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RAJAH SIR ANNAMALAI CHETTIAR OF CHETTINAD

A Memoir.

Rajah Sir Annamalai Chettiar was born at Kanadukathan on the 30th of September 1881. He was the third son of Muthiah Chettiar, a man distinguished for his practical piety and benevolence. Muthiah Chettiar was a greatly respected member of the Nagarathar community of which he was, in his day, the undisputed head. He was thoroughgoing in his benefactions. He renovated the temple of Sri Nataraja at Chidambaram at a cost of several lakhs of rupees and also established a *choultry* where pilgrims could find food and shelter. In the cold weather, at the time of the *Arudhra Darsanam,* the *choultry* is thick with pilgrims from all over the country and gets the appearance of a little town. He also repaired and renovated the famous shrine at Karur, which has since been in an excellent state of preservation.

Muthiah Chettiar's piety was profound. He undertook a pilgrimage to Benares and for half the distance he went on foot. While at Benares, at the desire of his community, he began the construction of the Nagarathar *choultry* a spacious and richly-endowed rest-house on the *Dasaswamedha Ghat,* where hundreds of pilgrims congregate everyday all the year round.

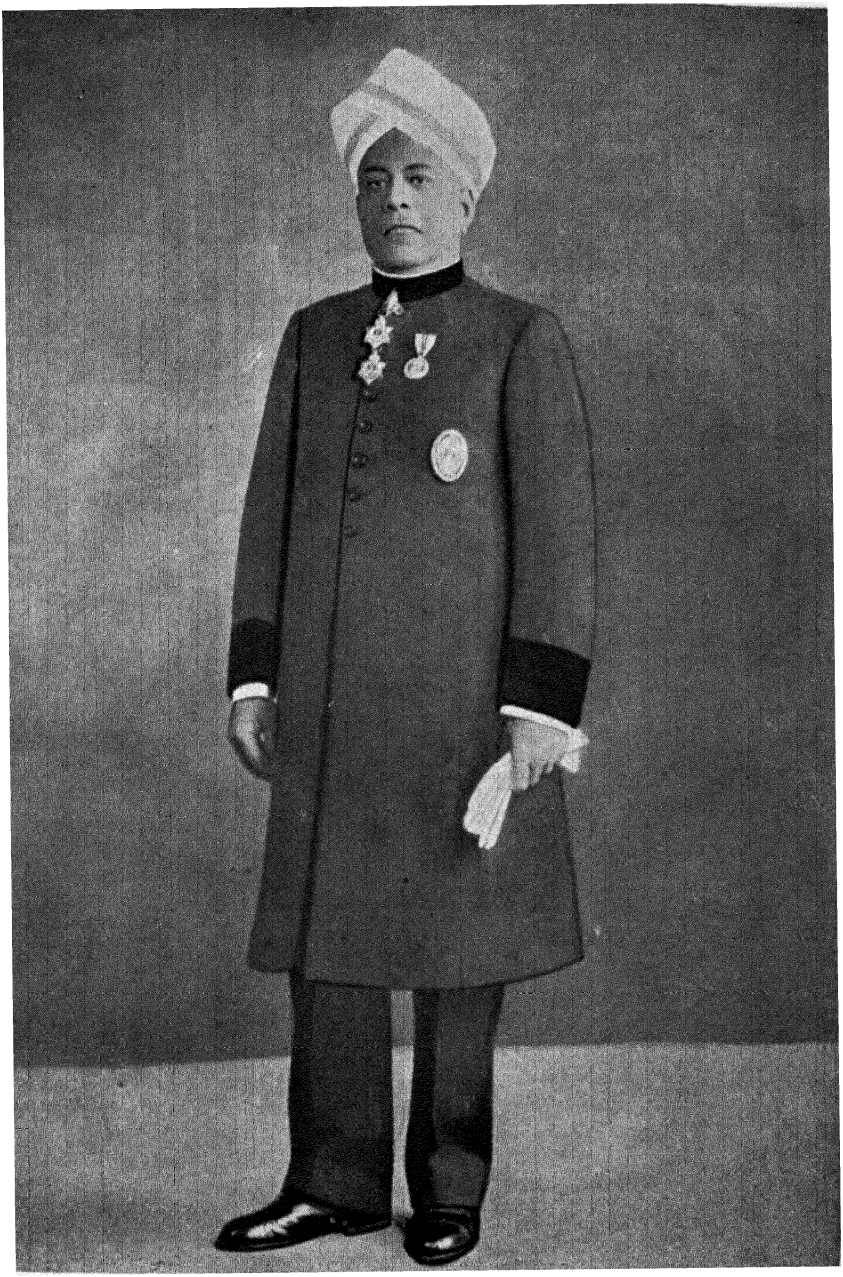
Muthiah Chettiar had three sons, Chidambaram, Ramaswami and Annamalai. Chidambaram Chettiar, a forceful personality, was the first among the Nagarathars to make roads in Chettinad. Cart-tracks and pathways began to give place to metalled roads over which one could pass in

comfort and safety. He had two sons, Sir M. C. T. Muthiah Chettiar, who attained considerable prominence in the social life of Madras and Pethachi Chettiar, who died comparatively early. This branch is represented now by Sir M. C. T. Muthiah Chettiar's son, the Hon'ble M. C. T. Chidambaram Chettiar.

Ramaswami Chettiar, the second son, was a man of great probity and public spirit. He was nominated to the Legislative Council constituted under the Morley-Minto Reforms and was the first member of his community to receive that distinction. He built and endowed a school at Chidambaram, which is now flourishing as the Ramaswami Chettiar High School. He was Chairman of the Chidambaram Municipality for many years and was President of the Taluk Board. For his many services, the distinction of Dewan Bahadur was conferred upon him.

Annamalai—the subject of this sketch—was the third son of Muthiah Chettiar and is said to have been his father's favourite, probably from being the youngest of his sons. His was a normal childhood and youth with little to distinguish them from those of his contemporaries. Probably a distaste for what was merely *mamul* and conventional and a more than ordinary propensity to get into mischief were the main features of his early youth.

Annamalai Chettiar's early years were years of preparation. His father was keen upon giving him a good upbringing. He personally supervised his studies and gave him a thorough grounding in the family business. From early in his career, Annamalai Chettiar, studied different systems of banking and, in time, came to be acknowledged as an expert in that field.



THE RAJAH SIR S.Rm.M. ANNAMALAI CHETTIAR

Muthiah Chettiar died when Annamalai was nineteen. After his death, his sons effected a partition of the family properties among themselves and began to conduct their several businesses separately. Chidambaram, the eldest and Annamalai, the youngest, stayed on at Kanadukathan while Ramaswami Chettiar chose Chidambaram for his residence and stayed there, more or less permanently, visiting Kanadukathan at intervals.

For about ten years Annamalai Chettiar devoted himself entirely to his business and family affairs. He was very careful in his choice of agents to conduct his firms abroad and he avoided the not uncommon mistake of leaving too much to them. System, regularity and attention to detail marked his way of doing business. With slackers he had no patience at any time and such was his driving power and force of example that his firms and businesses were run without a hitch.

The results of his methods were seen in the returns. His business prospered exceedingly. With fuller profits he decided to lead, not an easier, but a fuller life. The ancestral family house, big as a barn, was not exactly to his taste and he built himself a commodious house at Kanadukathan. It is a gracious edifice built in the conventional Nagarathar style but planned on liberal lines, with larger halls and ampler verandahs than is common in Chettinad. It is a house with character. In that palatial abode more than one Governor has been an honoured guest. Men of light and leading from all over the country have enjoyed the Rajah's princely hospitality within its halls.

Annamalai Chettiar toured extensively in India, Burma, Ceylon and Malaya. He was always fond of seeing "cities of men, manners and governments," and acquired

by personal study a remarkable degree of varied knowledge. In 1910, in company with his nephew, the late Sir M. C. T. Muthiah Chettiar, he toured over Europe. He was also accompanied by Mr. and Mrs. Miller of the American Mission. They were old friends of his and it was his appreciation of their devoted services that was largely responsible for his gifts to the American Mission. He spent many months in England and saw a good deal of the country. Annamalai Chettiar was deeply interested in local self-government and took advantage of his stay in England to study the administration of parishes and county councils. To this tour, Annamalai Chettiar says he owes much. He was impressed by the efficiency of the day-to-day administration of affairs in the west, the highly-developed civic sense of the people and wondered why, in this respect modern India should not follow the example of the west.

On his return to India, he enlarged the sphere of his activities. He desired to give practical expression to his interest in local affairs and got a chance to do so when he became the Chairman of the Karaikudi Union. He did not regard his job as a sinecure; he took his responsibility seriously and, in his time, things began to hum. People still talk of the days—it was before the discovery of the internal combustion engine—when Annamalai Chettiar used to drive up to Karaikudi, all the way from Kanadukathan, in his landaulette drawn by a magnificent pair of iron-grey horses, go round the town, giving orders and seeing them carried out and return to Kanadukathan, while to the rest of the townfolk, the day was just beginning. Spacious days they were and, in his own heart, I feel certain Rajah Sir Annamalai Chettiar looks back with longing to the days of the streamlined landaulette, on which the most luxurious Daimler or Buick, he asserts, is not a patch.

He was Chairman till 1913. His tenure of the Municipal Chair gave him a lot of insight into the problems of Municipal administration, the ways of men who will help and those who will hinder, and he learned at firsthand when wheels move and when they get stuck. He was also a member of the District Board and, in this capacity also, he bestowed careful attention to parochial problems. He was so great a believer in self help that he induced his native village of Kanadukathan to form itself into a voluntary union without waiting for the government to confer that status on it.

Annamalai Chettiar was ever ready to do everything in his power to serve the interests of law. On one occasion His Majesty's mails were waylaid and stolen. Information was sent to Annamalai Chettiar who, with a handful of men, scoured the country in person and finally succeeded in running the offenders to earth at an out-of-the way spot, just as they were in the process of dividing the 'swag'. At the sight of the 'intruders' they bolted, leaving the larger part of the loot behind. Annamalai Chettiar recovered the properties and duly forwarded them to the District Magistrate. The Police were soon on the tracks of the runaway robbers. Those were the days of highway robberies and dacoities and Annamalai Chettiar's pluck and determination came in for cordial appreciation. Here was another proof of his public spirit and soon afterwards he received the *sanad* and badge of Rao Bahadur. They say that "a good launch is half the voyage" and there can be no gainsaying the fact that Rao Bahadur Annamalai Chettiar made his launch into public life in a most favourable wind.

In 1916, Rao Bahadur Annamalai Chettiar was nominated to the Madras Legislative Council, and from this time he divided his time between Chettinad and Madras.

From a very early period, Rao Bahadur Annamalai Chettiar was deeply interested in education. Education, he was convinced, was the prime need of this country and he made liberal contributions whenever possible. In 1915, he provided a hostel for the students of the American College at Madura, a gift which was greatly appreciated. The sister institution, known as the Madura College, was languishing for lack of funds. Rao Bahadur Annamalai Chettiar was approached for financial aid and he readily contributed about 30,000 rupees, being one half of the amount needed for acquiring a site for the location of the College. The other half was contributed by the Government.

The family had already to its credit the High School established by Dewan Bahadur Ramaswami Chettiar at Chidambaram. Rao Bahadur Annamalai Chettiar desired to extend the family benefactions so as to cover the field of higher education as well. His ambition was to build and endow a College. He consulted his old friend and colleague on the Legislative Council, The Right Hon'ble V. S. Srinivasa Sastriar who enthusiastically supported the idea. The two called in Mr. P. A. Subramania Aiyar, Headmaster of the Hindu High School, a veteran educationist, and took counsel together. They discussed details, ways and means. The idea grew and took shape in Annamalai Chettiar's mind. The question was where the proposed college should be located. At one time, Annamalai Chettiar thought of Madura but the rival claims of Chidambaram could not easily be brushed aside. He had not come to a decision

THE FATHER AND BROTHERS

when his brother, the Dewan Bahadur, died. It was patent that he would have to take some practical interest in the conduct of the High School and it struck him that the best plan under the circumstances would be to locate the College also at Chidambaram. Doubts were raised whether the South Arcot District was the most suitable area for the establishment of a college. It was said that the experience of the past was against it, as twice previously a College had been started at Cuddalore, but had been allowed to languish. Annamalai Chettiar was unconvinced. What were the reasons for the failure, he kept asking. In his own mind, he knew the answer. Lack of funds, a Micawber-like waiting on hope, and slackness in management should have been the reasons why the College did not take root. He thought over the matter deeply and came to the conclusion that Chidambaram was, on the whole, best suited for the purpose and decided in its favour. The reasons which weighed with him were, firstly, Chidambaram's historic and religious associations which qualified it to be the seat of a University, and secondly, the family's age-long connection with the town and its devotion to Sri Nataraja, under whose divine care and protection they had prospered in the past.

The idea once formed, there was no delay in carrying it out. With Rajah Sir Annamalai, to decide is to act. A staff of brilliant men was collected and the work was taken in hand. The College had started work by 1918. The absence of a suitable building was not allowed to stand in the way. Necessary extensions were made to the High school to accommodate the classes newly formed. At the same time plans for the building of a College were maturing. A suitable site was selected and the work of construction began in right earnest. Annamalai Chettiar threw himself

into the work heart and soul and spared no pains for the early completion of the project. He had expert assistance but he went over every inch of the ground himself. In purely academic matters, he trusted implicitly to his educational advisers. On the practical side, he held easy sway. In planning the buildings, in providing funds and seeing to their proper application, Rao Bahadur Annamalai Chettiar took the utmost interest. Not a stone was laid and not a rupee spent which had not met with his previous approval. Though the Rao Bahadur looked to most things in person, he took care not to get into people's way. His own views and suggestions were so sensible and practical that his advice was sought at every turn. On the academic side, he was ably assisted by Mr. K. A. Nilakanta Sastri, the first Principal of the Sri Minakshi College. In the work of construction he had the benefit of the willing assistance of such engineering experts like Dewan Bahadur A. V. Ramalinga Aiyar, Dewan Bahadur Duraisingam and Dewan Bahadur N. Swaminatha Aiyar.

No suitable contractor was locally available. Materials had to be brought down from great distances but this was not allowed to deter or delay the work which had been undertaken. He worked hard, and his employees worked hard. The Rajah acts on the principle that the labourer is worthy of his hire. And the labourers in turn reacted so splendidly to the prevailing mood that work became a pleasure. The construction proceeded like clockwork and the new Sri Minakshi College was completed and fit for occupation in 1923.

While engaged in advancing the cause of higher education, Rao Bahadur Annamalai Chettiar had not been unmindful of his other obligations. In 1920, he stood for elec-

tion to the Council of State and was returned at the top of the polls. In the same year, the Viceroy appointed him one of the Governors of the Imperial Bank of India. In both of these capacities, he had increased opportunities of serving the country. His vast experience of banking made him extremely valuable on the Bank's Governing Board while, as an elder statesman, he expressed himself with moderation and good sense. To the Council of State he was elected thrice consecutively, and was always returned at the head of the polls.

To him honours were not slow in coming. In 1922, he was made Dewan Bahadur and in 1923, a knighthood was conferred upon him. Never were honours more deservedly bestowed. Apart from the record to his credit crowded with achievement, his courtesy and charm of manner had obtained for him a large and ever-increasing circle of friends belonging to all parties and spread all over the country.

The Sri Minakshi College was prospering. With the years, it grew in reputation and popularity. So good was its work and so high its standing in the educational world that Sir Annamalai conceived the idea of making it the nucleus of a University. He took counsel with his numerous friends, both academic and lay, and they welcomed and supported the idea. Lord Goschen, who was Governor of Madras, and whose interest in the Sri Minakshi College was keen and constant, gave the proposal his instant blessing. An Annamalai University Bill was drafted and was passed into law. And the University came into being in 1929.

The inauguration of the University was hailed with universal satisfaction in our province. Sir Annamalai, the Founder, is the Pro-Chancellor of the University.

The Right Hon'ble V. S. Srinivasa Sastriar was appointed Vice-Chancellor but, because he had to go away as the Agent to the Governor General in South Africa, he could not take up the appointment. Dewan Bahadur S. E. Runganadhan was appointed Vice-Chancellor in 1929 and he held the office till 1935. Dewan Bahadur S. E. Runganadhan's unremitting care and attention helped to increase the usefulness of the University. He was succeeded by the Right Hon'ble V. S. Srinivasa Sastriar who was Vice-Chancellor for five years and by the distinction of his personality and his devoted work enhanced the status and reputation of the University. For reasons of health Mr. Sastriar had to resign in 1940, and Sir Kurma Venkata Reddi Garu, Ex-Governor of Madras, with a distinguished record of public service succeeded him as Vice-Chancellor.

Annamalainagar, as the University area is called, is a lovely creation. Beautifully designed colleges and halls, comfortable quarters for the staff, broad and shady parks, a magnificent cricket pitch and spacious playing grounds make it an ideal spot for the dissemination of education. The place is packed with all the amenities of life. Rowing facilities, clubs for men and women, temples and tanks give the University its distinctive charm. Sanskrit, Tamil and Music stand out prominently in the University courses, a matter of deep significance from the cultural point of view. Students from the Tamil country flock to it in thousands and receive the education which is so readily imparted in ideal surroundings. And they are deeply appreciative of the bounty of the founder who saw the "seed of learning" imbedded within the young and enabled "its flowered future" to unroll. The Founder's Day is a sort of minor annual carnival at Annamalainagar.

THE RAJAH SAHEB AND THE RANI SAHEBA OF CHETTINAD

In 1929, the high and unique distinction of a hereditary Rajah was conferred upon Sir Annamalai Chettiar. A magnificent thrill of delight went through the country. The Nagarathars were overjoyed and organised what was a regular carnival to express their joy. The celebrations were held at Kovilur, the traditional meeting-place of the ninety-six villages of Chettinad. Thousands of fairy lamps, gleaming in the evening in the streets, gay with bunting and greenery, turned the sleepy little township into a veritable fairy-land. The Right Hon'ble V. S. Srinivasa Sastriar presided on the occasion. His close friendship with Rajah Sir Annamalai Chettiar and the mutual regard which was known to subsist between them pointed to him as the person most fitted to take the chair. Numerous friends of the Rajah, representing all communities and all shades of opinion, were present. In a magnificent speech, The Right Hon'ble V. S. Srinivasa Sastriar showed how eminently the Rajah was fitted for the regal rank bestowed on him.

The University of Madras marked their appreciation of the Rajah's services to education by conferring on him the degree of Doctor of Laws.

In 1935, Rajah Sir Annamalai visited England at the head of a delegation whose purpose was to obtain the necessary safeguards in regard to the position of Indians in a separated Burma. The Rajah Sahib interviewed the Secretary of State, Sir Samuel Hoare, Mr. R. A. Butler, Lord Winterton and other leading members of Parliament. It was, on the whole, a successful trip and valuable concessions were obtained. Separation, however, has forced into prominence other outstanding matters all of which Rajah Sir Annamalai Chettiar handles with his accustomed energy and determination. The Indo-Burma Immigration Agreement

which has been exercising the public mind considerably, is engaging his attention at the moment.

From England, the Rajah paid a flying visit to the United States of America. He was accompanied by Rani Lady Annamalai Chettiar and both of them appeared to have enjoyed the visit greatly. Their only regret was that they had to return very quickly to keep their various engagements in Great Britain. While in England, the Rajah visited the Universities of Oxford and Cambridge. In Oxford, he met the Master of Balliol who showed him over the University. He discussed problems of University Administration with, it was said, "considerable insight." He also visited the several slum areas as he is keenly interested in the housing conditions of the poor. His visits were not intended to fill a dull hour; he was serious and purposeful in making them, he was "like a chiel, takin notes". Sir Annamalai had the knack of turning all his experiences to practical account. He personally designs the quarters which he provides for his numerous employees and dependants, and these are invariably airy and comfortable.

Before returning to India, Sir Annamalai visited Belgium, France and Germany. In Paris he was able to do a real good turn to his country. The Government of French Indo-China were beginning to look upon Indians with disfavour and had actually expelled some of them. Sir Annamalai took the matter up with the French Government. The India Office put him on to the British Embassy in Paris, who arranged a meeting with M. Rollin, the Minister for Colonies. M. Rollin recognised the force of Sir Annamalai's contentions and promised to remedy the situation, which he did without loss of time. In this connection the Rajah remembers with gratitude the help

willingly given among others by M. Outrey, an exceedingly genial and helpful member of the Chamber of Deputies, and M. Eugene Simoneau, a cultivated and charming young Frenchman, employed as Secretary to M. Rollin and who has since joined the administration at Morocco as a member of the Cabinet of General Nogues.

If the Rajah has a hobby, it is building. It may be said of him that he has given much and built much. In England, and all over the Continent, he studied novel building designs with a practised eye. His houses are models of elegance and comfort. His home at Chettinad is commodious, well-lighted and airy and Chettinad House at Adyar is a lovely piece of architecture. With the Adyar on one side and the sea on the other, in a spacious park, it stands, a fabric in white, which looks like fairy gossamer at dawn in a December mist. The Palace which he is now engaged in building at Chettinad is certain to surpass similar edifices in grandeur and comfort.

And in hall, grange and park, Rajah Sir Annamalai loves to dispense hospitality. His visiting list is long and his geniality and princely hospitality have won all hearts. He is lucky in his helpmate. Rani Lady Annamalai Chettiar is an ideal wife, and has won all hearts by her piety and charitable disposition.

In his house at Chettinad he has been honoured by the visits of successive Governors of the Province. Lord Pentland stayed with him in 1916 and was struck by the Rajah's standing in his District.

In 1932, Lord and Lady Willingdon visited Chettinad and greatly enjoyed their stay at his house. Lord Goschen was his guest in 1925. The Stanleys spent a day with him in

1934 and recently in March last, the Rajah had the honour of entertaining His Excellency Sir Arthur Hope at Chettinad. Rajah Sir Annamalai's services to his community have been marked by careful attention to their interests here and abroad. He has been the President of the Nattukkottai Nagarathars' Association for many years and has secured for the Association valuable rights and privileges.

Rajah Sir Annamalai Chettiar's paramount claim to public esteem lies in the abundant charities which he has founded. Apart from the University which is the biggest endowment ever made by a single individual in these parts and by all accounts one of the first four or five leading endowments in all India, he has given large sums for schools, hospitals and similar benefactions. It is a safe estimate that his numerous benefactions have, so far cost the Rajah over a crore of rupees—a truly magnificent record indeed.

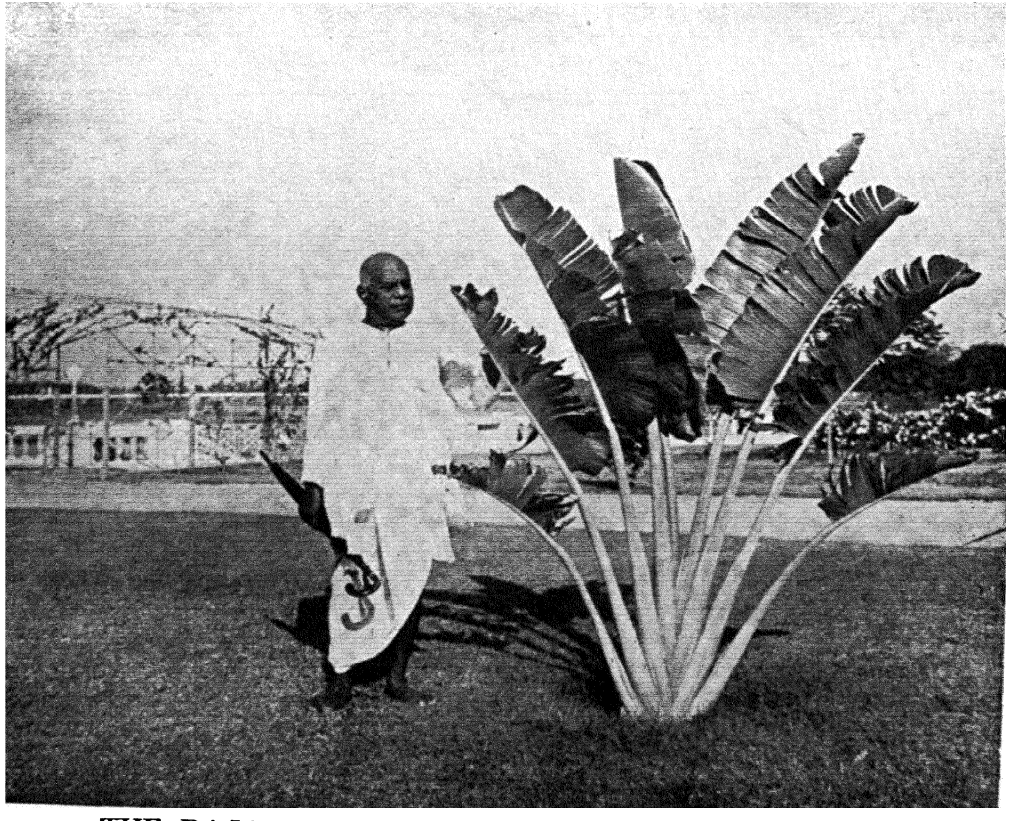
One may safely prophesy that the future of the family and the family charities is assured. Rajah Sir Annamalai Chettiar's sons are sure to carry on the family tradition. His eldest son Kumararajah Sir M. A. Muthiah Chettiar has already distinguished himself in the public life of the Presidency by his great gifts or organization, and leadership. As Mayor of Madras, as a Minister of State, as the leader of the Justice Party and as a businessman he has won laurels. The Rajah's younger sons, Mr. Ramanathan Chettiar and Chidambaram Chettiar are in business. The former is also Deputy Sheriff of Madras.

In his own personal habits the Rajah is extremely simple. He adheres resolutely to the Tamil maxim which exhorts one to rise before the dawn. He is generally up at four in the morning, has a bath and has an early cup of coffee. He

THE RAJAH SAHEB OF CHETTINAD IN LL.D. ROBES
(MADRAS UNIVERSITY)

is at his desk by six and by about ten contrives to get through the bulk of the day's work. He walks about a great deal and is happiest when sauntering on his grounds directing a path to be made here or a tree to be planted there. Of music he is passionately fond, and often, while at work, he turns on the wireless to listen to his favourities. He has taken in hand the resuscitation of Tamil music and it is the prayer of his numerous friends that he should live long to enjoy the sweet strains he is doing so much to revive.

GREETINGS, GOOD WISHES AND APPRECIATIONS.



THE RAJAH SAHEB ON HIS WALK IN THE GARDEN

HIS EXCELLENCY SIR ARTHUR HOPE, G.C.I.E., M.C.,
Governor of Madras

I am very pleased to hear that the University is celebrating in a fitting manner the Shastipurti of Rajah Sir Annamalai Chettiar, and to add my own warm congratulations. The Rajah's munificence has been widespread, but it is above all for his magnificent contribution to the cause of education in South India by the founding of Annamalai University that his name will be remembered among future generations with affection and respect.

HIS HOLINESS KASIVASI SWAMINATHA THAMBIRAN AVL.,
Tirupanandal

As a philanthropist, Dr. Rajah Sir Annamalai Chettiar stands foremost in South India. The munificent gifts that he has made for the cause of education, medical aid, and women welfare all over India and elsewhere, not to speak of his other charities, distinguish him as the most generous hearted gentleman of the present generation. In particular, the University at Chidambaram founded by him with departments of Science, Tamil, Sanskrit and Music, the first residential teaching University in South India, is a boon to the rising generation. The University town has sprung, as if by magic, into a centre beaming with intelligent faces and pursuing academic work of a high order. That part of the town in which the University is situated has been fittingly named after the Founder, having been converted from a dry waste into a model town with all modern amenities. Thus the University with its colony stands to the credit of Dr. Rajah Sir Annamalai Chettiar as a monument of his educational munificence. We heartily congratulate him on the happy function of the celebration of the completion of his 60th year and wish him long life and prosperity.

DR. GEORGE S. ARUNDALE,
President, Theosophical Society

It is with very great pleasure that I add my congratulations to all those with which I am sure Rajah Sir Annamalai Chettiar will be inundated on the occasion of his Shashtiabdapurti—a notable spiritual event in his life and the herald, I am sure, of that added fineness of stature with which the new period will bless him.

The Rajah Saheb has been in the public eye almost from the beginning of his career, and it was not long before he entered the public service in the Councils of this Presidency and of India. Indeed, this very year marks the twenty-fifth anniversary of his association with the Madras Legislative Council, while on each occasion that he stood for election to the Council of State he was returned at the top of the poll, thus receiving a notable token of the esteem in which he has always been held both by the general public and by his own community. His Majesty the King-Emperor has fittingly recognised the outstanding worth of Sir Annamalai by conferring upon him honour after honour, and worthily have these been worn.

As a business man he has achieved success which few even among his peers have reached, largely because his benefactions have always increased as his worldly prosperity has grown. But the crown of them all has been the great Annamalai University at Chidambaram—a veritable monument to his public spirited patriotism and kingly generosity. Most rightly did the Rajah Saheb say in 1926, a few years before the actual establishment of the University:

> Since days long past, Chidambaram has been a great centre of culture in South India and has enlisted the

devotion alike of her warriors and kings, philosophers and poets. It has often struck me that at Chidambaram, if anywhere in South India, there is a great opportunity for working on chosen lines and to noble ends that synthesis of the great cultures of the East and the West which is the prime task of our country and of her educational institutions at this hour.

Chidambaram is indeed a sacred spot fragrant with the splendour of noble lives and with the dedication of mighty saints, and there could be no better setting for the education of India's young citizens in the true spirit of their Motherland.

Rajah Sir Annamalai Chettiar has thus sought to make available to these modern days of India's life the very soul of India's spiritual greatness that her young sons and daughters of to-day may be greatly inspired to build a future worthy of her incomparable past.

Surely the blessings of Bharata Mata must be upon him for this signal act of filial homage to her and will gladden his way as he passes this sixtieth landmark of his present incarnation.

May he be spared many years to continue his great services to India and to this Presidency.

MR. T. AUSTIN, C.I.E., I.C.S.,
Adviser, Government of Madras

I gladly add my best wishes to the commemoration volume which is to mark the completion of Rajah Sir Annamalai Chettiar's sixtieth year. The list of his benefactions is long and varied: in the great generosity shown towards

KUMARARAJAH SIR M. A MUTHIAH CHETTIAR. B A

educational institutions and the welfare of women, he has taken the direction where help is so much needed. I wish the Rajah Sahib many more years of useful life.

REV. FATHER P. CARTY, S.J.

The 61st birthday celebration of Dr. Rajah Sir Annamalai Chettiar of Chettinad appeals to me not only as the worthy public recognition of the truly royal munificence of one of India's most distinguished sons and benefactors, but also as an event of national importance, occurring as it does at the very time when the world suffers, as it has rarely suffered before, from the inhuman machinations of ruthless malefactors. This horrifying background of fierce war and bloodshed involving in its destruction peaceful and harmless citizens even more than the armed forces, sets out by contrast, as nothing else would, this admirable life of peaceful endeavour so generously and so unassumingly spent in the one object of doing good and being good to others and making people happy.

The benefactions of Dr. Rajah Sir Annamalai have become a household word not only in South India but in the North and in Burmah as well; and what, to my mind, makes their chief value is the high purpose which we discover behind each one of them. They are either charitable endowments seeking to relieve the misery of the poor, or religious endowments which clearly indicate his high spiritual motives and reveal that sense of service to man for God's sake which is so different from mere humanitarianism;—or, lastly, but not the least, educational endowments which he has spread so lavishly throughout the length and breadth of India and Burmah. If I stress this last proof of his genuinely gener-

ous and kindly heart it is because by his munificent largesses in this field he has shown the high value he sets on the promotion of education and learning in India. In this he is perfectly right, since obviously a nation of illiterates is bound to lag behind in every form of improvement and progress. And though India cannot certainly be called an illiterate country when we consider the quality and the numbers of those of India's sons who, in the field of learning and science, can proudly stand any comparison with those of other countries, nevertheless the hundreds of millions who still await their chance of receiving even a fairly adequate elementary education, reveal perhaps one of the chief factors which account for the slow march of all-round progress in India. For it is by the brains of its citizens that a nation ultimately develops and prospers.

It is the peculiar merit of Dr. Rajah Sir Annamalai to have keenly realized this fundamental need of India and to have come forward to meet it on so magnificent a scale. It is, moreover, a peculiar trait of his enlightened generosity that by the crowning foundation of the Annamalai University he has opened up new vistas of higher learning and efficiency to many a poor student who, but for this institution and the free scholarships with which it is endowed, would have been unable to rise from their humble surroundings and to take place among the builders of India's future.

I feel deeply honoured to have been invited to associate myself with the many admirers of Dr. Rajah Sir Annamalai in expressing in however imperfect a manner, my personal esteem, respect and admiration for him on this auspicious celebration.

THE MAHARAJAH OF COCHIN

On the occasion of the Ṣaṣtyabda-poorṭi of Dr. Rajah Sir Annamalai Chettiar of Chettinad, I have great pleasure in wishing him many more years of happy and useful life.

My son was a student of the University of which Rajah Sir Annamalai Chettiar is the founder, and the glowing accounts he has given me of the University will ever remain fresh in my memory.

KULAPATHI DR. J. H. COUSINS,

Art Adviser to the Government of Travancore;
Head of the Department of Fine Arts, University of Travancore

I have watched the career of the Honourable the Rajah of Chettinad, with deep appreciation of the princely manner in which he put the material results of his genius in the affairs of the outer life into the creation of a great institution for the development of the powers of the inner life of the young men and women of South India. I have also been much gratified by his continued fostering of the Annamalai University, and trust that the institution will have the benefit of his guidance for many fruitful years to come.

THE HON'BLE SIR MANECKJI B. DADHABHOY, K.C.S.I.,

Barrister-at-Law, President, Council of State

I am very glad to state that I had come in close contact with my friend Dr. Rajah Sir Annamalai Chettiar of Chettinad for many years in our capacity as members of the Council of State, and I had always entertained very high opinion of his business ability and his noble and spotless character. He was well respected by all the members of the Council of

State and his debates in that House were full of information, sober thought and sound judgment. His business capacity is very much respected in the town and Presidency of Madras. He is an ornament of his community and I pray that he will be spared for many years to render good and substantial services to his country which for many years he has so faithfully discharged.

PROFESSOR B. B. DEY, D.Sc. (LONDON), F.I.C., I.E.S.,
Presidency College, Madras.

The foundation of the Annamalai University the first real residential University in the South, through the vision and munificence of one single individual, is unique in the annals of education in this Presidency, and the beneficial work of the University with its high standard of efficiency is slowly becoming known throughout the country.

My close association with the University even from its inception, and particularly with the Chemistry department which has been built up so efficiently by my friend Dr. S. N. Chakravarthi has made me familiar with the work of the Science Departments and particularly with the research activities in Chemistry and in Physics, which would do honour to any of the old Universities in this country.

I send my best wishes for success of the celebrations of the event.

LORD ERSKINE, G.C.I.E., M.P.,
Ex-Governor of Madras.

I send my best wishes to the Rajah of Chettinad on the occasion of his sixtieth birthday. The Annamalai

KUMARARAJAH IN MAYORAL ROBES

University will remain a lasting symbol of his love for learning and culture. The Tamil country should ever be grateful to Sir Annamalai as one of the leading educational benefactors of South India. May he be with us for many more years.

PROFESSOR J. FRANCO, M.A.,
Presidency College, Madras

It is extremely pleasing to me to render my tribute on the occasion of the celebration of the Shashtiabdapurthi (61st birthday), of the Rajah Saheb of Chettinad for the invaluable services he has rendered to the cause of higher education in this country.

Apart from the traditional and free-handed generosity for which his family has been noted, his own benefactions for the relief of suffering, the uplift of the poor, the renovation of our ancient temples and the promotion of indigenous culture have been immense. Besides, one cannot but be struck with his pioneer achievement in a new and most fruitful direction, namely, the starting on a magnificient scale, of the first Unitary Residential University in South India. This is but the beginning of the realisation of the idea of establishing Residential rather than merely Examining, Universities, at the principal centres of culture, within the jurisdiction of the overgrown University of Madras and the Rajah Saheb deserves to be congratulated on taking the first step in this direction.

It was on the sub-structure of the Sri Minakshi College at Chidambaram which the Rajah had started in 1920 and which had developed into a vigorous and popular Honours College, that the Annamalai University was founded. It

not only embodies the idea of a University of the Residential type but also serves as a centre in which the genius of Tamil culture can be fostered. For over two decades the Rajah has assiduously watered and anxiously watched the tender plant that had been set in the soil of hallowed Chidambaram. The sapling has now become a big and leafy tree spreading its foliage over a number of branches of learning, one of which we may note with pride, is South Indian Music and another the department devoted to the revival of Tamil Literature and Culture.

The Rajah Saheb's many-sided philanthropy has thus reached its acme in the Annamalai University. This will perhaps be the most serviceable and enduring of all his charities. It is, my sincere prayer that he may be long spared to us to see his work thrive and prosper and if possible, to render yet other valuable services to South India.

MAHATMA GANDHI

"I would wish the Rajah Saheb many a long year of useful service."

MR. V. V. GIRI, BAR-AT-LAW

It is but right and fitting that the Annamalai University is celebrating in a fitting manner the 60th year of its great founder Rajah Sir Annamalai Chettiar. His many sided charities are well-known throughout India and have earned the esteem of his fellow countrymen. My esteemed father the late Mr. V. V. Jogiah Pantulu, and myself have known the Rajah Saheb for nearly two decades and we always appreciated his services to the country. His sacrifice

for establishing the University will ever be remembered. I wish the Rajah Sahib long life, happiness and prosperity to continue his great work of putting the University on a sound basis.

THE HON'BLE SIR MAURICE GWYER, K.C.B., K.C.S.I.,
Chief Justice of India and Vice-Chancellor, Delhi University

The princely benefactions of Rajah Sir Annamalai Chettiar of Chettinad are known over the whole of India, and it is difficult to say which we have admired the more, the magnificence of his gifts or the breadth of his sympathies, for no good cause has ever appealed to him in vain. Education owes him an inestimable debt, not only for what he himself has done, great though that is, but for the noble example which he has set to others.

It is not given to many men at their Shashtiabdapurthi to look back on a life so full of liberality and beneficence ; and all those who labour in the field of education will join in offering their most hearty congratulations to the Rajah Saheb upon this anniversary and their earnest prayers that he may live to enjoy many more years of happiness and welldoing.

MR. A. A. HAYLES,
Editor. Madras Mail.

Nearly a hundred years divide Annamalai Chettiar from Pachaiyappa, but it is significant that the century which opened with the founding of a school and college by one great South Indian should have closed with the esta-

blishment by another of a university. Rajah Sir Annamalai Chettiar will be best remembered for the university which bears his name, but that only partially represents his benevolence. From the temples he has built or renovated and endowed for the benefit of his fellow religionists to the hospitals and other public institutions, big or small, that he has supported his charity has flowed into many channels, helping those less favourably circumstanced than himself.

A genial, wise and uncommonly shrewd personality, Rajah Sir Annamalai Chettiar has made friends in many places and in different walks of life. They join his colleagues and fellow-workers in wishing him continued happiness and prosperity.

THE HON'BLE KHAN BAHADUR SIR MD. AZIZUL HUQUE, C.I.E., B.L., M.L.A.,
Vice-Chancellor, Calcutta University

On the happy day when the Hon'ble The Rajah of Chettinad, the Pro-Chancellor of the Annamalai University completes his sixtieth year I recall the great service which he has rendered to the cause of education and social welfare of the people of the province of Madras. The Annamalai University stands most pre-eminently as the monument of his great work. He has given a new incentive to the cultural life of the people of the Annamalai area and I am sure that a time will come when under the auspices of the University, Annamalai will stand second to none in the cultural progress of India. The Rajah has been closely associated with many aspects of public life and the people all over India must always feel gratitude for all that he has done for the people of this country.

KUMARARAJAH M A MUTHIAH CHETTIAR AS PRO-CHANCELLOR.
MADRAS UNIVERSITY

THE RT. HON'BLE SIR AKBAR HYDARI, KT., P.C. LL.D. D.C.L.,
President, H.E.H. The Nizam's Executive Council

I have had the privilege of knowing Dr. Rajah Sir Annamalai Chettiar for a number of years and of being aware of the great charities dispensed by him for public benefit and utility, the most monumental endowment being the Annamalai University itself which derives its name from its most generous donor. The example set by this great philanthropist is one which may well be copied by others who have the good fortune of possessing wealth and the spirit and the heart to use it for the benefit of mankind.

AMIN-UL-MULK SIR MIRZA M. ISMAIL, K.C.I.E., O.B.E.

It is with genuine pleasure that I avail myself of this opportunity to convey my hearty felicitations to Rajah Sir Annamalai Chettiar on the completion of his sixtieth year, and to wish him many years of happiness and usefulness to his fellow-citizens.

Sir Annamalai Chettiar's record as a philanthropist is one of which any man may be proud. As the Founder of the Annamalai University, his name will ever be remembered. That University will stand for all time as the noblest record of his munificence and his public spirit.

A most obliging friend, a generous host, a successful business man, Sir Annamalai is a most prominent and popular figure in the social and commercial life of this Province.

Let me wish him once more every good fortune in the years to come.

SIR FREDERICK JAMES, M.L.A.

I count it a privilege to send a message for the Commemoration Volume to be presented to Dr. Rajah Sir Annamalai Chettiar of Chettinad on his 61st birthday.

Few men acquire great riches; fewer still use those riches for the common weal. The Rajah has done both. He must indeed be a happy man when he contemplates the many monuments of his generosity—and particularly the spectacle of that University which was founded and endowed by him, and so fittingly perpetuates his name.

Titles have rightly been bestowed upon the Rajah; but I have no doubt that on this day his heart will be warmed, not by their decorative dignity but by the gratitude and affection of all classes in his and succeeding generations.

When I wish him many happy returns of his birthday anniversary, it is not the usual formal greeting. It expresses the sincere wish of one of his many friends that he may long be spared to continue his charitable activities and to share, with his family, the satisfaction and reward of years of distinguished public service.

SIR COWASJI JEHANGIR

In any part of the world to find a man who devotes his wealth to discriminating charities, bringing great institutions into existence for the benefit of his fellow subjects, is rare. Such a man is Dr. Rajah Sir Annamalai Chettiar, whom the whole of India in general, and the Madras Province in particular, will congratulate on his 61st birthday. He will ever be remembered in his Province as the Founder of a great University and as a great patron of Art and Learning.

Young men of the Province of Madras will for generations be grateful to the man who helped to educate them. May all the educational institutions founded by him help to produce Indians who will be an honour to their country.

It is a pleasure to know the Rajah Saheb personally, a most unassuming man who, having amassed a fortune, delights in helping those who are not so fortunate as himself. May he continue to add to the good works that have distinguished his whole career.

THE HON'BLE SIR BARON JAYATILAKA

Minister for Home Affairs & Leader of the State Council, Ceylon

I have been invited to associate myself with the celebrations which the Annamalai University proposes to hold in connection with the sixty-first birthday of Sir Annamalai Chettiar, the Founder and Pro-Chancellor of the University. I respond with sincere pleasure, and send this brief message in order to express my high appreciation of the great services Sir Annamalai Chettiar has rendered to his country, notably in the sphere of education.

Last December it was my good fortune to visit the Annamalai University and see for myself the magnificent work that is being done in that unique institution. During that visit I had also the opportunity of gaining some idea of the generous liberality with which Sir Annamalai is maintaining religious and charitable institutions in that part of the country.

"Dātā jagati durlabhah" (a giver is rare in this world) is an ancient and true saying. Sir Annamalai Chettiar has by his munificence earned the right to be enrolled among

those rare beings who spend their wealth nobly for the welfare of humanity.

MR. T. J. KEDAR, B.A., LL.B., M.L.A.,
Vice-Chancellor, Nagpur University

It is with the greatest pleasure that I associate myself in the celebration of the Diamond Jubilee of the Founder Pro-Chancellor of the Annamalai University.

Unique among the educational benefactions in Modern India, the princely donation of the Hon'ble Rajah Dr. Sir S. R. M. Annamalai Chettiar of Chettinad laid the foundation of a new teaching University in India. And it has been given to him, as it has been given to few, to nurse and bring up the most favourite child of his own charity and to set it going on the path of progress under his paternal guidance.

May the noble Rajah live a hundred years and may his great example inspire others and bear thousandfold fruit!

DIWAN BAHADUR R. V. KRISHNA AYYAR, C.I.E.,
Additional Secretary to the Government of Madras, Public Department

I am glad that the Annamalai University is intending to celebrate the Sashtiabdhapoorthi of its Founder-Pro-Chancellor. It is very meet that it should do so. The attainment of the Sixtieth year is an auspicious event in the life of every Hindu; but in the case of the Rajah of Chettinad, who has dedicated such a substantial part of his wealth as he has done for the benefit of the Annamalai

S Rm M Rm RAMANATHAN CHETTIAR, UNDER-SHERIFF, MADRAS

University, the event is one for national celebration and jubilation.

The name of the Rajah of Chettinad will be prominent in the roll of the honoured names of great Kings, Noblemen and others who have encouraged learning and Arts. In one sense, his work is greater than that of many of them, as he has not been content merely with patronising one or more individual poets or musicians, but has created a whole University with its many-sided activities which in course of time would bring forth a whole host of poets, philosophers, economists, scientists, musicians and leaders of men.

The Rajah of Chettinad is an example of what is expected of rich and wealthy men in these days. Though the inheritor of a vast fortune, he is one who has not been content to sit idle and enjoy himself, but his life has been a great example of active work, diligence and devotion to duty.

Even as regards this University, but for his perseverence and resolve, it would not have come into being. After its coming into existence, the constant care and attention he has been bestowing on its welfare and progress are truly remarkable.

His original endowments and gifts to the University which are already fabulous have constantly been added to, every time when the University was in need of help.

But the University is no longer the Rajah's property but is a national institution specially intended for the benefit of the Tamil land. It is the duty of all of us to see that the institution does not languish for want of support and that it becomes truly and in effect a magnificent Temple of Learning for the whole of the Tamil land.

Chidambaram is situated in the heart of the Tamil country. It is known in our ancient books as the centre of the Universe. It has hoary traditions of learning; but the glory of the ancient traditions of this town will, I hope, be nothing as compared with the glory which ought to be its future.

Being a Residential University, it has special facilities to enable the students tc learn the greatest of all Arts, and so far as India is concerned, also the most difficult of all Arts, namely, the art of living together. It can not only help in the creation of a cultured and intelligent society, but to build up a fraternity which will replace the strife of classes by social peace.

Now that an Andhra University has come into existence for the Andhradesa, a Travancore University for the Malayalam speaking peoples, a Mysore University for the Kannada-speaking people, this University must be treated by the Tamilians as the embodiment of their aspirations and the realisation of their unity.

It is the prayer of every citizen in this Province that the Raja of Chettinad will be spared to us for many many years to come and that he and his children and children's children will be happy and prosperous from generation to generation.

SIR ALLADI KRISHNASWAMI AYYAR, B.A., B.L.,
Advocate General, Madras

I rejoice in the opportunity that you have so kindly afforded me to send my most cordial and affectionate greetings to Dr. Rajah Sir Annamalai Chettiar, the Founder and Pro-Chancellor of the University on his 61st

birthday. The event represents according to our Hindu notions a significant mile-stone in one's life and it is singularly appropriate that the University which he founded and has been nursing with such devotion should organise the celebration with felicite' and goodwill.

The Annamalai University is by far the most outstanding contribution to the cause of University education by any private benefactor in this part of India. To the Rajah of Chettinad belongs the credit of giving a new direction to the well-known philanthropy and the public spiritedness of the Nattukottai Chettiar community. Not content with founding the University the Rajah has been taking a sustained, living and parental interest in the work of the University and has added largely to the original foundation by the institution of new scholarships and studentships.

It is not without significance that the University is located in the heart of the Tamil country sanctified by the shrine of Lord Sri Nataraja, "The Kovil" of Saivite Literature. At Chidambaram Patanjali and Vyagrapadha performed their great tapas and Nandanar in later times attained his beatitude. I have no doubt that Sanskrit and Tamil culture will radiate from this University and that votaries of science and humanities will gather within its walls and spread knowledge to the different parts of India.

It is my fervent hope and prayer that the Rajah may be long spared in health and happiness to be of service to the country and to the cause of education, that the institution which he has founded and nursed may grow from strength to strength and that from its walls may go forth men and women filled with the sense of the text of the great Upanishad.

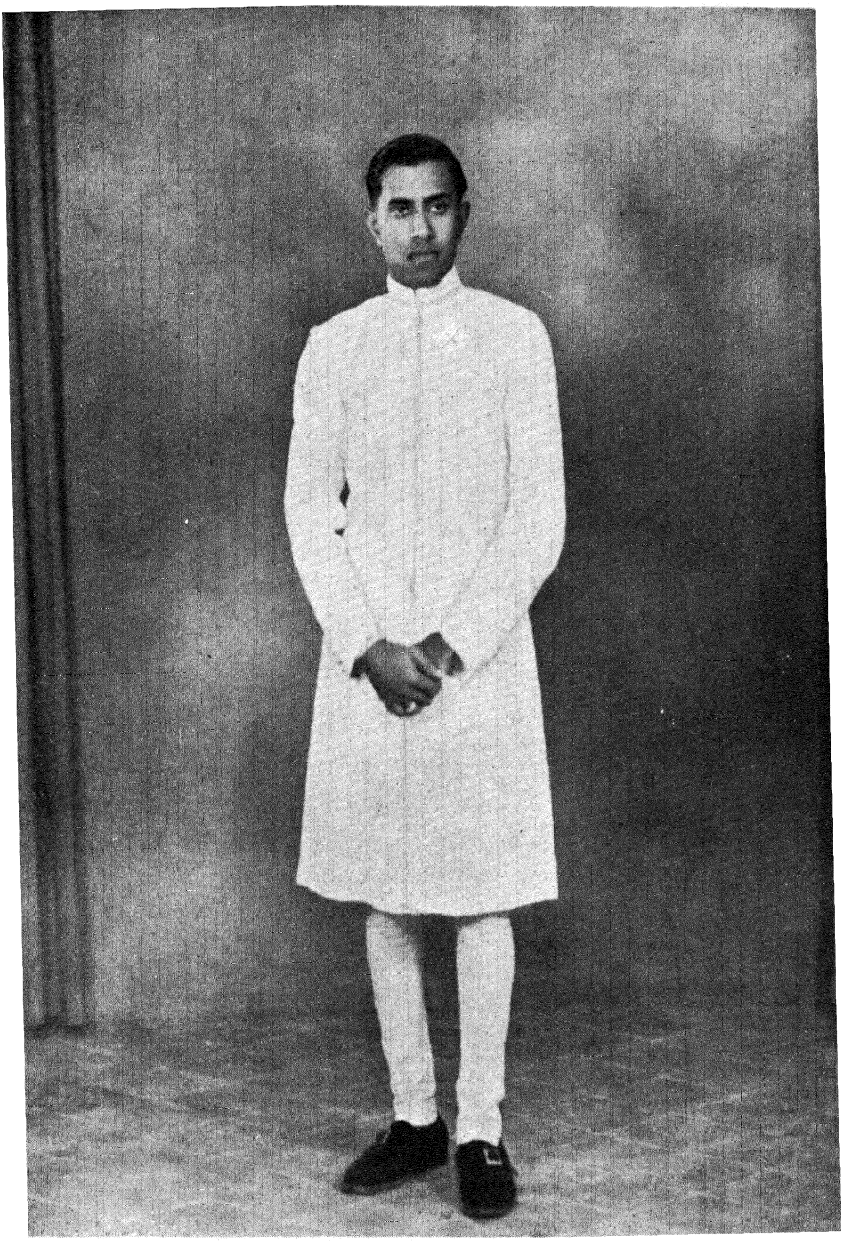
ओं असतो मा सद्गमय ।
तमसो मा ज्योतिर्गमय ।
मृत्योर्मामृतं गमय ॥

Om. From the unreal lead me to the Real.
From darkness lead me to Light.
From death lead me to Immortality.

MR. V. N. KUDUVA, M.A., I.C.S.,
Collector, South Arcot,

For generations, Nagarathars have been well-known for their charities. The temples renovated and endowed by them are innumerable, and they are by no means confined to the Tamil Nad. A healthily conservative community, their charities, while they are extensive, had till recently a tendency to run in time-honoured and traditional grooves. It was given to the Rajah Sir Annamalai Chettiar of Chettinad the auspicious occasion of whose sixtyfirst birthday, has evoked expressions of gratitude from his countrymen, to strike a new channel of philanthropy by devoting a considerable portion of his wealth to the creation of a new University which perpetuates his name.

Chidambaram is singularly fortunate to have attracted the attention of the Rajah Sahib's family and to have been the recipient of their benefactions. For over three generations, members of his family have spent a fortune in the stupendous task of renovation of the great Sabhanayaka shrine including the rebuilding of the gopurams, mantapams, and fine-pillared corridors of the inner enclosures of the Sri Nataraja Temple, a shrine which was for over fifteen



M A. CHIDAMBARAM CHETTIAR, 3RD SON OF THE RAJAH SAHEB OF CHETTINAD

centuries a great centre of South Indian culture, which attracted the devotion of the Chola Kings and a large number of saints, philosophers and poets who have left an indelible mark and shaped the culture of the Tamil people. The action of the Rajah Sahib in completely and effectively renovating the dilapidated shrine of Sri Govindaraja is characteristic of his catholicity of mind in view of the age-long disputes between the followers of the Vaishnavite and Saivite faiths which had marred the harmony of the great shrine. Chidambaram has also to be specially grateful to the Rajah Sahib's elder brother, the late Dewan Bahadur Ramaswami Chettiar, for its two great amenities, a flourishing High School which provides for the education of its youth, and its protected water-supply which has to a large extent minimised the ravages of cholera and filaria.

The nucleus of the University, Sri Minakshi College was founded by the Rajah Sahib in 1920, and by rapid and successive stages, it has been developed into a University of a unitary teaching and residential type which is unique in South India. The purpose and aims of this University in the words of the Rajah Sahib are "to embody and work for the synthesis of the great cultures of the East and the West which is the prime task of our country and her educational institutions at this hour." Provision has been made for research, and a unique feature of this University is a well-endowed faculty of oriental studies including a school for the training of the youth in the art of Carnatic and Tamil music.

The University is still in the stage of development, and it is essential for its development as a residential University that its authorities should endeavour to promote the social and corporate life of its students in a healthy manner. One of the objects of its Founder Pro-Chancellor is to satisfy,

after the inauguration of the Mysore and Andhra Universities, the desire of the people of the Tamil Nad to have a University of their own. It is therefore natural that education should be imparted in a manner to promote the highest ethical and cultural wealth of the Tamil race. It is hoped that this University will build up a healthy and noble tradition and give scope for the full expression of the Tamil genius without restricting it to the barriers of provincialism.

THE HON'BLE SIR LIONEL LEACH,
Chief Justice of the Madras High Court

The Sixtieth anniversary of the birth of Dr. Rajah Sir Annamalai Chettiar of Chettinad, the Founder and Pro-Chancellor of the Annamalai University provides a fitting opportunity for the members of the University to acknowledge the deep debt of gratitude which they owe to him. The debt is not, however, confined to the members of the University. It is a debt which all in South India owe. The public benefactions of Dr. Rajah Sir Annamalai Chettiar have been many, but the greatest benefaction of all has been the foundation of the Annamalai University. It is impossible to conceive of a more useful object to which wealth could be devoted in times of peace.

It may not be possible to express adequately in words the gratitude which is felt for the magnificent public spirit which the Founder has shown, but the feeling of gratitude is there and all will join in offering him their sincere congratulations on this happy occasion and in the prayer that he be granted many more years of life to watch and aid the development of the University which he has founded.

THE HON'BLE NAWAB MAHDI YAR JUNG BAHADUR, M.A., (OXON),
Vice-Chancellor, Osmania University and Educational Member, Hyderabad, Deccan.

The foundation and munificent endowment of the great Annamalai University by its Founder Pro-Chancellor, the Hon'ble Rajah of Chettinad, has marked him as a true benefactor of his country. The University will be a perennial fountain of learning, to which the youth of India will come in great numbers and drink deep of the springs for generations to come. On this the 60th Anniversary of the birthday of the Founder, thousands of his grateful countrymen join in paying him a tribute of admiration for his pious and selfless act of which the Annamalai University is an enduring monument.

MR. R. P. MASANI, M.A.,
Vice-Chancellor, University of Bombay

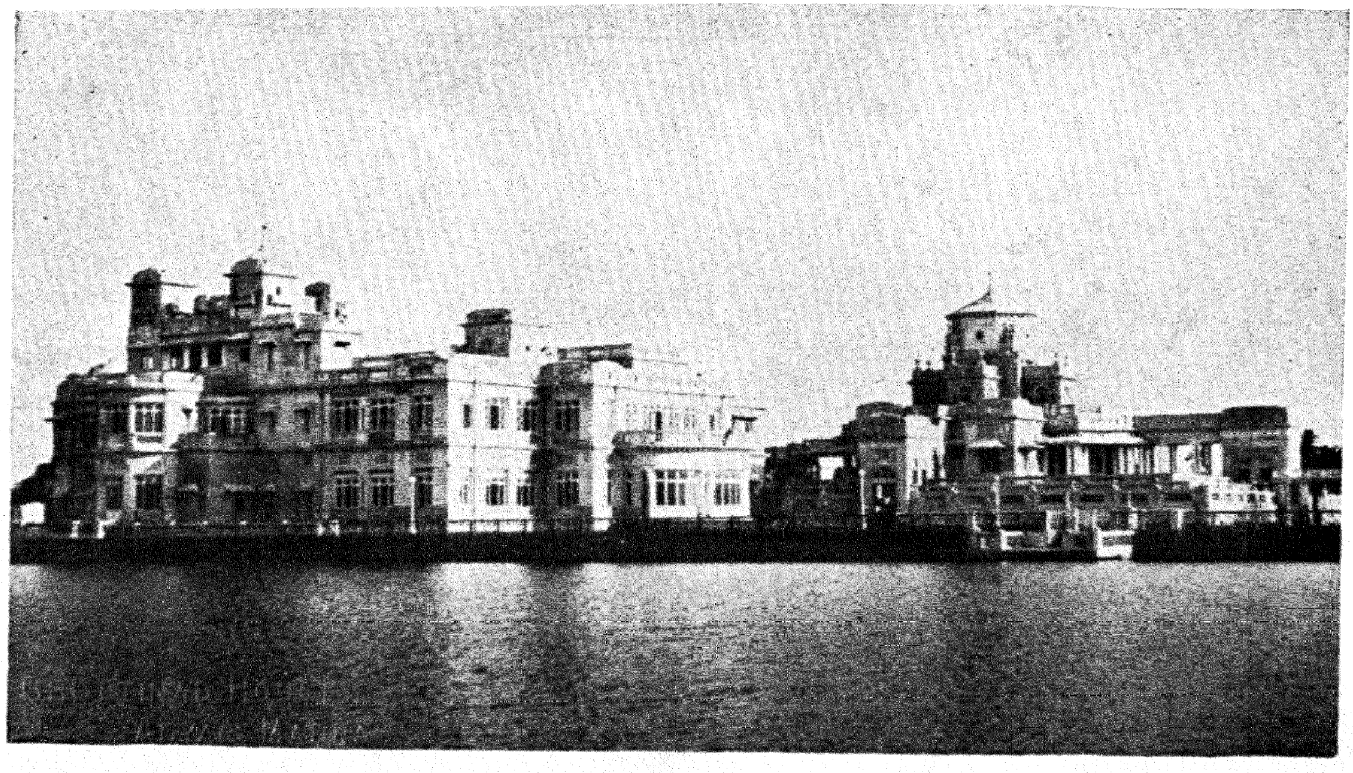
I am very glad to hear that it is proposed by your University to celebrate the completion of 60 years of the life of the Hon'ble the Rajah of Chettinad, Founder Pro-Chancellor of the Annamalai University, and that as a part of the celebrations it is proposed to present a Commemoration Volume to the Rajah Saheb on the 28th September 1941. You are thereby honouring one who has taken a very keen interest in the promotion of higher education and rendered it possible by his munificent donation to found a residential university. I have much pleasure in sending to your University, and through you to the Rajah Saheb also, my cordial greetings and best wishes.

SIR CHUNILAL V. MEHTA, K.C.S.I.,
Bombay

I consider it a privilege to be asked to send a message to be incorporated in the Commemoration Volume that it is proposed to present to Dr. Rajah Sir Annamalai Chettiar of Chettinad on his completing his Sixtieth year. It is a happy thought on this occasion to recognise the many extremely valuable services that Dr. Rajah Sir Annamalai has rendered to the Southern Presidency, to the cause of Education and to Hindu Religion, and its Shastras. His charities have been on a princely scale and have been both catholic and enlightened. The founding of the splendid University in Annamalainagar both Teaching and Residential will be a lasting monument to the public spirit and generosity of Dr. Rajah Sir Annamalai Chettiar and of his distinguished family, as lasting as the famous temples of Chidambaram which he has renovated at great cost. That Dr. Rajah Sir Annamalai Chettiar will be long spared to continue his useful public services and his generous charities for many years to come must be the fervent hope of every friend and well-wisher of his.

THE REV. JOHN K. MILLER, M.A., D.D.,
White Lodge, Coonoor, The Nilgiris, S. India

It is with real pleasure that I add my tribute and hearty congratulations to Dr. Rajah Sir Annamalai Chettiar of Chettinad, whose friendship I have enjoyed for more than thirty years, on having completed sixty years of life so satisfactorily for himself and others.



THE RIVER VIEW OF THE PALACE AT ADYAR

To few has it been given and made possible to do so much for others as he has done and I hope he may live for many more years to do even greater service for humanity.

In 1910 it was my privilege to help in preparing him and his nephew the late Sir M. C. T. Muthiah Chettiar, for a visit to Europe and to the coronation of our late good King George the Fifth and to accompany them on the voyage and trip through Europe.

This visit I am sure did much in awaking these gentlemen to a realisation of India's needs to their own ability to help meet them and our Madras Presidency has benefited greatly from their gifts and public service.

In 1913 a gift from the then Rao Bahadur Annamalai Chettiar made possible a hostel for our Pasumalai Normal Training School and a few years later he gave a generous donation towards our fund for the installing of our water and Electric lighting plant and he has since given to other good causes at Pasumalai.

It was also the privilege of Mrs. Miller and myself to assist him in entertaining at his Chettinad home three of our Madras Presidency Governors, beginning with H. E. The Right Honourable Lord Pentland and on these occasions to see the laying of foundation stones for numerous schools and hospitals in Chettinad.

I have watched with interest the work of Dr. Rajah Sir Annamalai and of his children, who are following in his steps and finding ample opportunity for service of mankind.

With every good wish for a long and happy life for himself and family I subscribe myself as one who is his true and loyal friend.

SIR B. L. MITTER, Kt., K.C.S.I., M.A., B.L., BAR-AT-LAW,
Advocate General of India,

Possession of wealth may be a blessing or a curse. In India material wealth has never been given the dominant value which it possesses in western civilization. Here the value is measured by the use made of it. The place of the owner of wealth in society is conditioned by the extent to which he regards his ownership as a trust. Rajah Sir Annamalai has always acted up to the Indian ideal and, hence, the high estimation in which he is held by his countrymen. He has used his great wealth for the spread of education, relief of distress and other acts of charity. I recall an occasion when I appealed to him for help to Lady Irwin Girls' School at Simla and Delhi. He said little, but, in about an hour's time, I received from him a cheque in five figures. The amount so generously given formed the nucleus of a building fund. The school now possesses a magnificent building and it is one of the foremost educational institutions in New Delhi for the benefit of Indian girls of all provinces and all communities. I have known Rajah Sir Annamalai for many years and I know how completely he is inspired by the Indian ideal of the union of Lakshmi and Saraswati. I offer my hearty felicitations on his completing his sixtieth year.

DR. MARIA MONTESSORI

I have heard of the great efforts of the Hon'ble Rajah Sir Annamalai Chettiar has made in favour of education in this country. Myself, as a pioneer of education and as the opener of a new field of discoveries, am deeply moved by those who open the possibilities to human beings of

obtaining the development which should be due to every human spirit. To him, therefore, I convey my congratulations on the attainment of his Sixtieth Birthday. I hope that his life may last long and that his figure may long remain an example to the rest and a living monument of those who have deserved well from India and from the rest of humanity.

REV. L. D. MURPHY, S.J.,
Principal, Loyola College, Madras

It gives me great pleasure to have this opportunity of adding my voice to the general chorus of congratulations to Rajah Sir S. R. M. Annamalai Chettiar. It is easy without exaggeration to speak in terms of high praise of the Rajah's manysided character, with its lotus-like development against a background of utter simplicity of life. Success sits lightly on his shoulders and the black care which the poet Horace foretells for such eminence as the Rajah has attained can never be his familiar. Its approach would be denied by the royal spirit of lavish generosity which has been so constant a companion in all his undertakings. Religion, Education and the poor are his special beneficiaries and together they form a strong buckler to protect him from harm. May God grant him many years of useful life for their benefit.

MR. S. MUHAMMAD HUSAYN NAINAR, M.A., LL.B., (ALIGARH), Ph.D. (LONDON),
University of Madras

Dr. Rajah Sir Annamalai Chettiar of Chettinad, in whose honour this volume is issued on the occasion of his

sixtieth birthday is known throughout India and Greater India as the founder of the Annamalai University and also a number of charitable institutions. The Tamilnad, in particular, can never forget this magnificent and liberal patron of learning who has made Chidambaram a centre of light and leading. Although there are several munificent men in this great country, the Rajah Sahib, is, I think, the first person to specially pay attention to the promotion of learning on modern lines by founding a University which is named after him.

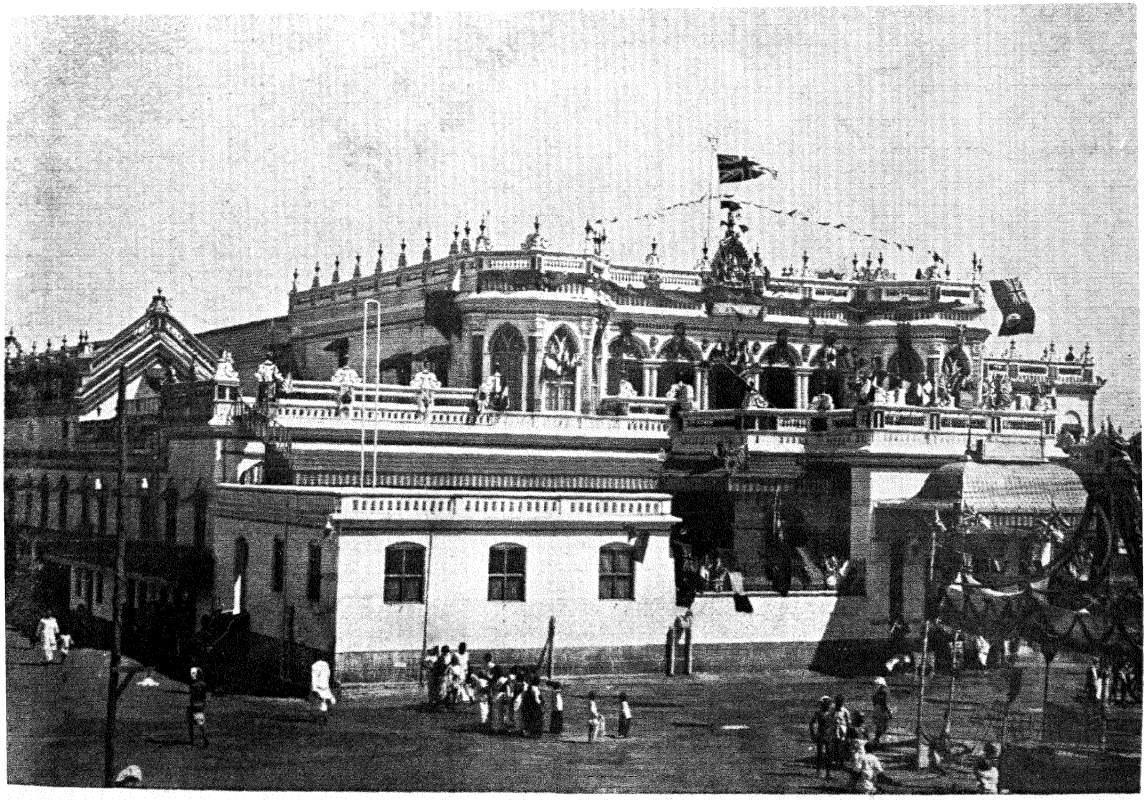
The Rajah Sahib has shown a rare devotion to Dravidian languages and culture. At a critical time in the history of the Tamil language he has come to its rescue. He has endowed special prizes for the study of Tamil and has thus inaugurated a new era of Tamil learning.

The Rajah Sahib's beneficence is so great that many towns and cities derive advantage from his charity. His charities stand out as a brilliant example of what a single individual with his own unaided resources can achieve. He is imbued with a spirit of such great self-sacrifice as is rarely met with in a man.

South India may well feel proud that it has produced such a noteworthy person who has done so much to quicken the intellectual life of this part of India. May he live long and continue to provide facilities for the development of culture and enlightenment.

PROFESSOR K. A. NILAKANTA SASTRI, M.A.,
University of Madras

I was for some time closely associated with some of the numerous benefactions which have made the Rajah's name a



THE RAJAH SAHEB'S PALACE AT KANADUKATHAN

household word in South India; and I had many opportunities of observing and admiring his great qualities of industry, clearness of mind, far-sightedness and, most important of all, promptness in well-doing. I have the pleasantest recollections of my association with the Rajah Sahib who in building up a great educational institution conceived policy on large and generous lines and gave his Principal and staff the widest academic and administrative freedom in carrying it out.

I wish him many years of life full of happiness to himself and his family and of service to the country.

MR. H. C. PAPWORTH, M.A., I.E.S., O.B.E.,
Principal, Presidency College, Madras

I greatly appreciate the invitation to write a short tribute on the occasion of the sixtieth birthday of Rajah Sir Annamalai Chettiar of Chettinad, Founder and Pro-Chancellor of Annamalai University. I do so with special pleasure, as it has been my privilege to be a member of Annamalai University from its foundation.

Many colleges in English universities and many universities in America owe their foundation to private benefactors. In some cases these foundations assumed and still retain the name of the benefactor as their title; in other cases, especially in some of the older foundations, the original name has given place to another dedication. In India the Rajah Saheb of Chettinad has the honour of being a pioneer in this munificent work, for it was his bounty placed at the disposal of the State which made possible the foundation of the University which bears his name.

All educationists and all who prize the inestimable benefits of knowledge and sound learning will remember his munificence with gratitude, and offer him their felicitations at the ensuing commemoration of his birthday.

THE RAJAH OF PARLAKIMEDI

It gives me profound pleasure to offer my hearty congratulations to Dr. Rajah Sir Annamalai Chettiar of Chettinad on the occasion of his Sashtipurthi, the completion of a period of life unique with abundant feelings of philanthropy and rare aptitude for the creation of colossal charities like the Annamalai University. May God spare him for many more years with blessings of prosperity and healthy life to do further useful service to our great country INDIA and her people.

THE MAHARAJAH OF PITHAPURAM

I have known my dear friend the Rajah of Chettinad for a very long time. A gentleman of charming manners, he makes his visitors feel quite at home from the outset. It is indeed a pleasure to converse with him. His hospitality is proverbial. Possessing business talents of an extraordinarily high order he works hard day and night. That he should work so assiduously, though endowed by Providence with immense wealth, is truly praiseworthy. This is a quality worth acquiring, as it enables one to spend more money for charitable purposes. His manifold philanthropic activities cover a very wide and varied field. He thus sets a noble example. The most outstanding of his charities is,

of course, the famous Annamalai University. He has been rendering meritorious services to the country. Many are the poor that are benefited by the munificence of this generous Rajah. Most heartily do I congratulate my esteemed friend on this auspicious occasion of his "Shastipurti". May God grant him long life, happiness and prosperity!

KUNWAR SIR JAGADISH PRASAD, K.C.S.I., C.I.E., O.B.E., LL.D.

Dr. Rajah Sir Annamalai Chettiar of Chettinad is one of those rare men in India who have used their riches for the benefit of their fellow men. He is the founder of the only Unitary, Teaching and Residential University in South India, the Annamalai University of Annamalainagar. Other educational, charitable, religious and social institutions have benefited largely from his open-hearted generosity.

It is right and proper that his countrymen should do him honour not only as a munificent benefactor of learning but as setting a worthy example to others of the right use of great wealth.

I join with others in wishing him many more years of beneficent service to his province and country.

H. H. THE RAJAH OF PUDUKOTTAI

On such an occasion as the 61st Birthday of one who has so notably benefited Tamilnad as Rajah Sir Annamalai Chettiar, it gives me great pleasure—as Ruler-to-be of the only Tamil State—to send a message to the Vice-Chancellor of the splendid University which Sir Annamalai's generous munificence brought into being.

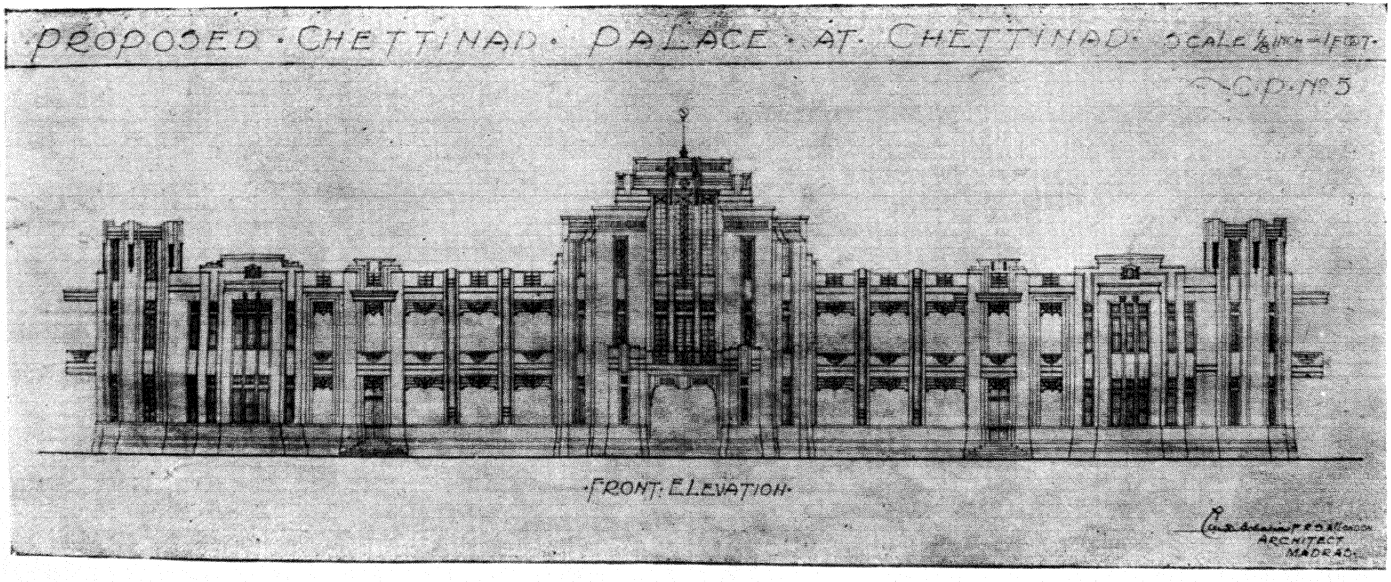
Many a Pudukkottian already has reason to bless the name of the Rajah Saheb and his now famous institution, and doubtless thousands more will do so. So it is in their name as well as my own that I send my sincere wishes for the continued prosperity and happiness both of the Founder and of his foundation.

SIR S. RADHAKRISHNAN, M.A., D.LITT., LL.D., F.B.A.,
Vice-Chancellor, Benares Hindu University

I am glad to know that your Pro-Chancellor the Hon'ble Rajah Sir Annamalai Chettiar, Rajah of Chettinad, will be completing his Sixty years on the 28th of September, 1941. The only University in the country founded by a single individual is yours. And for years it has been doing very valuable work. I have no doubt that the Rajah Saheb will continue to take an affectionate interest in the institution. I wish him many years of useful and happy life.

MIRZA MD. RAFI
Barrister-at-Law, Rangoon

I beg to send from Burma a message of congratulation to Dr. Rajah Sir Annamalai Chettiar on his completing the 60th year of his life. The Rajah's name is remembered with respect in this country where many educational institutions have benefited by his gifts. In India his charities have been simply colossal. The Annamalai University alone, which constitutes a landmark in the history of education in South India, will for ever remain a monument to his kingly generosity, his love of culture, his ardent desire for the spread of education, more enduring than any commemorative present



PROPOSED CHETTINAD PALACE AT CHETTINAD

that we may offer him. We are not all born for great things, but let us not deny ourselves the greatness of appreciating things that are great. May the Rajah live long will be the prayer of all his friends and admirers among whom I count myself, on this happy occasion.

MR. C. RAJAGOPALACHARI, B.A. B.L.,
Ex- Chief Minister, Madras

I appreciate the courtesy that prompted you to send me intimation of the Sashtipurti celebration of Sir Annamalai. My son forwarded me your letter. To the numerous messages and greetings that will surely grace the pages of the Commemoration Volume, let me add a sincere tribute from one of his own generation, whom wide-gaping differences in political creed and practice have not prevented from appreciating the outstanding ability and virtues of the Rajah. But for the unfortunate abnormality of our national status and the struggles imposed on us, who can doubt but Sir Annamalai Chettiar would have been to all of us one of the safest and most successful leaders in our public life? I first met him twenty-two years ago when I was in the fever of the newly-discovered creed of Non-Co-operation and I remember how deeply I was impressed by the manner in which he took my answer to his request for a vote in the Council of State elections. That impression has continued unmodified by anything that has happened since then. In him we can see one who knows by instinct how to move among men of differing views, how to be big and powerful yet preserve untarnished one's courtesy and humility of mind and speech, how to be a gentleman in the difficult sense of the term. I join his other friends in congratulating him on the jubilee day and send up the wish and prayer

that all his virtues may flourish in the younger men that wait to reach his age, round about him in Chettinad.

RAO BAHADUR M. C. RAJAH, M.L.A.

I am glad the Diamond Jubilee of Rajah Sir Annamalai Chettiar is to be celebrated in a worthy manner. Not merely because he is a Rajah or a Knight but because he is a great man who is also a good man. Greatness and goodness do not always go together. There are many great men, men who make a great impression on the public mind, but in whom goodness is not very conspicuous—goodness of heart, goodness of disposition, a desire to do good to others and to find their own happiness in the happiness of others. It is the presence of these moral qualities in a man who has immense means and opportunities of doing good which distinguishes Rajah Sir Annamalai Chettiar from other rich men. It is not enough to own riches: what makes riches a blessing is to know how to use it for the good of others. This knowledge Rajah Sir Annamalai Chettiar possesses in an abundant quantity. I remember how before making an endowment which constitutes the foundation of the Annamalai University he consulted more than one Educationist, Indian and European, and discussed details with them so that the money he invested might prove most beneficial—might bear fruit, tenfold, thirtyfold and a hundredfold. It is this painstaking thoughtfulness, so characteristic of the man, which endears him to all who know him. There is so much self-forgetful dignity about the man that his benefactions seem a natural expression of his inner disposition, and are acceptable as such. We have all heard the saying *"Noblesse oblige."* Nobility has its obligations and responsibilities. This is

applicable not only to mere titular nobility but also to wealth and influence which when properly used make a man truly noble. Rajah Sir Annamalai Chettiar takes his rank with Tata, the founder of the Tata family who earned money through business but used that money for the benefit of his people and his country. In establishing the Annamalai University, Rajah Sir Annamalai Chettiar has given an impetus to the progress of education in Tamil Nad which will continue for endless generations. In this stream of educational progress we of the Depressed Classes will be caught up and carried to new realms of happiness and prosperity for which we shall ever remember Sir Annamalai Chettiar as a real benefactor of our community.

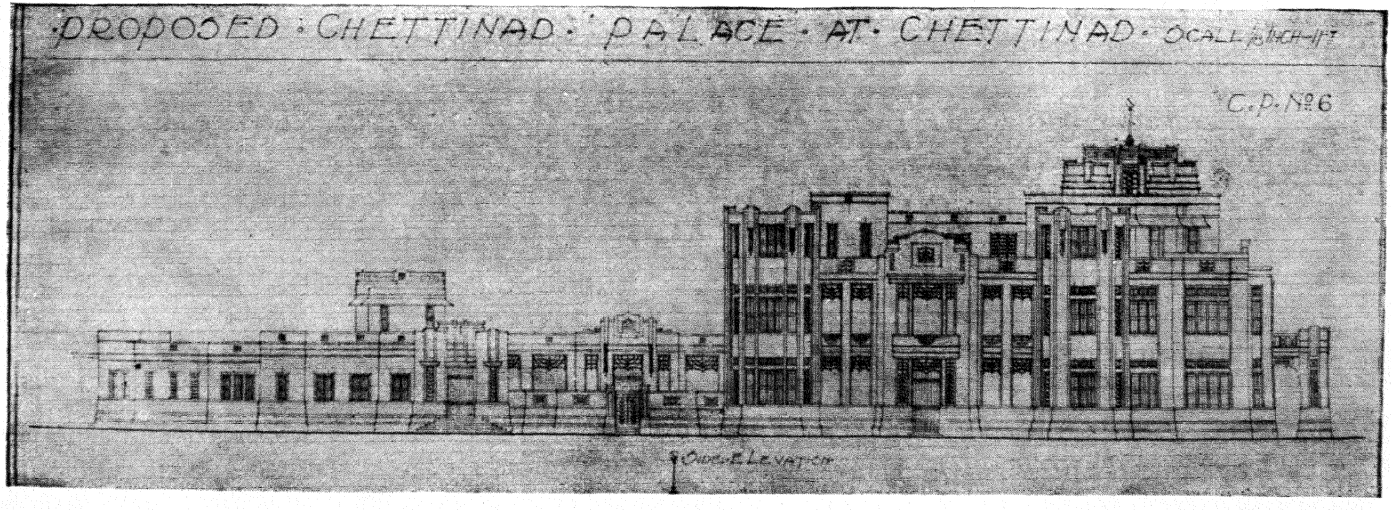
I have compared Sir Annamalai Chettiar to Tata. Perhaps a more appropriate and closer analogy and nearer home is to be found in Pachaiappa the founder of Pachaiappa Charities. This gentleman also earned and amassed a large amount of wealth, and endowed it all for the good of the people as religious benefactions, in the shape of free feeding and temple worship. These benefactions only fed the priests and did not bring any return of lasting good to the people at large. Certain wise men, however, of a later generation realised the comparative fruitfulness and barrenness of these charities, and rescued a portion of the funds for the purpose of educating the people. Thus we have the Pachaiappa Schools in Madras, Conjeevaram, Chidambaram and other places, and among these Pachaiappa's College stands as a prominent monument of his charitable disposition.

But Sir Annamalai Chettiar did not require the wisdom of a later generation to direct his benefactions. He has had not only the heart to give but also the head to direct his

gifts into fruitful channels so that they may irrigate the homes and happiness of thousands of people in the country. The application of charities to Educational Institutions is like introducing electric lighting and electric power into a District.

Sir Annamalai Chettiar's community was always noted for making large benefactions but these had for generations taken the form of building temples and choultries and feeding pilgrims on festival occasions. And it was only in recent times that some of them under the influence of enlightened public opinion added the starting and financing of schools to the list of their benefactions while still the chief item of their charitable dispositions was in the direction of religious endowments. In Sir Annamalai Chettiar's own family some younger members endowed local schools which are conducted in their names. But it was given to Sir Annamalai Chettiar to conceive a larger project which will cover the needs of the whole presidency and benefit generation after generation and become part and parcel of the intellectual moral and spiritual legacy of this presidency. His is not a one-sided endowment intended to benefit one community rather than another. In keeping with the spirit of the times and needs of the country the doors of the Annamalai University are thrown open to students of all communities; and on its staff and council are men belonging to Brahmin, Non-Brahmin Hindu, Christian and Mohammedan communities. This is in keeping with the largeness of heart and the breadth of vision of its founder.

It is not without significance that the University is in a holy city, sacred to the memory of the Panchama Saint Nandanar. To me this circumstance is an augury of the



PROPOSED CHETTINAD PALACE AT CHETTINAD (ANOTHER VIEW)

bright future which awaits my community. Sir Annamalai Chettiar's name will go down in history associated with the moral, social and intellectual progress of the community of which Saint Nandanar was the Prophet and shining star.

SIR SHRI RAM,
New Delhi

A handsome tribute was once paid to Baron Rothschild that needy Jews sometimes prayed to God but more often wrote to the Rothschilds. The tribute will apply better to Rajah Sir Annamalai Chettiar, as no deserving social cause has ever appealed to him in vain. His munificent charities to religious and educational institutions have been instrumental in reviving our great cultural heritage as represented in Sanskrit and Tamil philosophical works, in music and in other arts. He is a true Rajah, one who has endeared himself with the public as the prince of givers. The many beneficent institutions which he has founded in India, Burma and Ceylon are standing monuments of his philanthropy and of his desire to serve his fellow-men. May the Rajah Saheb be spared long to continue his elevating activities, is a prayer which will be echoed by thousands of his countrymen.

SIR C. V. RAMAN, KT., F.R.S., M.A., Ph.D., Hon. D.Sc., Hon. LL.D.,
Nobel Laureate,
Indian Institute of Science, Bangalore

A unique place in the esteem and affection of his countrymen has been established for himself by Dr. Rajah Sir Annamalai Chettiar by his unparalleled services to the cause of learning, culture and religion in Southern India for

over a quarter of a century. Generations yet unborn will have cause to feel grateful to him for the opportunities he has created for the acquisition of the knowledge, alike of the East and of the West, by the youth of Tamilnad. He has saved for posterity the highest traditions of our language and our music and ensured their permanence by transmission from teacher to the taught in the institutions created by his princely benefactions. In the Annamalai University, he has established a centre of learning of a distinctive kind whose achievements have justly been a cause of pride to his countrymen and which will keep his name and fame green for all time. We rejoice that he has reached the sixtieth year of his age in full enjoyment of his health and strength. We pray that he may long be spared to continue his life of generous solicitude for the welfare of the younger generation and for the promotion of the cause of learning and culture in our country!

MR. E. V. RAMASAMI NAICKER,
Erode

I am delighted to learn that the completion of the 60th year of Dr. Rajah Sir Annamalai Chettiar is going to be celebrated shortly.

The Rajah Saheb is a brilliant Gem of Tamil Nad. He is a Karma Veerar. Men of such keen intelligence, untiring energy and profound ability are very rarely found in this land. In his capacity for earning money and in his large-heartedness in utilising it for the welfare of humanity he stands unequalled in this Province.

It is a well-known fact that his charities are many-sided and innumerable and thousands are benefited by them.

In short, this Great Vallal has has given about one crore of rupees for charitable purposes. To-day, there is no equal to him in Southern India in munificence and philanthropy. It is but proper that the completion of the 60th year of this great benefactor should be celebrated in a fitting manner.

On this happy occasion, I have great pleasure in wishing him long life, sound health, great fame and prosperity.

SACHIVOTTAMA SIR C. P. RAMASWAMI AIYAR, K.C.I.E., K.C.S.I., LL.D.,
Dewan of Travancore

It is but appropriate and fitting that the Annamalai University should celebrate the Shashtiabdapurti of its founder, the Hon'ble Rajah Sir Annamalai Chettiar.

The community of which he is the most famous representative has been noted for centuries for its businesslike habits, frugality and simplicity of living and equally noted for the benefactions made by the Nagarathars from out of the wealth that they have amassed by the exercise of these qualities. Until quite recently, the community concentrated on the performance of various functions in South Indian temples; and their zeal for the renovation of temple buildings is a well-known feature. It was left to Rajah Sir Annamalai Chettiar to conceive the idea of starting a teaching and residential University in one of the most sacred and holy spots in South India. To the genius loci has been added the inspiration and stimulus of men like the Rt. Hon'ble V. S. Srinivasa Sastri who was, for some time, the Vice-Chancellor and who has been succeeded by my old friend Sir K. V. Reddy. The University can do a great deal not only in the matter of general studies but for maintaining and cherishing those great and ancient traditions of which

South India is so proud, namely, those of Sanskritic lore and Dravidian scholarship. As a nucleus of Sanskrit and Tamil learning and scholarship, the Annamalai University has a definite rôle to fill.

I join the University in wishing Rajah Sir Annamalai Chettiar many more years of beneficent activity.

THE HON'BLE SIR A. RAMASWAMI MUDALIAR,
Commerce Member, Government of India

I am glad to learn that the public of the Madras Presidency have decided to celebrate the *Shashtiabdhapurthi* the occasion of completing the sixtieth year by Dr. Rajah Sir Annamalai Chettiar—in a suitable manner and that, in particular, the Annamalai University is bringing out a Commemoration Volume which will be presented to the Rajah Saheb. I have had the privilege of knowing Sir Annamalai Chettiar for nearly a quarter of a century and of being fairly intimately acquainted with his numerous activities in the field of politics, education and religion. No one has done more in the Province than the Rajah in finding funds for the promotion of higher education, religious education and the fine arts. Temples, schools, colleges and other charitable institutions have equally benefited by his large hearted donations. A side of his activities which may not have attracted equally prominent attention is the help he has given to the promotion of the cause of women. The main Ladies' Club in Madras and several similar institutions in the mofussil owe not a little to his magnificent donations. These princely charities of Dr. Rajah Sir Annamalai Chettiar will be a standing monument to the nobility, characteristic of his family and of himself in particular. It is needless to add that not by his charities alone but by his innate gentlemanliness

THE RAJAH SAHEB'S REST HOUSE AT THE CHETTINAD RAILWAY STATION

and sweetness of disposition that Rajah Sir Annamalai has endeared himself to every one who has had the privilege of knowing him. May the blessings of Providence be vouchsafed unto him and may he be spared for many decades to continue his great work and to be an asset to the community!

THE RAJAH OF RAMNAD

I am glad to know that you are proposing through an influential Committee celebrating the completion by Dr. Rajah Sir Annamalai Chettiar of Chettinad, of his sixtieth year on the 28th of September, 1941 in a fitting manner.

I thank you very much for the honour you have done in asking me to send a message of appreciation of his noble acts of piety, charity and great munificence, on this happy occasion. I am sure one more competent than myself will be better able to pay tribute to his various acts of charity and benevolence which are wide and varied.

His one ambition in life seems to be to strive, save and serve for the benefit of his fellowmen which is well exemplified by the charitable and educational institutions of great help and usefulness to humanity. His benefactions are varied and many but the highest monument of his beneficent works is the founding, equipping and endowing of the great and unique Residential University at Annamalainagar, more fittingly named after him.

I am sure his great name will ever be cherished with esteem and gratitude by posterity.

May God bless him with a further long life of continued prosperity to be of still greater service to humanity.

DEWAN BAHADUR C. S. RATNASABAPATHI MUDALIAR,

It is indeed a kindly thought that should have prompted the University authorities to celebrate the Founder's Day, that will recall to the memory of one and all, the munificent benefaction of my esteemed friend and our illustrious countryman, Rajah Sir Annamalai Chettiar. And this year's function has a special significance in that it happens to be his 61st birthday Sashtiabdapurti year. The Rajah belongs to a rare order typifying in himself, the aristocracy of Brain, Heart and Bullion in happy harmony. True to the dictum, *noblesse oblige,* he has taken upon himself the sovereign task of founding a University by his solitary and magnificent efforts—a University in the true Oriental style, intended to foster our Art and Culture and our own Mother tongue, Tamil studies. It truly recaptures the genius and splendour of our former times, and stands in grandeur as the seat of modern Indian renaissance, even as Nalanda and Taxila of ancient days.

Situated at Chidambaram, the holy spot where Lord Nataraja with his Divine dance attunes the Universe to spiritual height, the Annamalai University radiates a sublime charm partaking of His all-pervasive spiritual grace. Its atmosphere is permeated by Sath, Chit, Anand, brightening the body and mind and sweetening the soul.

The career of the Founder is a chapter not only in India's commercial and industrial history but also in the educational history thereof. May the university flourish in the chosen path of its Founder, and may the Rajah Saheb and his successors live for long, long years brightening the pages of his University and those of India.

MR. C. R. REDDY, M.A. (CANTAB.), HON. D.LITT., M.L.C.,
Vice-Chancellor, Andhra University, Waltair

I associate myself most heartily with the movement to celebrate the Shashtipurti of Rajah Sir Annamalai Chetti in a befitting manner. The Rajah Saheb might be justly regarded as a national asset. No merchant or industrialist of South India has spent such large amounts on public benefactions. For a parallel to his philanthropy we have to go to Bombay. He started by making benefactions in the orthodox traditional style of the Hindus. Some of the most expensive and elaborate improvements of the famous Chidambaram and other temples are to be credited to his religious spirit. There are choultries or Dharmasalas built for the accommodation and comfort of travellers which bespeak his sense of humanity. Every project for public good organised in South India has found in him an exemplary contributor. But by far his greatest achievement is the University which very rightly bears his name. Contemporary India and posterity will note how this is the first University founded by private benefaction and how the entire extent of the benefaction rested on the limitless generosity of one single individual, the Rajah Saheb of Chettinad. There is no parallel to this, as far as my knowledge goes, anywhere in the world excepting one, the Rockfeller University of Chicago, founded and maintained by the monetary contributions of a single family. Though the Annamalai University cannot be regarded either from the point of view of the courses or standards organised to be anywhere near the world famous institution in Chicago, still it is the best that has ever been done by an individual in India and is notable furthermore as an example to other millionaires.

It is not merely by these outward achievements that the Rajah Saheb has made himself famous and endeared, but

by his personality. I had the pleasure and privilege of being his guest more than once. No host could have shown more personal attention to the comforts of a guest than the Rajah Saheb whose custom, in accordance with the best traditions of India, has always been to attend personally, though he could easily have appointed deputies. The lavishness of Chettinad hospitality is well-known and is not inferior to that for which some Indian States have become famous. The Rajah Saheb, in spite of his wealth and high dignity and position, is simple in his life and dress; modest in his manner and most considerate in his dealings with others. He makes no distinction between the different linguistic divisions in the Presidency. He has Andhra affiliations as the owner of an extensive Estate in Chittoor District. His possessions in Burma and interests in Ceylon and Indo-China mark him out not only as a national but as an inter-national figure. And wherever he has property, he has also exercised philanthropy.

Rajah Sir Annamalai Chetti ranks among the worthiest in the country. Most successful as a maker of money, he has been still more noteworthy as a spender thereof on right good causes and progressive projects.

If the service of the country, if the advancement of its material and moral prosperity are amongst the objectives of a University, then the Annamalai University cannot have a better example before it or a nobler inspirer than its own illustrious Founder.

DEWAN BAHADUR S. E. RUNGANADHAN, M.A.,
Adviser to The Secretary of State for India

Heartiest congratulations Rajah Sahib's 61st Birthday. His wise benefactions have earned him India's homage

THE RAJAH SAHEB'S BUNGALOW AT OOTACAMUND

and gratitude. May his University flourish and promote country's unity and progress. God bless him.

THE RIGHT HON. SIR TEJ BAHADUR SAPRU, P.C., K.C.S.I., M.A., LL.D.

I am greatly obliged to you for your letter of the 5th of August. I note with pleasure that Dr. Rajah Sir Annamalai Chettiar of Chettinad, the Founder Pro-Chancellor of the Annamalai University, will soon be completing his 60th year. I also note with pleasure that the Annamalai University has decided to celebrate the event in a fitting manner.

On this occasion I desire to convey to the Rajah Saheb my heartiest congratulations and best wishes for a long life. The Rajah Saheb's name is an honoured name throughout India as a munificent benefactor of education and culture. If it is a great thing to earn so much wealth, it is a still greater thing to make such good use of wealth. The younger generation in your presidency has every reason to feel grateful to him for what he has done for them, but more than that the entire country has reason to be grateful to him for being one of the very limited number of our wealthy men, who have set such fine example to others. Long after the names of those, who are so much in the public eye at present, have been forgotten the names of men like Rajah Sir Annamalai Chettiar, Jamshedji Tata, Tarak Nath Palit, Rash Behary Ghose and some others, will continue to be remembered with affection and gratitude by succeeding generations of their countrymen and will serve as beacon lights on our onward journey. I, therefore, send him through you my best congratulations and wishes for a long life and I could also ask you, as Vice-Chancellor, to convey to the University, of which he is the founder, my best

wishes for its success and continued service to the cause of knowledge and culture.

MRS. SAROJINI NAIDU,
Hyderabad, Deccan

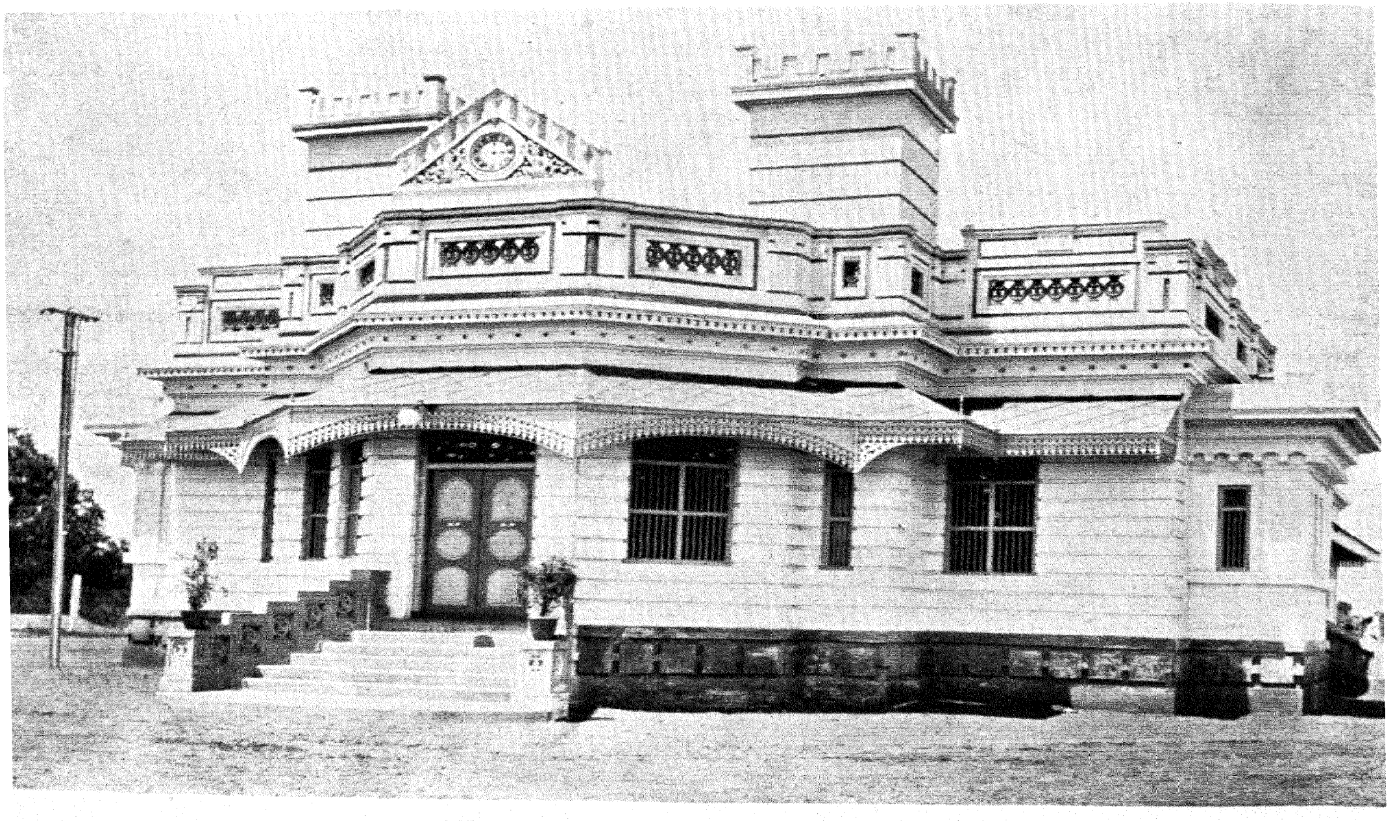
In adding my felicitations to Rajah Sir Annamalai Chettiar on his 61st birthday, I am happy to have this opportunity of expressing my appreciation of his many and far-reaching benefactions.

To the long family record, almost an hundred years old, of pious charities in their chosen city of Chidambaram, Sir Annamalai Chettiar has added a rich chapter by his personal and princely gifts to all fine causes—to promote and foster ancient and modern learning, to encourage literature, music, art and sport, to further movements for social service and social progress, to establish inter-provincial and international friendship. The Annamalai University is in itself an enduring tribute to his splendid generosity.

Not often in our generation has great individual wealth like his been devoted to public welfare and progress with a philanthropy so discriminating in its quality and so catholic in its range.

MR. S. SATYAMURTI, B.A., B.L., M.L.A.

I have had the pleasure and the privilege of knowing him intimately for many years now. The highest tribute, I can pay to him, is that he is every inch a gentleman. I have not met a more polished, courteous, or thoughtful gentleman. To have renovated the renowned temple of Sri Nata-



AERODROME BUILDING, CHETTINAD

raja, is by itself an imperishable monument to the Rajah's distinguished family.

The Rajah Sahib has done still a greater service to the country by founding the Annamalai University. From inside knowledge, I know his paternal care and solicitude for the welfare and the progress of the Institution.

His recent contribution towards the development of Tamil Music may, I hope, mark a turning point in the history of Tamil Culture. People earn a good deal, but give very little. But the Rajah Sahib has given over a crore of Rupees for charities. May God Sri Nataraja bless him. May he and his family live long, prosperous, and happy lives and serve the cause of the country.

THE HON BLE D. S. SENANAYAKA,
Minister of Agriculture and Lands, Ceylon Government

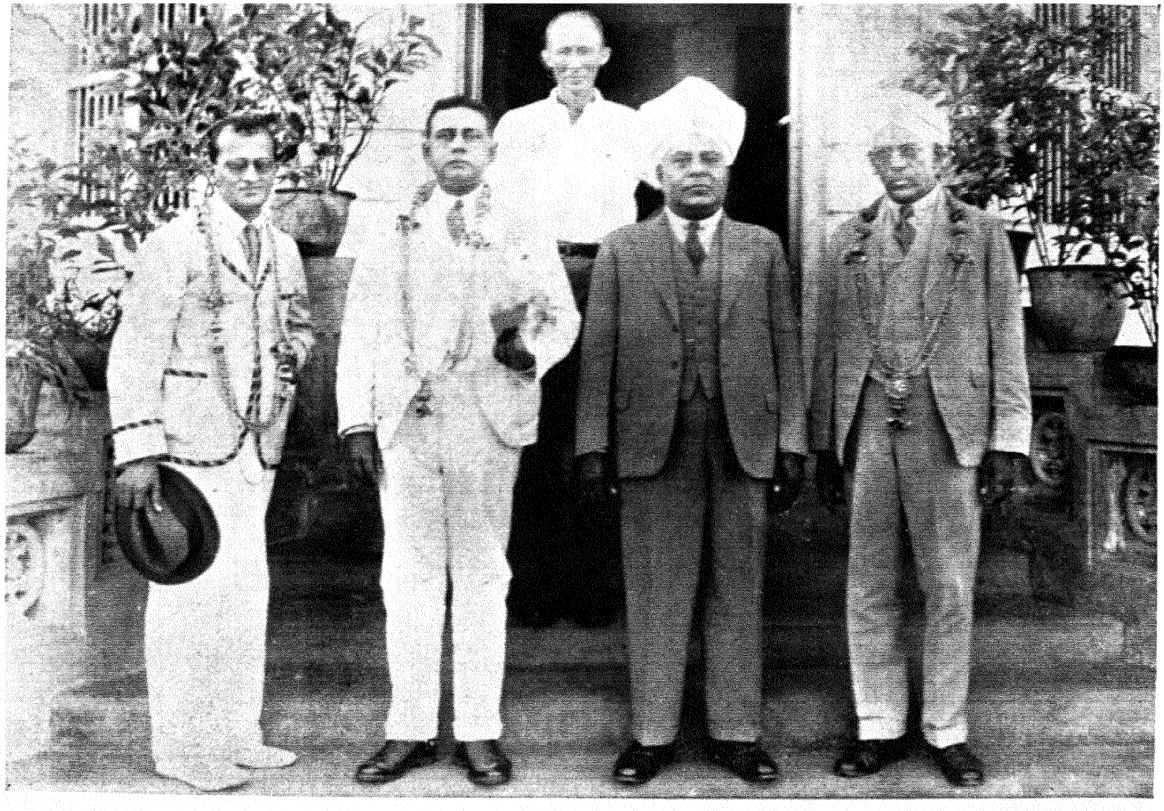
I am obliged to Sir K. V. Reddi and his Committee for giving me the opportunity of paying my own humble tribute to a personality whose radiating influence has cheered many thousands of human beings in South India and Ceylon. My wife and I have vivid recollections of the lavishness of the hospitality of the Rajah of Chettinad during our brief sojourn in his city. That hospitality, shown to strangers within the gates, is but the gleam of one facet of a gem whose lustre shines in and illumines the darkest recesses of a structure of society which, alas, is still not without its dark places. We in poor Ceylon gasp in wonderment at the fabulous tales of untold wealth among our neighbours which at times reach our ears: we thrill with a sense of indefinable pleasure when we hear that a few, at least, of the possessors of that wealth are not content unless they disburse that

wealth for the common good. The founding, equipping, and endowing of an entire University by one single individual seems a miracle to us in this country who can scarcely find a benefactor to endow one single Chair. But we take some comfort from the thought that the inspiration of such an achievement cannot altogether be lost, and that though we have no Annamalai Chettiars in our midst the emulation of the Rajah Sahib's benefactions can still be attempted on a smaller scale. I have heard it said that one who lives to his sixtieth year is entitled to be called a *purna ayus*, one who has lived a full life. It is my prayer, and I know it is the prayer of all in Ceylon who are acquainted even in the slightest degree with the person or the achievements of Rajah Sir Annamalai Chettiar of Chettinad, that he will be spared for many, many more years to come so that his life may be fuller and richer for the good of his own country and the world in general.

MR. P. SESHADRI, M.A., M.B.E.,

Principal, Government College, Ajmer and President, All-India Federation of Educational Associations

May I join in the felicitations which will be conveyed to the Hon. Rajah Sir Annamalai Chettiar on the auspicious occasion of his completing sixty years ? His magnificent endowment for the creation of the Annamalai University is one which will make his name immortal in the history of Indian education. There have undoubtedly been many benefactors of education in various parts of the world, but the example of one whose princely generosity is responsible for the creation of a whole University is unique. The numerous well-wishers of the Rajah can do no better



THE RAJAH SAHEB OF CHETTINAD AT THE OPENING OF THE CHETTINAD AERODROME

on this occasion, than to hope that the Annamalai University will soon take its rank among the best Universities of India and prove worthy of the great generosity of its founder.

SIR SHAFAAT AHMAD KHAN

I am delighted to hear that preparations are being made at Annamalainagar to commemorate the noble services of the Rajah Saheb of Chettinad. His love of learning has found perfect expression in the Annamalai University. It is a growing and expanding organism, pulsating with activity, and is a living definition of the intrinsic greatness of the Rajah Saheb's heart and mind. As an inconspicuous Professor of Madras University, I had the privilege of making his acquaintance in Madras in 1920-21 and I have a vivid recollection of the grace and charm which his conversation radiated. Our paths diverged in 1921 and I do not think we met again. But I have kept in touch with the currents of events in Madras and I find that during the last twenty years, the Rajah Saheb has developed a personality and organised enterprises of which, I must confess, I had little expectation at the time I met him in Madras. He is now one of the foremost philanthropists of India, and his wide sympathies, practical work for the social and economic uplift and absolute sincerity have spread his name and reputation through the whole of Southern India. He is a model of what an Indian Merchant Prince ought to be. Bacon says that the nobler a man is, the greater the objects of passion he has. The objects of the Rajah Saheb's passions are many, but the Annamalai University is naturally the first object of his affection. He has put the impress of his personality on this hallowed institution, and I have no doubt that it perpetuates the work of its founder in a manner that

is in perfect conformity with the spirit of its Founder. I wish India had more Chettinads at the present day, so that the humblest citizen may have an opportunity of nourishing himself on the best and noblest in our Indian culture."

HIS HOLINESS SRI-LA-SRI SHANMUGA DESIKA GNANASAMBANDA PANDARASANNADHI AVL.

Adhinakarthar of Dharmapuram Adhinam, Dharmapuram, Mayavaram.

May Lord Chockkanatha shower His choicest blessings on you, grant you long life, prosperity, peace and everlasting happiness.

Words fail to express your manysided activities, charitable and religious for the benefit of humanity especially to the South Indians. As an ardent devotee of Lord Nataraja, you deserve the well-deserved admiration of all worshippers and devotees of Lord Siva by your munificent contribution to the repairs of His Shrines on the mundane globe at Chidambaram and Karur, and by your large-heartedness in having established a residential University in the vicinity of His Shrine at Chidambaram accessible to students of all classes, regardless of caste, creed, religion and party politics. As pious as the Nainmars, you have in every possible way striven and are still striving to enrich and enliven the heritage of the South Indians—Tamil Literature and South Indian Music by your unequalled generosity by creating specific endowments for this purpose. Your liberal charity with a unique broad outlook, with a humanitarian object, devoid of all ostentation with no tinge of self in it, and non-fanatic, will hand down to posterity your name and fame as long as life exists in the world. You have by your unstinted help to all deserving of help irrespective of any other con-

dition social, religious, political or territorial set a living example to others by giving a lead to show how on this earth one possessing wealth and influence and power can best serve the public, especially the poor.

May the Almighty bless you and guide you in your future career to continue the selfless task of sacrifice you have undertaken.

SIR JAMES SIMPSON

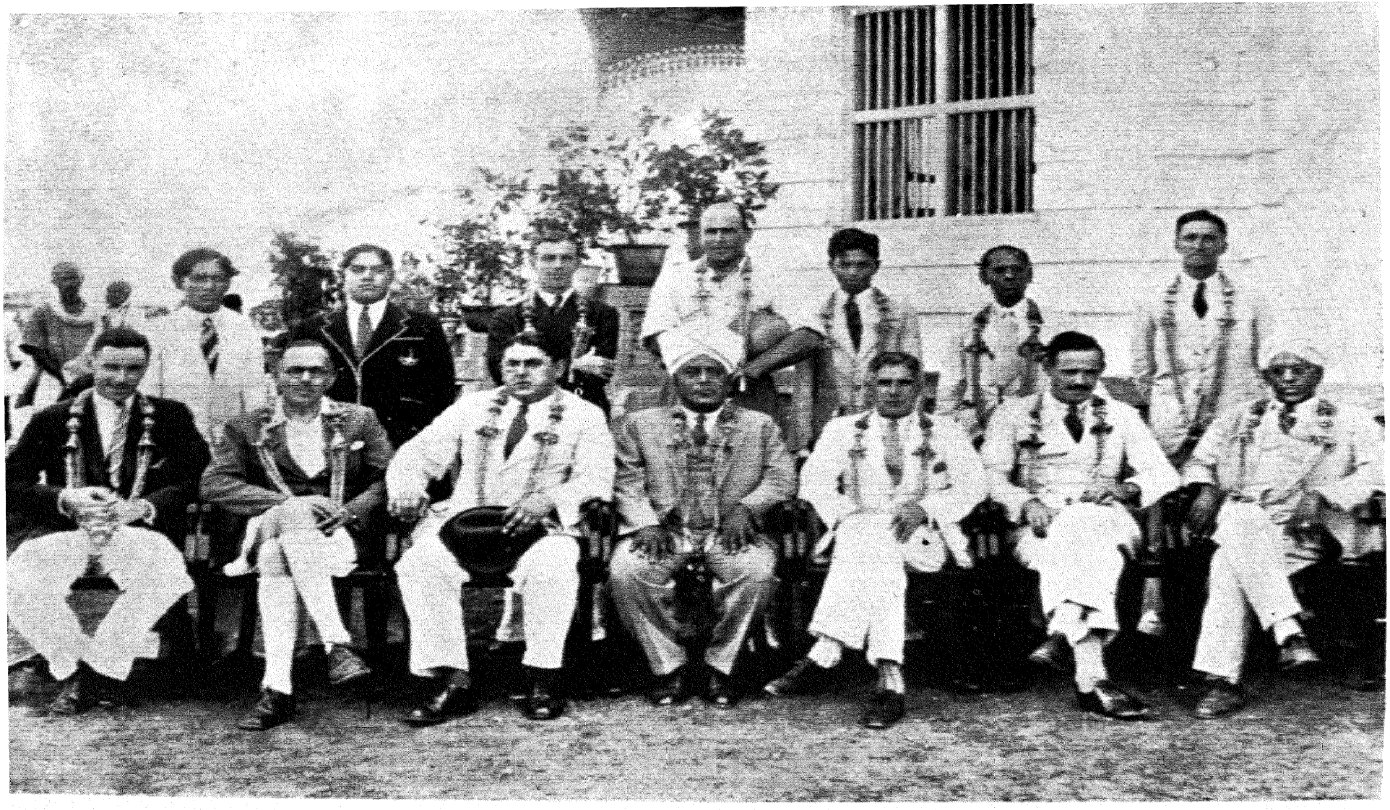
Sir James and Lady Simpson join heartily in the Commemoration of the Sixtieth Birthday of the Rajah of Chettinad. They recall very affectionately the many happy visits and long years of friendship and association with the Rajah Saheb and his family.

What an achievement for sixty summers and what a remarkable contribution the Rajah has made to the Cultural, Political, Economic and Social life of India! Long may he be spared further to adorn his chosen motto "Strive, Save and Serve."

SIR P. S. SIVASWAMY AIYER, K.C.S.I., C.I.E., B.A., B.L., LL.D.

I am very glad to hear that the Annamalai University has resolved to celebrate the 61st birth-day of Rajah Sir Annamalai Chettiar, the founder and Pro-Chancellor of the University, and has decided to present to him a commemoration volume. Rajah Sir Annamalai Chettiar comes from a family of Nagarathar Chettis well-known in South-

ern India for its numerous charities. I knew his elder brother Dewan Bahadur S. Rm. Ramaswami Chettiar and greatly appreciated the interest he took in the administration of Chidambaram Municipality and the Taluk Board, and the health, education and welfare of the Chidambaram town. The leaders of the Nagarathar community have always been noted for their charities, but they were generally of a more or less religious character: they have taken great interest in the repair, renovation and beautification of the great Siva temples in Southern India, in the construction of choultries for the feeding of the poor and in the foundation of religious Pathasalas and other forms of charities sanctioned by Hindu usage. The Rajah's family has set an example of a more enlightened form of public benefactions in accord with modern ideas and present-day needs. Rajah Sir Annamalai Chettiar is the illustrious representative of his family. It is not possible to enumerate the many charities which he has founded or supported. The Annamalai University is the greatest monument of his enlightened munificence. He has encouraged western as well as Oriental learning and culture, secular as well as religious learning, the fine arts as well as literature and science. The administration of his charities has not been marked by any narrow-minded communalism such as has become the bane of South Indian life, and will, it is hoped, continue to be free from any such influences. The numerous charities of the Rajah have earned for him the undying gratitude of Southern India. I offer him my most cordial felicitations on the auspicious occasion of his sixtieth birthday and pray that he may be blessed with health and strength to guide the Annamalai University for many years to come with his broad-minded outlook and generosity.



A GROUP PHOTO AT THE CHETTINAD AERODROME

THE RT. HON'BLE V. S. SRINIVASA SASTRI, P.C., C.H., LL.D., M.L.C.

I am happy to be allowed to congratulate the Rajah Sahib of Chettinad on his sixty-first birthday and to wish him many more years of prosperity and honour. Like hundreds of other people I have received favours and kindnesses from him without number. These I have acknowledged elsewhere; it is not possible to acknowledge them adequately. More than these is the affection and personal attachment that prompt them. What I have done or can ever do to deserve it all has puzzled me for a long time. It was in the old Council hall at Delhi that we met first. The friendship that began then has continued without a break, the years have strengthened and deepened it. We have had few trials and tasks in common, we have not been engaged together in literary or business pursuits, we have not journeyed together in India and abroad or studied men and measures out of the same books. What has drawn and held us each to the other? I cannot flatter myself that I am capable of doing him any service, material or other. The flow of benefits between us, copious and uninterrupted, has ever been in one direction and one direction only. In the nature of things it cannot be otherwise. Am I wrong then in regarding the bond between us as an example of that "subtle inner force" which the Sanskrit poet postulates as the essence of love?

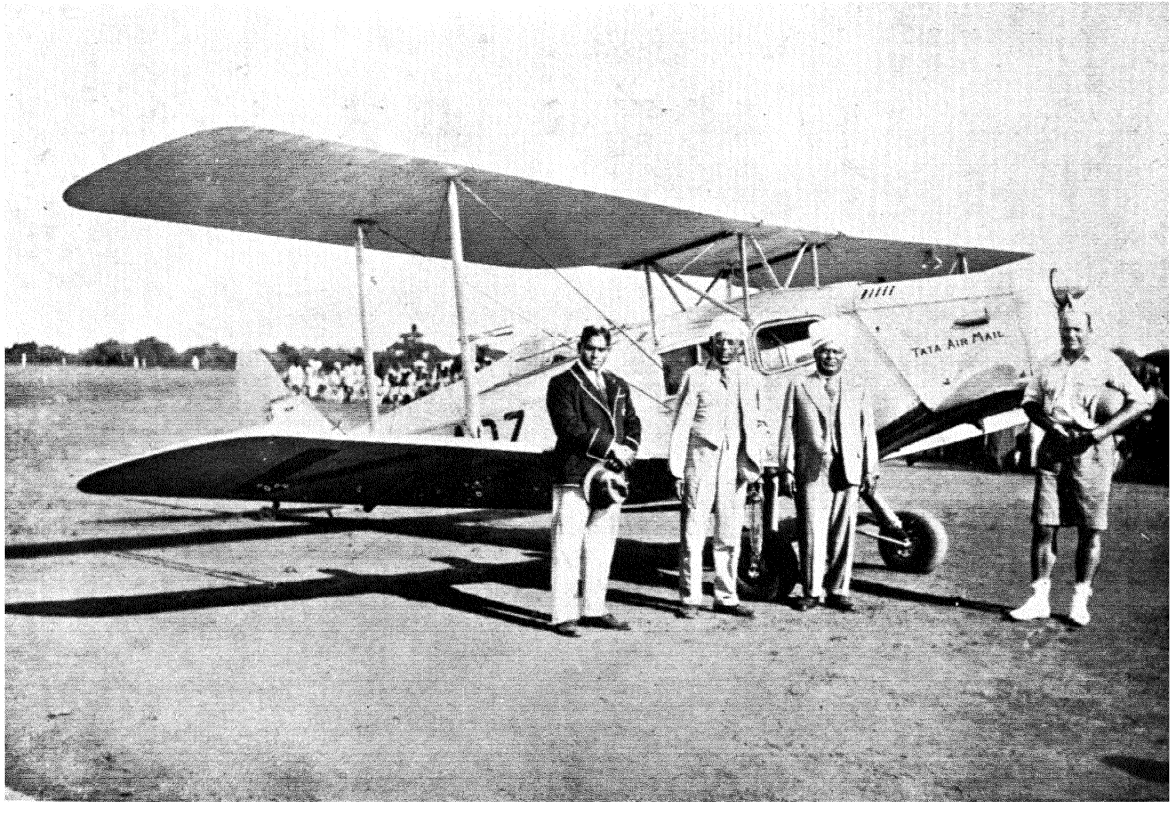
Annamalai University comes late in the story. I was sixty-six when the Rajah entrusted it to my care. For five years he gave me his confidence and support in the fullest measure. Twice during the strike of students the institution was in serious peril, and as a change of policy seemed to me scarcely proper, I implored him to relieve me and try

another management. His practical wisdom was truer than mine. He left me to weather the storm as I might; and though I have no reason to boast, the result vindicated his patience and his trust in me. I do not wish to live a day after I have ceased to be thankful for such a blessing.

Of the Rajah's many-sided career, I have no detailed knowledge. I shall not presume to portray his character or canvass the qualities that have enabled him to conquer difficulties and achieve success. Two points, however, which may seem small to the superficial observer, I venture to pick out for special mention. A teacher of youth cannot do less in holding up to their admiration and imitation the life of a patron of youth. Though he can employ agents and secretaries and relieve himself of anxiety and hard work, the Rajah rises early and goes to bed late and fills the intervening hours with serious business, carefully allotted and planned. To idle pastimes and strenuous games on the field, he is a complete stranger. Still he seldom misses an engagement or neglects a social duty, and I have always envied the equability of temper which enables him to greet all persons, high or low, friendly or unfriendly, with the same engaging smile.

MR. K. SRINIVASAN,
Managing Editor, "The Hindu", Madras

It is with great pleasure that I offer my felicitations to the Hon'ble Rajah Sir Annamalai Chettiar on the completion of his 60 years. I wish him long life, health and continued prosperity.



THE RAJAH SAHEB AT THE CHETTINAD AERODROME

DIWAN BAHADUR R. SRINIVASAN, M.L.C.,
President, The Madras Provincial Scheduled Castes Federation

Dr. Rajah Sir Annamalai Chettiar of Chettinad has been spending a large sum of money for several years on educational institutions in India and abroad, women's cause, religious charities, renovations and maintenance of temples, particularly Sri Natarajà Temple at Chidambaram where Saint Nanda's shrine remains most sacred.

Rajah Sir Annamalai Chettiar is a generous hearted gentleman, a great benefactor and a sincere friend of his race.

MR. R. M. STATHAM, M.A., I.E.S., C.I.E.,
Director of Public Instruction, Madras.

It gives me the greatest pleasure to send a message for the Commemoration Volume to be presented to Rajah Sir Annamalai Chettiar of Chettinad on the occasion of his 61st birthday. I have been connected with Education in this Presidency for over 28 years and I am therefore fully able to appreciate the immense contribution which the Rajah Sahib has made to the furtherance of Education in all its branches. It would be difficult to find another public man who has given so liberally and willingly not only for the establishment and improvement of many types of educational institutions but for all forms of deserving charities. His gift of 20 lakhs of rupees for the founding of a Unitary and Residential University at Chidambaram has been a unique feature of the development of higher education in this Province. In thus remembering Rajah Sir Annamalai Chettiar's wide generosity I am sure that he would like us also to remember that for nearly one hundred

years the members of his family have set aside large sums of money for religious and educational purposes in and around Chidambaram. I can only conclude by expressing the most sincere wish that the celebration which we are now commemorating may be most happy and successful and that Rajah Sir Annamalai Chettiar may long continue to extend his wise and generous patronage to the work of advancing Education in this Province.

RAJAKARYAPRAVINA MR. N. S. SUBBA RAO, M.A., (CANTAB), BAR-AT-LAW

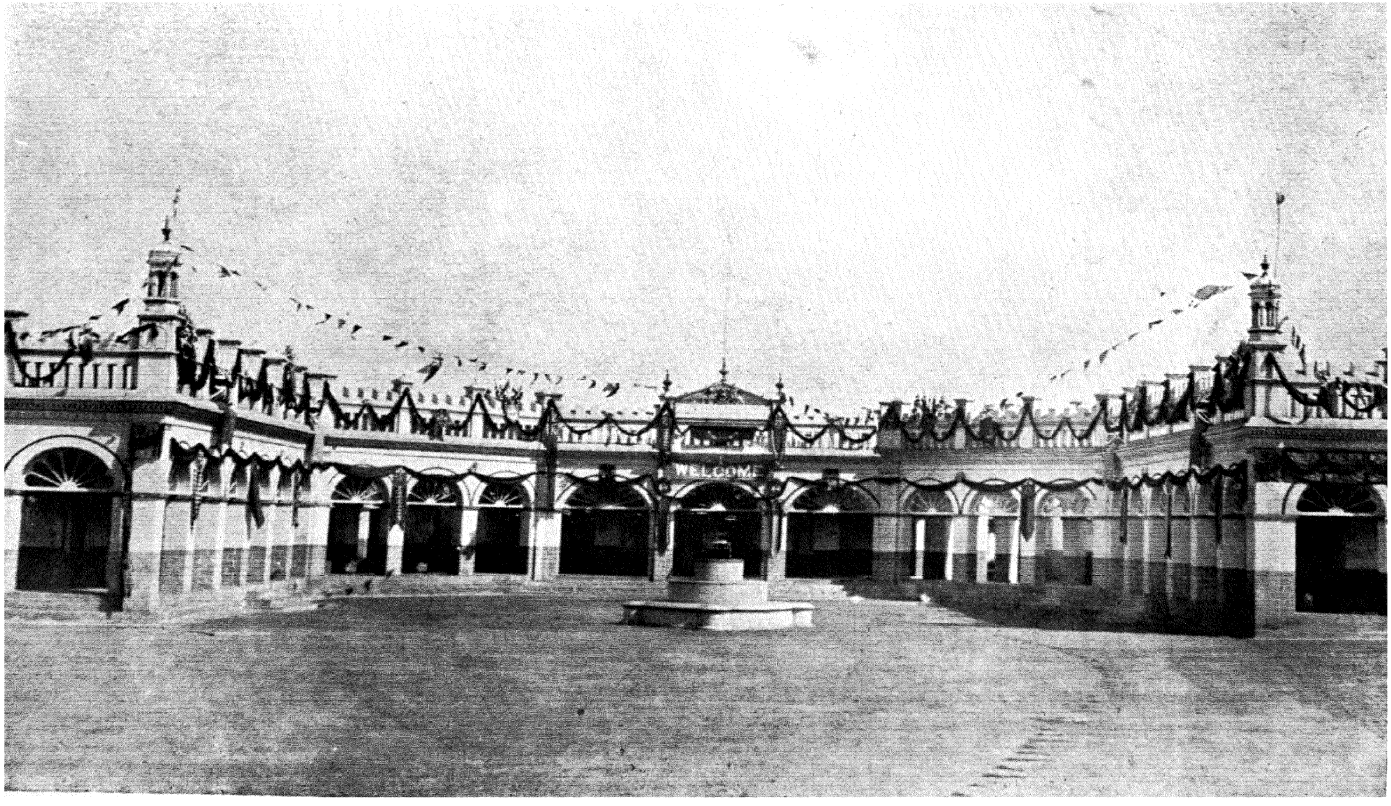
Vice-Chancellor, Mysore University.

It is a great pleasure to add my own tribute to those of others to the Rajah Sir Annamalai Chettiar of Chettinad on the happy occasion of the completion of his sixtieth year. It was my privilege to take part in the celebrations of the Founder's Day in 1937, and I took advantage of the occasion to pay my tribute to the munificence of the Rajah in the cause of higher education in South India. His munificence recalls the remarkable manner in which the millionaires of America, J. P. Morgan and Rockfeller, have advanced the cause of higher education and research in America. It is very much to be hoped that the great example of the Rajah will find numerous and equally generous imitators.

KULAPATI P. A. SUBRAMANIA IYER, M.A., L.T.,

Triplicane, Madras

On this blessed day, the 61st Birthday of the Hon'ble Rajah Sir Annamalai Chettiar, my thoughts go back to a period of time, over twenty years ago, when he conceived the happy idea of founding a Collegiate Institution at



LADY PENTLAND WOMEN AND CHILDREN HOSPITAL, CHETTINAD

Chidambaram and naming it after his mother of blessed memory. The Sri Meenakshi College, which has since bloomed into Annamalai University at Annamalainagar, then came into being.

I am proud at the recollection that I was present with the Rajah to meet the University Commission headed by Sir Ramunni Menon that came to Chidambaram to recommend the affiliation of the Sri Meenakshi College to the Madras University.

Prior to this time and later also, we used to have long conversations about this institution—the selection of the site, the choice of the staff, the equipment of the Library, Laboratories etc. etc. When, some years later, he met me one evening and said that the preparations for the foundation of The Annamalai University had been completed and that it would soon commence to function, nobody was happier than I.

"Mighty of heart, mighty of mind, Magnanimous—to be this is indeed to be great in life, to become this increasingly is indeed to advance in life—in life itself, not in the trappings of it," said Ruskin years ago. Who that knows the Rajah and has watched his benefactions of various kinds, and, particularly, the rise and growth of the Annamalai University would not say that this description applies very aptly to him? All his life the Rajah has been 'scorning delights and living laborious days,' living on almost ascetic fare, sleeping for not more than four to five hours a day (he once told me this), and with an intelligence, keen and unsleeping, keeping watch over every little detail of the business of his vast estates in and beyond India, practising, with meticulous care, punctuality, method, preciseness, economy of time and speech, to the wonderment, delight and admira-

tion of all who have anything to do with him. May we not pray that soon he may be enabled to extend his benefactions by the addition to the University of a first-rate Technological Institute equipped on up-to-date lines?

'To strive, to save, to serve'—This has been his personal motto. How much has he not striven? And how much has he not saved and given away to others for their benefit!! In thus saving and giving away, he has been walking in the foot-steps of the *Upanishadic Rishis* of old whose maxims, as quoted in Taittariya Upanishad, were:

(a) *Annam Bahukurveeta.*
Do multiply food.

(b) *Nakanchana Vasathou.....Pratyachaksheeta.*
Tasmat.....Bahvannam Prapnuyat.

Do not deny shelter to any one that seeks it. Therefore acquire abundance of food.

And all the commentators on the above say that this gathering of *Annam* is for the purpose of giving to those who are in need.

All honour to the Rajah who alike by the manner of his personal life and by his rich benefactions is setting a bright example to all mankind!

Subhamastu.

DEWAN BAHADUR K. SUNDARAM CHETTIAR,
Retired High Court Judge

Let me avail myself of the privilege of paying a tribute of praise in the form of a message to Dr. Rajah Sir Annamalai Chettiar of Chettinad, at the celebration of a memora-

ble event in his life-time, viz., his completion of his sixtieth year. Born in a very respectable aristocratic family, with a golden spoon in his mouth, his career in life has been unique in its glory. Endowed with a heritage of wealth, he has worked himself up to the pinnacle of name and fame, by means of his remarkable skill in the business of commerce and banking, and being equipped with a deep insight, a spirit of adventure, sound common sense, admirable tact, and suavity of manners. Having been blessed by the Goddess of Wealth in the wide vista of his undertakings, his generous heart inspired him to lavish his riches in numerous kinds of charities, which would make his name to be treasured up in the memory of posterity, as that of a great benefactor. His philanthropy has come out with shining lustre, from out of the crucible of action. While the possession of even large surplus wealth, is no prompter for the utilisation of any portion of it for the good of others, which is a sorry spectacle in the case of many, is it not a matter for admiration that the Rajah of Chettinad has not merely stopped with generous intentions, but has given them concrete shape with a spectacular effect? Many and varied are his benefactions, which can be rightly characterized as princely.

In the field of education, his monumental benefaction is the founding of the famous Annamalai University. What was a barren tract of land, has now become Annamalainagar, a splendid colony with beautiful buildings, spacious halls, hostels, residential quarters, play-grounds, libraries, and laboratories. His religious charities reached their climax in the recent renovation of Sri Tillai Govindaraja temple at Chidambaram. His steadfast loyalty to the Crown has been strikingly manifested in his generous contributions and in several other ways.

Many humanitarian causes in South India and elsewhere, have had his generous response. A patron of music, his sympathy for its encouragement and development is laudable. It is no wonder, that he has been the recipient of high and rare honours in the world. Above all, he has earned the deep gratitude of humanity as also the benign Grace of the Almighty.

May God shower His choicest blessings on him and may he live long with sound health and happiness.

SIR ALEXANDER TOTTENHAM, C.I.E.,
Administrator, Pudukottai State

It is a pleasure to me to send a message on the occasion of the Sashtiabdapurti of Rajah Sir Annamalai Chettiar. I have had the pleasure of his friendship for about 30 years. He and his brother were, I think, pioneers amongst the Nattukkottai Chettiars in making large gifts to promote education, medical relief and similar objects. Previously, the Nattukottai Chettiars confined themselves mainly I think to "tiruppani" and constructing large uranis.

Perhaps the most striking example of his liberality is the foundation of the Annamalai University. It is a striking monument of his generosity. In addition he has made large donations to a number of Colleges and Schools in Madras Presidency, in Burma and even in Ceylon; as well as to institutions for the study of the Vedas and Sastras. He has also been a liberal patron of Indian music.

He has given liberal donations to various Ladies' Clubs and Associations and Hospitals intended for the welfare of women.

THE RAJAH SAHEB OF CHETTINAD

At the same time, he has spent large sums on the traditional objects of Nattukottai Chetty munificence.

I think he must be easily the premier philanthropist of South India.

I am glad to associate myself with the congratulations to him on this occasion, and wish him long life and prosperity, and his University every success.

SIR MAHOMED USMAN, K.C.I.E., B.A., M.L.C.,
Vice-Chancellor, University of Madras

I congratulate the Annamalai University on celebrating the completion of the sixtieth year of its distinguished founder, Rajah Sir Annamalai Chettiar of Chettinad, who is the Pro-Chancellor of the University. His large-hearted charities to various educational, religious and other institutions in this Presidency are well-known. By these generous gifts he has earned the gratitude, esteem and affection of the people of this Presidency. The most outstanding act of his philanthropy is the foundation of the Annamalai University, which is the only Unitary, Teaching and Residential University in South India and whose special aim is the encouragement of South Indian culture. He will ever be remembered by posterity as a great benefactor and a great patron of learning in Southern India. I wish him long life and happiness of every kind.

SIR S. VARADACHARIAR,
Judge, Federal Court, Delhi

It is quite in the fitness of things that the Annamalai University should celebrate the *Shashtyabdapurthi* of its en-

lightened founder. The Community to which Rajah Sir Annamalai Chettiar belongs has long been known for the Philanthropy of its members; but, it has often been remarked that their Endowments were limited to the traditional lines, and did not take sufficient note of the needs of the changing times. Sir Annamalai Chettiar's family was one of the earliest in the Chettinad to recognise the force of this Criticism and to give the lead in the direction of what may be called 'enlightened charity.' In his own time, the Rajah has, in his innumerable acts of public munificence, shown a striking catholicity of outlook and a wise discrimination in the choice of the objects of his bounty, happily combining the old outlook and the new vision.

The Annamalai University is an experiment in the service of a high ideal and it is no wonder that criticisms and suggestions continue to be heard even from well meaning quarters. I have no doubt that the Rajah and those associated with him in the administration of the affairs of the University will keep the ideal constantly before them and the Rajah will be proud to see the day when the Annamalai University comes to be recognised on all hands as a fulfilment of that ideal. May a kindly Providence be pleased to spare him for many more years of useful and philanthropic service to his mothreland.

SIR M. VENKATASUBBA RAO,
Agent to The H.E.H. The Nizam of Hyderabad and Berar, Nagpur

On this happy occasion of the Shastipurti of the Rajah of Chettinad my wife and myself send him warm greetings and most sincere good wishes.

South India has produced shining lights in several spheres—in statecraft, science and scholarship, law and medicine; but in philanthropy—judged by modern notions—the same good fortune has not fallen to our lot. The Rajah of Chettinad as a philanthropist, while ranking with the most prominent in any part of India, is in our province first and foremost. His benefactions are so outstanding and so manifold that they will be gratefully remembered through many generations. From every side we hear of a new world-order based on economic justice; that however, in spite of the sincerest efforts, will be long in coming. Meanwhile, the man in the street feels chagrined at the galling contrast between extreme wealth and extreme want and challenges the very basis of society. There are a few among the wealthy of the world who realising this make inequality less irritating by giving generously for the public weal. The Rajah of Chettinad belongs to this band of discerning men and may be truly described as the Prince of philanthropists in South India.

May good luck attend him.

MR. C. VIJAYARAGHAVACHARIAR

I am greatly delighted to hear that the Sashtipurthi of the Hon'ble the Rajah Sir S. R. M. Annamalai Chettiar of Chettinad will be celebrated suitably on the 28th September 1941. I warmly offer my heartfelt congratulations on the event. It is by no means easy for me adequately to describe the unique character of the great benefactor and founder of the Annamalai University. This University may be said to be a model one in all India. I particularly note with feelings of gratitude that Physical Training is compul-

sory on all the students of the University and that lectures on Physiology, Health and Hygiene are delivered weekly. May I also venture to suggest that compulsory Military Training is called for by the unexpected crisis of the World. I call attention to the fact that Nazism is threatening even India both from the West and the East. Hence the necessity for the said military training. May I also venture to suggest that Hindi, the future National language of our country, be introduced as one of the subjects of the University. I need say no more. I am proud of the fact that the great man is a personal friend of mine. I prayerfully wish the founder and Pro-Chancellor long life and prosperity, so much so that his ninetieth birthday may be celebrated thirty years hence even with far greater enthusiasm and gratitude than it is possible at present, when also the Annamalai University may be the unrivalled model university in all India.

DEWAN BAHADUR SIR T. VIJAYARAGHAVACHARIAR, K.B.E.,
Dewan, Mewar State

It has often been a matter of complaint that there are not as many public benefactions connected with education in Madras as there are in some other major provinces of India. This is probably due to the fact that compared with those provinces, Madras is deficient in the number of wealthy citizens who can afford to make large benefactions. The Nattukkotai Chetty Community is probably the wealthiest section of the Madras population, but though they have made abundant contributions to public objects, these objects have been more of a religious character than of educational. My old friend, Sir Annamalai Chettiar, is a shining exception to

this. He has devoted a large sum to found the University which has been named after him. It is located in the heart of the Tamil country and one of its main objects is to foster Tamil learning and culture. It is not given to many in any country outside the United States to found a University of their own. A unique foundation of this character deserves commemoration by the citizens of the Province. So far as the founder is concerned, his name will live in the good work which the Annamalai University is carrying on. But an obligation lies on his fellow-citizens to express their grateful admiration of this great charity and it is a happy thought to make his sixty-first birthday the occasion and a Commemoration Volume the medium of the thanksgiving.

SIR ZAFURULLA KHAN, K.C.S.I.,
Law Member, H.E. The Viceroy's Executive Council

It has given me very great pleasure to learn that the Annamalai University proposes to celebrate the completion of his 60th year by Dr. Rajah Sir Annamalai Chettiar of Chettinad, the Founder Pro-Chancellor of the University, in a fitting manner. I have myself been the recipient of many gracious kindnesses from Rajah Sir Annamalai Chettiar, and know that the scope of his charities is not restricted by any considerations of caste, creed, or nationality. It is only right that the occasion to which I have referred above should be duly celebrated by the great institution which he has founded, and which is only one—though the principal one—of his numerous efforts in the service of his fellow beings.

MR ABDUL HAMEED KHAN, M.L.A.,
Ex-Mayor of Madras,
Leader: Madras Legislative Muslim League Party.

Dr. Rajah Sir Annamalai Chettiar of Chettinad is one of the most eminent sons of India. He is as good and successful a business man as he is bountiful and liberal. He has given away about a crore of rupees in charity in India and elsewhere. The large sum of money he is spending on the University at Annamalainagar, in the neighbourhood of that ancient town of Chidambaram, shows his large hearted munificence and zeal for higher education. His systematic and deliberate policy of protection of Tamil learning is manifested in his generous provision for its study in his University at Annamalainagar.

Rajah Sahib of Chettinad has in him, too, all the qualities of a leader of men. He has much of the charm of manner, ready humour and almost tender loyalty to his friends which makes a great leader.

Rajah Sahib is fortunate in his sons who are fine men, excellent and of striking merit. There is in Kumararaja Sir M. A. Muthia Chettiar of Chettinad a gentleman who, though comparatively young, has already reached a position of eminence by his wisdom and charming manners. He, like his great father, is very much interested in the advancement of learning and culture.

It gives me genuine pleasure to felicitate the Rajah Sahib of Chettinad on the happy occasion of his 61st Birthday and wish him a long life of everlasting usefulness and uninterrupted peace and happiness.

KHAN BAHADUR ADAM HAJEE MOHAMED SAIT,
Ex-Sheriff of Madras,
Director, Central Board of the Reserve Bank of India.

On the happy occasion of my esteemed friend and leader Dr. Rajah Sir Annamalai Chettiar entering upon his

Sixty-first year I have much pleasure in associating myself with the chorus of good wishes, praise and congratulations that will be pouring in from all parts of India. His is an eventful life distinguished for its manifold services to society. Rajah Saheb has filled with honour eminent positions of leadership. As a vigilant legislator, as a charming Prince among merchants, as a great patron of learning and arts, he has endeared himself to the entire people of South India who have nothing but praise for the Rajah Saheb and who, with one voice, pray to the Almighty that He may shower his bountiful gifts on the Rajah and the other members of his family. The Rajah is fortunate in his sons. Among them, Kumararajah Sir M. A. Muthiah Chettiar has already come to prominence in the public life of this Province, as a tireless worker for the economic and political regeneration of this country. Let me offer my humble tributes and hearty good wishes for the long life, health and prosperity of the Rajah Saheb of Chettinad.

BASHEER AHMED SAYEED, M.A., B.L., M.L.A.,
Advocate, Member, Syndicate, Madras University.

It is a pleasure and privilege to contribute a few lines to the Commemoration Volume that is to be published in connection with the 61st Birthday of the Rajah Saheb of Chettinad. It is but meet that the Sixty first Birthday of the Rajah Saheb should be rejoiced as a great and eventful day in the annals of South India. Numerous and well-known have been the benefactions of the Rajah Saheb but none could exceed in wisdom, merit and quality his foundation of the Annamalai University at Chidambaram. There could indeed be no greater monument for his philanthropy, charity and munificence than this. His contribution to the spread of knowledge and culture in the shape of this residential University, so well-conceived and so well-planned remains unsurpassed. Greatness of mind,

nobility of character, uniform courtesy, sincerity and thoroughness of purpose have been the unique characteristics of the Rajah Saheb and these have marked him out as one of the most outstanding personalities of our times and his life serves as a pre-eminent model for the younger generation to emulate and profit by. I wish the Rajah Saheb many many more returns of this happy day and pray that he may be spared to us for many a long year to come in the best of health, wealth and prosperity.

P. CHENCHIAH, M.L.
Chief Judge, Pudukottai.

Of the various foundations that are being laid for the New India of our vision and hope the surest and the most enduring one is that of knowledge. The universities are among the most powerful engines of National reconstruction in as much as they create leaders who are to take the nation into the land of promise.

Sir Annamalai, a prince among merchants of Nattukotai Community, has set an example for a new consecration of money in his munificent endowment of the Annamalai University. Year after year, hundreds of young men and women carry torches of light into the world and as they lighten the darkness around, look back on the university as the mother who nursed them in the ideals of service and on the Rajah as the great donor who founded it. As I believe that the higher education of the universities is the keystone of national progress, I regard Sir Annamalai a great benefactor whom the country will praise and cherish.

On the happy occasion of Shasti-purti, I join the great company of his friends in wishing him long life and prosperity.

HIS HIGHNESS SIR NAWWAB GHULAM MUHAMMAD ALI KHAN BAHADUR G.C.I.E.,

The Prince of Arcot.

I have great pleasure in associating myself with the 61st Birthday celebrations of Dr. Rajah Sir Annamalai Chettiar of Chettinad. The Rajah Saheb of Chettinad is one of the ablest and most successful men of Southern India. He is a good friend and possesses charming manners. There are many charitable institutions which are benefited by his munificence. He has done a great service to the cause of education in Southern India by founding a University which is named after him.

I wish Rajah Sahib long life, full of prosperity and happiness.

MR. G. JANAKIRAM CHETTY,

Mayor of Madras.

On the 61st Birthday of the Hon'ble Dr. Rajah Sir Annamalai Chettiar of Chettinad I rejoice to convey to him my humble congratulations. I feel glad to contemplate that his life has been one full of years and full of honours and glory. If ever any person was the architect of his own fortunes, the Rajah of Chettinad was pre-eminently one such. He battled with life and wrested from it wealth, power and glory. Nor were these obtained without anxiety, labour or shocks. Endowed with a prodigious memory and a giant intellect he could plan elaborately and with precision, organise with great thoroughness and succeed with comparative ease. Those who witness only his triumphs hardly know the travail behind these.

And now, after the completion of his sixtieth year he can look back on his work and achievements with justifiable and pardonable pride. By his simplicity, condescension and geniality he has endeared himself to one and all. He is considered as a patriarch in his own community and

one whose word is almost law to its members. He loves them and cares for their welfare as much as he loves and cares for his own children. His piety has led him into charities which few have excelled. His discriminative endowments have won for him a name and a fame which will last as long as India lasts. The Annamalai University alone, not to speak of other charities, will stand as a monument to the greatness of his heart and the regality of his munificence. Shrewd and far-seeing, he made a departure from the time-honoured courses of the charities of Indians and has made an endowment which has an universal appeal. His gifts to his University have not ceased. Yearly contributions and endowments go to swell a benefaction already large. He is guiding its destinies with a sure hand and will soon put it beyond all vicissitudes.

Sixty years are not much in a land noted for the longevity of its inhabitants. May God spare this great philanthropist and benefactor for many a decade to come, so that he may enrich his life of usefulness and service by further deeds which will add greater lustre to his name.

MR. M. PATANJALI SASTRI,
Judge, Madras High Court.

It is with great pleasure that I respond to your invitation to send a message on the occasion of the Shastiabdhapoorthi celebration of the Founder, Rajah Sir Annamalai Chettiar of Chettinad.

My memory goes back to the time when years ago I was a member of the Board of Trustees of Sri Meenakshi College, the nucleus of the great University which now bears his name and I recall how untiringly and enthusiastically he used to work for the institution in those days. It was named after his beloved mother and his attachment to it was marked by an almost filial devotion. How that institution later developed into the only residential Uni-

versity in South India and how the scrub jungle east of the Railway line in Chidambaram was transformed by the vision, faith and bounty of the Founder into the magnificent Halls of Learning and Research over which you now preside forms a romantic and glorious chapter in the history of the educational progress of this Province.

It must be a matter of legitimate pride and satisfaction for Rajah Sir Annamalai to have lived such a useful and successful life for sixty years. "He lives who helps many to live" says a Sanskrit adage. Hundreds have found their living in his beneficent activities, and his indeed must be counted a purposeful life.

Rajah Sir Annamalai Chettiar is in many respects a remarkable man. Keen business acumen, tireless energy, unwearying attention to detail and a discriminating readiness to take risks have combined in his case to produce a fortune which many a prince may well envy. Withal, his personal habits and tastes are of the simplest, and he avoids the usual extravagance of wealth. But if he is frugal so far as his own personal needs are concerned, he is lavish in his contributions to charities. Perhaps there is no philanthrophist in this part of the country, who has made larger contributions to charities, both institutional and private, than he. And their end is by no means in sight. In short, his own favourite motto "Strive, save and serve" may well be regarded as his autobiographical memoirs; for, he has striven mightily, saved thriftily and served nobly.

I wish your celebration all success, and the Founder, many happy returns of the day.

SIR PURSHOTAMDAS THAKURDAS.

Rajah Sir Annamalai Chettiar, whilst upholding all the admirable traditions of the great Chettiar clan in the South, has made this most welcome departure, that instead of spending his charitable endowments exclusively on

temples and other extra-conservative forms of charity, he has set the example of spending after more practical and up-to-date needs of his generation in his Province in many ways. The Annamalai University is a striking proof of this, and it is very much to be hoped that the example set by the Rajah of Chettinad will be taken up by all similarly placed in India. I wish the Rajah of Chettinad and the Chettinad family continued prosperity to follow up this most welcome innovation in their dispensation of charitable funds. India cannot have too many of such innovations. I look forward to the Kumararajah of Chettinad's whole-hearted support to his illustrious father's noble example.

DEWAN BAHADUR V. SHUNMUGA MUDALIAR
Sheriff of Madras.

Rajah Sir Annamalai Chettiar of Chettinad, whose friendship I have enjoyed for over two decades enters on the Sixty-first birthday on the 28th of September, 1941. Let me send my hearty felicitations on that occasion. This great business magnate is the foremost merchant prince, not only in this country, but also in Ceylon, Malaya, Burma, the Strait Settlements and Indo-China. He has been connected with the Reserve Bank of India ever since its inception and is the Director of several other banks of this Presidency. If he is a great business man making a great fortune by his farsightedness, he is a greater philanthropist giving most generously to all noble causes. The Annamalai University is a standing monument to his princely munificence. He has filled with honour and distinction many positions of responsibility and served the country in manifold ways. May the Lord Almighty be pleased to confer on him its choicest gifts and give him a long and unclouded life of happiness and public service.

RAO BAHADUR JUSTICE P. VENKATARAMANA RAO,
Judge, Madras High Court.

The traditions of Hinduism enjoin various charities and of these the most valued is the gift of knowledge. Annadhanam for the poor is also counted as a great virtue but the gift of knowledge is counted greater still. Gratitude prescribes that we should remember those who have not only furnished the means for relief of the poor of the country but also those who have planted beacon lights in the shape of Universities in our midst. On this auspicious occasion our country will thank God for raising a great donor in the person of Rajah Sir Annamalai Chettiar in South India for the promotion of learning.

An English writer writing on great men remarked thus : " Nor is power alone a sufficient title to greatness. It must be power governed by purpose, by a philosophy, good or bad, of human life, not by mere spasms of emotion or an itch for adventure." Sir Annamalai has utilised the power which wealth has conferred on him for really useful purposes. The motto of Sir Annamalai's house " Strive, Save, Serve " has received a glorious exemplification in the endowment of the Annamalai University. The merchant princes of the Nattukottai Chetti community have rebuilt temples in various places. But Sir Annamalai has given a new turn to the traditional modes of charity by endowing a temple of knowledge. The Annamalai University will be an enduring monument perpetuating his name among generations of students that go out from its portals.

The value of and the beneficial influence which universities are capable of exercising in this country and especially in the regeneration of India in the present turmoil and conflict which is confronting the world are immense and incalculable. In the course of my Convocation Address to the students of the Andhra University last December, I observ-

ed that the true and abiding basis for Indian unity lies in the creation of Indian culture which forges communal cultures into one living whole in art and literature and society and politics and the universities are the competent agencies for inspiring our youth with a passion for unity evoking in them a lifelong devotion to the promotion of a single unified Indian culture and the synthesis of cultures is a special need of India. From the note which has been sent to me by my esteemed friend Dr. Sir K. V. Reddi I find that the Annamalai University has realised this need and has this object in view.

Shastipurthi is a landmark in life celebrated with joy and thankfulness but the joy of the celebration must be great indeed for Sir Annamalai when it takes place in the temple of knowledge he has built. May Sir Annamalai reach the coveted age of hundred years and may the country continue to be the recipient of his benefactions.

K. VENKATASWAMI NAIDU, B.,A., B.L., M.L.C.,
Ex-Mayor of Madras.
Deputy President Madras Legislative Council.

On the occasion of Sastiabdha Purthi of Sri Rajah Sir Annamalai Chettiar of Chettinad let me join in the chorus of appreciation showered on him. Next to Pachaiyappas, Rajah Saheb will live for ever as one of the greatest Educationists of South India. His Annamalai University will be a standing monument of his love of service and culture. By renovating the famous temple of Sri Govindaraja at Chidambaram, he has become God's favourite. His pleasing manners, princely hospitality and an attitude of helpfulness at all times have earned for him the love and regard of everyone. May he live long and continue his beneficent acts.

ANNAMALAI UNIVERSITY

By

Dr. B. V. Narāyanaswamy Naidu

More than twelve years ago the Annamalai University was started, thanks to the generosity and public spirit of Rajah Sir Annamalai Chettiar of Chettinad whose name it bears. Its aims and ideals are similar to those of the other Universities in South India, but it differs from most of them in being both a teaching and a residential University. It differs from them in another respect also. It owes its existence to the munificence and generosity of an eminent citizen of our motherland. His princely gift for the cause of higher education has no parallel in the history of this presidency.

Since the publication of the report of the Sadler Commission, the trend of best educational opinion in the country has been in favour of a unitary, teaching and residential University as it makes for efficiency and economy in higher academic work and provides ample facilities for the moulding of character and the development of a corporate spirit. Early in 1928 the committee appointed by the Government of Madras to examine the need for establishing a university for the Tamil districts, wrote in their report that it was desirable to have unitary teaching Universities and as many of them as the country could afford but that the immediate realisation of this desire was not to be expected as the financial resources even for one such University could not be indicated with any degree of assurance. But

even while these words were being written, the Rajah Saheb of Chettinad was in consultation with the Government of Madras regarding a scheme for the creation of a teaching University at Chidambaram. With princely generosity he offered to hand over to the proposed University the three collegiate institutions for higher instruction in English, Tamil and Sanskrit studies founded by him at Chidambaram and their assets together with twenty lakhs of rupees in cash. The Government recognising the unique nature of the benefaction, came to the conclusion that they should not miss this opportunity of encouraging private effort in the cause of public instruction and establishing a new University of a type, which was admittedly the best, though unknown in the Presidency of Madras.

On the 27th June, 1928, the Government published a communique promising twenty lakhs of rupees towards the endowment fund which was later raised to twenty-seven lakhs and a recurring grant of a lakh and a half per annum. A bill to establish and incorporate a teaching and residential University was published in a Gazette Extraordinary on the 24th August, 1928. It was introduced into the Madras Legislative Council on the 8th September 1928, and referred to a Select Committee of 25 members of the Legislative Council. On the 12th October, 1928, the bill was passed into law. The Act received the assent of the Governor on the 3rd November, 1928 and that of the Governor-General on the 11th December, 1928. The assent of the Governor-General was published in the Fort St. George Gazette on the 1st January, 1929. The Government in G.O. No. 1 dated 1st January, 1929, brought into force the several sections of the Act from 1st January, 1929. Thus this unique University in South India came into being. The

Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Senate, the Academic Council and the Syndicate constitute the body corporate of the University. The Governor-General is the Visitor of the University; the Governor of Madras is the Chancellor; the Founder of the University is the Pro-Chancellor; the Vice-Chancellor is a whole-time officer, to whom a salary may be paid, who holds office for a period of three years and is appointed by the Chancellor from among three persons recommended by the Founder. At present we have in our midst as our Vice-Chancellor, Sir Kurma Venkata Reddi Naidu, K.C.I.E., D.Litt. M.L.C.

The authorities of the University under the Act are; (1) the Senate; (2) the Academic Council; (3) the Faculties; (4) the Boards of Studies; (5) the Syndicate; (6) the Finance Committee (for a period of ten years from 15th May 1929) and (7) the Board of Selection.

About 150 miles from Madras a stone's throw to the east of Chidambaram Railway Station lies the University Colony named Annamalainagar. The Colony is 540 acres in extent, and the lecture halls, hostels, administrative buildings and residential quarters stand in this area. It is ideally situated in the midst of green fields far from the bustle of town life; and yet it has every amenity that most progressive towns enjoy. During these 12 years magnificent buildings, costing more than 20 lakhs, have come up and great progress has been made in various directions. This is in no small measure due to the tireless efforts of Dewan Bahadur S. E. Runganadhan—at present Advisor to the Secretary of State for India —who was Vice-Chancellor of the Annamalai University from 1929 to 1935, and of the Rt. Hon'ble V. S. Srinivasa Sastri, who was Vice-Chancellor for five years

from 1935 and of our present Vice-Chancellor, Sir Kurma Venkata Reddi Naidu.

In this University nearly a thousand students are pursuing, to-day, various courses of study. Instruction is provided and facilities for study offered from the Intermediate course up to the Ph.D., M.Litt. and M.Sc. degrees. This University is the only one which offers an Honours course in Tamil. Another noteworthy feature is its Department of Music which has done not a little to promote the study of Carnatic Music.

The University Library is one of the best of its kind and is just a few yards from the hostel. It affords every facility for reading and contains many up-to-date books and periodicals. More than 15,000 rupees are spent every year on new books and journals. The study of current journals and periodicals is specially encouraged in this University. The total number of books in the general and sectional libraries is over 50,000. The library receives regularly 248 scientific and learned periodicals. Each Department of Study has its own seminar library for the use of Honours and Research students.

The residential aspect of this unitary and teaching University deserves special mention. Students and teachers live in the same colony and there are many opportunities for fruitful contact of mind and mind. Every opportunity is given to develop in the student not merely a keen and cultivated intelligence but also sound character and a sound physique. The students' hostel is managed by a Warden and a Sub-Warden and five inspectors. Students, too, have their share in the management of the hostel. The Warden is assisted in his work by a Students' Representa-

PRO-CHANCELLOR, CHANCELLOR AND VICE-CHANCELLOR,
(IN ACADEMIC ROBES, 1931)

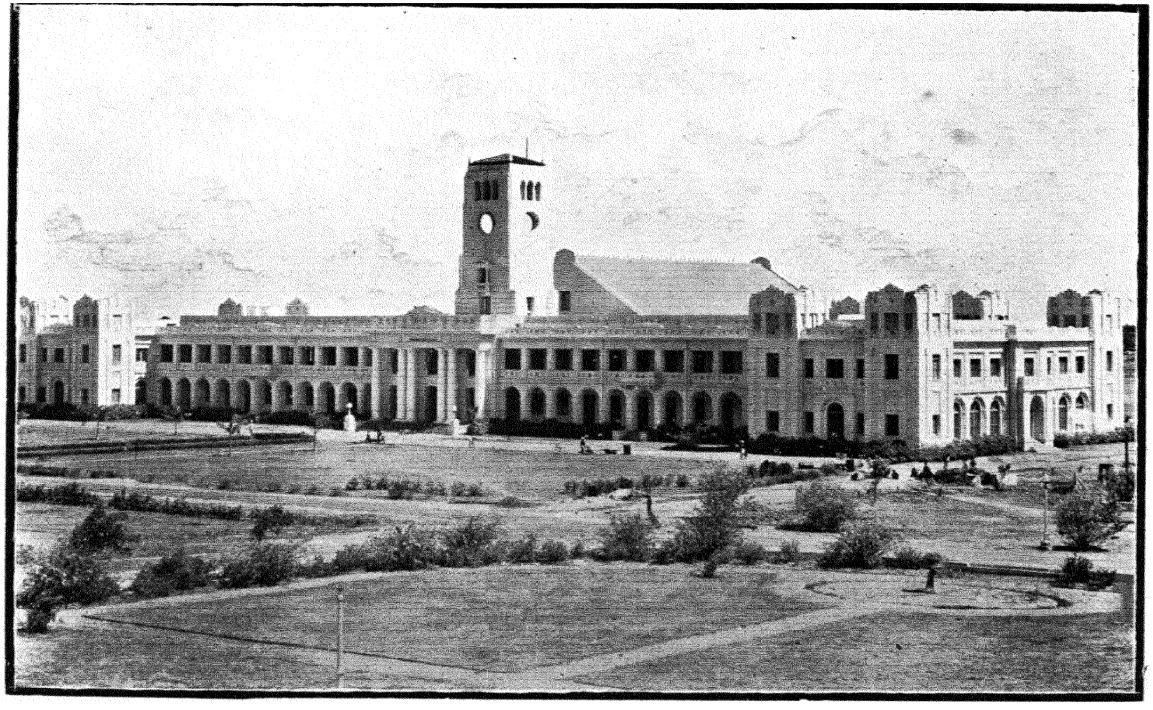
H. E. LORD ERSKINE G.C.S.I.
(CHANCELLOR, ANNAMALAI UNIVERSITY, 1934-39)

H. E. THE HON'BLE
SIR ARTHUR OSWALD JAMES HOPE, G.C.I.E., M.C.
CHANCELLOR, ANNAMALAI UNIVERSITY FROM 1939

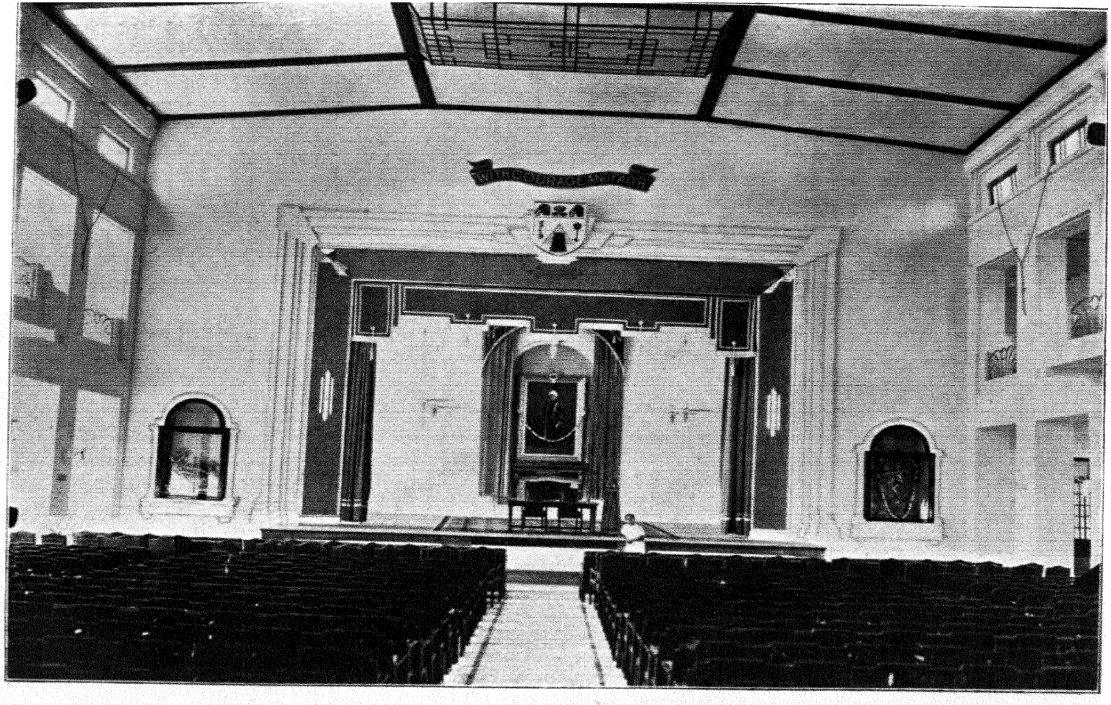
DIWAN BAHADUR
S. E. RUNGANADHAN, M.A., I.E.S. (RETD.),
VICE-CHANCELLOR FROM 1929-1935

THE RT. HON'BLE
V. S. SRINIVASA SASTRIAR, P.C., C.H., LL.D.,
VICE-CHANCELLOR FROM 1935-1940

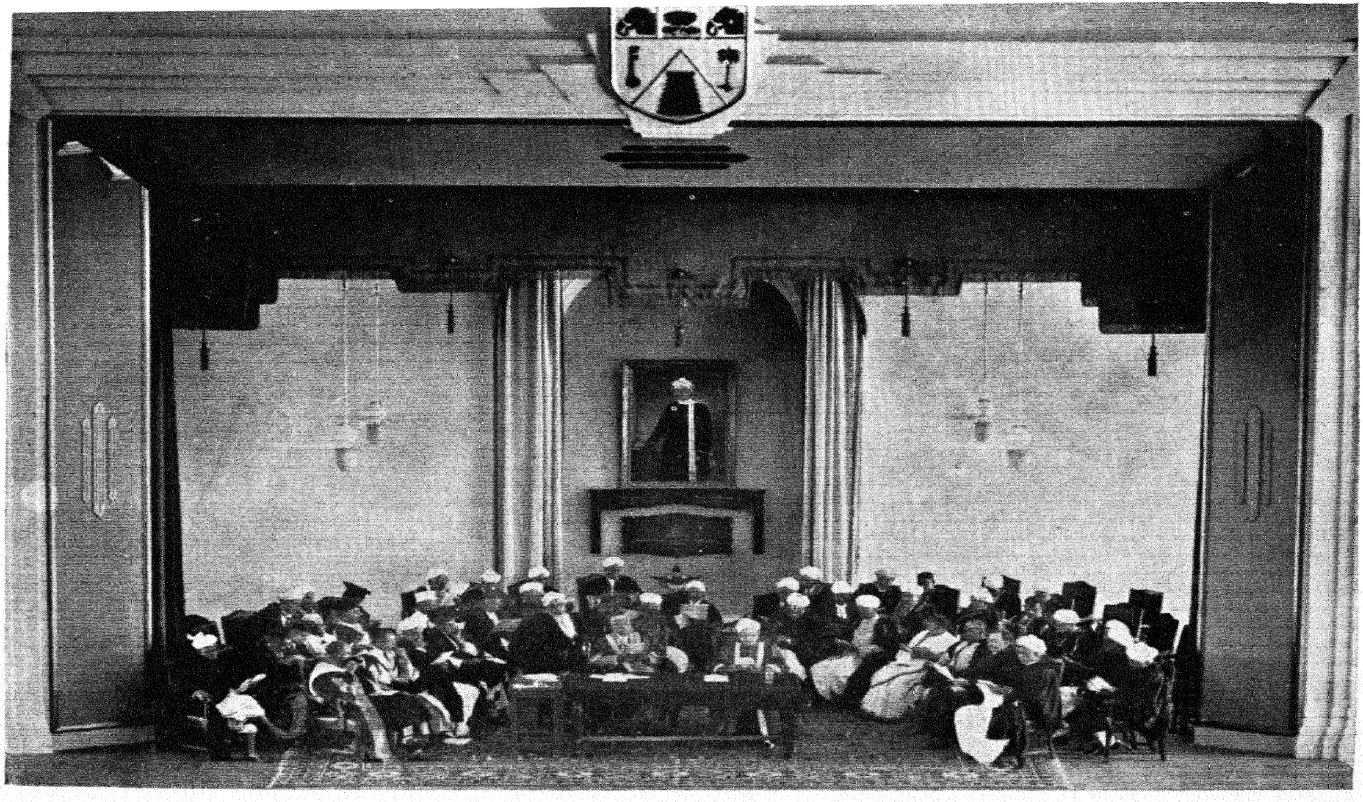
RAI BAHADUR SIR KURMA VENKATA REDDY NAYUDU GARU, K C I E., D.LITT , VICE-CHANCELLOR, ANNAMALAI UNVERSITY FROM 1940



LIBRARY AND ADMINISTRATIVE BUILDINGS



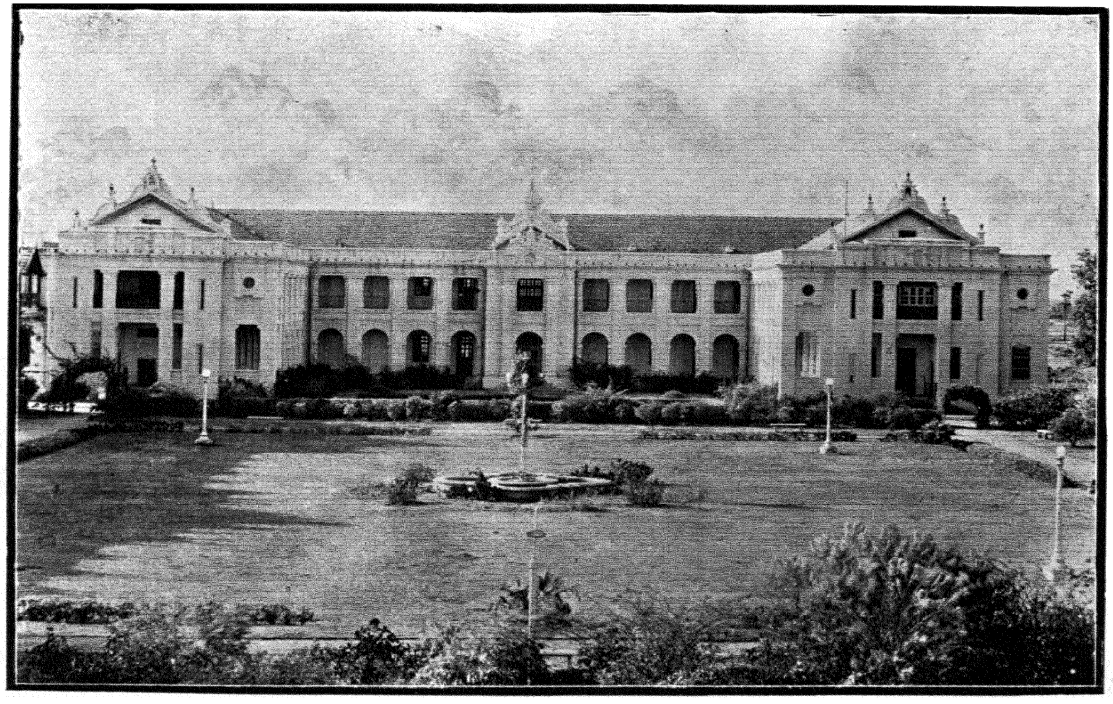
INTERIOR VIEW OF THE SRINIVASA SASTRI HALL



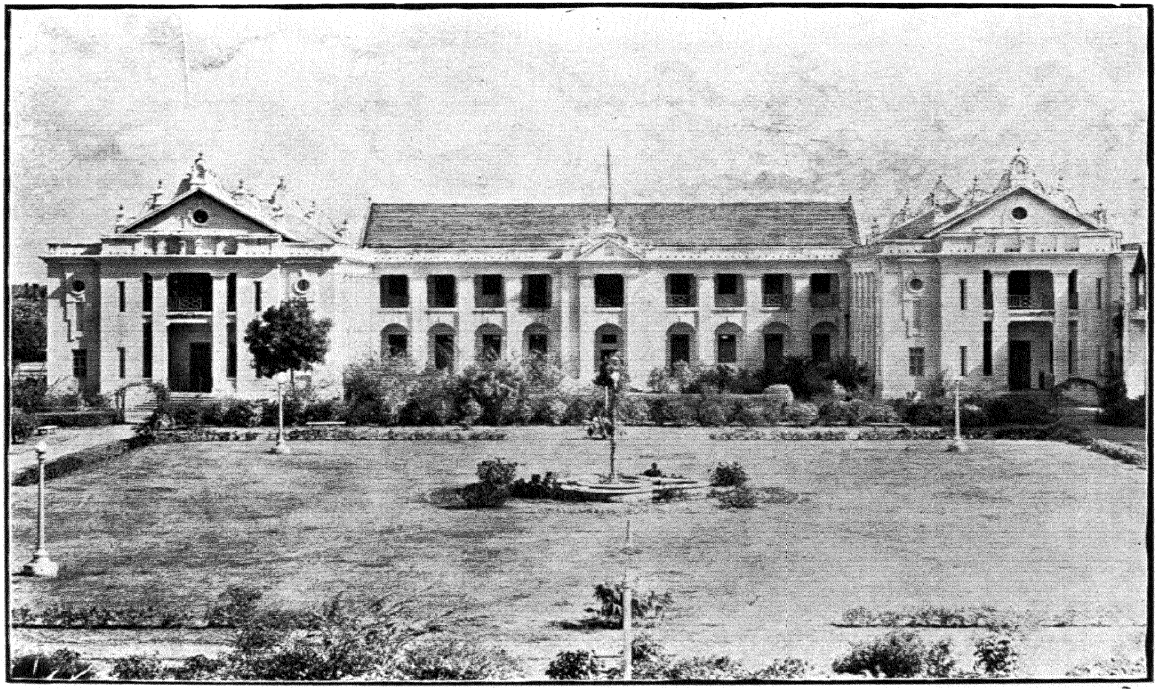
ANNAMALAI UNIVERSITY CONVOCATION, RAJAH SIR ANNAMALAI CHETTIAR PRESIDING

ARTS COLLEGE

ARTS COLLEGE



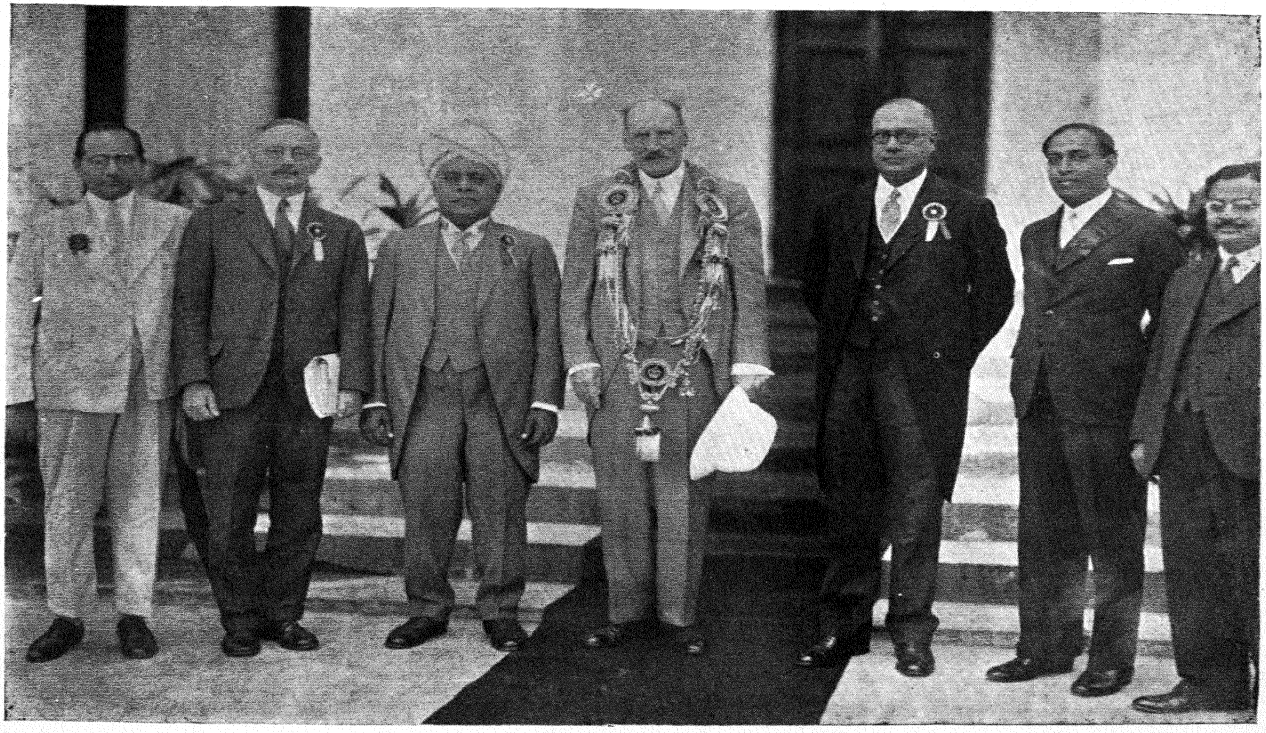
SCIENCE COLLEGE



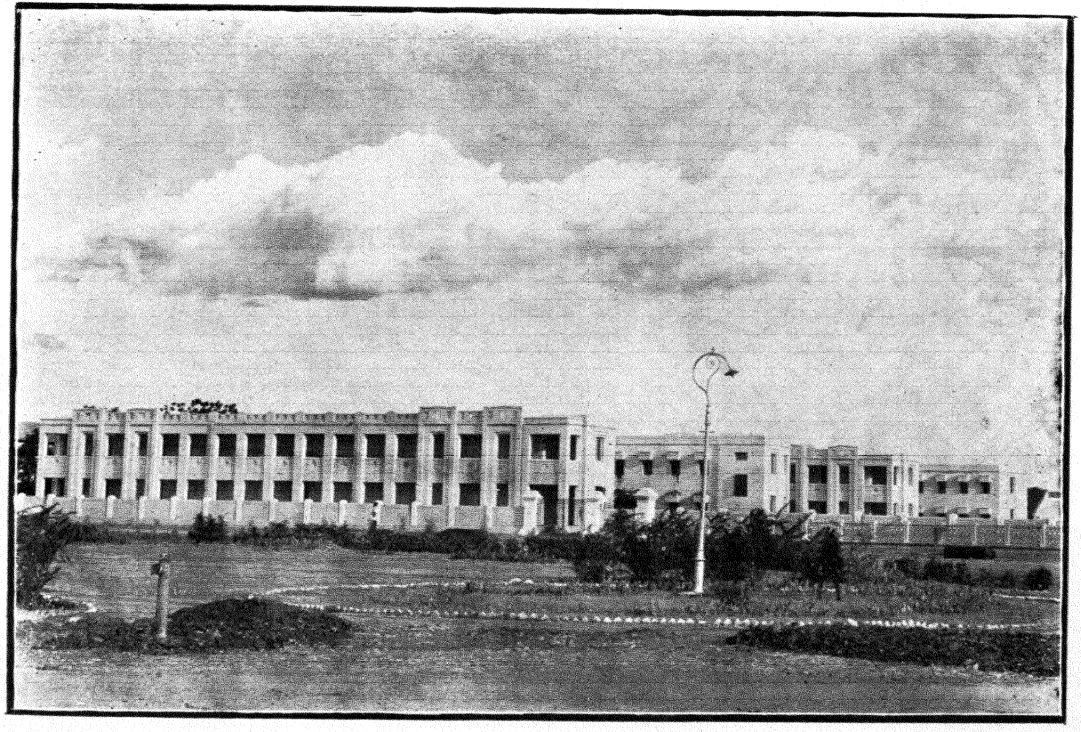
ORIENTAL COLLEGE

MUSIC COLLEGE

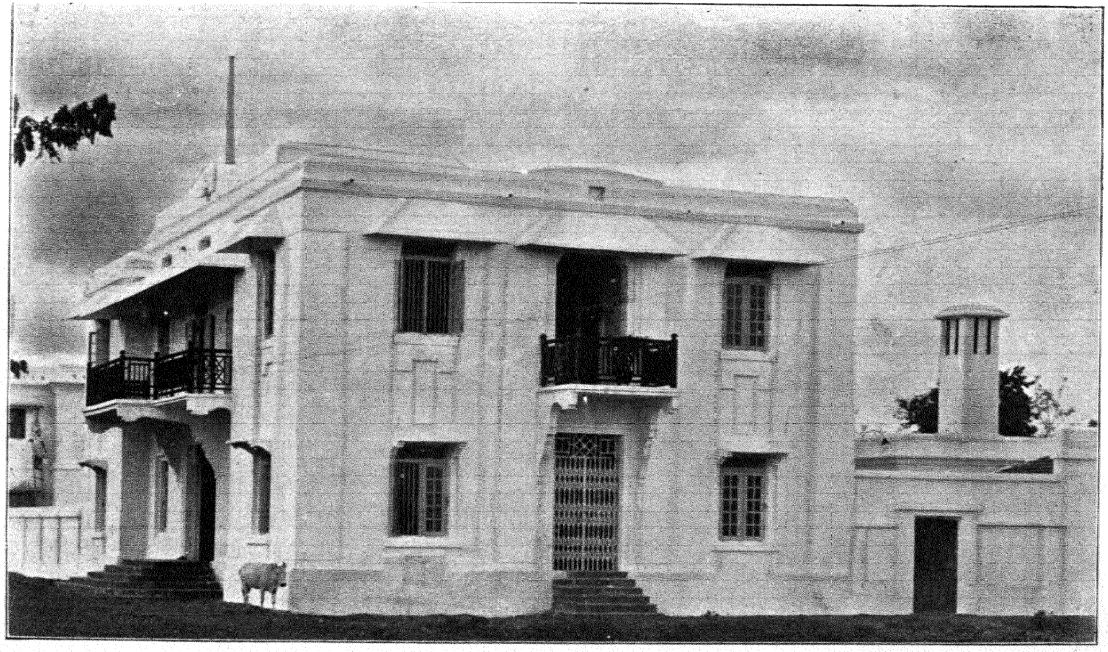
GOKHALE HALL—UNION HALL



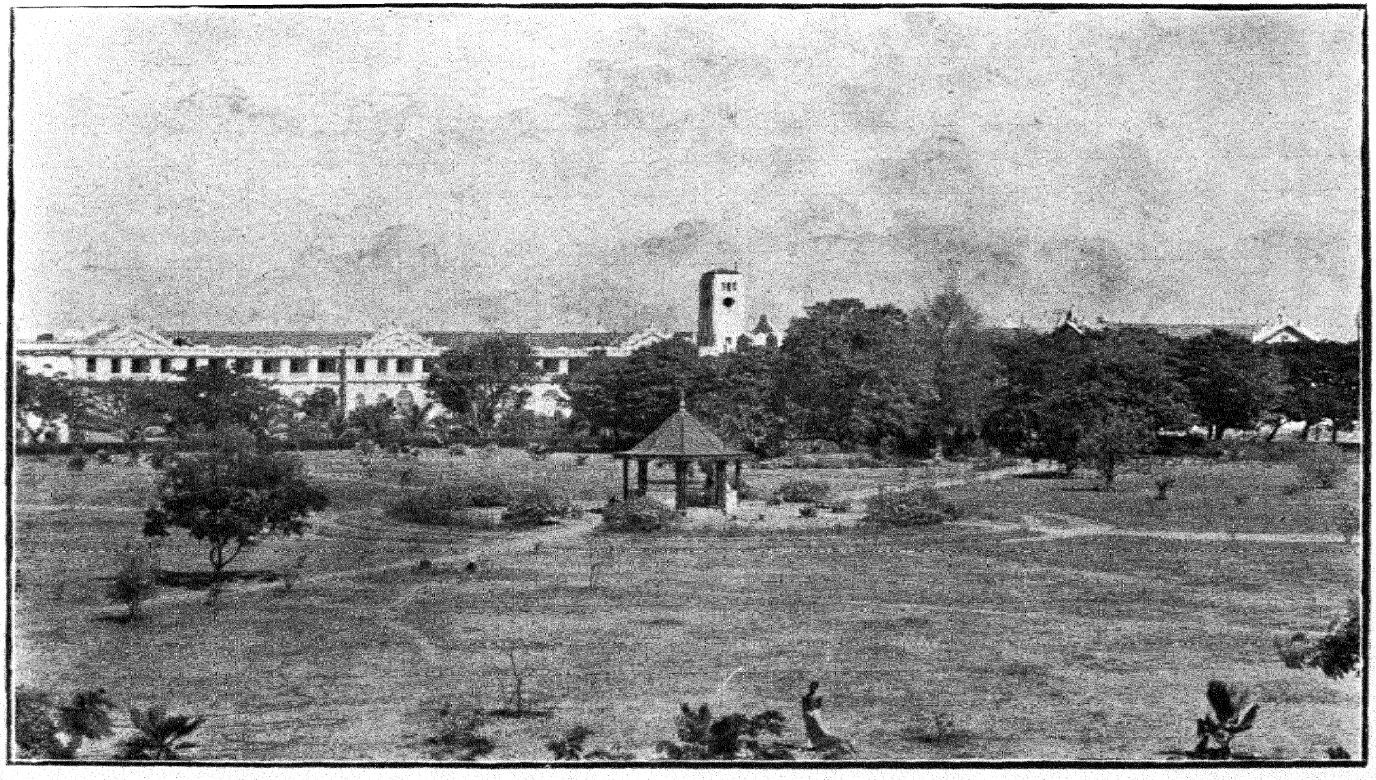
DR. S. N. CHAKRAVARTHI; PROF. C. D. THOMPSON (PRESIDENT); RAJA SAHEB; SIR GEORGE FREDERICK STANLEY; DEWAN BAHADUR S. E. RUNGANADHAN; DR. B. V. NARAYANASWAMI NAIDU (SECRETARY); PROF. C. N. VAKIL (SECRETARY)



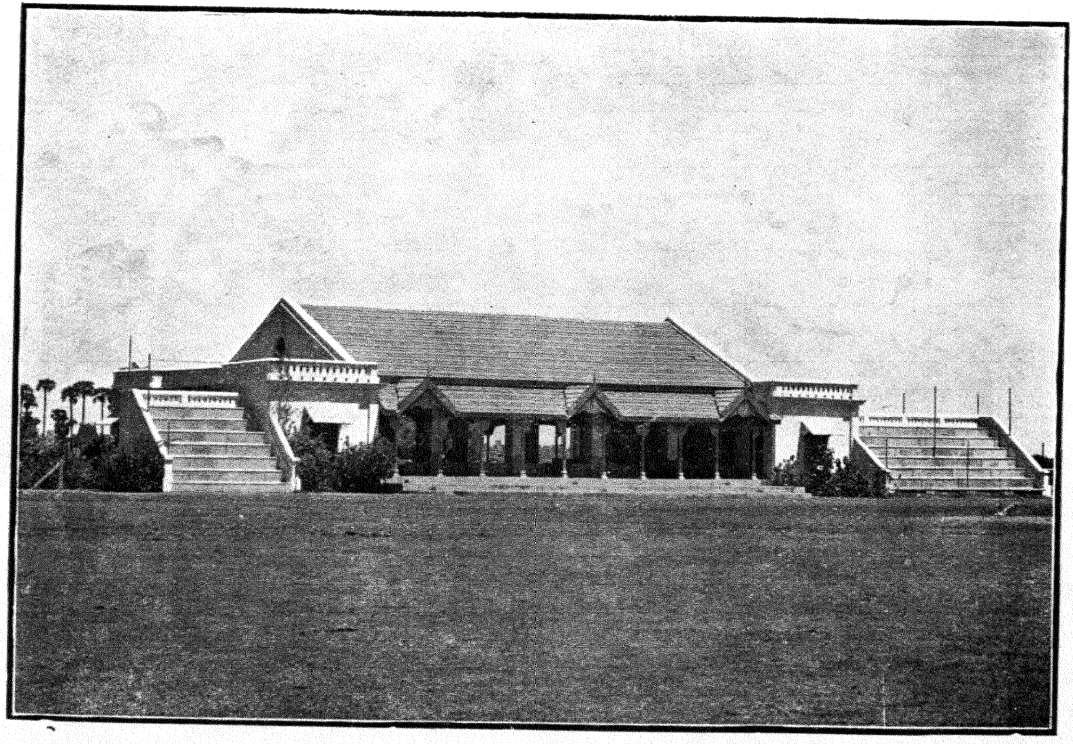
HOSTEL



WOMEN STUDENTS' HOSTEL

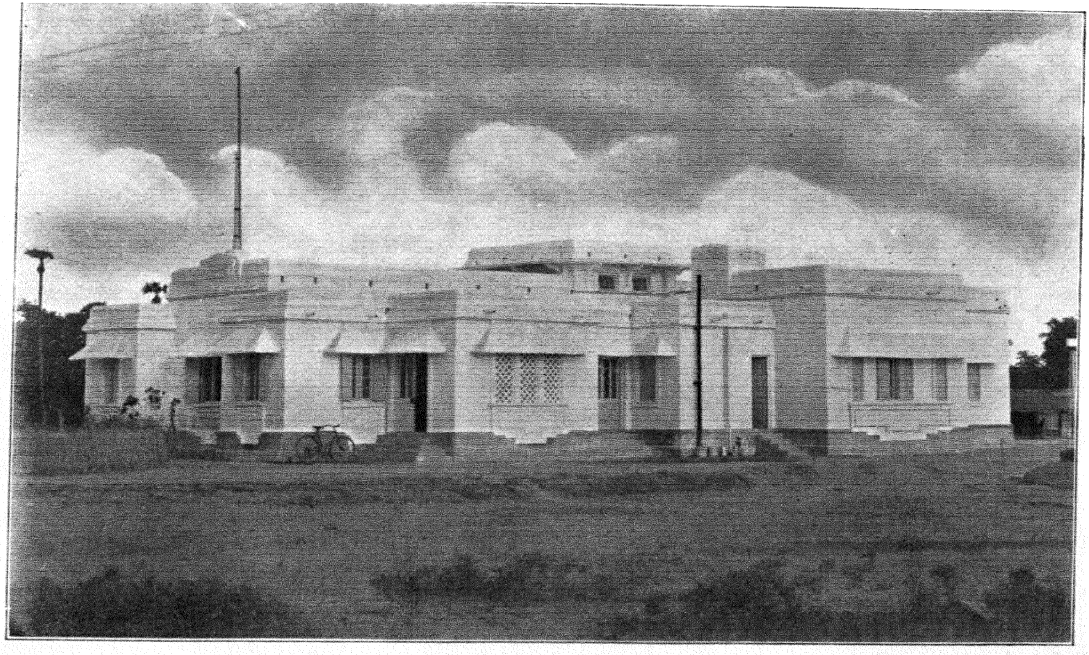


THE PARK AND THE BANDSTAND

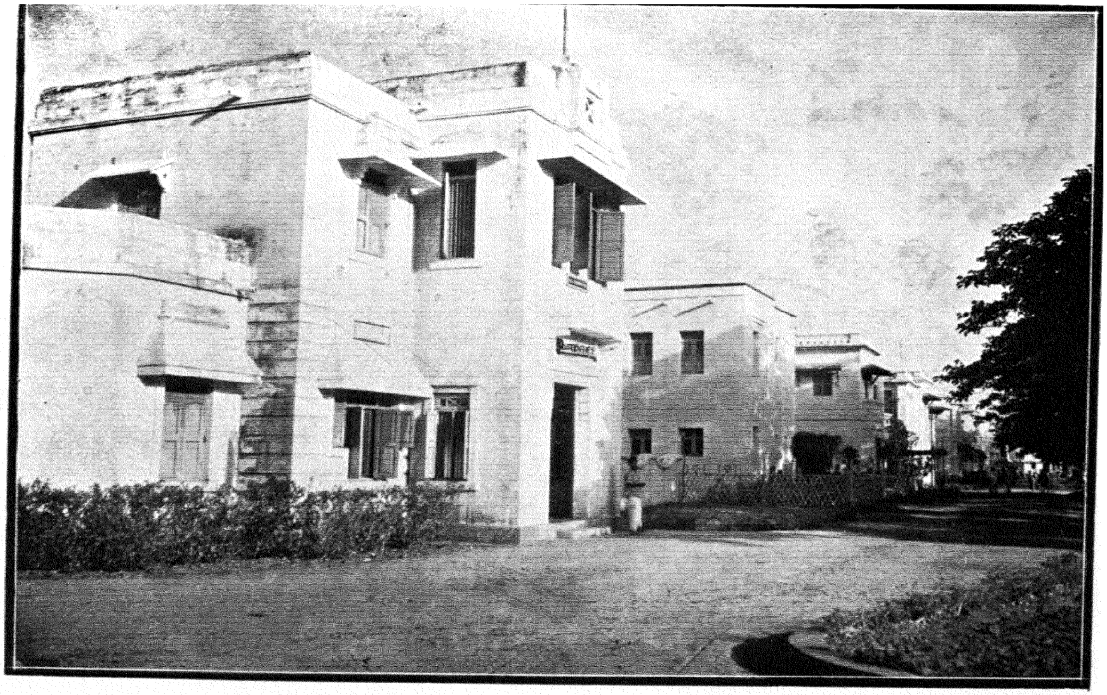


SPORTS PAVILLION

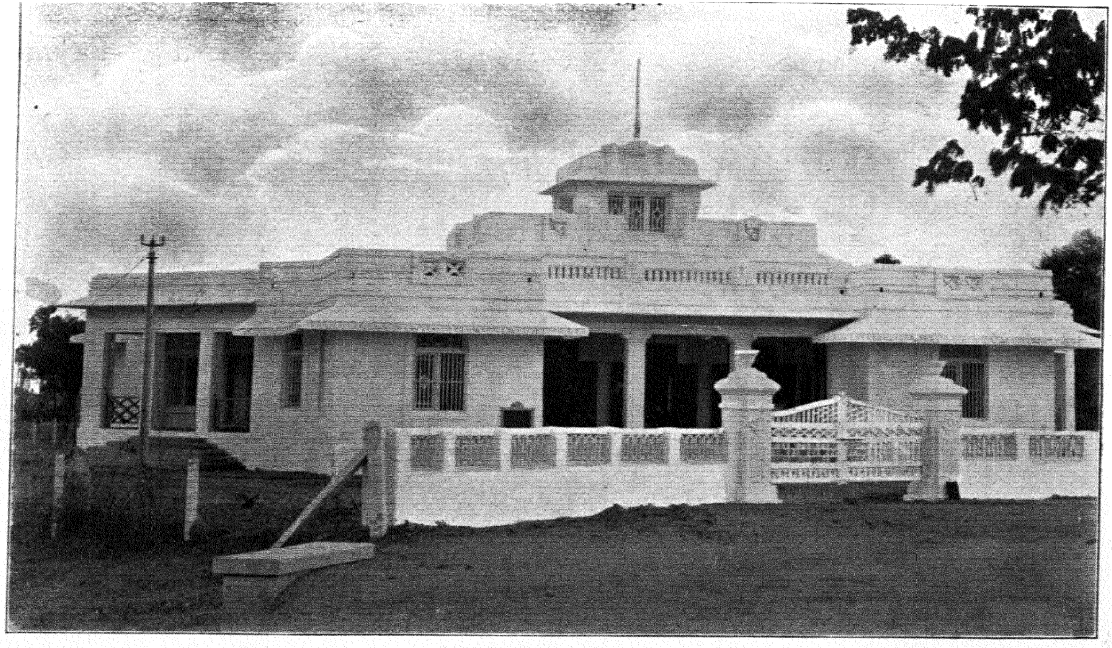
GUEST HOUSE AND STAFF CLUB



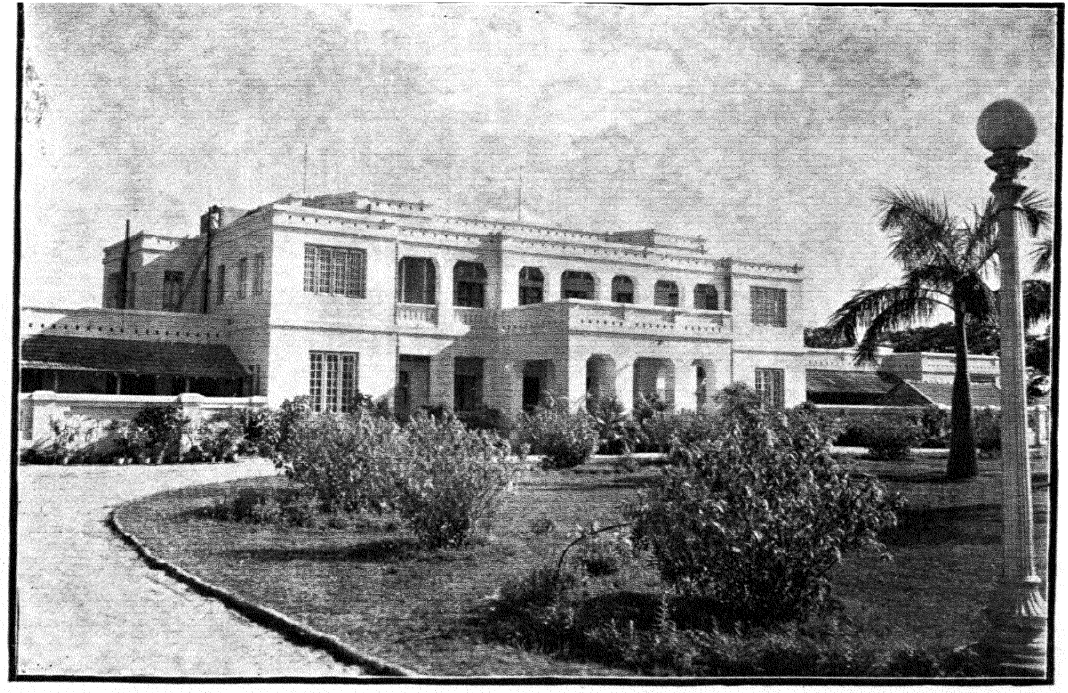
HOSPITAL



POSTS AND TELEGRAPHS OFFICE AND PROFESSORS' QUARTERS



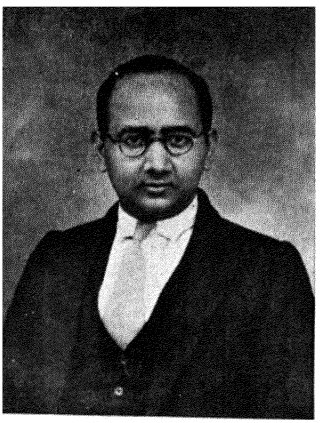
LADIES' CLUB



VICE-CHANCELLOR'S BUNGALOW

ACTING VICE-CHANCELLORS

1



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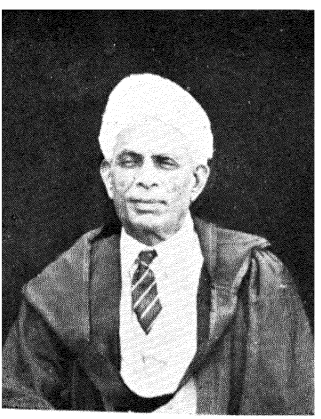

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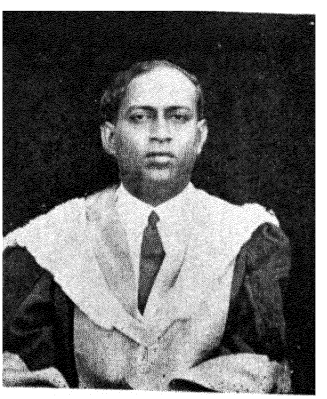

4

1. PROF. K M. KHADYE, 1931 (May-August)
2. DR. S. N. CHAKRAVARTI 1935 (May-June)
3. MR T R VENKATARAMA SASTRIAR (December 1936 to January 1937; 1939 January)
4. DR. B. V. NARAYANASWAMY NAIDU 1939 (March-April)

SRI PASUPATHESWARAR TEMPLE—ANNAMALAINAGAR

tive Council. Living in close proximity to the lecture halls and the huge University Library a student in this University can consult without the least trouble any of his teachers about the books he should read, get his doubts cleared and receive instruction in any other matter in which he is interested. He need not travel long distances to meet his teachers; they are at his door ready to be consulted whenever any doubt or difficulty arises.

The women students have a well-equipped hostel of their own under a resident lady Warden. In recent years more and more women students have joined the University especially for the study of Music. Some have taken up advanced courses of study in Arts and Science.

The capacity for organisation and leadership finds play in the largely self-governing University Union and in various other Sectional Societies. A Union Hall has been built at a cost of Rs. 15,000. The University has also a Dramatic Club, a Boating Club and a Students' Co-operative Society.

The University possesses one of the most extensive play grounds in South India and provision is made for all types of games and sports. In this University, Physical Training is compulsory for all students and no one can take a University Examination without producing a Certificate of Physical training from the University Director of Physical Education. Particular care is taken of the health of the students. There is a Resident Medical Officer who periodically examines the students. A well-equipped hospital with up-to-date arrangements has also been provided.

Ever since its inception the University has emphasised teaching as well as research. In addition to the Research Journal, published three times every year, the University

has to its credit a large number of learned publications. Studentships and fellowships have also been instituted for the promotion of advanced research. The departments of study are organized not merely for teaching but also for advanced research. Advantage has been taken of these facilities by students and by members of the teaching staff who have contributed many papers to learned journals.

Grants-in-Aid of research work are also awarded under certain conditions. With a view to providing for the advancement of learning in Tamil a special research department is working under the guidance of the Head of the Department of Tamil. With a view to the ultimate adoption of Tamil as the medium of instruction in the University the syndicate instituted prizes for text-books in Tamil on various subjects. So far books in Tamil on Logic, Physics and Chemistry have been published. A Tamil work on Music selected for the award of a prize of Rs. 750 will be published shortly. The Heads of Departments of studies in History, Economics, Mathematics, Botany and Zoology have been requested to arrange for getting ready Tamil text-books in the several optional subjects suitable for use in the Intermediate classes. These are expected to be published by the end of the year 1941.

Any casual visitor to Annamalainagar will be struck by the pulsating life of this centre of cultural activity. Any day of the week he will see in the evening hundreds of young men lustily playing in the open air Cricket, Tennis or Hockey or any one of the games popular with the youth of this country. Or he may see them sitting and silently pouring over books or periodicals in the spacious Reading Rooms of the University Library. Yet again he may see a scholar reading a learned paper before an advanced Study Circle of

kindred spirits; or see him going out Scouting or on Social Service work. Perhaps he may light upon a Music performance given by one of the foremost exponents of Carnatic Music; or listen in to the Radio or spend a few minutes reading a daily newspaper or current weekly. If he is more lucky he may see the whole University professors, lecturers, students and townsmen gathered in the Srinivasa Sastri Hall listening to a learned discourse on some topic of importance.

Barring the Travancore University, the Annamalai University is the youngest in the Indian Empire. During the first decade of its existence it has served South India as a true centre of Indian culture and as an ideal training ground for the young men and women of this land. We cannot be sufficiently grateful to the Rajah of Chettinad for founding this magnificent institution which is unique in our country.

We cannot all found Universities; but every one of us can do our bit to strengthen and encourage centres of learning like the Annamalai University.

SUCCESSION LIST.

CHANCELLORS.

1929. The Rt. Hon'ble Viscount Goschen of Hawkhurst, G.C.S.I., G.C.I.E., C.B.E.

1929. July to December—The Hon'ble Sir Norman Edward Marjoribanks, C.B.E., G.C.I.E.

The Rt. Hon'ble Sir George Frederic Stanley, P.C., G.C.S.I., G.S.I.E., C.M.G.

1934. May to August—The Hon'ble Sir Muhammad Usman, K.C.I.E., B.A.

His Excellency Lord Erskine, G.C.S.I.

1936. June—The Hon'ble Sir K. V. Reddy Kt., B.A., B.L.

His Excellency Lord Erskine, G.C.S.I.

1939. The Hon'ble Sir Arthur Oswald James Hope, G.C.I.E., M.C.

PRO-CHANCELLOR.

1929. Dr. Rajah Sir S. Rm. M. Annamalai Chettiar of Chettinad, LL.D.

VICE-CHĀNCELLORS.

1929. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C. C.H., LL.D.

1929. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.

1931. May-Aug.—K. M. Khadye, Esq., M.A., (Bomb.), B.A. (Cantab), Officiating.

1931. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.

1935. May-June—Dr. S. N. Chakravarti, M.Sc., D.Phil., (Oxon), Officiating.

1935. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.

1936. Dec. to Feb. 1937—Sri T. R. Venkatarama Sastriar, C.I.E., B.A., B.L., Officiating.

1937. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.

1939. March-April—Dr. B. V. Narayanaswami Nayudu, M.A., Ph.D., B.Com., Bar-at-Law, Officiating.

The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.

1940. Rai Bahadur Dr. Sir Kurma Venkata Reddy Nayudu Garu, K.C.I.E., D.Litt., M.L.C.

MEMBERS WHO HAVE DELIVERED
CONVOCĀTION ADDRESSES.

1931. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.

1932. R. Littlehailes, Esq., M.A., C.I.E.

1933. Diwan Bahadur Sir T. Desikachariar, Kt., B.A., B.L.

1934. Diwan Bahadur R. V. Krishna Ayyar, B.A., B.L.

1935. Sir Mirza Ismail, Kt.

1936. Sir Phiroze C. Sethna, Kt.

1937. The Rt. Hon'ble V. S. Srinivasa Sastriar P.C., C.H., LL.D.

1938. Sri K. Natarajan, B.A.

1939. H. C. Papworth, Esq., M.A., I.E.S.

1940. The Hon'ble Sir Lionel Leach, Kt.

PAPERS

ENGLISH

BIHARI

By

Pandit Amaranatha Jha, M.A.,
Vice-Chancellor, Allahabad University.

Both on personal and public grounds I am glad to send these few lines, as a I am hereby enabled to pay my tribute to an old friend of my father's, whose benefactions, magnificent alike in magnitude and in piety, make him one of the outstanding figures in modern India. Believing in the essential unity of Indian culture, I propose to translate some verses of a Hindi poet of the seventeenth century—short flights of fancy, pretty vignettes, which, because of the oneness of Indian tradition, will not be difficult of appreciation even by readers in the South.

Traditionally, Bihari wrote a Satsai, a collection of seven hundred verses. They are divided into four sections, Nayaka-nayikavarnana (Description of the Hero and the Heroine); Shringaravarnana (Description of the Erotic Sentiment); Shikha-nakha-ritu-varnana (Description of the Figure of the Heroine and of the Seasons); and Anyokti-Navarasa-Nripastuti-Varnana (Description of the Nine Sentiments and of the Monarch). The classification follows in the main the lines prescribed in the Sanskrit works, *Dasharupa* and *Sahityadarpana*. The verses centre round the eternally young and fresh figures of Radha and Krishna, but they are capable of universal application.

The *Doha* is a couplet and there is the same epigrammatic effect in it as in the heroic couplet in English. It de-

mands compression and brevity. It forces the poet to eschew unnecessary decoration. Each couplet is complete in itself and yet through hundreds of them there is a continuity of thought and harmony of atmosphere. Moods vary and emotions alter; but the underlying unity is not disturbed.

(263) My eyes are no more in my power: I am tired of explaining matters to them. They laugh at me, having obtained control over my mind and body. How, then, can I have power over them ?

(267) Himself full of beauty, from top to toe, he yet solicits me, smiling; truly, the covetous never abandon their greed.

(268) "Fie, you care not for your reputation. Why do you keep gazing at Krishna."?
"But what can I do to these covetous eyes of mine? What can I do to get rid of them ? "

(270) The Creator has not destined any happiness for these wretched eyes of mine. They dare not look at Krishna, because others are looking on, and they are restless without looking at him.

(276) How can one dwell, how can one exist in the domain of Love? There is no justice there: the eyes come into clash, but it is the heart that is taken prisoner.

(277) Fierce is the intoxication of beauty; terror does not drive it away ; it permits no sleep ; the passage of time does not diminish it ; it is not followed by the recovery of consciousness.

(278) Krishna's eyes rob me of my heart and of all my possessions. They waylay the wary and steal from those who are awake.

(280) I have made countless attempts; I have tried again and again, but I cannot extricate myself from Krishna's charms. My mind is mingled with his beauty, as completely as salt with water.

(284) The new love on the one side and consideration for the good name of her family on the other—between the two she was torn, and perplexed, and her mind is like the windmill.

(285) She ascends to the roof of the house and quickly comes down from it; she keep doing this without feeling exhausted in the least; she has become like unto a juggler's box.

(286) To and fro, and to and fro, she keeps moving, stopping nowhere even for a while; she keeps flitting backwards and forwards like the chakai bird.

(287) "My mind is engrossed with thoughts of him who has stolen my heart, and I have at the same time intense regard for my elders. I go on doing my household work, but my heart is as though on a swing."

THE FETISH OF APPLIED SCIENCE.

By

Dr. S. V. Anantakrishnan, M.A., Ph.D. (Lond)., A.I.C.

The origin of Science may be traced to that instinct in man that led to his acquisition of knowledge about Nature in order to survive. The need for food and the warding off of the attacks of animals led to the developments of primitive agriculture and primitive tools and weapons. From these beginnings to the scientific achievements of the twentieth century is a far cry and it is not our purpose here to trace historically this development.

One of the catchwords among politicians, especially in this country—and we hear their cry in our academic bodies too—is that research workers should devote their attention to problems in "applied science" rather than to "pure science." The fundamental mistakes made by these are the assumption that the two regions are water-tight compartments and the failure to realise that many of the socalled "applied science" problems arise only in the actual working of industries. A careful examination of the so-called applied sciences shows the extent of their dependence on the theoretical side. At the end of a Friday evening discourse at the Royal Institution, an old lady asked the lecturer Faraday as to the use of electricity and the scientist retorted "of what use, madam, is the new-born babe." Scientific outlook has not materially altered since then.

Scientific research may be broadly classified on the basis of the motives behind the work. To one class the dis-

covery and acquisition of new knowledge is the end while the other centres round utility. The transition from one to the other, however, is not a forbidden one. A large volume of scientific knowledge is useful though only a small fraction of it may be essential.

The close interrelationship between pure and applied science, between scientific discovery and invention, may be seen from an examination of a few select instances. Achievements in the latter field are often, however, a result of the exercise of mechanical ingenuity rather than a spirit of inquiry which should form the background of scientific research.

When Sir William Crookes uttered his warning on the possible shortage of nitrogenous fertilisers, several workers set on the problem but the final result of a successful fixation of atmospheric nitrogen could be achieved only when the theoretical side of each reaction was thoroughy worked out. The Birkeland Eyde process is a result of the thermodynamic and kinetic studies on the Nitrogen-oxygen reaction, while the Haber process of ammonia manufacture was preceded by a systematic investigation on heterogeneous catalysis and the nitrogen-hydrogen reaction. It is again the investigations of G. N. Lewis on the thermodynamics of the Ammonium Carbamate-urea equilibrium arising from the free energy change studies on the reaction $CO_2 + 2NH_3 \longleftrightarrow CO(NH_2)_2 + 2H_2O$ that has led to the manufacture of urea which is now gradually displacing other nitrogenous fertilisers.

The chemistry of colloids also reveals how the two aspects of scientific research cannot be dissociated. The present state of the petroleum industry, the textile industry and paint and varnish industry, is to be traced to the theo-

retical investigations of Carothers, Bancroft, Langmuir, Gardner in America, of Clayton, Donnan, McBain etc., in England and of Freundlich, Mark, Zsigmondy etc. in Germany.

The dehumanizing aspect of applied research is seen best in modern warfare. Scheele discovered chlorine in 1774 and Davy established its elementary nature some thirty years later. The use of its bleaching properties as well as the manufacture of bleaching powder is now known for nearly a century and a half but its use as an anti-human weapon in the form of poison gas is recent history. Another of Scheele's discoveries, glycerol, tells a similar story. It was a laboratory curiosity until Alfred Nobel's discovery of nitro-glycerine in 1865. The explosive properties and wartime use of this compound are too well-known to need any special mention.

Every one is familiar with radio-communication and broadcasting but few realise the beginning of these modern "necessities." Faraday discovered the principles relating to the nature and influence of the electromagnetic field and Clerk Maxwell's equations based on these enabled the proof that waves originating from conducting wires travel with the same velocity as light. The work of Fitzgerald, Oliver Lodge and Hertz were the logical outcome of these purely mathematical conceptions and gave them a physical reality.

Another development in pure science has, however, to precede the use of these electromagnetic waves for long distance transmission. The researches on "thermionic emission" form a necessary link in the chain. The "Edison Effect", the two electrode valve of Fleming, the triodes and pentodes of a later period and the theory and use of those

for generating and detecting continuous electric waves represent an important stage in the development of broadcasting. The promotion of natural knowledge has given place to purposeful invention. Here, too, we see the dehumanizing application of scientific research in some of the methods adopted in present day warfare.

Turning to another common industry, the electric lamp, we are faced again with an inter-woven texture of discovery and invention. These have become so common that one is apt to forget the early history as an outcome of purely scientific search. The observation that the passage of a current through a conductor raises its temperature sufficiently to even enable it to glow led to the carbon filament lamp but the peculiar property of carbon, *viz.*, a decreased resistance with increasing temperature, set limitations that necessitated the search for a substitute. As is well known, a rise of temperature tends to increase the speed of a chemical reaction and the high temperatures necessary for light emission restricted the choice to metals of high melting point and to an inert atmosphere for the filament. The vacuum lamp with a platinum filament is a result of investigations on high vacua and the chemistry of the platinum group of metals.

It is a far cry from the discovery of tungstic acid and tungsten by Scheele to the thoriated tungsten, coiled coil gas filled lamp of the present day. The properties of tungsten apart from its high melting point were against its wide use in the beginning. The discovery of ductile tungsten was of highly scientific importance and proved to be an equally important scientific invention. The theoretical investigations of Langmuir on heterogeneous catalysis and black body radiation, his extension of phase rule to non-equilibrium systems and his work on thermionic

emission paved the way for the development of the thoriated tungsten and the coiled coil lamps.

Accurate gas density determinations by Lord Rayleigh and the work of Dewar on heat transmission that led to the familiar Dewar flask enabled Ramsay to discover the inert gases. This discovery was of considerable theoretical interest and the post war period was to show its industrial import. The inert nature of the gases led to the choice of argon and krypton as suitable atmospheres for the gas filled lamp and in Neon provided advertisers with a means for a striking coloured sign. The invention of the electric discharge lamp and the production of these multi-coloured signs have their origin in the theoretical investigations of Crookes, J. J. Thomson and others on the discharge of electricity through gases and the more recent investigations on the phenomena of fluorescence and phosphorescence.

Another modern necessity, the refrigerator, also illustrates the transition from discovery to invention. It is in the investigations of Amagat, and Van der Waals on the pressure volume relationship and critical state of gases and vapours and in the classical "porous-plug" experiment of Thomson that one has to look for the beginnings of refrigeration. The foundation for the liquefaction of gases was laid by Faraday and the application of the Joule-Thomson effect enabled the development and use of liquefied gases.

When considering applied science, one cannot lose sight of work in the "border" sciences where investigations in several sciences find common ground. Reference may be made here to medicine, and its adjuncts. The work of Louis Pasteur on optical activity led him to a study of

fermentation phenomena and bacteriology that has immortalized his name all over the world by the work associated with Pasteur Institutes. It is no exaggeration to state that every outstanding discovery in the field of biochemistry and medicine has its origin in the quest for truth by disinterested workers. One has only to look into the history of X-ray therapy, radium therapy, chemotherapy and of studies on nutrition to see the close correlation of pure and applied science. The discovery and identification of the vitamins and the synthesis of some of them constitute a triumph in the search of new knowledge as much as in their practical applications.

The preceding paragraphs would have given sufficient indication that the political propaganda against work in pure science is baseless. One has only to glance through the publications of research laboratories of large industrial concerns to know the extent of fundamental work that is being carried on there in addition to work directly connected with the industry. In the ideal state, research may be carried on without any objective reward but the normal work is not so absolutely selfless. The seeker after knowledge aims at honour and academic distinctions while the inventor looks for a financial return for his labour and ingenuity. This leads us to the question of the existence and maintenance of research laboratories. A modern laboratory cannot exist or survive without an adequate subsidy. Most laboratories now functioning are either maintained by Governments or are subsidized by industrial combines. The financial interests, however, often tend to cramp the research workers' activities and freedom of thought. The extent to which vested interests thwart the spirit of inquiry varies with the country and the Institution. While not forgetting their objective, the

Bureau of Standards in Washington and the D.S.I.R. in its Teddington Laboratories carry on a lot of fundamental work but in this country we have to tell a different story. Industrial laboratories maintained by leading concerns view fundamental research with disfavour. While increased industrialization is a necessary development, it is a short-sighted policy to decry those workers who do not happen to carry on utilitarian research. They also serve a purpose in extending the bounds of knowledge. Understanding Nature is at least as important as using Nature and life may not be worth living if man had to deal with only useful things.

EDUCATIONAL RECONSTRUCTION

By

Dr. Anwar Iqbal Qureshi, M.A.,
M.Sc. (Lond.), Ph.D.,
Professor of Economics, Osmania University.

A system of education must be suited to the people for whom it is intended and there should be some consideration of the social and economic back-ground on which our system of education is to work. Unfortunately these two most fundamental concepts have been violently ignored in the present educational system of this country. In any scheme of educational reconstruction in this country the first and the most fundamental consideration should be that our educational institutions should have national outlook. In order to create this outlook the system of training should provide courses of instruction in that literature which contains the ideals of its race and all the nice proofs and subtle inspirations of the character, spirit and thoughts of the nation which it serves; and, besides that, instruction in the history and leading conceptions of those institutions which play an important role in the life of the nation. In order to achieve this important ideal special stress should be laid on the study of Indian culture and Indian History. The history books that are taught in our schools and universities give most misleading and hopeless accounts of events and leading character of our nation. They have already created enough mischief and without the least possible delay all efforts must be devoted to eradicate this evil and suitable text books should be prepared

to give an honest and sympathetic account of our past culture and heritage. Our universities could and should do a good deal to achieve this end. It is the object of learning not only to satisfy the curiosity and to perfect the spirit of individual men but also to advance civilization; and, if it be true, that each nation plays its special part in furthering the common advancement then every people should use its universities to perfect it in its proper role.

Woodrow Wilson has rightly remarked that, "Every man sent out from a university should be a man of his nation as well as a man of his time." In any scheme of reorganisation of education of this country this ideal should occupy a very important place.

Primary Education :—To begin from the very beginning our schools must be organised on sound modern lines to provide *real* education not only to the classes but to the masses as well. It should be the first obligation on the State to provide every citizen male and female with free primary education. The expenditure required for providing free universal education must be the first charge on our national exchequer. In this connection I would like to explain what I mean by free primary education. A good deal of nonsense and loose-talk has been going on in this country about the primary education and it is debated whether it should be a four years course or a five years course. Even if we accept a five years course it means that a child going to school at the age of five will finish with his free education at the age of ten. To my mind the idea of a free universal education finishing at the tender age of ten is most absurd and fantastic. In no country of the world such an absurd idea has ever been entertained. The average minimum age up to which free education is given in most countries is fourteen years which in itself is con-

sidered very inadequate. All money that will be spent on free compulsory education based on a course of five years will be absolute waste. Even in the interest of economy itself it is highly desirable that in no scheme of free primary education in India the course of instruction should be less than eight years.

Broadcasting and Education :—The development of broadcasting in India has opened many new possibilities for educational reconstruction. Broadcasting is still in its infancy in this country but still the possibilities of fully developing it are immense. Some stations in India have already started this experiment and many of their broadcasts for schools have been well deviced and of great interest and use. I propose that a separate department of education should be created by the All-India Radio and increasing use should be made of this modern educational instrument especially for the education of adults.

Cinema and Education :—The development of television is likely to provide still further facilities for the increasing use of the radio for educational purposes but until its further development increasing use should be made of Cinemas. Educational films should be prepared especially for teaching Geography and other allied subjects.

Vocational Education :—The second most important problem to be considered in any scheme of educational reconstruction is the need for the expansion of vocational education. India is rapidly developing into a vast industrial country and there is increasing need of skilled and trained labour. No country can develop its trade and industry without skilled artizans, therefore, the need for vocational education in all its aspects is most urgent.

Effective machinery should be established for securing close regular co-operation between industry and commerce, on the one hand and education on the other.

Vocational Guidance :—In any system of mass education vocational guidance must assume special importance. A swiftly changing economic and social world has made demand upon educational procedures for adjustment to the needs of the individual. Education through the discovery and development of individual ability prepares him for his life ; and the child's vocational guidance prepares him for living well ; and both yield him the maximum of satisfaction. Vocational guidance should assist the individual to choose an occupation, prepare for it, enter upon it and progress in it. As preparation for an occupation involves decisions in the choice of studies, choice of curriculums, and the choice of schools and colleges, it becomes evident that vocational guidance cannot be separated from educational guidance. Since work occupies one half of the working time of most individuals, it should represent the active expression of the whole personality. In view of this important function, careful study must be made of all the problems involved in vocational activity. Proper vocational adjustment for each citizen not only means individual happiness but avoids social and economic waste. The underlined principles which should govern vocational guidance activities should be based upon the recognition of individual preferences, of the complexity of modern educational life, of the right of the individual to make his own choices, and upon the realization that the adjustment of an individual to his occupation is an ever changing situation.

Effects of Economic Depression on Education :—Whatever hardships and privations the last Great Depression

may have caused all the world over, it has done one good service, and that is, it has made us all to face and examine critically the various important problems which were previously *ipso facto* taken for granted. One of these problems is the problem of university education. Until the economic depression set in, and the large number of graduates which our universities were minting rapidly found themselves without jobs, and the problem of unemployment among educated classes took a serious turn, little attention was devoted in India to the universities and their problems. All that mattered in the pre-depression period was, that the number of universities should be increased, and considering that the number of universities jumped from five in 1916 to sixteen in 1927, an increase of three hundred per cent. in the course of eleven years, the record of progress seems to be very satisfactory indeed. The universities that were established before 1916 were mainly based on the model of the London University, and were only examining bodies. The Calcutta University Commission of 1916 recommended strongly the desirability of starting unitary and residential universities and as a result, the majority of universities that have been founded since that date are residential and teaching universities. The establishment of so many residential universities on the model of the Oxford and Cambridge universities satisfied the Indian critics who had previously been dissatisfied by the older examining universities. It was considered that the establishment of residential universities had almost solved the fundamental problems of Indian education and all that was necessary was to improve the quality of teaching and emphasise the importance of tutorial work and to increase the contact of the students with the teachers. It was considered that in due course of time when the effects of these important improvements become

pronounced our problems will be solved. But during the past few years the ship of Indian education has not sailed as smoothly as it was expected and many critics have begun to doubt if the very structure of the ship itself was strong enough to stand the stormy seas of world events. The tremendous rise in the number of unemployed young persons has led to the policy of despair and many superficial critics hold that the universities are responsible for many of the country's troubles. It is not realised that the universities are in no way responsible for unemployment which, on the other hand, is due to causes far beyond their control. Moreover, it is not the function of the universities to create avenues for employment. It is a very narrow view to take that if the number of people admitted to universities is drastically curtailed the possibilities of employing this restricted number will increase. The fundamental function of universities is not to act as an employment bureau but as a trainer of the mind and intellect of the future citizens and to bring out their latent faculties which may be used in any walk of life. It is an unfortunate fact that our universities are not centres for intellectual training, culture and enlightenment as they ought to be. Have our universities succeeded in mental development of students ? It is on the answer to this question that our universities stand or fall. Unfortunately they are places for cramming and smattering, and there has been a serious maladjustment in the university life. Too much importance is attached to the literary and academic side and very little to the intellectual and cultural side. Much time is wasted by the professors on lecturing to students and by the students in cramming and digesting the contents of those lectures. We find that even in the field of knowledge an Indian student does not fare favourably with students of other universities. Why, in spite

of so much teaching by professors, and cramming by students do our students do so unfavourably ? Surely there must be something wrong in our system of teaching which shows such poor results. I think the fundamental difficulty and defect in our system of university education is that we impart teaching through a foreign medium, which acts as a great deterrent to any substantial progress. It is gratifying to note that educational experts in the country have begun to realise this great defect which exists to-day in our universities; the only exception to which is the Osmania University established in 1919. It is the first university of its kind in India where all lecturing work is carried on through the medium of the primary vernacular of the country. Twenty years ago when Mr. Akbar Haydri as he then was (Sir Akbar Haydri, Newab Hayder Newaz Jung Bahadur, President of His Exalted Highness the Nizam's Executive Council, and the present Chancellor of the university), submitted a memorandum in which he propounded this great scheme of starting a university with the primary object of teaching through Urdu, there were not many experts in the country who received this idea with any great favour. As a matter of fact, some of the greatest experts considered it rather fantastic and altogether unworkable. It must be said to the credit of Sir Akbar that all these heavy showers of criticism that poured from all quarters did not affect him, and with great courage, foresight and enthusiasm he launched this great experiment which today is an accomplished fact, and all experts in the country are now looking to this university for guidance. It will not be considered here out of place to reproduce briefly some of the remarks which the Vice-Chancellor of Andhra University made in his recent convocation address : " In pride and fullness of heart as an educationist, I congratulate the sovereign and his Government on the success

achieved by the Osmania University. The band of young, accomplished and enthusiastic teachers composing the different faculties are a team which the greatest educationists in India would be proud to captain. The researches accomplished and still in progress and the investigation in the theoretical and applied fields of Science including Zoology, Physics, Chemistry, Civil Engineering and History augur not merely an All India but an international future for the Osmania University. To be the first to recognise an Indian language as a fit medium for university culture and to have made the university founded on the principle a centre of modern research are accomplishments for which India must be eternally grateful to the Nizam's Dominions."

The primary function of the University, as I have already remarked, is to train the mind, but the training of mind can never be thorough if it has to employ a foreign vehicle of thought. English is not only a foreign language to most of us in India but is also "alien." By "alien" I mean that it has no connection with the tradition, culture and life of the East, and except in the big cities it is seldom spoken. A great deal of saving in time and improvement in the quality of the work can be effected if the teaching work in the Indian Universities is carried on through the medium of vernacular. One naturally asks through which vernacular, as there are so many languages in the country. The Indian National Congress has decided to adapt Hindustani as the *lingua franca* of the country, and I think if we rise above petty regional and provincial jealousies it will not be difficult for the country as a whole to adopt Hindustani as the chief medium of instruction in all our universities. I should not be misunderstood to belittle the importance of English in our universities. I firmly believe that a sound knowledge of English is absolutely essential if we

are to benefit from the very valuable treasures of knowledge and learning of the West. It is with this idea in view that English has been made a compulsory second language and no student is awarded a degree unless he passes an examination of fairly high standard in English.

Medium of Instruction

Now I come to the most pertinent part of my paper, *viz., the* possibility of teaching in Urdu. Still there are many people who seriously doubt the possibility or at least the practicability of such a proposition. Before I proceed further to explain this matter, I would like to mention a few facts. Perhaps it may be recalled that it is not very long ago that History and Geography were taught in English in the Punjab schools and the matric students had to answer these papers in English. It is fortunate that wise council prevailed and the Punjab University decided to give option to the Matric students to answer questions in these two papers either in English or in any of the vernaculars. To some it appeared a very retrograde step. I feel no hesitation whatsoever in congratulating the authorities of the Punjab University for their very wise decision. We find to-day the standard of these answers has increased considerably and more than 90% of the students answer their questions in vernacular. What the Punjab University has done for History and Geography for the Matriculation, the Osmania University has done for all other classes. Now, some may say that there is a limit to everything. And the likely limit to most people seems the matriculation. They would say so far and no more. This is the attitude of Calcutta and Madras Universities. The Agra University has gone a step further and would like to try up to the intermediate. In the Allahabad University candidates appearing for the M.A. examination in Economics have to write their

essays in easy Hindi or Urdu. I have given these examples just to show you the changing trend of opinion. What the Punjab University did for the Matriculation about twenty years ago, the Calcutta University is going to do now. The objections raised against the option in the Punjab University twenty years ago were repeated in the Calcutta University.

It is said that adequate literature is not available in the vernaculars. Also there will be immense difficulties regarding the technical terms, so on and so forth. I quite admit the force of the arguments. But something has to be done. We cannot afford to be mere spectators and watch our own intellectual ruin. Why is the intellectual standard of ordinary Indian graduate so low ? In my opinion the real answer to this question is that he does not properly understand what he reads. He only crams and passes the examinations. Although I have admitted above that there are real difficulties regarding the availability of literature and the coining of terms yet these difficulties are vastly exaggerated. Take, for example, the teaching of classical languages. Why on earth a student has to translate these in English ? I personally know the cases where students had passed the highest examination of the Punjab University in the classical languages but failed in the intermediate in the language paper, simply because their English was so weak that they could not translate the classical text into English.

When the Osmania University broke new ground and declared to base its teaching on Urdu, it was regarded as a most fantastic idea. But today we have showed the world how it could be done. The teaching and examining in all subjects from the intermediate to the Ph.D. standard is done in Urdu. The standard of answers of students is far higher as compared with the students of other universities.

I am firmly of the opinion that if teaching in Indian Universities is to improve it must be done in the vernaculars. In the course of twenty years we have coined thousands of terms and several hundred standard books have been translated into Urdu. If our example is followed by all other universities a tremendous amount of literature will be forthcoming in a short time. What Osmania has done, other universities too can do.

lus, Sophocles, and Euripedes, wrote tragedies (Eleusinian dramas) which were of a secret nature, because they were religious in plots. It is even said that on one occasion Aeschylus was accused of having let out an Eleusinian secret, and was released only on the intervention of his brother, who was a great warrior. Thus we see that the drama proper had its origin in religion in Greece.

In India, which justly claims to have an independent origin of the drama, we hear of the songs, some of which were accompanied with dances, in the most ancient times. Apart from the divine origin of music, dance and drama, we have the rhythmical hymns in the *Vedas* (*e.g. Samaveda*); and mention is made of the *lasya* or gentle dance of Parvati, the *tandava* or vehement dance of Rudra, etc. Dances formed a part of the celebrations in the most ancient sacrifices,—human, horse, goat,—one yielding its place to the next. Moreover, the *Bharatanatya-sastra* which is said to have been written in the fifth century B.C., contains a systematic record of canons on music, poetry, art, dance, and drama. *Bhasa,* one of the earliest dramatists as we have known, has selected most of his themes from the *Ramayana* and the *Mahabharata. Kalidasa,* (who lived between the first century B.C., and the fifth century A.D.) writes in his *Malavikagnimitra.*

" देवानामिदमामनन्ति मुनयः कान्तं क्रतुं चाक्षुषं "

(Sages say that the drama is a sacrifice to the gods, which is pleasing to the eye). This indicates that in those days, the Naramedha, the Asvamedha, and such other sacrifices were not considered to be pleasing to the eye ; but that the drama, which is also a sacrifice (action) gives not only pleasure to the eye, but also pacification to the gods. We see here the religious origin of the drama in India.

India and Greece are the only two countries which are bestowed with the fortunes of having brought forth their native dramatic faculities, even in the most ancient times.

China is said to have had her alphabet even before the twentieth century B.C. The Chinese are noted for their excellence in the imitative faculty. They take pride in their " Book of Oods " which proves the existence of music and poetry prior to the twelfth century B.C. The Chinese are famous for their taste and native talents in music, but they had no regular dramas till the sixth century A.D. But, even in those days when they had dramas not known to the historian, the Chinese are said to have celebrated every function with a dramatic performance—functions such as the promotion in the salary of an officer, the marriage of a middle class man, and the birth of a child.

In Italy, we hear about the songs and dances of the *Talics* in the eighth century B.C., at a time when Greece was enjoying her Mystic dramas, and India her Sacrificial performances. All these performances had for their ultimate object, the elevation of the soul and consequent sublimity. Again we see the religious aim in the ancient drama. After the Punic Wars which were fought in the third century B.C. Italy came into close contact with Greece ; by which the influence of the Greek drama spread on to Italy. The Greek prisoners in Italy were given privileges to exhibit their talents in dramatic action, and it is also known that some of those who fascinated the public by such talents were released, and were allowed to enjoy free-citizenship.

France, Spain, and Great Britain have their records of their dramas from the eleventh century A.D., but even before that time, there were, no doubt, folk songs in France and Spain, and Saxon dances in Britain. It is only after

the influence of Latin literature over Britain that she began to have her regular dramas. The other countries of Europe had their languages perfected even at a later date. The eleventh and the twelfth centuries brought manifold changes in the history of many countries in the world. Every country had her dialect perfected, her government systematised, and her art and culture dignified.

It is now seen clearly that the origin of the earliest drama was only religious as far as the theme is concerned, with very few exceptions, of which the *Mricchakatika* is one. After the twelfth century A.D. the drama took different shapes by taking in themes from the social, political and historical fields.

CERA NADU AND TAMIL

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For the elucidation of the history of the Kerala country just before and during the three centuries of the Christian era, we have no epigraphical, archaeological or even literary evidences in Malayalam. The 'Keralotpatti' is regarded as the oldest available account of Kerala, but this belongs to the 17th century A.D., and is further, as Logan observes, "a farrago of legendary nonsense which had for its aim the exaltation of the Brahman caste and influence." The late lamented[1] K. G. Sesha Aiyar similarly observes that "to gleam history from this work is as hopeless as to seek for a needle in a hay-stack." The Keralotpatti says that Kerala arose at Parasurama's Command from the seas. This means that, as P. Padmanabha Menon[2] suggests, the country covered by Malabar, Travancore and Cochin, was formed by volcanic agencies on this coast centuries ago; "that there was once a subsidence, probably sudden, at Gokarnam ; and secondly that there was afterwards a perceptible uprising, most probably in this case gradual, of at least some portion if not nearly all the coast between Gokarnam and the Cape." This view has received confirmation from the investigations of the Geological Survey of India.[3]

1. 'Chera Kings of the Sangam Period,' p. 78.
2. 'History of Kerala,' Vol. 1, pp. 19 and 20 of the notes.
3. Memoirs of the Geological Survey of India, Vol. XXIV, part III, p. 35.

Mr. Philip Lake shows that South Malabar between Beypore and Ponnani rivers was the result of such upheaval.

The chronicle then gives some traditions which are too hazy to be taken as History. According to it a period of indigenous kings, who were generally incompetent was followed by a period of kings selected from the neighbouring countries on the understanding that each was to rule for twelve years. The earliest of them is said to be one Keya Perumal, and after him were brought a succession of Chola, 'Pandi,' Kerala, Tulubha' Indra and Arya Perumals, and others. Historians can see in this only this much, that "the author has heard of invasions of Kerala by some Pandya, Chola[4] and other neighbouring kings or chiefs who probably retired to their territories after their raid and from that he wove his fanciful list of Perumals brought by the people into Kerala."

There is another work called the "Kerala-mahatmyam" which is in Sanskrit and which is allied to the work mentioned above. But it is even later, and, as pointed out by C. Achyuta Menon[5] and C. A. Innes,[6] so full of inconsistencies, anachronisms and absurdities that it is difficult to separate from the chaff what few grains of truth they contain.

In the absence of epigraphic and archaeological evidences, we are lucky in having literary sources of information in regard to this period of Malayalam History. These consist of (1) the Tamil classics of the Sangam period, and (2) the Greek and Roman writers like Ptolemy, Pliny and the author of the Periplus of the Erithrean Seas.

4. See 1.
5. *'Cochin State Manual,'* Ch. II, p. 29.
6. Malabar District Gazetter, Vol. II.

The Tamils, of all the Dravidian nations, cultivated and preserved the earliest literature of continuous development and unique historical value. Among these works we find three distinct classes, viz., the naturalistic, ethical and religious. The value of the first type, in particular, cannot be over-estimated, though even here much caution is necessary in sifting and arranging the available material. On the whole, we have in them faithful records of the political, social, literary and religious conditions of Malabar during the Sangam Period. Previous to the era of dated inscriptions, they are the earliest sources for the construction of South Indian History. The most important works among the Tamil classics that throw light on ancient Kerala are the *Purananuru, the Padirrupattu,* and the *Silappadikaram,* besides a few lyrics of the *Agananuru* and the *Narrinai.* We understand that the land, bounded on the east by the Western Ghats and the west by the sea, was called in the early Tamil works, the Cera-nadu (சேரநாடு), and the kings of the country Ceran, Ceraman or Ceralan (சேரன், சேரமான், சேரலன்). From very early times, Tamilakam was ruled by the three crowned kings, (முடியுடை மன்னர்) Cera, Cola and Pandiya. The *Tolkappiyam* the famous Tamil grammar and the oldest extant Tamil work, refers, in one of its[7] Sutrams, to the Tamil country as one belonging to 'the famous three within the four boundaries.' The Commentator Perasiriyar enumerates the four boundaries as Venkadam (Tirupati hills) in the north, Kumari on the south, and the seas on the east and the west. The Kumari mentioned here, it must be known, is not the present Cape Comorin, but the name of a river of the same name in the southern Tamil continent, the Kumarikandam, which was known to the early Tamil works and which was submerged

7. Tolkappiyam, Poruladikaram, Seyyuliyal, No. 79.

later on. Panambaranar, the class-mate of Tolkappiyar, has written a preface to the *Tolkappiyam,* wherein he refers to the northern and southern boundaries of Tamilakam. The commentator[8] Nachchinarkkiniyar explains the absence of the mention of the boundaries on the east and west on the ground that they were the seas. In those early days Cera country was part and parcel of Tamilakam. Tradition handed over from ancient days says that the Cera-Cola-Pandiyar were the rulers of the land from time immemorial. The famous commentator of the Tirukkural explaining the phrase Palankudi (பழங் குடி) ancient family, occuring in the chapter entitled Kudimai (குடிமை), says that it was as old and great even as the three royal families of Cera, Cola and Pandiya, which could be traced to the beginning of creation (படைப்புகாலந் தொடங்கி மேம்பட்டு வருதல்). Evidently the phrase "படைப்புக் காலந்தொடங்கி" is an exaggeration. We may take it to mean from very early times. To quote some more instances to prove that Tamil was prevalent up to the west coast, we may refer to the two following Sutrams of Sikandiyar and Kakkaipadiniyar respectively.

1. "வேங்கடம் குமரி தீம்புனற் பௌவமென்
றிந் நான்கெல்லை தமிழது வழக்கே".

2. வடக்குந் தெற்குங் குடக்கும் குணக்கும்
வேங்கடங் குமரி தீம்புனற் பௌவமென்
றந்நான் கெல்லை யகவயிற் கிடந்த"

These Sutrams refer to the east and the west boundaries of Tamilakam as "பௌவம்" or the sea. It is interesting to note that the Cera[9] author of the *Silappadikaram* too,

8. Tolkappiyam, Eluttatikaram, Naccinarkkiniyar commentary, p. 8. S.I.S.S.W.P. Society edition.

9. Silappadikaram, VIII, ll. 1-2.

while enumerating the boundaries of Tamilakam, leaves out the west and the east for the same reason pointed out by the commentator of Tolkappiyam.

The ancient Cera country is referred to in Sanskrit works as Kerala, and that seems to be the name by which the Malayalis love to call their native land. P. T. Srinivasa Aiyangar[10] says that the name of this country occurs in the original form of Cera itself in the Taittiriya Aranyaka as Cera-padah, and he cites the authority of Prof. A. B. Keith for constructing the expression to the Ceras. But this is doubtful, as Sayana takes Cera to mean snake.

Katyayana (first half of the 4th century B.C.) and Patanjali (B.C. 150) make mention of Cera, though Panini (7th century B.C. if not earlier) does not. The Mahabharata, the Ramayana, the Vayu-purana, the Matsya and Markandeyapuranas mention Kerala and Gokarnam. The second and 13th edicts of the great Buddhist emperor Asoka refer to the ruler of Kerala as Keralaputra and class this country as one of the border-lands (Pratyantas) of his empire.

Since the Cera country formed the western portion of Tamilakam, the Cera king is described in the Tamil classics as the ruler of the western country. The epithet, "Kudapulam kaval"—maruman literally meaning "one who came in the line of kings protecting the western country," (குடபுலம் காவல்மரபின்) is used for the Cera king by the author of the *Sirupanarruppadai,* a Sangam work ; and he describes the Pandya and Chola respectively as the kings of the southern and eastern countries. Since the western

10. History of the Tamils, p. 29.

country is mountainous, the Chera king was also known as Malaiyan (மலையன்).

Apart from the big geographical divisions, Tamilakam was divided into two divisions from the view-point of the purity of the language spoken therein. The one was Sen Tamil Nadu (area where good Tamil was spoken), and the other Kodun-Tamil Nadu (tract where bad Tamil was spoken). Madura, which was the seat of the Third Tamil Sangam, and its surrounding parts were the Sen-Tamil-Nadu, and under the Kodun-Tamil Nadu are included twelve districts, which Senavarayar and Nachchinarkkiniyar, commentators of the *Tolkappiyam*, name in the following order from the south-east to the north east of Sentamil Nadu—Ponkar, Oli, Tenpandi, Kuttam, Kudam, Panri, Karka, Sitam, Puli, Malaiyamanadu, Aruva and Aruva—Vadatalai.

The commentator of the *Yapparunkalam* gives the same list with this difference, that instead of Ponkar and Oli, he has Ven and Punal. Kanakasabhai Pillai[11] too accepts this view, and gives a map setting forth the four Koduntamil Nadus or Provinces bordering on the Arabian Sea in the following order from north to south. Puli Nadu, Kuda Nadu, and Venadu. The names were appropriately given to each province, as they noted its peculiarity. 'Puli' or the 'Sandy tract' extended most probably from the banks of the modern Agalapula to the mouth of the Ponnani river. The soil of this part of the country is remarkably sandy. Kudam or the "western land" denoted apparently the region between the mouth of Ponnani river and the southernmost mouth of the Periyar near

11. The Tamils 1800 years ago facing, p. 14.

Ernakulam. This would have been the most western land to the first immigrants who came into Malabar by the Palghat Pass.

Kuttam or the land of lakes comprised the territory around the modern towns of Kottayam and Quilon, which is to-day known by the same name to the natives of the country. The river Pali or Palai, which flows through this province formed at its mouth several islands and lakes, and hence this tract was called Kuttam[12] or " the land of lakes." To the south of this province, lay the Venadu which comprised the major portion of Travancore.

Even to-day the Maharajah of Travancore is known as " Venattadigal Tiruvadigal." The low hills and valleys in this region were covered with luxurous forests of bamboo, and therefore it was aptly called Ven-Nadu or the " bamboo land." The Chera, being the overlord of these provinces, was also known after them, Puliyan, Kudavan and Kuttuvan.

The above mentioned five provinces formed the ancient Chera country, the capital of which was Vanji or Karur. It was situated on the banks of the Periyar. Adiyarkkunallar, the commentator of the *Silappadikaram,* identifies this Karur with Tiruvanjaikkulam,[12] but Kanakasabhai Pillai identifies it with Tirukarur three miles from Kothaimangalam and[13] 28 miles east by north of Cochin, where the remains of an old temple and other massive buildings are still visible.[14] Pandit R. Raghava Aiyangar

12. Cera Kings of the Sangam period, chapter VI.
13. The Tamils 18 hundred years ago, p. 15.
14. Journal of the Asiatic Society, Vol. II, p. 336; Sewell's lists of Antiquities, Vol. II, p. 261.

discusses this question very elaborately in his "Vanjimanagar," and arrives at the conclusion, and Pandit M. Raghava Aiyangar in his "Cheran Senguttuvan" agrees with him, that Vanji, the ancient capital of the Cheras, is neither of these places, but Karur in ancient Kongu. or modern Trichinopoly District.

The western geographer of the first century A.D., Pliny, who refers to the ruler of Kerala as Calobotra, mentions Muziris, which has been identified by Dr. Burnell with the modern Cranganore, as the first emporium of trade in India. Tamil Literature too, has nothing but praise for the sea-borne trade that passed through this Chera seaport and we cannot but refer to two famous odes from the *Agananuru* and *Purananuru,* referring to his trade at Muzuris, and the articles (like pepper, etc.), obtained from the mountain and the sea exported to the countries of the Yavanar, *i.e.,* Greeks, in exchange for gold. The songs are :—

1. .....சேரலர்
சுள்ளியம் பேரியாற்று வெண்ணுரை கலங்க,
யவனர் தந்தவியன்மாணன் கலம்
பொன்னொடு வந்து கறியொடு பெயரும்
வளங்கெழு முசிரியார்ப் பென. (அகம். 148)

2. கலந்தந்த பொற்பரிசம்
கழித்தோணியார்க் கரை சேர்க்குந்து
மலைத்தாரமும் கடற்றாரமும்,
தலைப்பெய்து மருநர்க்கீயும்,
புனலங்கள்ளின் பொலந்தார்க்குட்டுவன்
முழங்கு கடல் முழவின் முசிரியன்ன.
(புறம் 343)

The *Periplus,* written in the second century A.D., also refers to 'Kerobotras' and the lands he ruled over. It says that it extended from Nouro and Tyndis in the north to Nelaynda in the south. Ptolemy (second century A.D.)

also mentions Karoura as the capital where Kerobotras lived.

The word Kerala will, if carefully analysed, ultimately lead us to the root Chera. Dr. Caldwell on the other hand erroneously conceived "Kerala" to be the original form of the word from which according to him Chera is derived. He committed the same mistake with regard to the word 'Dravidian,' but the mistake has been exposed by Dr. Grierson in his Linguistic Survey of India. In the *Purananuru* we find the words Cheralathan. Manikka-vasagar's *Tiruvachakam* has "தென்னவன், சேரலன், சோழன்" and in *Tirumukkhappasuram* given to Panapatra we have, செருமாவுகைக்கும் சேரலன் காண்க".

We know very well that in Canarese roots and words beginning with the palatal consonant *C*, it changes into the guttural consonant *K*, we give the following examples :—

Tamil.		*Canarese.*
Cey (to do)	..	Key
Cevi (ear)	..	Kivi
Ceri (a hamlet)	..	Keri
Centamarai (red lotus)	..	Kendavara.
Cennir (red water, blood)	..	Kennir

Thus there is a greater possibility for the word ceral to have become keral and the country of Keral, Keralam in Canarese than for 'Cera' to come out of Kerala ள and ல interchange easily and Keralam (கேரலம்) becomes easily Keralam, (கேரளம்). It is this form that has entered Sanskrit as Kerala. The Sanskritists might have taken the word from Canarese which was more easily

accessible to them perhaps, than Tamil which was spoken in the southern most part in India.

Rev. Foulkes* contends that Chera and Kerala denote the same country, Kerala being but the Canarese dialectical form of the word Chera. Dr. Gundert in his Malayalam Dictionary has, under the word Keram—" Canarese pronunciation of Cheram ", " Chera = Malabar ;" and under the word Keralam " Cheram = the country between Gokarnam and Kumari." While agreeing in the main with the learned Doctor that the word Ceram has become Keralam through Canarese, we are disposed to think that the word may have originated from Ceral, another form of the word Ceran. Many Cera Kings have been called as we know, Ceralan and Ceral. The word Ceral is used in the *Silappadikaram* itself while denoting the author of the poem as "குடக்கோச் சேரலிளங் கோவடிகட்கு".

It will not be out of place here to consider the terms " Malabar and Malayalam " which denote the country and its language now. We do not know for certain from when this word has come into existence to mean the language ; and its etymology also is obscure. The word properly denotes the territory and not the language. It is composed of two words *malai* (mountain) and *alam* (from al to possess, to use, to rule and not to be confounded with al, depth) which means a territory subject to the domination of mountains. It is noteworthy that the word Malayalam does not occur either in the early or mediaeval Tamil Literature. As we have pointed out before, the country where Malayalam is now spoken was called Chera Nadu and the people called themselves Tamilar and in the

*Salem District Manual, Vol. I.

Silappadikaram and other ancient Tamil classics the Cera king is spoken of as a Tamil king. Malayalam is also known as Malayalma, another form of which is Malayama ; but both words are substantially the same. The appellative noun corresponding to Malayalam is Malayali (a man of Malayalam).

The origin of the name Malabar has given scope for much speculation. The first part of the word is evidently the Malayalam word for mountain as in the word Malayalam itself. The first appearance of this word mala with the suffix 'bar' is in 1150, and from the time of its appearance, the first part of the word is frequently found to change. Col. Yule gives the following Arabian forms —Malibar, Manibar, Mutibar, and Munibar. The following forms are used by early European travellers :—Munibar, Milibar, Melibar, Minubar, etc. From the arrival of the Portuguese in India it seems always to have been Malabar.

It has been difficult to ascertain the origin and meaning of the suffix bar. Lassen explained it as identical with the Sanskrit vara in the sense of a region, Malayavara meaning the region of Malaya, the western ghats. But the term Malayavara is fictitious, neither found in Sanskrit nor used by the people of the Malabar coast. The same difficulty stands in the way of Mala Varam, (Tamil, Malayalam), the foot of the mountains. Dr. Grundert suggested the possibility of the derivation of bar from the Arabic, barr—continent as he considered it probable that the name of Malabar has been first brought into use by Arabian navigators.

Colonel Yule arrived independently at a similar conclusion, but he preferred the Persian bar to the Arabic

barr, and Dr. Caldwell* agreed with Colonel Yule and thought that bar, country, may have been added to 'Male' to distinguish the mainland from adjacent islands,—the Maldives and its Laccadives.

For a very long time Tamil was known to European scholars as the language of Malabar, or the Malabar language. Fabricius, who composed a Tamil Dictionary in the 18th Century, styled it " Dictionary of Malabar and English wherein the words and phrases of the Tamilian language commonly called by the Europeans, the Malabar language, are explained in English." It was only in the latter part of the 19th Century that this mistake was corrected, thanks to the writings of Beschi, Dr. G. U. Pope and other orientalists.

From the *Silappadikaram* we learn that the Cera king who ruled the country in the 2nd century A.D., was Senguttuvan. The author of this epic was the royal ascetic and younger brother of the king. He is called Illangovadigal (the royal prince ascetic). Senguttuvan is the best known of the ancient Chera Kings. He is also the hero of the fifth decade of *Padirruppattu* of which the famous Paranar was the author. Being a great warrior, Senguttuvan is said to have conquered extensive regions from Cape Comorin in the south to the Himalayas in the north.

வடதிசை யெல்லை யிமய மாகத்
தென்னங் குமரி யொடாயிடை யரசர்
முரசுடைப் பெருஞ்சமந் ததைய வார்ப்பெழச்
செல்லல நாட்டைத் தொல் கவினழித்த
போரடு தானைப் பொலந்தார்க் குட்டுவ"[15]

*Comparative Grammar of the Dravidian Languages, III, 2nd Edn., p. 28.

15. Padirruppattu, 43.

The Vanjikkandam or the 3rd Canto of the *Silappadikaram* is nothing but a graphic account of the king's northern expedition, in which he was assisted by his ally 'Nurruvar Kannar'.[16] On that occasion he fought a battle on the banks of the Ganges, in which the combined troops of certain "Aryan" princes among whom Vijaya, the son of a Bala Kumara, Rudra and others are mentioned. After defeating them he returned triumphantly with a fragment of stone from the Himalaya, for fashioning the image of Kannaki, the Pattini-Devi, who came to Malai-Nadu after burning down Madura, where her husband had been illegally sentenced to death by the Pandiya King. He built a temple, identified with that of modern Cranganur (Kodungalur) and consecrated her image there. From a few astronomical details available in the *Silappadikaram* K. G. Sesha Aiyar arrives at 171 A.D. as the year of fire which engulfed Madura at the Pattini Devi's command. Further, the poem says that at the consecration ceremony of the image, one of the princes present was King Gajabahu of Lanka, surrounded by sea (கடல் சூழிலங்கைக் கயவாகு). From this synchronism we can arrive at the date of Senguttuvan.

Historians are of the view that Senguttuvan's invasion was feasible in the disturbed conditions of North India in the latter half of the 2nd Century A.D.[17]

Space does not permit us to go into chronology and detailed history of the early Chera Kings. The *Padirrup-*

16. Kanakasabai Pillai has correctly identified the Nurruvar Kannar with the great Andhra Satakarnis of the times.

17. Cera Kings of the Sangam period. K. G. Sesha Aiyar, ch. VII, Section 5.

pattu, moreover is not completely extent now. The first and the last tens are lost. The extant eight sections deal with the achievements of these eight Chera Kings :—

1. Imayavaramban Nedun Ceralatan.
   (இமயவரம்பன் நெடுஞ் சேரலாதன்)
2. Palyanai-Selkelu-Kuttuvan
   (பல்யானைச் செல்கெழு குட்டுவன்).
3. Kalankaykkanni Narmudicceral
   (களங்காய்க் கண்ணி நார் முடிச்சேரல்).
4. Kadal-Pirakkottiya Senkuttuvan
   (கடல்பிறக் கோட்டிய செங்குட்டுவன்).
5. Adukotpattu-ceralatan
   (ஆடுகோட் பாட்டுச் சேரலாதன்).
6. Selvakkadunko-Valiyatan
   (செல்வக்கடுங்கோவாழியாதன்.)
7. Takadur erinta Perunceral irumporai
   (தகடூர் எறிந்த பெருஞ் சேரல் இரும் பொறை).
8. Kudukko-ilanceral irumporai
   (குடக்கோ இளஞ்சேரலிரும் பொறை).

The fifth decade, it will be noted, deals with Senkuttuvan of the *Silappadikaram* fame. For the names of the Cera kings celebrated in the *Purananuru* lyrics we have to depend on the colophon appended to each lyrics of that collection. From these we gather the names of the seventeen[18] Cera kings ; but some of these are reduplications. More than two attempts have been made to identify and assign chronological order for these cera kings. Full

18. Cera Kings of the Sangam period, K. N. Sivaraja Pillai.

justice cannot be done to the discussion[19] here, and the reader is directed to consult the special works on the subject. Kanakasabai Pillai brings the Ceras up to the middle of the 2nd Century; K. N. Sivaraja Pillai takes them to the end of the 2nd Century ; and K. G. Sesha Aiyer takes them still further to the end of the 3rd Century A.D.

It is curious that, neither in the Tamil classics, nor in Sanskrit, the language that is prevalent now in this country, is said to have been prevalent here in those days. The language spoken in those days was only Tamil, though it was Koduntamil and not Sentamil. Still it is a wonder that it is from this part of the country that the *Padirruppattu* and *Silappadikaram,* the famous Sentamil Kaviyan which poet Bharathi praises as capturing our mind (நெஞ்சை அள்ளும் சிலப்பதிகாரம்) saw the light.

The Purapporul-Venba-malai, the Tamil grammar assigned to the 7th or 8th Century A.D., the *Perumal Tirumoli* of Kulasekara Alvar[20] (*Circa* 600-800 A.D.), Sundaramurti Nayanar's *Tevarappadikam* on Lord Siva of Tiruvanjaikkalam, and his friend Ceraman Perumal's *Ponvannattantati* and *Adi-ula* (*Circa* 9th Century A.D.) sprang from this Cera country. This shows eloquently that the Cera kings were ardent patrons of Tamil, and that many of them were themselves no mean poets.

19. 1. Chronology of the Early Tamils—K. N. Sivaraja Pillai
2. Cera kings of the Sangam period—K. G. Sesha Aiyer.
3. Beginnings of South Indian History, Dr. S. K. Aiyangar.
4. The Tamil 1800 years ago—Kanakasabai Pillai.

20. 1. Early History of South Indian Vaishnavism in South India, S. K. Aiyangar.
2. Alvargal Kalanilai, M. Raghava Aiyangar, pp. 157-72.

Attention may now be drawn to the very interesting fact that the names of many villages in Malabar and Travancore which terminate in words like ceri, ur, kodu, karai, angadi, etc., indicate that they were originally occupied by the Tamils. Again, from the existence of the Tamil words kilakku and Merkku in the Malayalam language, Dr. Caldwell argues that the Malayalam country must have originally been colonised by the Tamils. The words Kilakku and Merku literally mean downward and upward respectively. In these words the particle ku is a termination denoting direction. These words quite aptly describe the East and the West of the Tamil country. They are derived from the roots Kil and Mel respectively, both of which must have necessarily originated on the eastern side of the Ghats ; for it is to the west of eastern plains that this lofty range of mountains rises everywhere with the result that to go westward is to go upward, while to go eastward is to go into the country sloping downwards to the sea. But the configuration of the Malayalam country is directly reverse, the mountain range being to the eastward and the sea westward. Notwithstanding this fact, the Malayalam words for East and West are identical with the Tamil words, Dr. Gundert argues that there is another word for denoting west in Malayalam, namely, Padinnaru, and that word is more commonly used than the word merku. It may be true, but Padinnaru is also a Tamil word. It is a corruption of Padinayiru, *i.e.*, the direction, where the sun sets. In the *Purananuru*, stanza 82, the word occurs in the form of Pattanayiru (set sun). According to Dr. Caldwell these words are a positive proof of the early colonisation of the country by the Tamils.

Some of the old customs and manners of the people are still lingering in the country, we are told, though the

traces of the very early occupation of the country by the Tamils are almost extinct except the Tamil element in the vocabulary and grammatical structure in Malayalam language, which therefore continues to be understood easily by a Tamil stranger. Among the ancient lingering Tamil customs, we venture to suggest here the Sakkaiyar-kuttu —the dance of the Sakkaiyar, of which Professor P. Sankaran Nambiyar of the Maharajah's College, Ernakulam, gives a valuable account and estimate in the 1939 Special Cochin Number of the *Madras Mail* in honour of His Highness the Maharajah's 77th Birthday Celebrations.

This Kuttu, which is, even to-day, very popular in Malabar, is said to have been performed before the Cera king, Senguttuvan, and on that particular occasion the Sakkaiyan chose to exhibit the Kodu kotticedam or adal of Lord Siva. The dress and make up, the gestures and abhinayams pertaining to this particular Kuttu, which the Sakkiyar selected for the occasion, are minutely described by the authors of *Silappadikaram.* We think that the " movements and facial expressions, the signs and gestures employed by the actors and actresses in the Kuttu " which Prof. Nambiyar says " are said to approximate most closely to the principles laid down in the authoritative sanskrit treatise on the subject, Bharata's Natya Sastra " are echoed in the description[21] mentioned above.

In those days the language of the country and court was Tamil. The famous Tamil poet of the Sangam at Madura, Maduraikkulavanikan Sattanar, the author of *Manimekalai,* was a great friend of Senguttuvan, and Illango. He spent a considerable part of his time in Vanji, and he was responsible for supplying him the material, and

21. Silappadikaram, XXVIII, lines, 67-77.

requesting Illango to compose the Silappadikaram. In fact the Silappadikaram was inaugurated in his presence.[22] There are several references in the work which indicate that the kings and the subjects of the Cera country were proved to call themselves Tamils. One or two instances will suffice. The Aryan Princes,[23] Kanaka and Vijaya, offended the Tamil kings in a banquet, and to avenge the wrong committed to a brother Tamil king (Chola), Senguttuvan wanted to invade their country while he went north for bringing a slab of stone for the consecration of Pattini Devi.[24] Villavan Kodai, one of the ministers, while referring to the encounter of the king's army with the "Aryas" of the north, calls the army a 'Tamil one.'

It is remarkable that the proportion of Sanskrit words in the early Tamil works composed in the Cera country is comparatively small. In the later writings of Ceraman Perumal and Kulasekhara the proportion is much higher owing to Sanskrit influences. There is a tradition that the poet Kamban visited the country and lectured on his Ramayanam. Even to-day his great Epic is highly popular here. Almost the first work in the early Malayalam language is the *Rama Charitam* which is closely modelled on Kamban's great work.

Sanskrit authors even up to the end of the 7th century A.D., refer to the languages of South India only as Telugu and Tamil. Kumarila Bhatta, a Brahmin philologist of the last decades of the 7th Century A.D., refers to the "Andhra Dravida Bhasha," the Telugu Tamil langu-

22. Vide Silappadikaram padikam and XXV, lines 65-92.
23. *Ibid.*, XXVI, lines 159-160, XXIX.
24. *Ibid,* XXV, line 158.

age or perhaps, the "language of the Telugu Tamil countries."

Canarese was probably supposed to be included in Telugu, and Malayalam in Tamil, and yet both dialects, together with any sub-dialects that might be included in them were evidently regarded as forming but one bhasha. Malayalam therefore was not yet evolved as a separate language. Even the three sasanas granted to the Jews are in old Tamil dialect, and they are recorded in the old Tamil script called Vatteluttu. These deeds of Baskara Ravi Varma have excited much interest not only because of their antiquity, but because of the curious fact that by them the ancient Cera kings conferred on the Jewish colonies certain privileges which they still possess to some extent. The Jews appear to have visited the western coast in the early centuries of the Christian Era. They have a tradition that a large number of their nation came and settled in Malabar soon after the destruction of their temple at Jerusalem[25] in 68 A.D. The charters have been translated more than once, and there has been much diversity of opinion regarding the dates assigned to them. While the learned author of "The Tamils 1800 Years Ago" assigns the last decade of the 2nd Century A.D. to the two deeds granted to Joseph Rabban, Lord of Anjuvannams and to his posterity, Dr. Burnell on palaeographic grounds assigned these to the 8th Century A.D. Placing the first deed in A.D. 774 as the only year in which the astronomical details of the date furnished by the grant would be satisfactory.

25. i. Tamils 1800 years ago, p. 60.
ii. Malabar Manual, Vol. II, pp. 115-122.
iii. History of Kerala, Vol. II, pages 507-512.

Dr. Kielhorn says that A.D. 774-775 is not the only year possible, and points out two dates—10th March 680 and 11th March 775 A.D. Sir Walter Elliot fixes 861 A.D. Whatever the date may be, we are here concerned only with the language of it.

The State Manual of Travancore, which is, no doubt, an authoritative history of the State, contains a few observations on the relationship between Tamil and Malayalam. It states—"The earliest phase of the language (Malayalam) must have been scarcely distinguishable from that dialect of Tamil which is called Koduntamil by scholars. It may be considered that Malayalam sprang from Koduntamil. Separated from the parent stock by natural barriers of mountains, the off-shoot of Tamil must have undergone gradual changes according to the circumstances and nature of the soil. Phonetic decay, differentiation and other agencies which are ever at work in the infancy of a language, must have had a full play in the case of Malayalam until the advent of Sanskrit. The Sanskrit language affected the vocabulary and grammar of Malayalam. Poets and authors indented upon Sanskrit not merely for the expression of abstract ideas, but even for indicating ordinary objects and things. In spite of this tendency, the literary language continued for a long time to follow the old Tamil models. The oldest poem now extant is *Rama Charitam* written in the 13th Century A.D. It was composed long before Sanskrit learning found favour in the land. It exhibits the earliest phase of the Malayalam language, and savours more of Tamil than Malayalam."

The mediaeval period of Malayalam is marked by the writing of Kannasa Panikker. He has written the *Ramayana,* the *Bhagavata,* the *Bhagavad Gita,* etc. His language

shows the transition stage of Malayalam in a stage in which the Malayalam tries to throw off Tamil inflexions and grammatical formations. Panikkar has been called the "Chaucer of Malayalam."

The modern period commences with the advent of Tunjatta Ramanuja Ezuttacchan of the middle of the 17th Century A.D. This poet set himself to the task of bringing the treasures of Sanskrit literature within the reach of ordinary man. He found that Malayalam as it existed then was not a fit vehicle for conveying refined thoughts. He therefore strove to develop the latent resources of his mother tongue. He rejected the old Tamil Vatteluttu alphabet (which did not have the hard aspirates, sonants, sonant aspirates, sibilants and aspirates, peculiar to Sanskrit) as defective, and adopted instead the Arya Elutu, better known as the Grantha script. He invented a new literary style blending Sanskrit and Malayalam idioms, and called it Manipravalam. He also created a new metre in Malayalam poetry called *Kilippattu* which has a peculiar melody and flow of its own. With regard to the modern Malayalam Dr. Caldwell says : "It is remarkable that the brahminisation of a language and literature has now become complete. This process appears to have been carried on systematically only during the last two or three centuries. The proportion of Sanskrit words is least in Tamil and greatest in Malayalam. The modern Malayalam character seems to have been derived in the main from the Grantha script. In consequence of these things the difference between Malayalam and Tamil, though originally slight has progressively increased, so that the claim of Malayalam as it now stands to be considered not as a mere dialect of Tamil but as a sister language cannot be called in question. Originally, it is true, I consider

it to have been not as a sister but a daughter. "Malayalam being as I conceive" says the learned bishop, "a very ancient off-shoot of Tamil differing from it chiefly at present by its disuse of the personal terminations of the verbs and the larger amount of Sanskrit derivatives it has availed itself of, it might perhaps be regarded as a dialect of Tamil, than as a distinct member of the Dravidian family." Dr. Gundert however appears to be unwilling to consider Malayalam as an off-shoot of Tamil.[26] He says :—"These two languages of old differed rather as dialects of the same member of the Dravidian family than as separate languages."

M. Srinivasa Aiyangar,[27] on the other hand, accuses Ezuttacchan for having given a deathblow to Tamil, his mother tongue. In somewhat severe language the learned author says : "For this act of vandalism he (Ezuttachhan) is admired by the people of Malabar as the father of Malayalam classical literature."

We have so for tried to trace the early history of the country and language; but the various aspects of the life of the people, their culture, commerce, arts and crafts, dress, customs, etc., which can be culled out from the Tamil works of the period, are not furnished here for lack of space.[28]

26. Introduction to Dr. Gundert's Malayalam Dictionary.

27. Tamil studies, The Origin of Malayalam.

28. The works of Kanakasabai Pillai and K. G. Sesha Aiyar, the Malabar Manual and Gazetteer, the Cochin Manual and the Travancore Manual, afford information on culture. R. P. Setu Pillai's studies in Silappadikaram in Tamil, Ch. 6, gives a valuable picture.

THE ANNAMALAI UNIVERSITY—A UNIQUE FOUNDATION.

By

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The invitation kindly extended to me by my friend, Dr. B. V. Narayanaswami Naidu, to contribute an article to the Rajah Sir Annamalai Chettiar Commemoration Volume was welcome, as I have always been convinced that the munificence and unexampled generosity of the Rajah which provoked the Government of Madras to an equally generous expenditure of public funds, was an act which deserved our warmest praise and gratitude. For a moment's reflection should convince us that, although our worship of *Saraswati,* our passion for education and learning, have always been high, and perhaps genuine, we never regarded that endowment for educational purposes was a sacred duty to society which its richer members owed to it. The chorus of praise with which the few exceptions are received is testimony to their rarity. If the goddess of wealth has blessed the Rajah's endeavours, the goddess of wisdom has endowed him with the vision and discernment to realise that there is no better or more enduring mode of using one's wealth than in giving birth to an institution where, for generations to come, young men and women of the country could receive the blessings of a liberal education. Both in itself, therefore, and as an example to others equally favoured, the Rajah's gesture has been full of significance.

The princely gift of the Rajah of Chettinad which started the foundation gives to the Annamalai University a character all its own ; but there is another circumstance of equal significance. The University founded in Chidambaram is of the unitary and residential type of which there is no other instance in the South and but a few in all India. It is well known, that it was the famous despatch of Sir Charles Wood in 1854, which brought the question of the founding of Universities in India, to the forefront. We read in that document that " among many subjects of importance none have a stronger claim to our attention than that of education. It is one of our most sacred duties to the nation, to be the means, as far as in us lies, of conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of knowledge, and which India may under providence derive from her connection with England." When, however, in pursuance of this enlightened policy, which is undoubtedly the source of the progress which the country has had these years, the universities of Calcutta, Bombay and Madras were founded in 1857, they were modelled rather on the University of London than on the much older and greater foundations, the residential universities of Oxford and Cambridge. The University of London, it need hardly be said, has a great reputation : it has always brought together many eminent men in their spheres of knowledge and it has always striven to set its standards high. The nucleus of the London University was University College, founded " by a group of enlightened liberals and radicals for the purpose of giving a University education to all qualified students ' irrespective of class or creed '." To compete with what was regarded as this " godless university," the Anglican community soon brought into being

King's College. In the meantime various educational institutions had sprung up all over the country and the London University was empowered in 1858 " to examine for a degree any students who presented themselves regardless of how or where they had studied." This is the ground of the one serious criticism always levelled against the University of London : in the words of Dr. Flexner, " if a university is, whatever its type or form, a highly vitalized organism, vitalised not by administrative means, but by ideas and ideals, with a corporate life, I confess myself unable to understand in what sense the University of London is a University at all." It was, however, perhaps inevitable that when in 1857 the three Presidency Universities were founded to serve the needs of this vast continent, anything like a residential university of the unitary type was unthinkable. The colleges founded for the purpose were to impart the teaching and the universities merely to examine the candidates and present them their degrees. The Universities of the Punjab and of Allahabad, founded in 1882 and 1887 respectively, in order to relieve the Calcutta University of some of the heavy burden she was bearing, were also of the same type as those of Madras, Bombay and Calcutta. Gradually, however, it was recognised that Indian Universities should aim at being not merely agencies to conduct public examinations, but that they should undertake both teaching and research, should bring both teachers and pupils together, that, in short, the type of university organization known as the residential should, wherever possible, be given preference to the merely affiliating type patterns of which were London and the new Indian universities. The findings of the Calcutta University Commission which was presided over by Sir Michael Sadler, and which included among its members

distinguished educationists like Ramsay Muir, gave a great impetus to the residential ideal which was strongly advocated by the Commission. It was in this atmosphere that the unitary and teaching universities of the residential type, founded in Benares and Aligarh, Allahabad, Dacca and Lucknow, came into being. The Madras University Act of 1923 had for its principal object the reorganization of the University "with a view to establishing a teaching and residential University at Madras, but neither in the parent university of Madras, nor in its daughters at Mysore, Waltair and Trivandrum has it been found feasible to achieve the residential ideal. The Annamalai University, however, founded in 1929 is "unitary, teaching and residential in character, the first of its kind," with little or no chance of being followed by a second, "in South India." It will be admitted that an institution which is unique both because it is a monument to the generosity and the vision of its founder and because of its character as a unitary and residential university deserves the warmest and discerning support of the citizens of South India.

Is there any special virtue in this residential ideal which deserves our sympathy and consideration ? It is no doubt true that the residential idea is enshrined in the older Universities of England, and these are, by the consensus of world opinion, among the very greatest universities of the world. But are they not "semi-monastic institutions "which, arising in the Middle Ages, still retain in their character something of their origin ? It cannot be denied that Oxford and Cambridge are the only residential universities that do exist. The newer universities of England, those of London, Sheffield, Manchester and others, the great universities of Scotland, are, like those of Germany, first rate organizations for purposes of learning and

research, but in no sense residential. Nor are the great American Universities of Harvard and Yale residential. But it has been generally recognised that the ideals which underlie the residential system as embodied at Oxford and Cambridge are ideals of singular educational value. In the residential universities students who assemble together from the different corners of the country, or from beyond its borders, students differing not infrequently in their race and creed and their social upbringing, live together for a period. This common living, it has been found, affords unique opportunities for that free social intercourse necessary for the development of the maturing mind of the student who as a human animal is necessarily a social being. It is not the contact of the pupils with the matured minds of their teachers only, the value of which no one will question, but the contact of the pupils with their own fellows which is of inestimable educational value. The opportunities of a residential university are that this contact which is so valuable for the harmonious development of the faculties of the adolescent pupil is made possible not merely in the class rooms and lecture halls, but in the common rooms of students, in debating societies, in religious associations and in games. It is well known that what is known as the tutorial system is a prominent feature of Oxford and Cambridge. "In its purest form it is *tete-a tete* dialogue between tutor and pupil." This is, of course, nothing strange to our ideas and is no other than the method followed by the ancient rishis and gurus, the method of Sandipani with that famous pair of pupils, Krishna and Kuchela. I am well aware that the tutorial system has its difficulties, often insuperable, in modern conditions and has been abandoned in Indian institutions, often without giving it any serious trial. I do not know

if Annamalainagar ever took it up seriously or gave it the consideration it deserved. But it seems clear that Annamalainagar, where there is, fortunately, only a single college for Arts and Science, with a few special schools of study attached, the opportunities for carrying out the residential ideal are unique. A proper recognition of the uniqueness if the foundation would be to develop to its utmost limits the residential ideal which underlies the university.

One of the recommendations of the Sadler Commission has been that Intermediate education should be separated from that of the University. Only a few universities like Dacca have carried out the recommendation and Annamalai University has left it severly alone. But it appears to me that, rid of the responsibilities of its Intermediate section, which no doubt helps to swell the limited income of the university, the Annamalai University which is already turning out excellent work in several of its branches should be in a position to grow into a real residential university, concentrating its efforts mainly in the development of such branches of learning and research as are not provided elsewhere but, at the same time, are of immense value for the conservation and enlargement of South Indian culture. A University which sets before itself the highest ideals, which attracts to itself men of scholarship and character devoted to the single-souled pursuit of learning and culture, untrammelled by the interests of party and of narrow and petty considerations, and offers them reasonable conditions under which they may live and work, a university whose jealous care is the maintenance of the highest academic standards, has nothing to fear. It fills an essential need of the community and is bound to live and thrive. May we not hope that the Annamalai University founded by the Rajah of Chettinad, whose Shashti-

abdapurti the University rightly proposes to celebrate in a fitting manner, will develop into one of the premier institutions of South India, making its invaluable contribution to the moral and intellectual advancement of this part of our great country ?

THE WORSHIPFUL MINISTER

By

M. Balasubrahmanya Mudaliyar, B.A., B.L.,
Hon. Secy. Saiva Siddhantha Mahasamajam.

Did you ever hear of a king worshipping his own minister? Has the mighty ruler of a vast country in any system of civilisation ever spent a whole year, day in and day out, hearing a learned disquisition on the lives of saints who belonged to the hoary past? Could a monarch ever afford to depute his prime minister for twelve months on a non-political mission? You would say "no"; yet all these strange things did happen in the Tamil country in the twelfth century of the Christian era. The king was Kulottunga Chola the Second and the Minister, Sekkilar.

Literature was the king's hobby, and the Jain work *Jeevaka Chintamani* was his favourite book. The shrewd minister was an ardent Saivite and could not contemplate with equanimity, the rising tide of Jain influence over the young king. He perceived that a glowing version of the selfless lives of the sixty three Saiva saints was the only means to retrieve his master. In his afternoon conversations, he narrated to the king some of the soul stirring incidents in the lives of these saints. The king was so fascinated that he begged of his minister to reduce the lives into a book. He got his furlough, went to Chidambaram, gathered a band of scholars around him to collate all the available material for him, and produced in an exact year the "*Periyapuranam.*"

It was the most valuable book yet produced on Saiva history. Its value must be judged, not with reference to the modern scientific methods of historical research, but with due regard to the times when history was still in its infancy in most countries of the world. The way in which pieces of internal evidence to be found in the songs of the three great Saiva saints were put together, and their biographies shaped, makes one wonder how the author would have fared if better and ampler material had been available. The book was not merely history or biography but also a piece of literature possessing high classical value.

The king was so much impressed with the excellence of the book, which was in verse, that he requested his minister to undertake a very detailed exposition thereof. The minister agreed. A daily assembly of scholars was convened by the king for a year. The hall chosen was the grand edifice with a thousand pillars in the northeast corner of the Chidambaram temple. The minister explained all the niceties and subtleties of the book in such a way that the entire audience was entranced and spellbound. Pindrop silence prevailed and the soul was lifted far above the mundane plane. Tears flowed freely when the sufferings and privations of some of the saints were narrated. The king and his subjects felt alike. The year was a unique experience in the life of everyone. *The seed for a true university was then sown, and it has taken eight long centuries for it to sprout out and shape itself into the temple of learning, whose founder's sixty-first birthday we are proudly celebrating to-day.*

The king was overpowered with emotion and fell at his minister's feet. He mounted the minister and his book on the state elephant, sat behind them, and waved chamara

with both his hands, and went in procession round the main streets. His subjects stood speechless and wonderstruck, watching the royal procession. Here was *pen mightier than the sword* in the noblest sense.

The minister was so sincere in practising what he preached that he preferred retirement to the glamour of state. The king gave leave with a heavy heart and chose the minister's brother to succeed him. The minister in his retirement was provided with every comfort which a simple and solitary life demanded. He spent his last years in devout contemplation of his Maker.

Nowhere has history recorded events of this kind which lift us from the base and material turmoils of earthly existence into the ethereal region of spiritual communion with the Infinite. Such events did truly happen at Chidambaram once. Let us pray for their repetition in a suitable form in the near future to lift us back to catch a glimpse of that bliss.

THE FUNDAMENTALS OF CULTURE

By

Begum Sultān Mir Amiruddin

On the occasion of the 61st birthday of the Rajah of Chettinad, I wish to join the chorus of tributes offered to him for, his share in the cause of promoting culture in larger than that of any other man in South India. The Annamalai University stands out as a towering and glorious monument to the magnanimity of its great and noble founder and demonstrates his wisdom and foresight, for it is an effective, genuine and progressive University education that can supply the nation with the creative minds of culture and with youths equipped with the qualities of leadership which it so much needs. There is a tendency in some quarters to belittle the importance of the establishment of Universities and consider efforts at the expansion of higher education to be a superfluity, but at the present stage of India's history when wise planning and deep thinking to reconstruct national life are so essential in order to enable her to take her due place in the comity of nations, we require a sufficient number of men and women endowed with the training that higher education imparts. I do not believe that there is a surfeit of such men and women in this land at present and higher education cannot be said to have reached saturation point.

In this article I wish to deal with the fundamentals of true culture, in the implanting of which our Universities are primarily engaged. Culture in its etymological sense means cultivation and has many connotations, but it is

usually taken to be synonymous with the cultivation of the mind through the medium of knowledge. In the majority of instances education is an indispensable pre-requisite of culture for knowledge is power; it is knowledge that supplies us with facts, ideas and ideals that make up life's kaleidoscope. Facts dominate life and ideas control the world and these have their basis in knowledge, which endows one with the capacity of deciding what to do. Usually it is education which holds the key that unlocks the treasures of culture. Hence the very essence of culture must be art and science and the human effort concerned—ceaseless effort in the sphere of study and in the domains of observation, reflection and contemplation.

But culture is not simply the cultivation of the mind. Mere knowledge which satisfies curiosity and the crowding of one's memory with facts is not culture; rather culture is the fine fulfilment of the knowledge acquired. How is this fulfilment achieved? By activity of thought. Knowledge becomes active thought when it is utilised and applied to the life around. But though knowledge static and inert is not culture, it must be remembered that knowledge in motion for wrong ends is the most terrible force in nature and is the very negation of culture. Totalitarian Europe offers an example of this, where, despite intellectual progress of a high order and the onward march of science, the elements of culture are absolutely wanting. Thus while knowledge is comparatively useless unless put into application, it must be not utilised and related to the affairs of life as will satisfy human needs and lead to human amelioration. Bacon says, "Some men think that the gratification of curiosity is the end of knowledge; some love of fame; some the pleasure of dispute; some the necessity of supporting themselves by knowledge, but the real use of all knowledge is this that we

should dedicate our reason which was given to us by God to the use and advantage of man."

The application of one's knowledge for human needs being the real import of culture, we find that it is not merely in the centres of learning that culture resides. It is not uncommon to discover sometimes even an uneducated cultivator, with no literary education at all but who has learnt his lessons on the book of Life and on the lap of Nature, to evince greater signs of culture than some of the by-products of our Universities. In such a case, though the range of the man's knowledge is small, that knowledge sparkles, it is alive; though his ideas are few, they are not inert and dead matter but constantly related to the stream of events that enter his life and the lives of those within his ken. This fundamental of culture, namely that the mind enriched and humanized should be a running brook for those that need to quench their thirst and not a still image on the canvas has to be grasped by those who are engaged in the pursuit of higher knowledge, and our Universities should set before themselves the task of evoking the interest of the students in putting their knowledge to use and throwing it into all its combinations with the life around. Education is generally undertaken for its utility as a means of livelihood and also as a mark of polish and refinement, but it is deprived of its real significance if in the pursuit of narrow personal ends it fails to arouse in the minds of young men and women that impulse of service, which is the essence of true culture. An education that does not rouse one's active sympathy to the dumb pangs of misery and unhappiness of the lives submerged in the shadows is one that is devoid of its cultural aspect.

The time has arrived when the youths of this land, who are the future moulders of the nation's destiny, should realize

the true significance of culture and get acquainted with the implications of *Noblesse Oblige*. A sphere wherein they can render yeoman service is that of the liquidation of mass illiteracy. The problem of making India's population literate is one of stupendous magnitude and of urgent importance. We learn in history that in the reign of Asoka about 60 per cent of the inhabitants of this land were literate. To-day, however, not even 10 per cent are literate. And it is the monster Ignorance that has been devastating the land from a long time past that has given birth to the evil conditions, which are undermining the strength and sapping all potentialities for good inherent in the nation. India's appallingly high death-rate, the incidence of epidemic diseases, the existence of social evils, and the prevalence of a high rate of crime are all to be traced to the ignorance in which people are steeped. During the past 50 years, every decennial census showed an increase of 1 per cent literacy. If the present rate of progress of literacy is not accelerated, it will take at least a thousand years for India to become literate. Since the task is of immense magnitude and of vital importance, it behoves the students of the Universities to contribute their quota to the great work of national regeneration. China has awakened from her opiate slumber of ages by the efforts of her students, who have dedicated a good portion of their holidays to imparting knowledge to the adults. Will not the youths of India answer the sonorous call of duty when the clarion is sounded? If they have imbibed the true spirit of culture, there is no doubt that they will.

While service constitutes an essential element of culture, it is erroneous to assume that a life of isolation from worldly affairs is a necessary pre-requisite, for a cultured man is pre-eminently one who does not ignore the practical aspects of

existence. As has been pointed out by Johnson, "The seeds of culture may be planted in solitude but must be cultivated in public." Culture though born of meditation, through the inward travail of the spirit, thrives most in contact with life and draws its vitality both from Nature and from man and is never inert but active.

Culture denotes the cultivation of a higher quality of life consequent on the mental training received, whether through the medium of books or otherwise. While objectively it requires an intelligent understanding of and interest in something tending to human welfare besides one's own job in the workaday world, subjectively it calls for self-analysis, self-control and self-reformation. Culture manifests itself in good manners and a catholicity of outlook that recoils from arrogance and exclusiveness; in understanding that ignores not charity; in a spirit of compromise and accommodation that realizes the need to co-operate with others and adopt the principle of live and let live; and above all in sympathy that knows no caste and creed. Culture awakens the sense of fellowship latent in all men. A cultured individual realizes that life is a unity and man is part of that life; he is conscious of the fact that he is part of that one world process that is at work about him as in him, and like the ancient Roman Emperor proclaims, "I do not regard as strange and foreign to myself anything that is human inasmuch as I am human."

Moreover, a cultured man not merely recognizes diversity, which is Nature's law, but respects it, since variety yields charm and colour to life. In a land like India inhabited by members of different castes and creeds, the most urgent desideratum of to-day, namely unity, can come about, paradoxically, not by a process of uniformity but by respecting differences. The hall-mark of a cultured man and woman is to be free from narrow prejudices and to be able to

appreciate the good and beautiful wherever found. No community or race should suffer from the delusion that it alone has the monopoly of truth, of virtues and of the fine arts, for of all dungeons the most terrible are those invisible ones wherein men's souls are imprisoned in self-delusion bred by vanity. The environments, the requirements, the temperaments and traditions of the various races and peoples have been responsible for different ways of approach to life's problems, but the divergences of the paths pursued should not befog our vision to the soundness of many of the methods and maxims of those different from ourselves. Kipling rightly says, "There are nine and ninety ways of inditing tribal lays, and very single one of them is right." Culture is essentially broad-based in its outlook and its appeal is universal. Hence the different centres of learning while recognizing and utilising diversity should admit interchange and exchange and each University should establish Chairs for the fundamental ideals and realities within other cultures besides developing its own and pulsate with all thoughts that are high, noble and great, not merely in the life of its own people but of the world in general. In the words of Lord Morley. "Let there be preferences, but let there be no exclusion."

India remains chaotic because the mental approach of the nation is defective. The problems of India will be solved when the educated sons and daughters of her land will become imbued with the true spirit of culture and will realize that despite diversities, the adherents of different beliefs, customs and traditions and the products of varying environments while retaining their own individuality and living their own lives to the full can still combine together as in a symphony orchestra, wherein the various instruments, though they are different from one another, yet all contri-

bute to the production of a melodious harmony. Such a combination and the cultivation of the true choir spirit, wherein each singer is given full scope to develop the best in him while he, on the other hand, gives of his utmost for the success of the choir, should be one of the ideals towards which our seats of learning should strive.

Mathew Arnold spoke of sweetness and light as the marks of true culture. The Annamalai University has added to it faith and courage—qualities which are of profound significance at the present juncture of world history. One of the most threatening features of life to-day is the reaction against faith and reverence, and expert designers who are planning out the main lines of a new and better order realize that their edifice will never stand unless steps are taken to check the rising tide of irreverence and lack of faith. Indeed, without faith the wheels of progress will be braked and civilization is bound to suffer a collapse. Courage is also a quality whose need was never greater than at present—Courage to battle against the forces of evil, courage to face life's problems with a spirit of stern, persistent determination to overcome difficulties, courage to surrender prejudices, courage to resist mass thinking and the temptation to applaud all popular sentiments irrespective of quality, courage to act up to one's conviction and to the new vision of world progress.

In short, the idea of refinement appears to be inseparable from that of culture. The term refinement calls up to mind the picture of a furnace burning the dross and yielding the gold or that of a sieve sifting the grain from the chaff. Culture imparts a finer tone, a gentler touch and a nobler quality to an individual and contributes to a richer life more directly than health contributes to wealth.

Though the acquisition of culture involves unremitting effort and sacrifice, the satisfaction obtained therefrom is immense, for while the pleasures of wealth and power are fleeting, the ecstasy derived from culture is perennial in enjoyment and of permanent duration.

THE RAJAH OF CHETTINAD

By

Mr. Somasundara Bharati, B.A., B.L.

Dr. Rajah Sir Annamalai Chettiar, the first Rajah of Chettinad, is a unique personality. And his diamond Jubilee is now fittingly commemorated by his grateful countrymen whom he long served and lavishly benefited by his numerous acts of Philanthropy and Patriotism. Hailing from the most talented affluent and charitable family of hereditary Bankers in Kanadukathan, he yet easily out-distanced and eclipsed all his forbears and cousins both in making colossal wealth and what is rarer still in wisely and lavishly spending fabulous fortunes on public welfare.

Many are celebrated charities that redound to the credit and glory of his family; now for nearly a century, starting from 1850. Chidambaram where God Nataraja sarabands His Eternal Cosmic dance came to be the centre of their charitable activities. The famous Gold-domed hold fane of God naturally received their first attention. The Pagoda and the Towers were renovated extensively and elaborately on the eve of this century. A feeding house for the poor and choultry for all pilgrims were their next gifts to this place of perpetual festivity. The Rajah Sahib's senior brother, Diwan Bahadur Ramasamy Chettiar, the first Dewan Bahadur in Chettinad, earned the eternal gratitude of this holy place by his invaluable two-fold gifts of a well equipped High School and a protected water supply to quench the physical and mental thirst alike.

Walking in his brother's wake, Rajah Sir Annamalai Chettiar first founded on the east suburb of Chidambaram three great Colleges successively, all in the name of his favourite Goddess, to wit Sree Minakshi Arts College, Sree Minakshi Tamil College and Sree Minakshi Sanskrit College. To these he soon added his Sree Minakshi Oriental Training College. He then started his brilliant career by quietly and unostentatiously minting millions with his unrivalled business talents on the one hand, and on the other by lavish gifts, endowments and benefactions in countless ways with counting costs all over Tamilaham and even in distant non-Tamil countries such as, Ceylon and Burma. It is no exaggeration to say that there is not any great institution or cause, community or country within the ambit of his enterprising fellow Nagarathar's activities that was not enriched or benefited by the inexhaustible purse and philanthropy of this modern Croesus and Macalnas rolled in to one. The Madura College, and the American College and Hostels in Madura and Pasumalai, the National High School at Trichinopoly, the Mylapore P. S. High School, the Indian Public School at Dehra Dun, the Irwin School at Delhi, the Ramakrishna Institution at Madras and Ootacamund and several educational and religious institutions in Rangoon, Moulmein Kanbe, and Colombo, the Y.M.C.A. and Red Cross Society are only some of the many institutions which were fertilized by his munificence. His piety which is non-sectarian, enthused him to renovate at great cost Thillai-Govindar's Shrine, God Pasupatheeswara's Temples in Annamalai and Karur, the Hindu Temple in Colombo, besides the abiding upkeep of the works, and maintenance of Kuttelais and endowments at the holy shrine of Sree Nataraja in Chidambaram.

The Crowning glory of his passion for services to his fellowmen and the sweetest fruits of his native patriotism is the latest yet the first and only Unitary, Teaching and Residential University in South India appropriately named after him. It is an edifice emerging four-square on and out of the four Sree Meenakshi Colleges which he previously founded on his extensive estates in the eastern environment of Chidambaram. The imposing new University buildings superbly and solidly built grudging neither cost nor care, stand towering above and overlooking, extensive grounds which are in turn enveloped by emerald fields and green swards. They form by day a panoramic perspective of picturesque piles, as a rare and unique blend of Classic Indian, Saracenic and Romantic styles. By night the brilliantly lighted premises of the University present a tableau of celestial charm of seraphic rest. The sanitary water supply, perfect drainage, the swimming pool, and boating channels each at an enormous cost the extensive and up-to-date play grounds and exquisite sports pavilion, are some of the graceful additions to the university, each and every one of which indebted more or less to the Rajah's privy purse. The new guest and rest-house and the staff-club on grand style are also indebted to his munificence. The magnificent ladies' club which is a very unique, costly and fine building, with extensive well-laid grounds is also the exclusive gift of the Rajah Saheb to the University. The hostels in general and the new Women's Hostel in particular add to the charm of the panorama. In short the buildings alone would be worth about twenty-five lakhs of rupees.

Add to all this, his lavish contributions to the University endowment fund, and the several auxiliary and additional endowments for prizes, medals, studentships to

scholars of this university for studies both in the university and in foreign universities. The up-to-date library house in the superb left wing of the new Senate House, the science laboratories, and the charming music college well-match and add to the fascination and utility of the University. Great endowments to educational institutions are not rare all over the world. But a well-equipped and endowed modern university owing almost its all from its inception to private enterprise and personal philanthropy of a single individual is not heard of in the old world, whereas the Rajah's University is an up-to-date Modern University second to none. The unparalleled philanthropy of this modern Croesus of South India attracted the attention of even the apathetic alien rulers. The Viceroy on the local Government's well deserved recommendations bestowed on him the hereditary title, style, honour and privileges of a Rajah in recognition and acknowledgment of his great philanthropy and genuine patriotism, in addition to the many other titles they had previously honoured him with such as the Knighthood, Diwan Bahadur, etc.

The Rajah is a real Karma Yogin, and his admirable disciplined life most rigorous and yet most restful, is the envy of businessmen and a wonder to all. With a zest for work, and spleen-proof placid temper an admirable abandon coupled with a genius for infinite industry and devotion to details, with volcanic energy embalmed in sweetest suavity, with an unbending will matched by innate courtesy and instinctive devotion, with enthusiasm in enterprise and aversion to lassitude, he is easily a prince among men as he is a man among princes. Rising invariably at 4 a.m. he finishes his ablutions and devotional regimen and urgent personal business correspondence all before 7 a.m. He is then ready to attend to the heavy business routine entailed by the in-

numerable business organisations and branches he runs in India, Burma, Malaya and Ceylon, and to calls and appeals to his head and heart, his time and purse alike. His unfailing method and admirable system, his mastery of details, his phenomenal memory and ready resources are some of his traits rare even among the captains of Industry and multipliers of millions in the busy west. His statesmanship, his reserve with well informed and diplomatic talent, his deep knowledge of men and affairs and his versatility would easily have made him a forefront cabinet-minister, Premier or President if only he were a citizen in any self governing country. As it is he stands in the Indian world of to-day as a striding colossus of wealth, a power for benevolence and a tower of strength to his weaker countrymen. His delight is his silent selfless service, and his strength is his matchless character. His unrivalled and enviable success is the fruit of his manifold virtues. His lofty service to culture and higher education earned him his doctorate *honoris causa* from the Madras University. We, his grateful compatriots and admiring countrymen cordially wish him on the happy completion of his Sixtieth Birthday a Methuselah's longevity, Solomon's happy prosperity and Socrates' wisdom. May the Almighty God shower lavishly all His choicest blessings on this Modern Kubera and inspire him to continue to promote the progress of his mother country and the welfare of his loving but less fortunate country. May he live long for the Glory of God and for the honour and success of perseverance, patriotism and public service, as an example to his peers now, and as an inspiration to all in future, is the prayer that goes up to God to-day from the hearts of all his well-wishing fellow-countrymen.

NATIONALISM AND DEMOCRACY

By

R. Bhaskaran, M.A.

Since the French Revolution, the states of Europe and the colonial countries of the world have grown on the two principles of Nationality and Democracy which seemed to sustain and fortify each other. Nationalism has had its critics; Lord Acton called it a retrograde step in history. Democracy too has its detractors who find it guilty of the grave error of supposing that a crowd could understand and choose. But, in the midst of "the chaos of talk, of argument, of opinion," men must find some excuse for unity and build a state for their secular needs, or be drawn into the political orbit of a stronger community. The task is always urgent and the penalty of failure is extinction. A common loyalty to something outside of self is needed to make a community: the nation replaced the dynastic ruler as the object of such devotion. Authority is needed to transform the community into the more enduring structure which is the State; Democratic theory furnished government with the sovereign authority of the General Will. Thus there is nothing fortuitous in the close association of nationalism and democracy at the beginning of the Nation-State. If people come together, they do so only because they all recognize certain values distinct from the values of other people. If a community keeps together, it can do so only under a government which can be trusted to guarantee these values. Yet it would not be right to describe the state as the work of

free will and reason ; for in the world of reality there are no absolutely free individuals and rational choice is almost non-existent. Nations are seldom truly "self-determined." Nationhood is sometimes achieved by the pressure of active groups inside the community. And "small" nations are born of the strategic needs of great powers. National unity may be fostered by similarity of culture, race, language, social habits and historical experience among the people that constitute the nation. National governments may acquire greater power by closely representing the national mind. But forces inside the national community and outside should be favourably disposed if a Nation-State is to emerge and survive.

In whatever way a Nation-State may be founded, it cannot forever be immune to attack. The complex of hopes, aspirations and fears that made it soon unmakes it. The cultural values of the ruling group are repudiated by the generality which once followed the èlite. Patriotism tends to find a smaller and more intense expression as regionalism. Submerged dialects come up again and divide the nation. Conservatives and radicals split the community. Several sectional economic interests engage in strife. When people see themselves as really belonging not to the political community of the nation but to a small group or class, when classes within the state appeal to or sympathise with similar classes in other states, the nation has ceased to be. When nations go to war to destroy nations the ruin is complete. The failure of the principle of nationality as a necessary and sufficient basis of political union is manifest today. But in the absence of a more rational or popular principle, nationality with all its dangers and inadequacies must prevail. Therefore the political animal instead of blaming nationalism which is the cause of his present agony blames

representative democracy and turns against it. It is not surprising that when the foundations of society are crumbling, people should be occupied with the reform of mere government. It might be urged against the critics of democracy that representative democracy is only a mechanism for the expression of the general will and it cannot create a general will where no such will is to be found. In an entirely rational world of intellectuals democracy would be acquitted and nationalism banished. Societies, however, detect the scapegoat by a sure instinct and nations in distress invariably pervert or overthrow their democratic institutions. Rid of a machine that would not work a miracle, they subside into an artificial unity imposed by a dominant group which has cultivated the will to power and seeks to encourage in its subjects the will to believe. In the end, new political myths may take the place and even the name of democracy and nationality.

In colonial countries feelings of nationality are easily engendered. Common and reluctant subjection to a foreign power makes a nation of the people inhabiting a centrally administered territory. What cost much to free peoples comes gratis to their subjects. A people demanding freedom and self-determination cannot imagine a native government that is not from the outset democratic. So nationalism and democracy are intertwined in the affections of a people aspiring, or even struggling to be free. But the vicissitudes of democracy and nationalism are the same all the world over ; in fact transplanted ideas go through the natural cycle of their lives with sensational rapidity.

India is no exception to the rule, though patriots of no country can be got to deny the uniqueness of their land. When India came under British rule, it was inevitable that her political structure should be determined by Western

ideas. When Macaulay triumphed over the Orientals, it was inevitable that the educated classes should seek for their home-land the institutions they had been taught to love and admire. Raja Rammohan Roy complained that India was " a country into which the notion of patriotism has never made its way." A century later Jawaharlal Nehru could write, "Patriotism is not enough, we want something higher, wider and nobler." That is the measure of the distance travelled by the intelligentzia in the course of a hundred years, and proof of the success of western education. It is a popular superstition, impossible to eradicate, that our educational system was devised to produce and only turned out inferior employees of government and commercial offices. On the contrary it has produced in the past, and is still turning out in large numbers, young men and women equipped to meet all the needs of a healthy society. But in the strange political conditions of the early days, government distrusted the educated classes, for in the words of Grant Duff they were 'professional malcontents ; busy, pushing talkers ; intriguers and grumblers'. Their patriotism then made them unpopular with the rulers. They were also soon to lose the regard of the people ; for the first fruits of the democratic theory they preached came to be a contemptuous rejection of the values they had learned to cherish. Nevertheless it was a growing class educated on western lines that propagated widely and planted firmly the notions of nationalism and democracy in this country.

The intelligentzia was from the beginning variously handicapped. Most of the educated men came from the poorer sections of the middle class and therefore lacked the local influence that would have made them an example to the countryside. They could not function as a leisure class. Nor could they obtain any position of power and real res-

ponsibility in the government of the country. They studied social and political theories out of textbooks ; they scanned the administrative methods of the British Government ; but of real politics and power politics they were altogether innocent. The ethical teaching they had absorbed at school and their native love of peace reconciled them to their lot. They had to take many things for granted and among them was the Government of India which was a gigantic administrative contrivance working so smoothly and with so much of Benthamite efficiency that no one asked where it got its power from. They saw the whole of India made one by a centralised system of law and government and understood the unifying effect of education in the English tongue. They could imagine a gradual Indianization of the personnel of government and a gradual association of the public in the councils of government. The language of the educated men of the last generation shows how firmly they believed in the supreme significance of the administration and how careless they were of the tremendous but obscure processes by which nations come of age or perish. If the educated classes were unable to understand or control the political climate of the country, they at least kept alive in institutions of higher learning respect for law and constitutionalism and the liberal devotion to "fundamental human decencies."

The piety of the educated gave us the political vision of a united Indian nation stretching from the Himalayas to the Cape. The vision was to be realized by an education fitting the people to the service of a constitutional democracy. And the Government should itself undertake the tuition of its subjects enabling them to reach in time the level of a free, united and democratic nation. And this new nation was not to remain alone and friendless in a

hostile world ; it would be a member of a great Commonwealth of Nations, a defensive league girdling the globe.

But when the first instalment of political power was bestowed on the natives of India, these noble academic theories had to retreat before the scramble which a coveted substance excites. Racial, territorial, economic, religious and linguistic interests manifested themselves and had to be acknowledged by the rulers and the ruled alike. Political India accepted a federal organization of the central government with its implications of territorial autonomy for several areas within the country. Nationalist political parties upheld many claims of language, culture and economic interests, in order to win a large following against the established order. Just as subject people get nationalism without tears, sub-nationalities acquire effusive recognition of their integrity and permanence from the government as well as from the rebels. It would be foolish to ignore the natural and legitimate expression of sectional interests ; they represent real political forces which cannot be dissipated by assumed indifference or by vehement invective. Any one of them, and not necessarily the largest, may yet grow powerful enough to make and lead a real Indian nation.

Mr. Ruthnaswamy whose knowledge of the theory and practice of Government and Politics is unrivalled wrote in 1932, "If ever there was a country that was made for unity it was India. ..... (But) the history of India is a continuous and complete denial of its geography." And in the epilogue to his treatise on *The Making of the State*, he expressed the hope that " the State that has at last been made in India may yet be the making of India." The duty of making the nation is here cast upon statesmen and adminis-

trators for in any sane order responsibility must go with power.

The late S. Srinivasa Iyengar told the Kumbakonam Parliament, "Let us firmly and ardently believe that, to whatever communities we belong, we Indians are all of one race and nationality ; on that conviction of racial identity alone depends our salvation in this world, in the present and in the future." Here was an attempt to create a new myth which would unite all the citizens of India.

It is unlikely that practical politicians and busy administrators will find the time and opportunity to devote themselves to the service of Indian nationalism. It is even more unlikely that any one will persuade the Indian masses to see themselves as one race. Meantime, the recriminations of sectional leaders separate classes and groups more definitely from one another. Indian nationalism has nearly attained the status of a lost cause and the right to asylum in Universities.

In these distracted times it is the duty of schools of social studies in Indian Universities to train the generations that pass through them to look on the political scene with eyes of compassion and not of revenge, to keep the channels of understanding open, and to equip every cause with fair-minded advocates and willing servants. Even a hostile and uncomprehending community deserves the ministration of trained minds.

ANNAMALAI UNIVERSITY—LANDS AND BUILDINGS

By

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The lands belonging to the University now cover an area of 572 acres of which 100 acres were handed down with the Sri Minakshi College and the 168 acres were a gift by the Founder direct to the University and the remainder were acquired by the University. The area lies to the East of the Railway line at Chidambaram and is bounded on the other sides by the Uppanar and Khan Sahib Canals.

Owing to the difficulty felt in finding accommodation for the staff and students in the Town, four professor's and four lecturers' quarters and hostel accommodation were already built as part of the Sri Minakshi College. These, with the College blocks, coverd a plinth area of 71822 sq. ft. and cost 8 lakhs of rupees.

The establishment of the University as a Unitary Teaching and Residential Institution by the Act of 1929 not only made the existing accommodation utterly inadequate for the needs of a University. Accordingly, a programme of buildings, roads and other works was commenced and buildings covering an area of 273,361 sq. ft. and costing 12 lakhs of rupees have so far been completed. Though a few individuals regarded the expenditure as a waste of money, the University authorities consistently held the view that a reasonable amount of expenditure on Buildings and

other amenities usually associated with a University were absolutely essential. The new buildings include a Convocation Hall, Library and Administrative Block, an Oriental Block, four new Hostel Blocks, a Union Hall, a Music College and a Guest House. There are now quarters provided for 100 members of staff and 60 menials. A few figures regarding the buildings are given in the Appendix.

The growth of the University in the first ten years of its existence has been so rapid that the Building Schemes and the provision of amenities could not keep pace with the needs of the expanding University. Thus the number of students rose from 771 to 983 in the three years ending 1940 and by the construction of four new hostel blocks, the accommodation was sufficient for only 651 students.

The essential needs for the present size of the University have been practically supplied excepting the Water Supply and drainage schemes. With the rapid increase in expenditure consequent on the constant expansion of the University, and the added difficulties caused by the present war, it has become necessary to temporarily stop the expansion and begin a period of consolidation. It is hoped that before long, the University will begin to grow again with renewed vigour until it attains its full maturity.

There are at present 18449 feet of roads as against 4480 feet in the pre-University days. Of these, 7466 feet have been tarred and it is proposed to tar the remaining portions also in due course.

There was no garden worth mentioning before the University was established. Since then 967,600 square feet of area, *i.e.*, nearly 22 acres, have been converted into gardens and playgrounds and this area is being gradually extended.

The beginnings of a protected water supply scheme have also been made. Water from the Usuppur channel is led by an open channel, one mile long, into two sedimentation tanks each capable of holding over three million cubic feet of water. From these the water is pumped through a pressure filter to an overhead tank of 25,000 gallons capacity. The hostel and 24 of the lecturers' quarters are now being supplied with filtered water. The water will soon be distributed to the areas through suitable pipes.

The drainage scheme for the whole area has not been taken up, but a scheme is in existence for the hostel and college blocks and the Hospital.

These works were in some cases carried out departmentally by the University Engineers but the more important buildings were constructed by experienced contractors. The plans and bills were scrutinised by distinguished engineers, such as Dewan Bahadur A. V. Ramalinga Aiyer and Dewan Bahadur N. Swaminatha Iyer, Retired Chief Engineers of the Madras P.W.D. and Rao Bahadur K. V. Natesa Iyer, Retired Chief Engineer, Travancore State. The administrative block was originally designed by Mr. L. M. Chitale but during execution was modified by Messrs. Edwards Reid and Booth. The University Engineers in chronological order are :—Mr. K. Yegnanarayana Sastri, Mr. V. R. Subrahmania Iyer, Mr. S. Rangachariar, Mr. S. P. Raju Aiyer and Mr. J. Krishnamurthi and the contractors who carried out the major works are :—Mr. P. Rajabather Mudaliar, Mr. V. Subrahmania Aiyer, Mr. Kolandaivelu Mudaliar, Mr. N. Kandaswami Pillai, Rao Saheb S. Sambasivam Pillai, Ratna Mudaliar and Santanam Aiyar and Messrs. Gannon and Dunkerley. The Engineer member of the Syndicate gave technical advice on engineering questions generally.

Although the standard of academic work carried out by the University may be regarded as an important cause for the prestige of the University, it cannot be denied that the buildings, roads, gardens and other amenities have also played a very great part in giving the University the importance it has attained.

APPENDIX

Building.	*Cost.* Rupees.	*Date.*
1. Library and Administrative Buildings ..	3,77,098	1937
2. Guest House ..	64,496	1938
3. Union Hall ..	19,805	1937
4. Music College and Music Hostel	33,258	1937
5. Hostel Blocks, New ..	3,83,939	37-39
6. Pandits' Quarters ..	68,810	38-40
7. Vice-Chancellor's Quarters ..	63,842	1930
8. Lecturers' Quarters ..	1,55,698	30-37
9. Garrages & Tiffin Shed ..	11,160	1939
10. Post & Telegraph Office ..	11,236	1938
11. Professors' Quarters ..	1,44,938	30-37
12. Ladies Club ..	15,000	1936
13. Hospital & an Isolation Ward	26,550	36-37
14. Women Students' Hostel ..	32,160	1938
15. Menials' Quarters ..	33,892	1938
16. College Buildings ..	5,24,305	24, 26, 32
17. Clerks' Quarters ..	10,875	1933
	19,77,062	

AN INTRODUCTION TO THE DRAVIDIAN FAMILY

By

Mr. A. Chidambaranatha Chettiar, M.A.,

It is customary in the Science of language to talk of certain languages as constituting a family. By this metaphorical usage it is implied that certain languages, which may be called sisters, represent so many local developments of one language which may be regarded as their common parent. Pushing the figure of speech further one will find that the languages which stand in the relation of sister to each other are daughters of the assumed mother. The idea is that in the course of the development of a language it has taken upon itself several shapes through the working of different conditions in different localities and has consequently received several names. When a close examination of a number of languages indicates that they participate to a large extent in a common stock of words or root-elements of words, an inference is ordinarily made that the languages concerned may be descended from a common source. A comparison therefore of word-materials of languages would enable one in trying to determine the relationship that may exist between language and language. Because of such resemblances as can be explained only on the assumption that the languages are varied forms of a single older language, a notion is naturally formed that the languages in question may be historically related to each other.

Tamiḻ, Telugu, Kannaḍa, Malayāḷam, Tuḷu, Kuḍagu, Tūḍa, Kōṭa, Kurukh or Oraon, Malto or Rajmahal, Kūi or Khond, Gond and Brahui are languages which appear to

have belonged to the same stock, *viz.*, the Dravidian. Though the term "Dravidian" is ill-considered, coming as it does from a foreign source, it has gained such rich currency and wide-spread usage as a common name for designating these languages that it is prudent now not to quarrel with the usage but to allow it to continue.

I shall make a short attempt in this paper simply to point out how these languages deserve to be brought under one family. While investigating the word-material of languages with a view to arriving at a relationship, it is necessary to take such words only as express familiar and ordinary things, creatures, operations and family relations and such words as are indicative of the numerals and pronouns. Such members of the vocabulary as are used everywhere by every one almost every day are of utmost importance from a philological point of view. "The 'language' consists to the philologist", as Dr. T. G. Tucker says, "of what is habitually spoken and habitually understood by the people at large." Words ordinarily used only by the learned classes or words of exceptional occurrence such as the strictly technical words of the arts and sciences are less important in a consideration of the question of ultimate relationship, for these are members of the vocabulary that are liable to be borrowed from foreign sources on contact with the foreigner.

Space would permit a comparison only among the chief languages and therefore Tamil, Telugu, Kannada and Malayalam alone would be taken now for the purpose. As words for familiar and ordinary things the following are found:—

ENGLISH	Tamil	Telugu	Kannada	Malayalam
HOUSE	vīḍu			vīṭa
	maṉai		mane	
	il, illam	illu		illam

SALT	uppu	uppu	uppu	uppa
IRON	irumpu karumpoṉ	inumu	kappina	irimba
STONE	kal	kallu	kallu	kalla
HILL	malai kuṉṟu	koṇḍa	male	mala
TREE	maram cheḍi	Mrānu cheṭṭu	mara giḍa	maram cheḍi
FLOWER	pū	pūvu	hūvu	pū
ARROW	ampu	ampu	ampu	ampa
BOAT	paḍaku valḷam tōṇi	paḍava	dōṇi	valḷam tōṇi
BONE	eṉpu elumpu	emuka	elume	elumpa
BLOOD	neyttōr kuruti chennīr	netturu	netturu keṉṉīru	chōra

It could be shown according to definite rules governing phonetic changes that these are various forms of the same word in each case. A final "ai" of Tamil ordinarily changes into a final "e" in Kannada as in the words "talai" (=head) and "Karai" (=bank) which become "tale" and "kare". Thus the change from "maṉai" to "maṉe" is explained. "Il" of old is retained in Tamil as it was, whereas it has become "illu" in Telugu; this can be explained by means of stating that there was a tendency among certain speakers to affix a vowel, generally u, to the consonantal ending of words for the sake of euphony. Witness for instance words such as kallu, mannu, ālu etc. in Telugu standing in correspondence with Tamil kal, maṇ, āḷ etc.

Among familiar and ordinary things must be included words relating to the parts of the body and to the Five Elements.

English	Tamil	Telugu	Kannada	Malayalam
HEAD	talai	tala	tale	tala
HAND	kai	chēyi	kayi	kai
FOOT	aṭi	aḍugu	aḍi	aṭi
EYE	kaṇ	kannu	kaṇṇu	kaṇṇa
EAR	chevi kātu	chevi	kivi	chevi kāta
TOOTH	pal	pallu	hallu	palla
BACK	mudugu ven	bennu	bennu	muduga
EARTH	nilam maṇ puḍavi	nela mannu puḍami	poḍavi	maṇṇu
WATER	nīr	nīḷḷu	nīru	nīr
FIRE	neruppu	nippu	tī	tī
AIR	kāl kaṟṟu	gāli	ghali	kāṭṭa
SKY	vāṇam viṇ	minnu	bānu	vānam

It could be shown here too that in each case the change is due to the operation of certain phonetic principles. For instance, in accordance with the well-known law of palatalisation a primitive "kevi" has changed into "Chevi" in Tamil, while Kannada retains a form (kivi) which is truer to the original. Because of the fondness for aspiration which a certain set of speakers developed, "pal" of old became "hal" (and later hallu) even as words such as pattu, puli and pambu have changed into hattu, huli and hāvu. Due to the common tendency of eliding a "r" sound in medial places as in erumai (=buffalo) becoming emme in Kannada, Nerunal becoming Neṇṇal in Tamil and Ninna in Telugu-Kannada, Neruppu has been changed into Nippu in Telugu.

Familiar creatures such as cow, fish, elephant and snake have words in these languages which have similar shapes. Ā,

mīṉ, Yāṉai or āṉai and pāmbu are found in one shape or the other in these languages answering to the names of these creatures.

Again, such common actions as eating, giving, going etc., are expressed almost by similar words: —

English	Tamil	Telugu	Kannada	Malayalam
EAT	tiṉ uṇ	tinu	tinnu	tiṉṉu uṇṇu
GIVE	ī tā koḍu	īchchu	ī koḍu	 taru koḍukka
GO	pō	pōvu	hōgu	pō
LAUGH	naku chiri	navvu	nagu	 chirī
STAND	nil	niluchu	nillu	nilka
KNOW	teri	teli	tiḷi	tiri

Among words indicating family relations what a remarkable similarity is found!

English	Tamil	Telugu	Kannada	Malayalam
FATHER	tantai appaṉ attaṉ	tanḍri appā	tande appā	 achchaṉ
MOTHER	tāy ammai taḷḷai	 ammā talli	tāyi ammā	 ammā taḷḷā
SISTER (elder)	akkai	akka	akka	akka

Numerals and pronouns, which are generally persistent and which therefore are sure to shed much light on determining the question of relationship, are also found to have the same or corresponding shapes in these languages.

English	Tamil	Telugu	Kannada	Malayalam
ONE	oṉṟu	oṇḍu okaṭi	ondu	oṉṉu
TWO	iraṇḍu	reṇḍu	eraḍu	reṇḍu
THREE	mūṉṟu	mūḍu	mūru	mūnnu
FOUR	nālu nāṉgu nālgu	nālugu	nālu nālku	nāl
FIVE	aindu añcu	aidu	aidu	añju
SIX	āṟu	āru	āru	āṟu
SEVEN	ēḻu	ēḍu	ēḻu	ēḻu
HUNDRED	nūṟu	nūru	nūru	nūṟu
I	yāṉ nāṉ	ēnu nēnu	yān nānu	ñāṉ
YOU	nī	nīvu	nīnu	nī
THEY	avar	vāru	avaru	avar

Each one of the changes noticed in the foregoing sets of words can be phonologically explained. For instance, by means of what is known as the principle of compensatory lengthening, in a word like "avar" which stood as "avaru" by receiving an euphonic vowel addition at the end, the initial vowel a migrated from its place and took the place of the succeeding vowel "a" with an increase in quantity as a matter of compensation for what it had lost. Hence vāru of Telugu and Avar of Tamil are ultimately related.

Though words of the class mentioned above would help one in determining the relationship, they alone do not suffice to prove it. If this evidence is corroborated by evidence from grammatical structure, one could say that these languages do belong to the same family. The main principle underlying the grammatical structure of all these languages is what is called agglutination, i.e., gluing together of elements that are attachable and detachable at will. This then helps us in establishing that the languages mentioned before are

members of the family generally known as the Dravidian. In order to show how these languages are similar in grammatical structure one sentence will now be cited. The English sentence "He said, o father. give me my share of the property" would be rendered into the four main languages thus: —

Tamil—Tandaiyē, cottil eṉakku varavēṇḍiya paṅkai eṉakku taravēṇḍum eṉṟāṉ.

Telugu—ō tanḍrī, āstilō nāku vachchē pālu Yimmani cheppināḍu.

Kannada—Tandeyē, āstiyalli nanage baratakka pālannu nanage koḍu andāga.

Malayalam—Appā, Vastukkaḷil enikku Varēṇḍunna paṅge tarēṇamē ennu paṟaññu.

Tandaiyē of Tamil and tandeyē of Kannada agree in adding a final ē as the vocative. Appā of Malayalam is exactly in line with the other way in which Tamil would form its vocative, namely, by dropping the final "n" in such places and affixing instead ā. The Telugu tanḍrī also is analogous to the formation in Tamil by elongating the final short "i" as in " talaivī " from "talaivi."

Tamil cottil=cottu+il (the sign of the 7th case); Telugu āsti+lō (Here lō is but an inversion of uḷ, another sign of the locative in Tamil); Kannada āsti+alli (Here "alli" is a morphological element derived from an old independent word meaning 'that place' and serves very well to express the idea of the locative); Malayalam Vastu+kaḷ+il (Here kaḷ, the pluralising particle and il, the locative sign have been glued on to the root-word).

Tamil eṉakku and Malayalam enikku are but phonetic variations of the same inflection. It is significant that ku or gu or ge is the element expressive of the idea of the 4th case in all these languages. While Tamil and Malayalam have formed an inflexional base "eṉ" by shortening the root-vowel in Yāṉ or ñāṉ and while Kannada has formed the base nan from nān by shortening the vowel, Telugu has retained the included vowel intact. So, nāku from Telugu nā, nanage from Kannada nān, eṉakku an enikku from Yāṉ have been formed as the dative of the first personal singular pronoun.

Even as "ai" in Tamil "paṅkai" has been suffixed to indicate the idea of the accusative or the second case, "e" has been affixed in the Malayalam word as "paṅge". Paṅgu and pāl are identical in meaning. While Kannada has pālannu from pāl+annu, Telugu generally uses pālu in the sense of share in the accusative without any affix therefor. This is in accordance with the usage noticed in other Dravidian languages which occasionally prefer not to affix any accusative case-sign to neuter nouns. [E.g. Tam. Uṇḍi Koḍuttāṉ =He gave food.] *Dr. R. Caldwell,* the founder of Dravidian Philology, remarks "the use of the nominative as the accusative of neuter nouns is the ordinary and almost universal colloquial usage of Tamil-Malayalam, and is often found even in classical compositions. . . . . In Telugu the use of the nominative for the accusative is confined to things without life. . . . . As far as things without life are concerned, Telugu adheres to the ordinary Dravidian rules."

Comparisons and considerations such as these point to the conclusion that these languages are in the relation of sister to one another and that they have sprung from the same mother, which may be designated as

the *Primitive Dravidian.* Apart from the fact of history according to which there was a Dravidian race, the fact that there is great similarity in the *material* and *method* of expression in these languages renders the existence of a Dravidian family certain. As the pressing necessity of space compels me to draw this paper to a close, I would simply conclude by saying that the subject of study relating to the Dravidian family of languages deserves further and greater encouragement, for it is sure to shed a flood of light on several dark corners in the history of thought relating to General linguistics and that, as *Dr. W. W. Hunter* of the Bengal Civil Service said, it is destined to open the door to the vast linguistic residue and to furnish the basis of a new Science of Language.

STATE INTERVENTIONISM

By

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During the last quarter of a century partly under the stress of the Great War (1914-1918) and partly under the stress of the Great Depression (1929-1935) almost every country has engaged in some form of economic effort to promote industrial prosperity. It is evident that a good many of the measures have been in response to temporary emergencies while others have come to stay. It is worth our while to review the whole sphere of State action as it stood at the beginning of the present war and to take note of the various possibilities for Government intervention in the economic life of India that such a survey will reveal.

Economic action on the part of the State can take either of two main forms. In one the Government takes charge of the whole economic process and operates a planned economy. In the other Government action and private enterprise go hand in hand. The U.S.S.R. falls into the first of these categories. The remaining countries, about 65 in number fall into the second. We are not concerned at present with planned economic systems. Our survey deals with the methods of State action in capitalistic countries where private initiative still plays the major part in the making and marketing of goods.

Even under a system of the most complete *laissez-faire* the Government has a certain economic role to play.

It is the extension of the role and also its intensification that makes for planned capitalism. There is a growing belief that it is the duty of the state to see not only that nobody starves but to ensure that the economic machinery of society runs smoothly and efficiently and that in particular it affords adequate employment for men and capital alike. The prevalent notion is that it is necessary for the state to take over a large measure of social responsibility and to improve the standard of living of the mass of the population. State action in the industrial sphere has won the approval of the Conservative as well as the Liberal.

It is difficult to cover the whole ground of State action within the limits of a short essay. We can give only the barest indications of the multitudinous forms of State intervention. We cannot go into the details of any particular scheme or project but we can make an attempt to see the movement as a whole or to vary the metaphor, to bring the different types of action into focus simultaneously.

State aid to Industry

Even in the days of unadulterated *laissez-faire* the state rendered certain indirect aids to industry. Technical assistance such as the provision of business information, experimental farms, research institutes and State insurance had become a recognized part of official activity. During recent years financial aid to industry has become a marked feature. It takes various forms e.g. Government guarantee of the interest on loans and Government participation in the capital of the concerns. As extreme form is the Reconstruction Finance Corporation of U.S.A. which has made loans to or brought shares in industrial corporations and has thus kept businesses from tottering in a time of economic depression.

The most noteworthy of all types of State aid is the grant of bounties or subsidies. Even those countries where the *laissez-faire* doctrines are deeply entrenched have made subsidies quite a feature of their budgets. The Netherlands makes a large allocation every year for financial assistance to market gardeners, bacon producers and exporters of dairy produce. Great Britain makes a grant of £ 3 millions to the growers of sugar-beet while Japan subsidises the associations of small producers. In addition there are a great many disguised or veiled forms of bounty: remission of taxation, reduction of freight charges and special rates of exchange.

State Management of Industry

One brought up in the school of orthodox economics scarcely realizes the extent to which Governments are now taking a hand in the making and marketing of goods. The old notion that there is no middle way between private enterprise and state ownership has been superseded. In practically every country private undertakings and state enterprises are found side by side. The mixture of industrial activity emanating from the capitalist and the Government constitutes a new situation.

State intervention in economic life may take one of many forms. It may amount to the actual management of business enterprises by a Government agency. Industries of key importance such as iron and steel in Japan and public utilities such as electrical supply in Great Britain have become the proper subjects for state management. Sweden has made a speciality of State purchase of wholesale drug and medicine houses while the Government in U.S.A. has created a network of State enterprises, called the Tennessee Valley

Authority, which serves as a yardstick by which to measure the costs in similar groups of industries under company management. The most successful method of State management of industry has been the "public corporation" under which persons directly responsible for the actual administration of the business are appointed by the State but they are left free to run the undertaking in their own way within the limits prescribed by general policy. The public corporation type of State management is likely to grow in popularity as it appears to be a happy compromise between economic individualism and governmental regimentation.

State Regulation of Output

State regulation or adjustment of output involves price fixing and control of productive capacity. In a system where private enterprise and State action intermingle, the adjustment of output becomes a fairly easy problem. For economic equilibrium the various kinds of goods—capital goods and consumption goods should be produced in the right proportions. Whenever there is persistent disproportion in the production of particular commodities the state has to make the necessary adjustment.

Adjustment of output necessitates direct control on the part of Government of prices, production and productive capacity. The control of prices ranges all the way from general price control over practically all commodities as is the case in Germany to State action calculated to mitigate seasonal price changes, as for instance of wheat in Canada or coffee in Brazil. Apart from price fixing on behalf of the consumers with which we are not at present concerned, price determination by the state in the producers' interests has become almost a normal feature of some administrations.

A characteristic type of price fixing consists in the setting up of a price at which the Government itself guarantees to buy all that is produced as for instance the cereals scheme of Czecho-Slovakia. Another method of price control is that the producer sells at the market price, the state making up the difference between the price obtained and the price guaranteed e.g. the wheat scheme of Great Britain. Yet another method, illustrated by the butter scheme of Australia, is to fix a high price for the home market and subsidise the exports out of the surplus realized from the domestic consumers.

Government control of output has also been successfully attempted in recent times. We have to bear in mind that price control and output control are inseparably connected. Whether prices are fixed and the output is left to adjust itself to the situation or vice versa leads more or less to the same result, namely the restriction of output. State regulation of the amount produced has become an important device though at times it assumes fantastic shapes. The ploughing-in of over 10 million acres in U.S.A. in 1933 thereby carrying out a partial destruction of the cotton crop, the burning of coffee in Brazil to an amount exceeding one year's total world consumption and the slaughtering of cattle in Argentina and Hungary are but sorry examples of an operation whose primary object ought to be a planned restriction of output.

Even more important than the control of prices and of output is the State regulation of productive capacity. Regulation in practice means a reduction to the point where supply can meet the new demand conditions. Thus in U.S.A. the Government gives a subsidy for the restriction of wheat and cotton acreage and the French Government does the same for the vineyards. In Bulgaria and Czecho-Slovakia the Gov-

ernment prohibits the establishment of new factories or extensions in certain industries. A number of the industrial codes under the New Deal prohibit any increase in capital equipment until demand improves. The restrictionist movement may be carried to great lengths as in Germany where further investment in some thirty important branches of industry was forbidden, as it was thought the investment had already outrun the possible demand.

So much for methods of direct regulation. Government also exercises indirect control over prices, output and productive capacity and this kind of control is operated through associations of producers. The state as in Germany, might compel the formation of cartels, an important feature of which is to force the outsiders to join so as to obtain unity of management and economies of marketing. Or again the state, as in Poland, might promote schemes of self-government in industry by which the majority of producers in a given industry will have power to frame decisions binding on the whole body.

Government control creates the need for further and further measures as in a concentric circle. Control is contagious and a Government which sets about regulating prices, output and productive capacity will soon discover that there are hardly any frontiers to its activity. Thus a Government that determines the price of one product will be called upon, sooner or later, to determine the prices of connected and complementary goods. An intervention at any single segment of the price system can rarely be an isolated act for, its repercussions spread over a wide area.

Moreover if price is controlled output also must be controlled and restrictionism tends to grow. Thus the Government may be obliged to pass a measure to the effect that fields taken out of rice or wheat cultivation are not used

to grow sugarcane or rye and thus spoil the markets for these. Neither should the manufacturers, say millers, be ground between the upper stone of price-fixing regulations in favour of producers of wheat and the nether stone of price-fixing regulations in favour of consumers of bread. These difficulties do not dispense with the idea of State action but they call for caution and an application of economic judgment to Government intervention.

State Adjustment of Consumer Demand

An analysis of the Great Depression revealed the existence of an almost infinite capacity to produce and despite huge populations, an insufficient capacity to consume. In other words production was running ahead of effective demand and the people though willing to buy had not the purchasing power. The best remedy for the imbalance between output and consumption seemed to be for the State to create and maintain effective demand.

The measures proposed to keep the industrial system on an even keel are classified as either contractionist or expansionist. The contractionist method relies upon a reduction in prices and costs. In practice it amounts to a diminution in the total quantity of money in circulation, increased taxation to balance the budget, diminution in state expenditure, reduction of interest on loans, scaling down of farmers' debts and wage-cutting under the initiative of the Government. Germany, Italy and France have tried Government policies tending in these directions. Their object is to reduce costs to the level of effective demand.

The expansionist method adopts the opposite line. It is based on the argument that if more and more purchasing power were placed in the hands of potential buyers prices would cover costs, surplus stocks would be sold, the unem-

ployed resources would be brought into active use. The demand would become effective to the point where consumption would be equal to the wealth produced. Under the influence of expansionist ideas Great Britain and the countries of the Sterling Bloc broke off from the gold standard and allowed their currency to depreciate or become cheap in terms of foreign currencies, while the United States without actually going off the gold standard reduced the gold value of her dollar. The expansionist process has been followed up by what is called "open-market operations", that is to say, by the State Bank purchasing securities with a view to inject additional purchasing power into the monetary system. The process leads on to low interest rates and "cheap money" for the businessmen. The Government then goes a step further and borrows a part of the abundant supply of purchasing power and uses the funds for public works, relief schemes and social services, thus placing new money in the hands of potential buyers of goods. In Germany the measures for increasing effective demand were associated with a rigid system of price control with the result that the whole of the expansionist policy was directed towards increased activity. The expansionist ideas are tending to become a part of the permanent technique for business stabilisation.

State Intervention in Foreign Trade.

Government interference in the conduct of international trade is of the utmost complexity. It takes various forms and most of these are interconnected with the various types of State action within the country itself.

The oldest and by far the most important method of State intervention in foreign trade is the regulation of imports and exports. On the imports side the chief motive

of action appears to be restriction on the entry of foreign goods, prompted by a variety of considerations such as the desire to protect home industry from foreign competition, or as an offset against currency depreciation and dumping and as a preventive of an adverse balance of payments. The simple device of the tariff is now supplemented by quotas, licenses, prohibitions and blocked accounts.

In contrast to the restriction of imports every encouragement is given to the exports and among the measures thereof we may mention export subsidies, State credits to exporters, assumption by the state of the trading risks and the setting up of marketing organization under State direction. While in theory the advantages of free international exchange are conceded by all, each country overcome by fear of unemployment, of war and of exchange difficulties pursues in practice a policy of national self-sufficiency. Imports are suspect so long as effective demand in the home market is not sufficient to keep capital and labour reasonably fully employed.

THE CHRONOLOGY OF RAGHUNĀTHA ŚĀSTRI PARVATE AND HIS WORKS — BETWEEN A.D. 1821 AND 1859.

By

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According to Satischandra Vidyābhūṣaṇa[1] the date of Raghunātha Śāstri Parvate the author of the *Nyāyaratna* is "about 1815 A.D." Aufrecht[2] records the following Mss of this commentary: —

"न्यायरत्न" a commentary on the *Pañcavādī* Section of the Gadādharī by Raghunātha Śāstrin. Hall p. 32, B. 4, 24, Ben. 198, 199, 205, 221. NP. I. 118, 124. Poona 550. Oppert. 190, 653, 1270, 3156, 3267, 5437. II, 7142, 7612, 8262. Rice. 112."

"न्यायरत्न", a commentary on Gadāhara's *Pañcavāda* by Raghunātha Parvata (or R. Śāstrin) Hz. 978, p. 84, 1311."

1. *History of Indian Logic,* Calcutta, 1921, p. 487—
"92 Raghunātha Śāstri (Parvata)
(about 1815 A.D.)
He was a Maratha, who wrote a gloss on *Gadādharī pañcavāda,* while residing at Poona about 70 years ago." If Raghunātha lived 70 years ago from A.D. 1921 backwards we must suppose that he was living in A.D. 1850 or so. Dr. Vidyābhūṣaṇa, however, gives "*about A.D. 1815*" as the date of Raghunātha. These two dates viz., *A.D. 1815 and 1850* will not contradict each other if we presume that Raghunātha lived, say, between 1800 and 1850.
2. *CC. I,* 309.
3. Aufrecht, *CC.* III, 66.

In the above entries of Aufrecht no reference regarding the date of the author has been recorded. Fitzedward Hall,[4] however, while describing in Ms of the न्यायरत्न refers to its author as "'Raghunāthā Śāstrin Parvatīkara, *late of the Poona College.*" As Hall's *Bibliography* was published at Calcutta in 1859, he appears to have had some knowledge of Raghunātha Śāstri and his association with the Poona College earlier than A.D. 1859. Hall also refers to a lithograph copy of the *Nyāyaratna* made at Bombay in A.D. 1843. It appears that another lithograph copy[5] was

4. *Bibliography*, Calcutta, 1859—Hall was "Inspector of Public Instruction of Saugor and Nerbudda territories." He describes a Ms of the न्यायरत्न as follows: "*Nyāyaratna*—A Commentary on the Pañcavādī Sub-section of No. XLI by Raghunātha Sāstri Parvatīkara, *late of the Poona College*. This work was lithographed in Bombay in the Śaka year 1765 or *A.D. 1843*; leaves 316 of the Ms. form, and four leaves of emendations."

5. This copy is found in the Viśrāmbāg Collection at the B.O.R. Institute (Govt. Mss.). It bears the number *550* of *Viśrāma I* and *begins* as follows:—

"श्रीगणेशाय नमः ॥ श्रीमदुपास्यदेवतायै नमः ॥
नित्येच्छाकृतिचित्सौख्यं परभाणुकलेवरं ।
अन्यात्मादिजगद्धेतुं नमामि परमेश्वरं ॥ १ ॥
द्रव्यं निष्पाद्य तस्मिन् गुणगणमदधत्कर्म जातिं विशेषान् ।
संबंधं चाप्यभावं सुरगृहनिरयौ बंधमोक्षौ च कार्यात् ।
एकोपि ब्रह्मविष्ण्वीश्वर विविधपदै गीयते धर्मभेदात् ।
तं सर्वज्ञं दयालुं दुरितगिरिपविं मंगलायाश्रयामः ॥ २ ॥
कृष्णंभट्टयादिसंदर्भसिंधुसायासमंथनैः ।
न्यायरत्नं समुद्धृत्य प्रकटोकरवाण्यहम् ॥ ३ ॥
मीमांसान्यायपंचास्यराघवाचार्यसूरिणां ।
शिष्यस्यैषा कृतिर्भूयाद्रघुनाथस्य सन्मुदे ॥ ४ ॥

made at Poona from this Bombay edition of *A.D. 1843* in Śaka 1772=*A.D. 1850* as will be seen from the colophon of the Poona lithograph edition.[6] But a closer study of this

6. Ms. *No. 550 of Viśrāma I* ends as follows:—folio 330

नित्याप्वादि क्रियातक्र्योर्जीवेभ्यो भिन्न ईश्वरः ।
ज्ञानाद्यष्टगुणः पायादपायात्तर्कजाद्विनः ॥ १ ॥
न्यायांभोधि निमज्जने क्षणमुखायासोद्भुताच्छस्फुरत् ।
तर्कत्वेप्सितरम्यरत्नजलसन्मालर्पिता विष्णवे ।
श्रीशायापि निपातिता मतिमतां तर्कोधकूपस्खल-
द्धीवाचामधिकंठमलपमतिभिर्योद्धारणीया नहि ॥ २ ॥
कार्ष्णभट्टयादिककोडग्रंथक्रोडीकृतिः कृता ।
रघुनाथेनालसानां तच्छीघ्रोपस्थितीप्सया ॥ ३ ॥
विशेषयंतु मत्प्रोक्तान्विशेषांस्तर्ककर्कशाः ।
आर्या मात्सर्यमुत्सार्य दृष्ट्वैतज्जातविस्मयाः ॥ ४ ॥
न्यायाकूपारपारं गतमतितरणीन्मत्सरोद्रेकशून्यान्
मान्यान्विज्ञापयामः सविनयमिहयन्न्यायरत्नेऽपबद्धं
तत्संशोध्यं परेषामुपकृतिविधये संप्रवृत्तावयं यत्
तस्मादेवात्र धाष्टर्याज्जन निजधिषणा प्रौढिसंदर्शनाय ॥ ५ ॥
शके **बाण षडद्रींदु** संमिते मासि भाद्रके ।
रघुनाथो न्यायरत्नं शोभकृद्वत्सरे करोत् ॥ ६ ॥

इति मीमांसान्यायपंचास्य श्रीमद्राघवाचार्यशिष्यस्य **पर्वते** इत्युपनामक **रघुनाथ**स्य कृतौ **गादाधरी पंचवाद**टिप्पण्यां **न्यायरत्ना**भिधायां पक्षताग्रंथांतर्गत-संशयपक्षता समाप्ता । समाप्रेयं **न्यायरत्ना**भिधा **गादाधरी**पचवादटिप्पणी ।

द्विसप्तसप्तेंदुमिते शाके **पूर्णाख्यपत्त**ने ।
अंकिता **पाठशालायां** टिप्पणीयं **शिलाक्षरैः**

The chronogram **द्वि सप्त सप्तइंदु**=Śaka 1772 = *A.D. 1850* which is the year of this Poona (**पूर्णपत्तन**) lithograph.

colophon shows that Raghunātha composed the *Nyāyaratna* in Śaka 1765 represented by the chronogram "बाण, पड्, अद्रि, इंदु" in verse 6 at the end of the work. It is possible therefore, that Hall may have confused the date of composition of the *Nyāyaratna* viz., Śaka 1765 or *A.D. 1843* with the date of the lithograph copy. At any rate we have to believe in the testimony of the author who specifies the year (Śaka 1765) called "*Śobhakṛt*" and also the month (*Bhādraka* or *Bhādrapada*).

In view of the above date of composition of Raghunātha's *Nyāyaratna*, viz., *A.D. 1843*, we find it impossible to accept the date of Raghunātha's death given by Pt. Critrāva Śāstri[7] in his *Caritrakośa* viz., "*about A.D. 1820.*"

7. *Madhyayugina Caritra-kośa*, Poona, 1937, p. 675—"रघुनाथ शास्त्री पवेत—(मृत्यु स. १९२० सुमार)"—He favoured intermarriages between the Brahmin sub-castes, viz., *Deshasthās*, *Kokanasthas* and *Karhadas*. In fact he married girls belonging to these castes. He took sides in the dispute in the Husabinis family of Poona, which resulted in some scuffle. Raghunātha was prosecuted and sentenced to simple imprisonment for some years. During his imprisonment he composed a work called "शंकरपादभूषण" which is a commentary on the *Bhagavadgita*. This work has been published by the Anandashram, Poona, in their series. He wrote a commentary on the गदाधरीपंचवाद. He wrote also a work called न्यायरत्न. He was a pupil of the celebrated राघवाचार्य" (translation mine).

The editor has not specified the source of the above information. He appears to think that न्यायरत्न is different from गदाधारी-पंचवादटीका. In fact न्यायरत्न is the name of this टीका. Then again शंकरपादभूषण is different from the Marathi commentary on the *Bhagavadgītā* called the भाषाविवृत्ति which Mr. B. G. Tilak read out to his father during the latter's illness in A.D. 1872, in which year Mr. Tilak was only 16 years old (*Vide* गीतारहस्य प्रस्तावना p. 1).

Hall's remark of A.D. 1859 viz., "late of the Poona College," if considered along with (1) *A.D. 1843* the date of composition of the न्यायरत्न and (2) *A.D. 1850* the date of the Poona litho-copy of the न्यायरत्न made at the (Viśrāmabāg) Pāṭhaśālā, leads us to infer that the literary activity of Raghunātha may have commenced about A.D. 1820, the year about which Pt. Chitrāv Śāstri states he was dead. Perhaps Raghunātha may have been a teacher in the Viśrāmbāg Paṭha-Śālā, from which he may have retired about 1859 A.D. Apparently Hall knew his connection with the Poona College viz., the Viśrāmbāg Pāṭhaśālā before A.D. 1859.

In the *Nyāyaratna* (verse 4 at the beginning and colophon) Raghunātha definitely states that he was the pupil of राघवाचार्यसूरि who is called "मीमांसान्यायपंचास्य". I am inclined to identify this राघवाचार्य with "राघवाचार्य रामानुजण" who was appointed by the Bombay Government as the first Principal of this Sanskrit College at Vishrāmbāg, Poona according to a letter[8] dated *6th October, 1821.* This राघवाचार्य issued Rules and Regulations for the guidance of teachers and students of the Sanskrit

8. Vide, p. 45 of *Peshwa Daftar Selections* (No. 42—1934). The teachers appointed by Government for the Sanskrit College were:— (१) विठलभट फाटक (२) माहादेवभट (३) मेघश्याम पाठक (४)अनंताचार्य (for अलंकार, नाटक) (५) राघवाचार्य (for न्याय) clause 10 of this letter reads:— राघवाचार्य रामानुजण थोर विद्वान जाणोन पाठशालेत मुख्तसर केले आहेत, ते गुरूवर व विद्यार्थी यावर व शालेचे इलाखदार यावर हुकूम करितीलले

College under his own signature in a document[9] dated *19th July 1322*. In another document[10] dated *17th July 1837* राघवाचार्य (along with बाळाजीपंत नातू, आबा पारसनीस, कासीपंत बंद्रे) is referred to as advising Maharaja Pratapsinh of Satara to confess the charges brought against him. Messrs. Natu, Parasnis and Bandre and Rāghavācārya were pro-Government persons and consequently their advice was refused by the Raja of Satara who was not prepared to do anything against his conscience.

I am inclined to suppose that Raghunātha the author of the न्यायरत्न was a pupil of राघवाचार्य the first Principal of the Vishrāmbāg College which was started in *A.D. 1821*. "राघवाचार्य" taught न्याय in this College and produced able pupils like our Raghunātha the author of the न्यायरत्न and शंकरपादभूषण. The chronology of the guru and the pupil may now be represented as follows :—

A.D.

1821—(6th October)--Poona Sanskrit College started by Government with राघवाचार्य as its Principal, and teacher in न्याय.

रघुनाथ पर्वते possibly joined at this time the above College as a student and studied न्याय under राघवाचार्य.

9. P. D. No. 42 (p. 49ff), Letter No. 9 dated 19—7—1822 "यादि विश्रामबागचे वाडयांत पाठशाला घातली आहे त्यास वहिवाटकरण्याचीं कलमे शके १७४३ चित्रभानु सवत्सरे (p. 51) कलमे सहि राघवाचार्या मि ॥ श्रावणशुध्ध १".

10. *Ibid.*, p. 106—*Letter No. 56 dated 17-7-1837.*

1821—(19th July)— राघवाचार्य issued Rules and Regulations for the teachers and students of the College.

1837—(17th July)— राघवाचार्य advises the Raja Pratapsinh to confess charges against him.

1843—(Month of Bhādrapada)— रघुनाथ पर्वते the pupil of राघवाचार्य composed his न्यायरत्न.

1850—A litho-copy of न्यायरत्न is prepared at the litho press of the College "अंकिता पाठशालायां टिप्पणीयं शिलाक्षरैः"

1859—Fitzedward Hall publishes his *Bibliography* at Calcutta in which he refers to रघुनाथ पर्वते as *"late of the Poona College"*.

1872—Lokamānya B. G. Tilak reads out रघुनाथ's भाषाविवृत्ति (commentary on Gīta in Marathi) to his father in his last illness.[11]

The above chronology of Raghunātha's life and works is reconstructed on the basis of the *Nyāyaratna*,[12] the letters

11. *Vide infra.* foot-note 14.

12. In verse 3 at the beginning of न्यायरत्न our author refers to कृष्णभट्टी . Again in verse 3 at the end of this work we find this work referred to as "कार्ष्णभट्टी" This work is a gloss on गदाधरी called गदाधरीकर्पिका by कृष्णभट्ट आर्डे, a Maratha residing at Benares. This gloss has been printed in Telugu characters. S. Vidyābhūṣaṇa states that कृष्णभट्ट died about 150 years ago," *i.e.*, about A.D. 1770. (See p. 486 of *His. of Ind. Logic*). If this date is correct Raghunātha's reference to कार्ष्णभट्टी in A.D. 1843 appears to have been made after about 133 years from the death of कृष्णभट्ट.

in the *Peshwa Daftar* and Fitzedward Hall's remarks. We must now see what evidence is furnished by another work of Raghunāthā viz., शंकरपादभूषण represented by some Mss in the *Catalogus Catalogorum* of Aufrecht[13] and by the printed edition of the work in the Ānandāshrama Sanskrit Series. It appears that Raghunātha composed a work in Marāthī also. This work is a commentary in Marāṭhi prose on the *Bhagavadgīta* called the भाषाविवृत्ति and it will be of special interest to us in view of the fact that Lokamānya B. G. Tilak's first contact with the Gīta literature which later blossomed forth into his monumental work *Gītārahasya* in Marāṭhī, began with the reading of Raghunātha's भाषाविवृत्ति in *A.D. 1872* during the last illness of Mr. Tilak's father[14] as stated by him in the *Gītārahasya* itself. In the *Catalogue of Gujarat Mss* by Bühler

13. CCI, 625—"शङ्करपादभूषण" Vedānta, by Raghunātha B. 4. 98. Oppert 3226.II.5575.8374."
"*B.* 4.98"=p. 98 of Bühler's *Catalogue of Gujarat Mss,* Fasc. IV; Bombay (1873). Ms. No. 346—शंकरपादभूषण by रघुनाथ, Folios 311 in the possession of संतोषराम देसाई of Bhavanagar.

14. *Gītarahasya,* Prastāvana (p. 1) dated A.D. 1915—
"इसवी सन १८७२ साली वडील शेवटच्या दुखण्यानें आजारी असतां भगवद्गीतेवरील भाषाविवृत्ति नावाची प्राकृतटीका त्यांस वाचून दाखविण्याचें काम आमचेकडे आलें होतें, तेव्हां म्हणजे आमच्या वयाच्या सोळाव्या वर्षी गीतेचा भावार्थ पूर्णपणें लक्षांत येणें शक्य नव्हतें तथापि लहान वयांत मनावर घडणारे संस्कार टिकाऊ असल्यामुळें भगवद्गीतेबद्दल तेव्हां उत्पन्न झालेली आवड कायम राहून etc." Evidently Mr. Tilak's love for the *Gītā* began at the age of 16 on a perusal of Raghunatha's भाषाविवृत्ति. I am thankful to Mr. Achwal of Poona for drawing my attention to this important reference.

published in *1873* he notes a Ms of **रघुनाथ**'s **शंकरपादभूषण** in the possession of a gentleman at Bhavanagar. It would thus be seen that the chronology of the works of our author so far known is capable of being represented as follows:—

न्यायरत्न—Composed in A.D. 1843.

भाषाविवृत्ति[15]—Composed before A.D. 1872.

शंकरपादभूषण—Composed before A.D. 1873.

15. *Bhagavadgīta* with **भाषाविवृत्ति** of **रघुनाथशास्त्री पर्वते** Printed in the Vṛttaprasāraka Press of Naro Appaji Godbole, Sadashiv Peth, Poona, Śaka 1809 (=*A.D. 1887*). This Marāṭhī Commentary begins with 9 Sanskrit verses as follows:—

"**श्रीगणेशाय नमः ॥ अथमंगलाचरणम्** ।

आत्मतत्वं स्वप्रकाशं सुविचार्य पुनः पुनः ।
कुर्वेहं भाषया व्याख्यां गीतायाः कृष्णतुष्टये ॥ १ ॥
येषां संस्कृतभाषायामभ्यासो नास्त्यथापि च ।
छंदोबद्धेषु ग्रंथेषु भाषया रचितेष्वपि ॥ २ ॥
तेषां गीतार्थबोधाय भाषयाऽनतिविस्तृतः ।
स्पष्टार्थः सुखबोधश्च दीपोऽयं क्रियते मया ॥ ३ ॥
शास्त्रिणो **रघुनाथेन रामचंद्रात्मजन** वै ।
अनेन प्रीयतां देवो भगवान् श्रीपतिः स्वराट् ॥ ४ ॥
मीमांसान्यायपंचास्य**राघवाचार्य**सूरिणाम् ।
शिष्यस्यैषा कृति र्भूयाद्रघुनाथस्य सन्मुदे ॥ ५ ॥

The last verse, *viz.*, verse 9 in the above extract is exactly identical with verse 4 at the beginning of **न्यायरत्न** . From verse 4 we know that **रामचंद्र** was the father of **रघुनाथ**.

The commentary ends as follows:—

"गीताशास्त्रस्य गूढार्थप्रकाशार्थं मया कृतः ।
भाषाविवृत्तिदीपोऽयमज्ञानावृत्तिनाशनः ॥

It will be seen from the data recorded above that Raghunāthā Sāstri, the son of Rāmacandra Parvate, flourished *between A.D. 1821 and 1859* during the time of English patronage of Sanskrit learning at Poona. The view of Dr. Satischandra Vidyabhūṣan that this author flourished *"about 1815"* has been also refuted on documentary evidence. In the same manner the statement of Pandit Chitrāv Śāstri that our author *"died about 1820"* is incorrect because it is not supported by any document. Moreover, Raghunātha himself states that he composed his *Nyāyaratna* in Śaka 1765 i.e. in *A.D. 1843.* The present paper amply illustrates how our knowledge of authors and their works even of the last century is most inaccurate owing to the want of proper historical reconstruction on the strength of reliable documentary evidence.

श्रीकृष्णायार्पितो भक्त्या नीराजनपुरःसरं ।
अनेन प्रीयतां देवो-ह्रींपतिः श्रीपतिः स्वराट् ॥
"मीमांसान्यायपंचास्यराघवाचार्यसूरिणाम् ।
शिष्यस्यैषा कृतिर्भूयात् **रघुनाथस्य** सन्मुदे ॥ इति ।

श्रीमद्भगवद्गीतायाः **रघुनाथशास्त्रकृतभाषाविवृत्तौ** अष्टादशोध्यायः समाप्तः ॥

SPORTS AND GAMES AT ANNAMALAINAGAR

By

L. K. Govindarajulu, B.A., B.L.

The University has been the centre of considerable athletic activities since its very foundation in 1929. A sound tradition of outdoor activities had already been set up in this place by the Sri Minakshi College, thanks to the far-sighted policy of the Principal, and the munificent patronage of the Rajah Sahib of Chettinad, the Manager. Cricket for lovers of the King of Games, Football and Hockey for the hardy and fleet-footed, Badminton and Volleyball for the less ambitious but active students, were all well-established games at the time the Universiy came into being.

With the inception of the University, a programme of compulsory physical activities for all students was introduced, and every able-bodied student is required by the regulations to play some game or other of his own choice. Facilities have accordingly been provided for a very large variety of games and sports; and as many as fourteen clubs now form the Athletic Association of the University. Daily, the undergraduates may be seen taking part in the following games and sports activities : badminton, basketball, cricket, football, hockey, playground-baseball, quoits, tennikoit, tennis, volleyball, boxing, heavy gymnastics, group games of all types, and indigenous games. To these amenities are to be added shortly two very popular and useful kinds of sport, boating and swimming.

We owe all this great array of activities to the far-sightedness and generosity of the Founder-Pro-Chancellor, whose interest in every aspect of modern education is well known. It is he who chose this " solitary, solubrious " and spacious corner of South Arcot for this famous seat of learning and art. It is he who planned its rapid development from a wide and barren sea of sand and swamp into a small paradise of gardens, mansions and playfields. Fields had to be raised and levelled, tanks, ponds and hollows filled up, and thousands of gaunt, ugly and useless trees felled down in order that the wide acres we now have could be used either for the active and healthy recreation of the undergraduates or for the creation of beautiful parks in which the pensive student may amble at will. The cost of all this was indeed counted ; but, though high, it has been willingly and cheerfully met in order that this place may become a great and worthy centre of learning in Tamil Nad.

The Raja Sahib has given this place of his best, even in respect of games and sports. He has endowed attractive and valuable trophies, and for the award of these, annually inter-collegiate and inter-club tournaments are conducted in athletics, cricket and tennis. A big prize is annually given in his name to the best all-round student distinguishing himself in the sports and games competitions of the year. The amenities for boating now being added are entirely due to his kindly interest and guidance. That his interest in athletic activities as a means of education is great and sincere is further shown by a magnificent gift he has recently made to the Inter-University Board of India of a large and artistic trophy for Inter-University Athletics.

To the facilities we possess for games at the University, its numerous and spacious playfields, the large

pavilion, office-rooms for the staff, the boat canal and the boat-house, we owe a great deal to the successive Vice-Chancellors, Dewan Bahadur S. E. Runganadhan, the Right Hon'ble V. S. Srinivasa Sastri and Sir K. V. Reddi. These are due to their benign and active interest in games and sports. Physical activities at this place have also derived immense encouragement from the youthful and valuable co-operation of members of the Teaching Staff who have actively participated in the play of the under-graduates, and assisted them in its organisation and conduct.

Thus, sports and games have been a marked feature of our University life here. To the Founder who has made all this possible, may God be pleased to give a long life of service and ever-lasting happiness.

KARNA'S BURDEN

By

H. L. Hariyappa, M.A.

This short play which is ascribed to the authorship of the celebrated Sanskrit dramatist Bhasa glorifies Karna who figures as one of the great heroes of the Mahabharata. It is as exquisite as it is short. The chief theme is Karna's bounty which knew no bounds and which, for the very reason, made his name for ever "like the Sun, the Moon, the Himavan and the Ocean." To-day Karna's name is a household word signifying limitless generosity.

Our dramatist however has, in this little piece of hardly half an hour's performance, portrayed the hero with a rare insight into the human mind. Karna's generosity was not an accident; it was not a freak of his nature. We find it fully supported by many a noble quality which makes him majestic as well as magnanimous. He was high born, valiant in fight and just and honest in conduct. But one thing was against him and that was Fate. He was Kunti's first born child by favour of the Sun-God. No more auspicious circumstance is needed for one's prosperity, but for Karna it proved otherwise. For fear of scandal Kunti cast the baby into the river. A charioteer, Adhiratha by name, rescued the child and his wife Radha became the foster-mother. Thus nobody could tell Karna's lineage. In the eyes of the world he was low born with no stake in society. But his personality and attainments were so irresistible that they caught the fancy of Duryodhana who elevated him to Kingship. No two friends could be more affectionate and true to each other. But in the scheme of the Mahabharata,

this friendship proved fatal to Karna. He came to be as much hated and despised as Duryodhana himself by friends and foes alike. How could a base born son of a charioteer enjoy such confidence with the King ? Hence he should be humiliated—that is how he was looked down upon even by Duryodhana's supporters. And what about his generosity? Even this great virtue which the world praises so much turned out to be the blunder of his life. His own mother Kunti took advantage of it and extracted a promise that he would not kill the Pandavas except one and that he would not use the same weapon against a person a second time. No less than Indra played the trick on him to the utter disregard of all ethical principles.

It is indeed vain to suppose that Karna was all virtue and that his end was thoroughly undeserved ; for, how can he be exonerated from the falsehood that he uttered, quite consciously, before Jamadagni's son ? It may be his excessive enthusiasm to learn at the feet of the eminent sage or it may be a boyish wantonness that encouraged him to utter the lie. Nevertheless, it is an error which merited the sage's curse and which thereafter steadily worked the nemesis of our hero. Karna however reconciled himself to the unfortunate incident. He was consecrated on the throne of the Anga country, became famous for his skill in archery and valour in war and basked in the sunshine of Duryodhana's friendship.

Inspite of all the glory he earned, Karna developed a rather pessimistic outlook. He was inwardly smitten with remorse on account of his early misfortune. His education and training ended in the fatal curse of Parasurama. In life, too, he came to be associated with wickedness. Kunti, Bhisma, Krishna and others chose psychological moments to bring home to Karna that the Pandavas were his younger

brothers and that he was only out to kill his kith and kin. These crucial incidents in his life swayed heavily upon the mind resulting in an attitude of diffidence which ever and anon oppressed him. He often seemed to betray a deplorable weakness of will as much as magnanimity of nature.

At all events, therefore, Karna's is a great personality endowed with manly qualities and divine splendour. By the decree of destiny only his magnificent life turned out to be a tragedy. Truly his is an instance of the tragic hero as conceived by the Greeks ; and *Karnabhara* can be described as a tragedy with all the appeal of its technique. Recently however, Mr. Pusalker in his *Bhasa—A Study* has expressed a view differing from the above opinion. He would not concede the title of a tragedy to the play though he is willing to perceive "a pathetic note pervading the whole play." He would have us further interpret the title Karnabhara as follows :

कर्णयोः भारभूतानि कुण्डलानि दत्वा कर्णेनापूर्वो दानशूरता प्रकटीकृता ।
तामधिकृत्य कृतं नाटकम् ॥

This appears to be a very far fetched explanation of the title which in simple terms means "Karna's Burden" (कर्णस्य भारः, तमधिकृत्य कृतं नाटकम् ।) which easily reminds us of Karna's task or responsibility as commander of Duryodhana's forces ; he has also a friendly duty to discharge, that is to secure victory for Duryodhana. The title further suggests the heavy handicap under which the hero has had to fight the battle. The *Sahrdaya* cannot indeed afford to ignore the tragic appeal of Karna's character as brought out in the little play. The technical aspect of tragedy too is clear enough. It may however be urged that the theme of the play is the gift of the armour and the ear-rings, not Karna's end. True, that is the primary incident that is related in the piece, a large portion

of which is taken up by the episode. But ponder over it with due regard to the background on which it has been set. The sentiment of pathos is overwhelming. Karna finally bids Salya drive the chariot to where Arjuna is. That is enough to suggest the end of the great warrior. Need it be actually included in the play ? We know that it is his final fight. The greatness and majesty of his personality have already been killed ; only his mortal frame marches to the field to perish. Indeed, when fates are against what can poor souls do ?

Tragic as his end was, Karna's fame will endure till the end of creation. The world has forgotten all that was possibly bad in him. His supreme self-sacrifice and unstinting generosity will stand unsurpassed for ever. Both by example and precept he has taught the world the spirit of sacrifice in these memorable words :

शिक्षा क्षयं गच्छति कालपर्ययात्
सुबद्धमूला निपतन्ति पादपाः ।
जलं जलस्थानगतं च शुष्यति
हुतं च दत्तं च तथैव तिष्ठति ॥ (Verse 22)

As Time lapses, learning fades, trees fall though deep-rooted and lakes dry up. But what is sacrificed and what is given will remain for ever. And again

धर्मो हि यत्नैः पुरुषेण साध्यः
भुजङ्गजिह्वाचपला नृपश्रियः ।
तस्मात्प्रजापालनमात्रबुद्धया
हतेषु देहेषु गुणा धरन्ते ॥ (Verse 17)

After all, man ought to strive in pursuit of Dharma. King's fortunes are wavering as the serpent's tongue. Therefore, in solely promoting public weal, while lives are lost, virtues will endure.

KARNA'S BURDEN

(The preliminary worship over, enter the Stage-Director immediately)

Stage-Director :

May God Vishnu (Bearer of Fortune)
grant you prosperity—Vishnu, the
slayer of gods' hostile hosts, whose
Man-Lion form, men, women, gods,
demons and the denizens of the nether-worlds
beheld with amazement and who
ripped open the bosom of the demon-king
with his axe-edged claws. 1

This is what I would submit to the honourable gentlemen. Hark ! what is it I hear something like a noise while I am engaged in making an announcement ? Well, I'll see.

(In the wings)

Tell, O tell His Majesty the King of Anga.

Stage-Director :

Well, I understand :
In the tumult of battle,
the servant perplexed, with
hands folded, reports to Karna
under Duryodhana's command. 2

(Exit)

End of the Prologue

(Enter the Soldier)

Soldier : Tell, O tell his Majesty King of Anga that the hour of battle is nigh.

With elephants, horses and
chariots, arranged in battle under
Partha's banner, the lion-like
Kings in glee send forth their lion-roar ;
and he of the serpent-banner,
world-famed warrior apprised of
the situation, has set out in haste
to battle which is dreadful with
the enemies' war-cries. 3

(*Stepping forward and looking about*) Aye, here is the Anga King sallying out of his mansion. Accoutred in full, he hies this way with King Salya. But what turmoil of heart, never before felt, for one who is known for his valour and who is prominent in the feast of war ! For he—

conspicuous by his dazzling brilliance,
counted the first in battle and prowess,
the skilled one arrives with
sadness overcome. Karna in his
native splendour now appears like the
summer sun besieged by clusters of clouds. 4

Let me keep aside (Exit)

(*Enter as described Karna with Salya*)

Karna : Not so : will these kings who
cross my arrows' path ever
have life left in them ?
Good must be done to the Kauravas
on the battle-front ; only
Dhananjaya must be seen. 5

King Salya, pray, steer my chariot straight to the place where Arjuna is.

Salya : Certainly (*steers*).

Karna : How strange !

In this hour of battle,
a sense of oppression lies heavy
on the mind even of me whose
prowess in great wars is like
Yama's in rage-wars
in which soldiers, horses,
elephants and chariots are hacked to
pieces by volleys of arrows on either side 6

How hard !

First-born of Kunti was I, then known
to the world as a Radha's son ;
and that these Pandavas—
Yudhishthira and others—are but
younger brothers to me ! 7

Now has befallen the moment
that augurs well for me.
The great day is come.
But alack, vain is the
weapon I learnt to wield ;
and besides am I prevented
by my mother's words. 8

O King of Madra, pray listen to the story of my weapons.

Salya : I am eager too to hear the story.

Karna : Once before I went to Jamadagni's son.

Salya : What then ?

Karna : Then—

going thither I bowed
and humbly stood before
the great sage, crest of the
Bhrigu race and foe
of the Kshatriyas, with matted
locks tawny like the lightning—
creeper, and bearing an axe
enveloped by the halo of its
radiance.

Salya : And then.

Karna : Then Jamadagni's son blessed me and asked —who art thou ? and what brought thee hither ?

Salya : And then.

Karna : 'Holy Sire, I desire to be instructed in all the weapons' said I.

Salya : And then.

Karna : Then spoke the sage 'Only to the Brahmans will I impart instruction, not to the Kshatriyas.'

Salya : Yes, there is that old enmity that the sage bears to those of the Kshatriya race. Then ?

Karna : I averred I was not a Kshatriya, and began to take lessons.

Salya : Then :

Karna : Then after some time, I once went with my teacher to fetch fruits, roots, flowers, dry twigs and *kusa* grass. Weary with wandering in the woods, the master fell asleep on my lap.

Salya : And then.

Karna : Then—

A certain insect with a sting hard as diamond
unfortunately bored both my thighs ;
with fortitude however, did I endure
the pain, lest I
disturb my master's slumber. Wet with
blood he woke up suddenly and
found me out.
Inflamed with rage, he cursed me—
let thy weapons fail thee in thy hour of need.

Salya : Alas, the holy sage spoke sternly.

Karna : But let us verify the story of the weapons.
(*Doing so*)
These weapons seem to be powerless !
Besides—

With eyes blinded by despair
faltering again and again having lost control, these steeds,
and these elephants too—with icher smelling like the *Saptacchada*—seem to forebode retreat in battle. 11

The conches and the drums have also been silent !

Salya : 'Tis hard indeed !

Karna : King Salya, enough, enough with this despondency.
Killed in battle one attains heaven ;
victorious, of course, one wins glory. Both are highly commended in the world. Hence, to fight is not in vain. 12

And Again—

these steeds of excellent Kamboja breed
have never disappointed my hopes in
wars. In speed they are equal to
the King of Birds.
Surely will they protect us if need be at all.
13

Prosperity be to the kine and Brahmans ; Prosperity be to virtuous wives ; Prosperity be to warriors who do not retreat in battles and good luck be to me whose hour is come. Here I am, pleased.

I will straightway rush
to the Pandavas' fierce
battle-front and capture King
Dharma, famed for many virtues.
And felling Arjuna with my swift
arrows will I make the field
easy of access even as a forest
when the lion is killed. 14

King Salya, we shall mount chariot.

Salya : Certainly. (Both feign mounting the chariot)

Karna : King Salya, pray steer my chariot to the place where Arjuna is.

(*In the wings.*)

O Karna, a great favour do I beg of thee.

Karna : (*Listening*) Aye, it is a powerful voice ! Surely a nobleman he, not a mere Brahman, as there is great majesty. Hearing his sweet and dignified voice, these courses of mine, losing control over their bodies, stop movement all on a sudden. They

stand, as in a picture, with ears erect, eyes steady and
the forehead winding to a side with the neck. 15

Call the Brahman. No, no. I will myself call him .

Your worship, this way please.

(Enter Indra in the guise of a Brahman)

Sakra :

O Clouds, return ye with the Sun. (Approching Karna) O Karna, a great favour do I beg of thee.

Karna :

I am very pleased, Your Worship.
I am now to be counted among the
blessed in the world. Here do I bow to you--
I, Karna, whose lotus-feet are
illumined by the gems of the coronets of kings
but whose crown is now hallowed by
the dust of a worthy Brahman's feet. 16

Sakra : (*To himself*) what shall I say now ? Should I say ' live long ' long will he live. Should I not, he would scorn me as a fool. Avoiding both what then shall I say ? Well, I have it. (Aloud) O Karna, as the sun, the moon, the Himavan, the ocean, let thy fame endure.

Karna : Holy sage, would you not wish to say ' live long ' ? Rather this alone is worthy. For— [After all, man ought to strive in pursuit of

Dharma.] King's fortunes are wavering as the serpent's tongue. Therefore in solely promoting public weal, while lives are lost, virtues will endure. 17

Your worship, what would you desire and what may I offer you ?

Sakra :

A great favour do I beg of thee.

Karna : Yes, I will grant you the great favour. Pray listen to what riches I have.

I would confer upon thee a thousand cows excellent and sacred, with horns decked with gold ; young, beautiful and much coveted by those in need ; yielding a stream of nectar-like milk, after their calves are suckled to contentment 18

Sakra : Cows a thousand ! Their milk I may quaff for a while. No, Karna, I do not need.

Karna : Your Holiness would not have it. Pray listen to this.

I would at once give away thousands of steeds of excellent quality comparable to those of the sun. As instruments to kingly fortune they deserve to be highly regarded by the princes; their mettle is tested in battle ; and born as they are of the famous Kamboja breed, they equal the very Wind in velocity. 19

Sakra : Horse ? For a while I ride on it. No Karna, I will not have it.

Karna : Your worship won't have it, Pray listen yet further.

I would give you many a herd of these
elephants, of tusks and toe-nails shining,
able to rout the enemy in battle. Their
temples streaming with ichor, the bees
gather about them in
swarms. Further, they would look
like a huge range of mountains and
trumpet deep and resonant as the clouds.
20

Sakra: Elephant ? for a moment would I ride. I like not, Karna, I like not.

Karna: Your holiness wouldn't have that either. Pray, listen again. Gold beyond count, I would give you.

Sakra: I take and go. (*Pacing some distance*) No, I like not Karna, I like not.

Karna: Then will I conquer the Earth and give you.

Sakra: What shall I do with the Earth ?

Karna: Then, I would make over to you the fruit of Agnishtoma.

Sakra: What is the use of the fruit of Agnishtoma ?

Karna: Then, I give you my head.

Sakra: Alas, Alas !

Karna: Fear not, fear not. Pardon me, Holy Sir, pray, listen yet.

Born with my own person, this armour
is protection to my body. Neither
gods nor demons could pierce it
with all their weapons. Yet I would
with pleasure part with the armour
and also this pair of ear-rings
should your worship so desire. 21

Sakra : (*Gleefully*) Give, do give.

Karna : (*To himself*). This after all was his end and aim. Could it be the cunning of that highly deceitful Krishna ? May be. Fie ! It is unworthy to bewail what is past. There is no doubt. (Aloud) Pray accept.

Salya : Give not, O King of Anga, give not.

Karna : Don't you prevent me, King Salya. Look

With the lapse of time, learning suffers decay, trees fall though well-rooted ;
water even in springs and lakes dries up
But what is sacrificed (into the fire)
and what is gifted away (to the needy)
will remain for ever. 22

Hence, please accept. (*tears open and gives*).

Sakra : (*To himself after taking*) Well, the two things have been taken. I have thus accomplished what all the gods proposed to do for Arjuna's victory. Let me now mount the Airavata and witness the grand duel between Arjuna and Karna. (Exit.)

Sailya : O King of Anga, pity thou art deceived.

Karna : By whom ?

Salya : By Sakra.

Karna : Not indeed. Sakra, on the contrary, has been deceived by me. Because

With offerings at many a sacrifice the twice-born seek to propitiate him.
Hosts of demons are crushed by him ;
he punished Paka. Constant patting
on the back of the divine elephant has

hardened his fingers. Arjuna is his son. Such a one has, through me, gained his purpose ! 23

(*Enter divine messenger in a Brahman's garb*)

Divine Messenger : O Karna, thou hast been blessed by Purandara who regrets for having taken away the armour and the ear-rings. Pray, accept this unfailing missile, called Vimala, to slay one of the Pandavas.

Karna : Fie ! I do not accept anything in return for my gift.

Divine Messenger : Would you not accept by the word of a Brahman ?

Karna : Word of a Brahman ? Never before have I transgressed. When may I have it ?

Divine Messenger : Whenever you think of it, you have it.

Karna : Very well. I am beholden. Dost thou return.

Divine Messenger : Certainly. (Exit.)

Karna : King Salya, let us mount the chariot.

Salya : Certainly. (*They feign mounting the chariot.*)

Karna : Aye, I hear something like a noise. What could it be ?

It is the blast of the conch, resembling the roar of the Ocean of Doom.
Is it Krishna's ? It may not be. It is Arjuna's. Enraged at the defeat of Yudhishtira, indeed, Arjuna will fight with all his might. 24

King Salya, pray, steer my chariot to the place where Arjuna is.

Salya : Certainly.

(*Epilogue*)

May prosperity reign everywhere.
May adversity vanish for all time.
May our Sovereign full of
Kingly virtue, alone, rule
the Earth.

(*Exeunt.*)

FINIS.

THE LOVE LETTERS OF RICHARD STEELE

By

K. P. Karunakara Menon, M.A.

Steele, the father of the periodical essay, the collaborator of Addison in the *Tatler* and the *Spectator* is a familiar figure, but Steele the passionate, faulty but loyal-hearted lover, the author of the exquisite letters to his wife, is comparatively unknown. Of the great love-letter writers in English Steele alone represents the typical eager wooer and devoted husband, "hoping and worshipping doubting and quarrelling—now in the seventh heaven of delight, now crying in outer darkness—always thinking of the beloved with a boy's heart and a man's care."

The object of his love is Mary Scurlock, a Welsh lady of some property and considerable personal attraction. "She was a brunette, with a rather high forehead, the height of which was ingeniously broken by two short locks upon the temples. Moreover, she had distinctly fine eyes, and a mouth which, in its normal state must have been arch and pretty." Steele falls a victim to her charms within a short time after the death of his first wife who, on his own authority, "had so extreme a value for him, that she, by fine, conveyed to him her whole estate." The passion is reciprocated by Miss Scurlock, who, though less impulsive than her wooer, is not less keen on the marriage. The letter that she wrote to her mother seeking the latter's consent and blessing reveals her opinion of Steele.

> "But he has a competency in worldly goods to make easy, with a mind so richly adorned as to exceed an

equivalent to the greatest estate in the world, in my opinion: in short, his person is what I like; his temper is what I am sure will make you, as well as myself perfectly happy, if the respect of a lover, with the tender fondness of a dutiful son, can make you so; and, for his understanding and morals, I refer you to his 'Christian Hero' which I remember you seemed to approve..... What I desire is, your consent and blessing to my putting it out of my power to delay, and so perhaps to lose, my first and only inclination; for I shall never meet with a prospect of happiness if this should vanish."

Steele is a man of transparent sincerity. To affectation of every kind he is a total stranger. He repudiates the artificial language of romance from the first. "I shall affect plainness and sincerity in my discourse to you, as much as other lovers do perplexity and rapture. Instead of saying, 'I shall die for you,' I profess I should be glad to live my life with you." But the ardour of his passion gushes out in words throbbing with emotion. Like all fervent lovers he looks upon his beloved as a goddess, and his union with her as the consummation of human felicity.

"You are so good as to let me know I shall have the honour of seeing you when I next come here. I will live upon that expectation, and mediate on your perfections till that happy hour. The vainest woman upon earth never saw in her glasse half the attraction which I view in you. Your air, your shape, your every glance, motion, and gesture, have such peculiar graces, that you possess my whole soul, and I know no life but in the hopes of your approbation: I know not what to say, but that I love you with the sincerest passion that ever entered the heart of man."

He interrupts her sabbath meditations to tell her in a letter that "there is nothing but Heaven itself which I prefer to your love which shall be the pursuit of my life." Every moment of separation from her is torture to him, and he is so full of her that " his books are blank paper, and his friends intruders."

"Madam.

I lay down last night with yr image in my thoughts, and have awak'd this morning in the same contemplation. The pleasing transport with which I'me delighted, has a sweetness in it, attended with a train of ten thousand soft desires, anxieties, and cares. The day arises on my hopes with new brightness; youth, beauty, and innocence, are the charming objects that steal me from myself, and give me joys above the reach of ambition. pride, or glory. Believe me, fair one, to throw myself at yr feet is giving myself the highest bliss I know on earth."

His was a whirlwind courtship. Nevertheless he grows impatient, and presses her to mention the happy day when he can call her his.

"Dear Mrs. Scurlock, I am tir'd with calling you by that name ; therefore say the day in which, you'le take that of, Madam, your most obedient, most devoted humble ser'nt."

Again:

"Oh hasten ye, minutes! bring on the happy morning wherein to be ever hers will make me look down on thrones! Dear Molly, I am tenderly, passionately faithfully thine."

At last the date of the marriage is fixed. It is to come off on Tuesday, September 8, 1707. The ecstatic lover is on the tenterhooks of expectation, and he can think of nothing else.

'Madam,

> It is the hardest thing in the world to be in love and yet attend businesse. As for me, all who speake to me find me out, and I must lock myself up, or other people will do it for me.
>
> A gentleman asked me this morning. 'What news from Lisbon?' and I answered, 'She's exquisitely handsome.' Another desir'd to know 'when I had been last at Hampton Court ?' 'T will be on Tuesday come se'nnight.' Pr'ythee allow me at least to kiss your hand before that day that my mind may be in some composure."

On the appointed day they "commit" matrimony, and Steele, in course of time, "dwindles" into a tame and submissive husband. He subscribes himself in his letters to her as "your happy slave and obedient husband," or "your most obsequious husband and most humble serv'nt." The letters are full of references to her as his "absolute governesse" and "ruler." He repeatedly acknowledges her sway: "You are the head of us and I stoop to a female reign, as being naturally made the slave of beauty." After these confessions we need not be surprised to hear Dean Swift writing to Stella : "He is governed by his wife most abominably, as bad as Marlborough."

But if she governs him it is well for him, for he is a most hopeless governor of himself. His improvidence in money-matters is notorious, and he is no less aware of it than others. "I never can, I own. . . . be what they call thoroughly fru-

gal." His sanguine Irish nature makes him mistake his expectation for his income. He lives mostly on airy calculations, and unfounded hopes of coming into wealth. "I shall on Michaelmas day have £593," writes the incurable optimist. Again, "Within a day or two I doubt not but we shall have our money, which will be the introduction to that life we both pant after with so much earnestness." And, "I have that in my pockett which within few days will be a great sum of money." He repeatedly assures her that the bargain he is making will keep them for ever from want, and once he promises her that she "shall be provided for better than any other family in England." Despite these extravagant hopes and promises he has to confess that "all his endeavours and thoughts tend only to extricate his condition." She is certainly more *prudent* than he, and that is why he calls her his "dear *Prue.*"

Again, Steele loved, not wisely but too well, the drink that both cheers and inebriates. Without it he could not have been what he calls himself, "no undelightful companion," or what his wife describes him to be, "as agreeable and pleasant a man as any in England." It was a habit all too common in his age. Sir Leslie Stephen has classified the men of the eighteenth century into those who could drink two bottles of port after dinner and those who could not, and Thackeray has observed that the wits of the age of Queen Anne were fat: "Swift was fat; Addison was fat; Gay and Thomson were preposterously fat; all that fuddling and punch drinking, that club and coffee-house boozing shortened the lives and enlarged the waist-coats of the men of that age." Though Steele was not "a mountain of beef" (as Horace Walpole described a fellow diner at the table) there is no doubt as to which of the two classes of people mentioned by Sir Leslie Stephen he belonged. With the morning headache, a disease

with which most of his contemporaries were familiar, Steele confesses his crime to his wife and promises amendment.

> "I have been a little intemperate, and discomposed with it; but I will be very sober for the future especially for the sake of the most amiable and most deserving woman, who has made me her happy slave and obedient husband."

But promises are more easily made than kept. Many of the letters are written in drink. "I am, dear Prue, a little in drink but at all times yr faithfull husband." In one letter he subscribes himself "dead drunk" for love, another in toto is

"Dear Prue,

Sober or not, I am ever yours."

One need not be a prophet to guess in what condition Steele was when this letter was written. Equally obvious is the reason why many letters consist of illegible scrawl. It is well that a man so improvident and imprudent as Steele has his "Prue" to govern him.

Like all affectionate couples Steele and his wife frequently quarrelled with each other. Steele's irregular habits are a constant source of friction. He is often away from home, business and conviviality make him stay out at night. This "coquette of some years' standing," this "cried up beauty" must have found life with her incurably social, impractical and extravagant husband somewhat of a trial. Evidently she is vexed by his frequent absences, and one of Steele's letters written in an unusually serious and wounded vein shows that "his absolute Governesse" must have been exceptionally disrespectful and cruel. He returns the letter to her, complaining about her masterful ways and asserting

that though he loves her "better than the light of his Eyes or the life-blood in his Heart," he will be master of himself, that "his time and his will should be under no direction but his own." She must also have been guilty of inquiring too closely as to how he was spending his time, and of making him look ridiculous by "sending after him." How frequent these bickerings are is clear from what he once writes to her: "I wish I knew how to court you into Good Humour; for Two or Three Quarrels more will despatch me quite."

The embers of misunderstanding flicker and fade, and fade and flicker again, but the steady flame of his love never dims for a moment. If a frown or a hard word of hers sinks him into despair a smile or a compliment sends him into ecstasy. Once she addresses him as "dear Dick" in a letter written from Wales, and the enraptured husband declares that he could forget his gout and walk down to her from London. The letters are full of instructions to her to take care of her health. "Pray wrap yourself very warm" is the refrain of many of his notes. Her report of "continuall pain" in her head gives him "sensible affliction" and he gives her his own recipe.

> "I am confident that washing your head in cold water will cure you; I mean, having water poured on your head, and rubbed with an hand, from the crown of your head to the nape of your neck. When I lay in yr place and on yr pillow, I assure you, I fell into tears last night, to think that my charming little insolent might be then awake and in pain, and tooke it to be a sin to go to sleep."

Many of his letters are merely notices of little presents sent to her, "I enclose a guinea for your pocket",

or"I send you some tea which I doubt not you will find very good," or again,

> "Dear Prue,
>
> I send you seven pen'orth of walnutts at five a penny which is the greatest proof I can give you of my being, with my whole heart yrs."

Before the letter is despatched he adds in a P.S. "There are but 29 walnutts." The next day he sends her "half an hundred more of walnutts." In all these letters we have the prose of love. "For thee I die, For thee I languish." he says in a short note of two sentences in 1712, six years after the marriage, and in 1717 he addresses her as "Ten thousand times my dear, dear, pretty Prue," and concludes another letter with "Poor, dear, angry, pleased, pretty, witty, silly, everything Prue, yours ever."

Steele's affection and respect for his wife do not appear surprising to us when we remember that it is he who in speaking of Lady Elizabeth Hastings, has paid the most handsome compliment that has ever been paid to a woman: "passion so high souled and graceful that to love her is a liberal education." As Thackeray has pointed out, Steele is the first of English writers who admired and respected women. While Congreve looks on it as mere instruments of gallantry, and destined like most fortifications to fall after a certain time before the arts and bravery of the besieger man, while Swift takes no pains to hide his opinion that woman is a fool, while Addison watches them as if they are harmless, half-witted pretty creatures made only to be men's play things, while Pope declares that "every woman is at heart a rake" hungry for pleasure and for gain, Steele alone pays a manly homage to woman's goodness and understanding as well as to her beauty and tenderness. "His breast seems to warm, and his

eyes to kindle when he meets with a good and beautiful woman, and it is with his heart as well as with his hat that he salutes her."

Steele's letters are also full of tender references to his children. "The children are almost always in my head at the same time as yourself," he writes to his wife. Again (playfully): "All my public spirit and gallantry is turned into the care of a wayward beauty called a wife, and a parcel of brats called children." Here is an interesting account of one of the sons by the affectionate father:

> "Your son at the present writing, is mighty well employed, in tumbling on the floor of the room, and sweeping the sand with a feather. He grows a most delightful child, and very full of play and spirrit. He is also a very great scholar: he can read his Primer; and I have brought down by Virgil. He makes very shrewd remarks upon the pictures. We are very intimate friends and play-fellows."

Indeed Steele must have been a great favourite with his children of whom and of whose mother he was very proud. "Your son," he writes to Mrs. Steele, "is extremely pretty, and has his face sweetened with something of the Venus his mother, which is no small delight to the Vulcan who begot him."

Steele commits to paper every thought the moment it comes into his head. If any letters could be called unpremediated effusions, undoubtedly Steele's letters to his wife deserve the description. Many of them are dashed off in a hurry.

> "I have but few minutes from the duty of my employment to write in, and without time to read over what

> I have writ; therefore beseech you to pardon the first hints of my mind, which I have expressed in so little order."

Sometimes he has "to steal a moment" from a friend who is with him and observes him in every gesture and motion, to tell "the charmer and the inspirer of his soul" that he is "her devoted, obedient servant."

The open hearted, unreserved, simple and affectionate nature of the man reveals itself in everyone of his letters. In fact, reading two or three of the short notes scribbled by Steele to his wife we get details for a mental portrait of the writer such as might be sought in vain in fifty essays of the *Tatler*. But when we read these tender and loving letters we feel even now as though we are unjustifiably prying into the writer's confidence. Steele expressly begs his wife "to show his letters to no one living," for the most excellent reason that "other people cannot judge of so delicate a circumstance as the commerce between man and wife." They answer to the definition of the true letter, a spontaneous non-literary production, ephemeral, intimate, personal and private, a substitute for a spoken conversation." Well does Steele deserve to be remembered as the ideal letter writer no less than as the father of the familiar essay.

REVIEWS OF BOOKS

By

Prof. K. M. Khadye, M.A., (Cantab).

Nowrosjee Wadia College, Poona.

I deem it a very high honour to be called upon to write something for this Commemoration Volume. The services of the Founder of the Annamalai University to India have been so great that they deserve to be recorded in letters of gold. This duty I would naturally leave to the present workers in the University.

I have thought it best to write on Reviews of Books, because I wish the University had the opportunity to base its choice of Books for its Library on such reviews as I would look upon as ideal.

There was a time when the *Reviewer* thought that it was his duty and his privilege to show up the faults, and the faults only, of the books he had to review: to censure them or—what is virtually the same thing, if not worse—to damn them with faint praise. Bishop Coplelton had such reviewers in his mind when in the course of his satirical 'Advice to a young Reviewer' he said:—

"You will perhaps wonder why all my instructions are pointed towards the censure, and not the praise, of Books; but many reasons might be given why it should be so. The chief are, that this part is both easier, and will sell better."

To-day we have almost reached the other extreme. Books do not sell well unless they have a good press, and

favouritism—or worse—has often resulted in an undue adulation of third rate stuff.

In either event it is the poor reader who suffers. Reviews have in these days become almost indispensable. Our very existence as men and women of culture depends on them. For, as Sir Arthur Quiller-Couch puts it: 'Man and this planet being such as they are, for a man to read all the books existent on it is impossible; and if possible, would be in the highest degree undesirable'.

We have to make a choice. And to whom shall we go, if not to the *Reviewer* for help in making our choice? 'Some books, Bacon tells us, 'may be read by Deputy'. For books of this type at least, we shall certainly have to depend on the Reviewer in these days—when the output of Books has been enormous and when our interests have been so varied. For such books and the literature of knowledge in general, what we expect from the *Reviewer* may be only a faithful and easily intelligible summary of the book he reviews. His task is easy, provided, of course, he is somewhat of an expert in the subject of the book reviewed. Be it said to the credit of the better sort of our periodicals and newspapers that their reviews hardly ever fail to give fair satisfaction in this field. When, however, we come to the reviews of what De Quincy calls the *literature of power,* we have often a different tale to tell. For one thing, all literature of power is subjective—at least more subjective than objective, and its appeal cannot be the same to everybody. Tastes differ. What the reviewer dislikes the reader may like and what the reviewer relishes the reader may hate. Theoretically speaking, this position must be conceded. But, as a matter of fact, normally, this situation must not and does not arise. If the *Reviewer* is what Dr. I. A. Richards calls an *adequate reader*—a man of normal feelings, with no special preposses-

sions or prejudices, a man of Catholic tastes, widely read, conversant with bad as well as good literature, there is no reason why his judgment should not be ordinarily acceptable to the reader. Whether the reviewer is such a man is what the reader is keen on knowing. And that is why signed reviews are so much in demand. We ask for guidance from a man on whom we can rely. This reliance on great names may not be without its own peculiar risks, but on the whole the system of signed reviews works better than any other.

I have, by implication at least, included judgment as a factor of some importance in a review, and here I am in good company. For instance, the Century Dictionary defines a review as 'A critical Examination; a Critique; particularly a written *discussion of the merits and defects* of a literary work.' I must admit, however, that this definition may not be universally accepted. The shorter Oxford tells us that a review is 'a general *account* or criticism of a literary work.' The fact is, of late, all criticism has tended to become impressionist. Anatole France looked upon criticism as 'the adventures of a soul through masterpieces' and Benedetto Croce would have us believe that the critic's sole business is to reproduce the work of art as the author conceived it. To me it appears that this tendency is a reaction against the dogmatic criticism of earlier days. The this won t-do-sort of criticism is definitely worse than an attempt to get at the author's point of view. The critic can often do nothing better than initiate the reader into the inmost recesses of the writer's heart. To reproduce the conditions at the time the work of art was conceived is an achievement of the highest merit, and we should be grateful to a critic who suceeds in doing it. But when all his due praise is given to such a critic, we have also the right to ask him whether, while giving his author his due, he has con-

sidered the position of the reader or the *reader's point of view.* How the work of art is concieved is one thing, and how it would affect the reader is quite another thing. Those critics who adventure through masterpieces may not give a moment's thought to the reader, but the reader's point of view is at least as important as the author's, so long as authors write for the readers and not for themselves. And when a critic thinks of giving any importance what-so-ever to the reader's point of view, he has, *ipso facto,* to include judgment of some sort in his critique.

What is true of criticism on a large scale is true also of reviews—such as appear in periodicals and newspapers. Reviews have to be brief—the briefer the better, provided they have all the essentials of criticism on a large scale—they must recreate the original work of art—that is due from them to the author—and they must understand the reader and make him feel at ease in the presence of the work of art. Judgment of some sort is implicit in this second part of the Reviewer's duty.

PHYSIQUE OF OUR UNIVERSITY WOMEN STUDENTS.

By

Dr. (Mrs). Krishnabāi Khadye, M.B.BS.

Poona.

As a Medical Examiner of the University women students of Poona for the last few years, I have arrived at some conclusions, which I take this opportunity to place before the Public, in this volume which commemorates the services of a great man to the Public of India.

At the outset, I must point out that there is a great improvement in the height and health of our girl students in schools and colleges during the last five years. This is due as much to the greater freedom of life which now has been theirs, as to the Compulsory Physical Training to which they have been subjected in recent times.

Those girls who have at least a moderate kind of freedom in their daily life at home and in the teaching institutions and who take part in sports are the best in health.

Poverty is one of the causes of undernourishment and deficient diet among us and our students are a prey to it. But considering the money that is spent by our students, I must say that the undernourishment and deficiency in diet are due more to our lack of knowledge of balanced diet than to poverty. We must create a real interest in balanced diet among our men and women.

The sight of a good many of our girls is bad owing to uncorrected eyesight. I may say that this is often due to

their working when they are not keeping fit, or are convalescent afer some disease like malaria or some infectious fever. We often neglect convalescence and that is often the root cause of many diseases and bad health amongst us. The girl who is deeply engrossed in her studies and does not take any part in the social life of her college is often anaemic or weak. The girl who lives in the college hostel and enjoys a freer life is often better in health than a girl who comes from her home, as I believe the home atmosphere and environments of our girls are not often as free and congenial as they ought to be.

The educated woman is not worse in her married or social life than her uneducated sister, nor does she suffer more in any of the complaints peculiar to women, or in pregnancy, nor does she have more difficult child-labour than her uneducated sister.

It must also be admitted that both our men and women are often ignorant of the rudimentary principles of health—of sex-hygiene, or antenatal and postnatal care, and this is a great handicap in life. Somebody—perhaps the University or the heads of our schools—ought to make the rudimentary knowledge of the rules of hygiene and health—sex-hygiene, balanced diet, first aid, antenatal and postnatal care compulsory for our students—both men and women, if our future generation is to be strong and healthy and hardy enough to take a leading part in our country's social and political life. Without this knowledge, mere culture or deep learning is no good to our boys and girls. For, we ought to know that a sound mind exists only in a sound body.

There are very few facilities for sports and physical exercise for our women students, and many cannot and will not take part in sports, and therefore I think Physical Train-

ing must be made compulsory for all students from the primary education stage to the University stage. I must say here that if Compulsory Physical Training is to be successful, a genuine interest in Physical Training has to be created not only among the students, but also among the parents and the managers of the teaching institutions. Without the co-operation of all these three groups of people, Physical Training tends to become a mere farce. Last but not the least in importance is the medical examination of students. It is medical examination which points out the defects and deficiencies and abnormalities in the student. The guardians and the heads of institutions have to look into these matters.

In conclusion, I would suggest that our teaching institutions ought to take more interest in the physique of our students. They ought to impart to them the knowledge of the rules of hygiene, create a freer and more congenial atmosphere, provide good and adequate—though not necessarily costly—sports facilities and introduce medical examination and Compulsory Physical Training. Only then can we hope to make our young men and women fit to take their due share in the burdens of life.

UNIVERSITY EDUCATION

By

Rajasevasakta Dewan Bahadur
Dr. S. Krishnaswami Aiyangar, M.A., Honry., Ph.D.

Rajah Sir Annamalai Chettiar, the Founder of the Annamalai University, evinced his practical interest in education when he made his first efforts to found a college in Madura which found fruition ultimately in the starting of what was the Sri Minakshi College in Chidambaram. As is usual with Sir Annamalai Chettiar, it was a whole-hearted effort as he is known not to do things by halves. It is his efforts to make the college many ways a model institution under the Madras University that brought about the acquaintance between us. The college rapidly advanced from step to step, and had almost reached the position of being one of the comparatively few fully equipped colleges in the Presidency, when the agitation for a separate University for the Tamil districts resulted in the appointment of a Tamil University Commission, which was to tour the Tamil districts taking evidence and submit its recommendations in regard to this. The University of Madras was seriously making efforts to become a teaching University contemplated by the Act of 1923. The normal development expected by the sponsors of the new Act was the creation of the teaching University at Madras, which would have become, with its constituent colleges, a teaching centre like Oxford or Cambridge, the affiliated colleges constituting more or less a distinct section of this University, ultimately to become a

separate affiliating University. This course of development was marked out for the Allahabad University and resulted in the creation of the teaching University of Allahabad and the affiliating University of Agra. The Tamil University Committee went about making its enquiries in this view. Differences of opinion soon developed as to the centre of this new University and it became a matter of contention whether Trichinopoly or Madura should have this honour. The majority of the members, however, were opposed to the separation and did not favour it mostly on the ground it would have tended to create a much less efficient affiliating University than the Madras University was during more than sixty years of its existence. In the course of this enquiry and the discussions in connection with it, Sir Annamalai Chettiar's intention to develop the Sri Minakshi College into a unitary teaching institution raised to the rank of a University, was discussed. I took occasion, when the report was got ready, to file a note that the recommendation of the Committee against starting a new University in the Tamil districts should not prejudice the question of the Sri Minakshi College developing into a unitary teaching University. Whether this had any influence or no, the idea fructified in the foundation of the Annamalai University, and took its character readily as a unitary, teaching University. In the course of normal development in earlier years, it held out promise of becoming a University centre of learning very much like the German Universities of the old regime. This position was due entirely to the active exertions all round of Rajah Sir Annamalai Chettiar.

The Annamalai University started under very favourable auspices, thanks to the active interest of this gentleman, and set before itself two specific objects in view. It was to be a residential unitary teaching University.

Secondly it had laid itself out deliberately to foster South Indian culture specifically, and work for the special promotion of the study of the history, culture and literature of the Tamils, involving, as it naturally should, the promotion of the study of Tamil and Sanskrit in all their branches to the highest specialised work possible. Having regard to the active personal interest taken by the Pro-Chancellor, there was every hope that this double ambition would be realised to the full. Courses were accordingly laid. During the earlier years therefore work went on along the lines laid down and carefully selected appointments were made to fill the various Chairs and, in respect of certain subjects, even provision was made for sending out young men for training in various branches of teaching under terms of indenture to serve the University on their return. These early acts naturally gave the best promise of realising the objects with which the University started. Naturally in the present condition of opinion in regard to University education, there came in the external influences which led on to the expansion of the University along new lines. Certain schemes like schemes of agriculture and industry were brought in, to claim their quota of attention and diversion of funds. We have the fullest appreciation of the development so far in oriental studies and institutions brought into existence therefor, such as the Sanskrit and the Tamil Colleges, the College for Music which promised to develop into a real academy of music, a good library and numbers of up-to-date laboratories, with a residential system and promotion of social life. We feel certain that the distinguished Rajah Saheb who has done so much already to promote this unique institution would find it possible to put the University on the rails for a fuller and a freer and a brighter development, his original

ambition. We congratulate the Rajah Saheb upon his having completed his 60th year, and reaching his *Sashtiyabdapurti* in orthodox parlance. Let us hope that he will step forward steadily from this milestone to the further Biblical three score and ten, to the more orthodox *Satabhisheka* or the 80th year, and the real Vedic *Satayush* or the 101st birthday.

Before concluding, however, we take the liberty of appealing to the Rajah Saheb to exert his influence, both among the wealthy members of his community and others similarly happily placed, to secure if necessary their co-operation and good offices to place this University beyond all need. It is his function as the original founder of the institution to hold aloft the high ideal. Promotion of the culture characteristic of India involves an equal and impartial treatment of all subjects coming within the purview of Indian studies. Linguistic studies of the most general character imply, as it does in distant foreign countries, the study of Sanskrit language and literature essentially as a basic study, and the understanding of the Indian culture as such, or of its preservation and promotion on right lines, equally demand the cultivation of its philosophy, history and the sciences of India. In the realm of Sanskrit studies, South Indian Sanskrit studies have a very important and peculiar role to play in the study of Indian literature and culture. May the Almighty God help him to fulfil his aims, and place his own foundation on a permanent footing to achieve his high cultural ambition. May the Almighty God shower on Him His blessings to enable him to do this good work.

EVOLUTION OF STARS

By

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Introduction

The first notable success of astrophysics was the theory of ionisation of stellar atmospheres. Later work related to constitution of stars dealing with problems of equilibrium and energy transport leading to the mass—luminosity relation, which can be taken to characterise the second stage of this development. As long as considerations relating to energy-production were not tackled rigorously, there was no hope of proceeding further and reaching the third stage of explaining the mysteries of the Russell-Hertzsprung diagram. The development of nuclear physics in the last few years has made it possible to obtain definite results regarding energy—generation. Just as in the first stage it was the theory of atomic structure that helped in the development, it is appropriate that in this third stage we should invoke the help of nuclear structure. Some of the achievements of these latest ideas, their bearing on stellar evolution and the difficulties still to be surmounted are indicated in this article.

It is a great pleasure to offer this as my humble contribution to the volume commemorating the 61st birthday of one whose ideals in founding this University have been as lofty and sublime in conception as the subject of this article.

I. *Internal constitution of stars*

A general theory of the internal constitution of stars has been shown to be possible on the basis of the laws of gravitation, of radiation, of atomic structure and of simple gas laws. The theory is not too complicated mainly on account of the fact that the properties of matter in its gaseous and highly ionised state in the interior due to the enormous pressures and temperatures ruling there are much simpler than in any other state.

The principle of mechanical equilibrium permits the calculation of the pressure P at any point of a star if one knows the way in which the density ϱ varies with the distance from the centre in other words if the "model" be known.

In the simple gaseous ionisated state the mean molecular weight μ can be calculated from atomic theory, and the equation of state for the perfect gas is also valid. For a given model therefore the temperature T at any point can also be calculated.

The next important consideration is that at the high temperatures in the interior, radiation pressure is as important as gas pressure. Taking this into account and using the fact that radiation pressure varies as the fourth power of the temperature, one could calculate the internal temperature of a star for any given model. The calculations become particularly simple on Eddington's model for which $\varrho_c=28$ that of water,

$P_c=36\times10^9$ atm; $T_c=2\cdot9\times10^7$ K for the sun.

To relate the above quantities with conditions at the surface, one has next got to calculate the escape of radiation from the interior. On general principles it is evident that

the heat will flow, inside the star, from regions where the radiation pressure is greater to those where it is smaller. This flow of heat however meets with a resistance due to the opacity of the gas, and the co-efficient of opacity κ can be calculated as a function of P, μ and T by applying the general methods of the quantum theory of the interaction of matter and radiation. It is thus possible, starting with pure theory, to calculate the luminosity of a star of given mass and radius and built on a given model. It is found that the luminosity increases very rapidly with the star's mass-rather faster than its fourth power on the average. For the same mass it changes but slowly with the star's size (inversely as $\sqrt{r}$). Differences in the model make surprisingly little difference in the luminosity. The chemical composition makes little difference too except for the abundance of hydrogen, the luminosity of a star of almost pure hydrogen being less by a factor of 300. Applying this to the sun, an agreement between calculated and observed luminosities is obtained if hydrogen forms 35% by weight of the interior mass, the rest being heavy elements.

This conclusion that the luminosity of a star depends mainly upon its mass is in effect Eddington's well known "mass-luminosity relation," and it will be shown later that it is really a consequence of the fact that the hydrogen content of a star does not vary at random for a given mass.

2. *The Russell-Hertzsprung diagram.*

The theory of constitution of stars described above accounts for the close correlation between luminosities and masses, but it gives no explanation at all of the equally conspicuous relations connecting luminosity and spectral

class as is brought out clearly in the Russell—Hertzsprung diagram, R.H.D. in brief. Experience has shown that, up to a certain approximation, all stars are characterised by two numbers which might be chosen in general as the luminosity L and the surface temperature T. These at the same time also define the radius of the star R. In the R.H.D. these co-ordinates are plotted as log L and log T; alternatively one could also plot log $(R/R_{\odot})$ and log $(L/L_{\odot})$ and call this the modified R.H.D. or the R-L plane. The diagram shows (Fig. I) that stars favour only certain regions of the plane. The great majority of the stars belong to the so

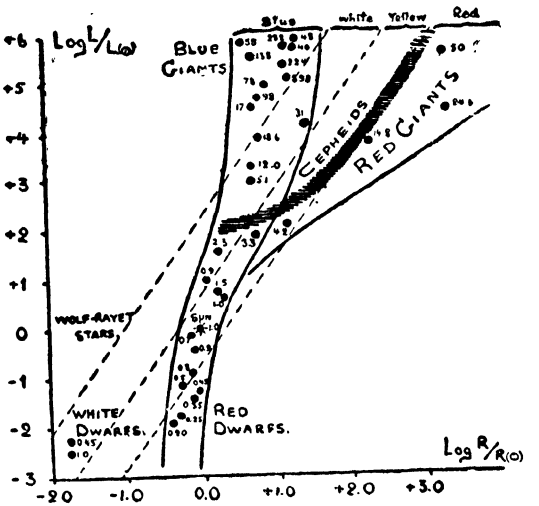

Fig. I

FIG. 1. Showing the relation between masses, radii and luminosities of various stars and the division of stars into the normal stars or the stars of the main sequence, red giants (including Cepheid variables) and white dwarfs (including probably Wolf-Rayet Stars)

called *main-sequence;* their luminosities and radii increase rather regularly with their mass, as also the effective temperature. So the stars of this group range from hot and luminous blue giants down to the cool and faint *red dwarfs.* According to the best observations it is practically a sharp line, and the stars belonging to it therefore form a one-parameter group. Besides the stars of the main sequence,

and to the right of them above lie the *red giants* (L large T small) with L and R larger than for stars of the same mass in the main sequence. In the R-L diagram these form a separate branch (giant branch) branching off near the middle of the main sequence. It should also be noted that some particular stars located in this region possess a property of periodic luminosity changes (Cepheid variables and others of long period) and represent the upper boundary, in respect of L, of the giant branch. Again to the left and below the main sequence are the *white dwarf* states (T large, L small) corresponding to smaller luminosities and radii than stars of corresponding masses in the main sequence. Probably related to the white dwarfs are the central stars of planetary nebulae (Wolf-Rayet stars) which also possess small radii for given luminosities.

A proper understanding of this distribution of stars in the R-L diagram is of fundamental importance for questions of stellar evolution and it can be seen from very general considerations that this understanding depends on a knowledge of the mechanism of energy production in stars. In consonance with the theorem of Vogt and Russell one must expect theoretically that under certain assumptions the state of a star is completely characterised by two parameters and accordingly by its position in the R.H.D. Further the matter which a star consists of is determined by specifying its total mass and its chemical composition. If now the original chemical composition of stellar material be universally the same (and our knowledge of the abundance relations of chemical elements makes this assumption plausible) a difference in the chemical composition of stars can only be a result of the energy-generating nuclear reactions which on their part are determined by the state of the

star. Therefore there remain, besides, only the mass and the age of the star as independent parameters.

The calculation of the empirical parameters L and T from the mass and the parameter of chemical composition assumes a theory of the internal constitution of the star. On the theory of Eddington sketched in § 1 which assumes the conditions of equilibrium and energy-transport as fundamental but not the energy-generation, the mass-luminosity relation is obtained as a relation between two parameters, the stars of different luminosities in the main sequence being also stars of different masses. But it is obvious however that the mass-luminosity relation merely describes their uniform chemical composition. The principal problem of the theory of nuclear reactions in stars is to derive the dependence of energy-generation on chemical composition, and thereby elucidate the structure of the R.H.D.

3. *Stellar nuclear reactions*

The magnitude of the problem of energy-generation inside a star can be best illustrated by considering the Sun, a typical star. The Sun radiates 2 ergs per second per gram of its mass which corresponds to a loss of 4,200,000 metric tons per second, and since there is equilibrium between generation and loss of energy, energy of the same order must have continued to be generated throughout geological times during the last $2 \cdot 10^9$ years. Besides the Sun there are stars which throw out nearly thousand times as much energy. The question naturally arises: where does this energy come from? According to the ideas of modern Physics, there are four possible sources:

(i) Contraction of a star without change of chemical constitution—the energy liberated is gravitational energy.

(ii) The building up of heavy atomic nucleii out of lighter ones—the energy liberated is nuclear energy.

(iii) Contraction by transformation of a part of the matter into densely packed neutrons.

(iv) Complete annihilation of matter—energy liberated is the rest energy of matter.

Of these the last source can be left out of account in view of the fact that it has not been so far observed in the laboratory, and even from a theoretical point of view the discovery of the neutron and positron has shown that by the equalisation of positive and negative charges only the electron mass is transformed into radiation while the proton mass is unaltered. On very general thermodynamic arguments it can be shown that the third source postulated is improbable for normal stars but might be invoked for explaining catastrophic phenomena. Thus we have to make the assumption that during the life time of a star, in so far as it is subject to our observation, only the first two sources need be considered. Of these the first alone is not sufficient to explain the production of energy as for example, in the case of the Sun whose present rate of radiation would exhaust this source in $4 \cdot 10^7$ years. One is led almost by a process of exhaustion to the second as the most likely one. Although this had been surmised some years ago it is only the progress of nuclear physics in the last few years that has made it possible to prove this surmise and decide rather definitely which process can and which cannot occur in the interior of stars. A careful analysis by Bethe of all the possible processes has shown that the only thermonuclear reactions which can occur at sufficiently large rates at the temperatures of stellar interiors are those bet-

ween protons and the light nucleii. In general terms one might say that the energy production of stars is due entirely to the combination of four protons and two electrons into an α particle. As can be seen from Table I this formation of four atoms of hydrogens into one of helium results in a diamution of the combined masses of the interacting nucleii by 1 part in 135. This simplifies the discussion of stellar evolution in as much as the amount of heavy matter, and therefore the opacity, does not change with the time.

TABLE *Corrected and additional nuclear masses, and binding energies.*

NUCLEUS	MASS	BINDING ENERGY (MMU)	REFERENCE
n^1	1.008 93		19
He^3	3.016 99	5.87	18
H^4	4.025 4	0.6 ±1	
He^4	4.003 86		29
Li^4	4.026 9	−1 ±1	
He^5	5.013 7	−0.9 ±0.2	23
Li^5	5.013 6	−1.6 ±0.3	
Be^6	6.021 9	−1.8 ±0.8	21
Be^7	7.019 28	5.7	26
Be^8	8.007 80	−0.08±0.04	28
B^8	8.027 4	0.0 ±0.4	21
B^9	9.016 4	−0.5 ±0.2	21
C^{10}	10.020 2	3.8	21
N^{12}	12.022 5 −24 3	0.0 ±0.9	21
N^{13}	13.010 08	2.03	19
O^{14}	14.013 1	5.1	21

Table I

These reactions of hydrogen with the lighter nucleii are shown in Table II which gives the energy evolution Q of the reaction, its probability per second and also the life time, all calculated for a temperature of 2×10^7 degrees.

As has been shown by Bethe no elements heavier than helium can be built up to any appreciable extent permanently in the interior of stars under present conditions. An extract from table II of reactions leading to He^4 is given in Table III, along with the average energy produced in ergs/gm

TABLE *Probability of nuclear reactions at $2 \cdot 10^7$ degrees* **

REACTION	Q (mMU)	P (cm)		P (sec^{-1})	LIFE, FOR $\sigma_{cm} = 10$
$H+H=H^2+\epsilon^+$	1.53	Ref. 10	12.5	$8.5 \cdot 10^{-23}$	1.2 10^{14} yr
$H^2+H=He^3$	5.9	1 E	13.8	$1.3 \cdot 10^{-2}$	2 sec
$H^2+H=He^3$	21.3	10 E	14.3	$1.7 \cdot 10^{-3}$	0.2 sec.
$He^3+H=He^4$	(0.5)	0.02 D	22.7	$3 \cdot 10^{-7}$	1 day
$He^3+H=Li^{5*}$	(0.2)	0.005 D	23.2	$6 \cdot 10^{-8}$	6 days
$Li^6+H=He^4+He^3$	4.1	$5 \cdot 10^4$ X	31.1	$7 \cdot 10^{-6}$	5 sec
$Li^7+H=2He^4$	18.6	$4 \cdot 10^4 X$	31.3	$6 \cdot 10^{-6}$	1 min
$Be^7+H=B^{8*}$	(0.5)	0.02 D	38.1	$6 \cdot 10^{-13}$	2000 yr. .
$Be^7+H=Li^8+He^4$	2.4	10^6 X	38.1	$4 \cdot 10^{-6}$	15 min.
$B^8+H=C^{189}$	1.5	2 D	44.6	$2 \cdot 10^{-13}$	5000 yr
$B^{10}+H=C^{11}$	9.2	10 D	44.6	10^{-12}	1000 yr
$B^{11}+H=3He^4$	9.4	10^6 E	44.6	$1.2 \cdot 10^{-7}$	3 days
$C^{11}+H=N^{12}$	(0.6)	0.02 D	50.6	10^{-17}	10^8 yr.
$C^{12}+H=N^{13}$	2.0	0.6 X	50.6	$6 \cdot 10^{-16}$	$2.5 \cdot 10^8$ yr
$C^{13}+H=N^{14}$	8.2	30 X	50.6	$2 \cdot 10^{-14}$	$5 \cdot 10^4$ yr
$N^{14}+H=O^{15}$	7.8	5 D	56.3	$2 \cdot 10^{-17}$	$5 \cdot 10^7$ yr
$N^{15}+H=C^{12}+He^4$	5.2	10^4 E	56.3	$5 \cdot 10^{-18}$	2000 yr
$O^{15}+H=F^{16}$	0.5	0.02 D	61.6	$8 \cdot 10^{-22}$	10^{12} yr
$F^{19}+H=O^{16}+He^4$	8.8	10^4 E	66.9	$4 \cdot 10^{-17}$	$3 \cdot 10^7$ yr.
$Ne^{20}+H=Na^{21}$	10.7	10 D	71.7	$5 \cdot 10^{-18}$	$2 \cdot 10^{14}$ yr.
$Mg^{24}+H=Al^{25}$	8.0	10 D	81.3	10^{-26}	10^{17} yr.
$Si^{28}+H=P^{29}$	7.0	10 D	90.9	$4 \cdot 10^{-30}$	$3 \cdot 10^{23}$ yr
$Cl^{37}+H=A^{38}$	12.0	10 D	103.1	$5 \cdot 10^{-30}$	$2 \cdot 10^{23}$ yr.
$H^2+H^2=He^3+n$	3.5	$3 \cdot 10^4$ X	15.7	10^{-4}	
$Be^7+H^2=B^{8*}$	18.5	10 D'	45.9	$2 \cdot 10^{-14}$	
$Be^7+H^2=B^8+n^*$	11.9	10^6 E	50.7	$2 \cdot 10^{-10}$	
$Be^7+He^4=C^{11}$	16.2	1 D'	80.5	$3 \cdot 10^{-19}$	
$H^2+He^4=Li^6$	1.7	$6 \cdot 10^{-4}$ Q	27.5	$3 \cdot 10^{-10}$	
$He^3+He^4=Be^7$	1.6	0.01 D'	47.3	$3 \cdot 10^{-17}$	3 10^7 yr.
$He^4+He^4=Be^{8*}$	(0.05)	$5 \cdot 10^{-5}$ Q	50.0	10^{-20}	
$Li^7+He^4=B^{11}$	9.1	1 D'	71.0	$2.5 \cdot 10^{-24}$	
$Be^7+He^4=C^{11}$	8.0	1 D'	86	$3 \cdot 10^{-20}$	3 10^{20} yr.
$C^{13}+He^4=O^{16}$	7.8	1 Q'	119	$7 \cdot 10^{-43}$	

** The letters in the column giving the level width mean: X = experimental value, D = calculated for dipole radiation, from Eq. (12), D' = dipole radiation with small specific charge 1/4 to 1/20 of Eq. (12), Q = quadrupole radiation Eq. (12a), and E = estimate

* These reactions are not believed to occur since their product or one of the reactants is unstable. They are listed merely for the sake of discussion

Table II

per second. As can be seen at once from this table it is the nitrogen reaction alone which gives energy generation in consonance with the observed data for the sun. We can divide these reactions into three classes:

(i) $H+H=D+\epsilon^+$

with the deuteron being next transferred into He^4 by further capture of protons. From the life time value in Table II and energy generation value in Table III, this appears a probable reaction, but there is a possibility that this reaction itself may be forbidden by selection rules.

TABLE *Energy production in the sun for several nuclear reactions.*

REACTION	AVERAGE ENERGY PRODUCTION ϵ(erg/g sec.)
$H^1+H^1=H^2+\epsilon^++f.$*	0.2
$H^2+H^1=He^3$	3×10^{16}
$Li^7+H^1=2He^4$	4×10^{14}
$B^{10}+H^1=C^{11}+f.$	3×10^{5}
$B^{11}+H^1=3He^4$	10^{10}
$N^{14}+H^1=O^{15}+f.$	3
$O^{16}+H^1=F^{17}+f.$	10^{-6}

* "$+f.$" means that the energy production in the reactions following the one listed, is included. E.g. the figure for the $N^{14}+H^1$ includes the complete chain (1).

Table III

(ii) the reactions in which the light elements Li, Be, B are involved

$$Li^7 + H^1 = 2\ He^4$$
$$Be^9 + H^1 = Li^6 + He^4$$
$$B^{11} + H^1 = 3\ He^4$$

Li begins to be used up at about 2×10^6 deg, Be at $3{\cdot}5\times10^6$ deg and the isotopes of B at about 9×10^6 degrees. As seen from Table II these light elements would "burn" in a very short time, and moreover they are destroyed permanently and will not be replaced. Thus for example, Be would act in the following way

$$Be^9 + H^1 = Li^6 + He^4$$
$$Li^6 + H^1 = Be^7$$
$$Be^7 + E^- = Li^7$$
$$Li^7 + H^1 = 2\ He^4$$

(iii) $N^{14}\ H^1 = 0^{15}$

which written out fully as a chain reaction is given in Table IV. This is in fact the most important source of stellar

$$C^{12}+H^1=N^{13},$$

$$N^{13} \quad =C^{13}+\epsilon^+,$$

$$C^{13}+H^1=N^{14},$$

$$N^{14}+H^1=O^{15},$$

$$O^{15} \quad =N^{15}+\epsilon^+,$$

$$N^{15}+H^1=C^{12}+He^4.$$

Table IV

energy and in it carbon and nitrogen isotopes serve merely as catalysts for the combination. It can conveniently be called the carbon-nitrogen cycle. As seen from Table II, a given C^{12} nucleus will, at the centre of the sun, capture a proton once in $2{\cdot}5 \times 10^6$ years, a given N^{14} once in 5×10^7 years. These times are short compared with the age of the sun, and therefore the cycle will have repeated itself many times in the history of the sun so that statistical equilibrium has been established between all the nucleii occuring in the cycle. Another important point about this cycle is its very strong dependence on temperature viz. T^{18} and this has important astrophysical consequences.

The one thing that is common to all the above reactions is the end product He^4, the α-particle. Obviously nothing can happen to it since the reaction $He^4 + H = Li^5$ is unstable because of the non-existence of Li^5. The

α-particle appears to be the only thing stable in this microcosm of changes, and if hydrogen be the "fuel of the stars" helium is the ashes.

4. *The Sun*

As has already been remarked in connection with Table II it is the carbon-nitrogen cycle that keeps the sun shining. This can be brought out in a more striking way by answering the following question. Neglecting all nuclear considerations regarding the cycle, which nucleus will give us the right energy evolution in the sun ? or conversely ; given an energy evolution of 20 ergs/g-sec at the centre, and 2 ergs/g.sec at the surface, which nuclear reaction will give us the right central temperature ($\sim 19 \times 10^6$ degrees) ?

TABLE *Central temperatures necessary for giving observed energy production in sun, with various nuclear reactions.*

REACTION	T (MILLION DEGREES)
$H^2+H=He^3$	0.36
$He^4+H=Li^5$	2.1
$Li^7+H=2He^4$	2.2
$Be^9+H=Li^6+He^4$	3.3
$B^{10}+H=C^{11}$	9.2
$B^{11}+H=3He^4$	5.5
$C^{12}+H=N^{13}$	15.5
$N^{14}+H=O^{15}$	18.3
$O^{16}+H=F^{17}$	32
$Ne^{22}+H=Na^{23}$	37

Table V

This calculation has been carried out in Table V. It has been assumed that the density is 80, the hydrogen-concen-

tration 35% that of the other reactant 10% by weight. It is seen from the table that all nucleii up to boron require extremely low temperatures in order not to give too much energy-production; these temperatures ($<10^7$ degrees) are quite irreconcilable with the equations of hydrostatic and radiation equilibrium. On the other hand, oxygen and neon would require much too high temperatures. Only carbon and nitrogen require nearly, and nitrogen in fact exactly, the central temperature obtained from the Eddington integrations (19×10^6 degrees). Thus from stellar data alone we could have predicted that the carbon-nitrogen cycle is the process responsible for the energy production.

TABLE *Comparison of the carbon-nitrogen reaction with observations.*

STAR	LUMINOSITY ERG/G SEC.	CENTRAL DENSITY	H CONTENT (PERCENT)	CENTRAL TEMPERATURE (MILLION DEGREES)	
				INTEGRATION	ENERGY PRODUCTION
Sun	2.0	76	35	19	18.5
Sirius A	30	41	35	26	22
Capella	50	0.16	35	6	32
U Ophiuchi (bright)	180	12	50	25	26
Y Cygni (bright)	1200	6.5	80	32	30

Table VI

5. *The main sequence*

The theory that the main sequence stars owe their energy generation chiefly to the carbon-nitrogen reaction is very satisfactorily verified from observational data. In table VI a comparison of the theory with observation is

made in the case of five stars for which the data are sufficiently well-known. The last column in the table is calculated as the necessary central temperature to give the correct energy evolution as observed. In the calculations the N^{14} content is taken as 10%. The last column but one gives the temperatures as calculated on Eddington's theory. The agreement between the two columns is highly satisfactory, the only exception being the star Capella which cannot really be considered as belonging to the main sequence.

Russell had suggested long ago that the central temperatures of all stars of the main sequence are nearly the same although the luminosities of these stars varied by factors of the order 10^6. This is easily understood on the present theory if we assume that in general all these stars have the same energy source. In fact the very strong dependence of the N-C cycle on temperature ($\sim T^{18}$) shows that a small variation of the central temperature brings about a large change in the luminosity.

As pointed out by Von Weiszsäcker it is also possible on this theory to understand the bend in the R·H·D (See Fig. 1) in the region of the red dwarfs. The reaction $H + H = D + \epsilon+$ already considered before plays a role in this connection. Due to its weak dependence on temperature this reaction is not of much importance for the major part of stars in the main sequence whose central temperature are $\geqslant 2 \times 10^7$ degrees. In the region of smaller temperatures of the order 15×10^6 degrees and less, this reaction appears to be concurrent with the N—C reaction and as shown by Fig. 2. even of greater importance. The bend in the main sequence is to be attributed to the weak dependence of luminosity on central temperature in this region of red dwarfs of mass $(1/10)M_{\odot}$ nearly.

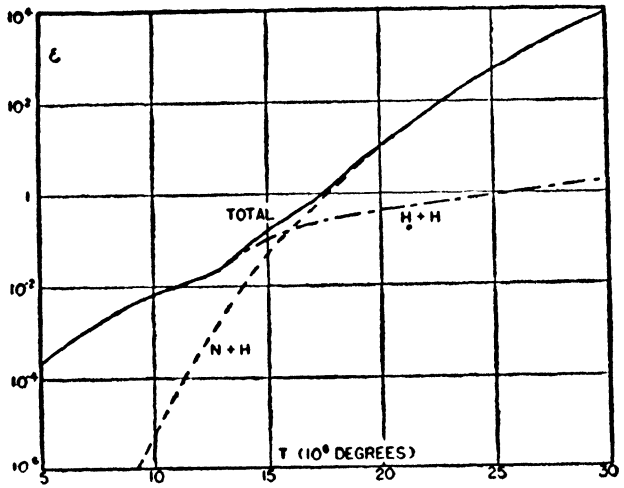

FIG. The energy production in ergs/g sec. due to the proton-proton combination (curve H+H) and the carbon-nitrogen cycle (N+H), as a function of the central temperature of the star. Solid curve: total energy production caused by both reactions. The following assumptions were made: central density = 100, hydrogen concentration 35 percent, nitrogen 10 percent; average energy production 1/5 of central production for H+H, 1/10 for N+H.

Fig. II

The narrow width of the main sequence can be understood if we observe that its stars are prescribed to lie in a region which corresponds to certain allowed variations in their chemical composition. These stars must satisfy both the following conditions (a) they must not be so young that their energy-generation is due either to contraction or the burning of elements lighter than carbon and (b) on the other hand they must not fail to possess hydrogen. We describe gaints as those stars which do not satisfy (a) and the white dwarfs as those which do not satisfy (b).

6. *Giants and Variable Stars.*

The central temperatures of these stars are less by a factor 10 than those of main sequence stars, which also

amounts to low densities. Under these circumstances it is impossible for the carbon cycle to work, and one has to assume that the energy is generated either by contraction or by the transformation of very light atoms. In either case the giants must still be young stars. Since the elements Li, Be and B are scarce on the sun and the earth it is plausible to assume that these elements have been burnt away in normal stars but exist in abundance in very young stars.:

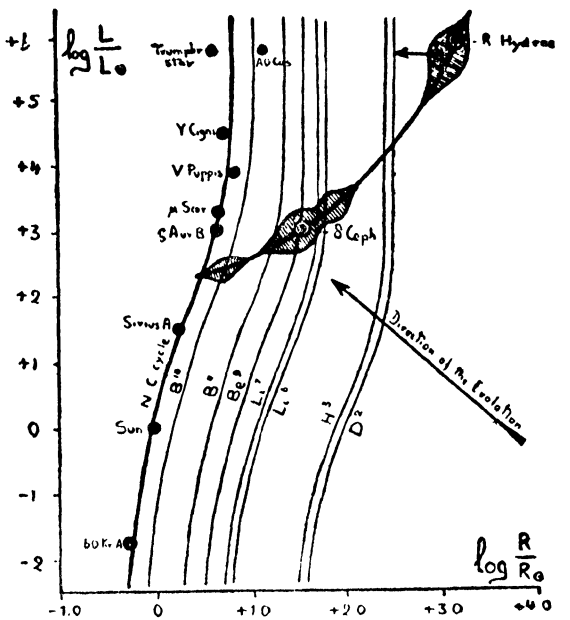

FIG Pulsating variables and different nuclear reactions.

Fig. III

On the assumption that the energy generation in giants is due to reactions of the lighter elements, Gamow and Teller have drawn in the R—L diagram calculated curves for each reaction parallel to the main sequence (See Fig. 3). A star which contains all these nucleii in large quantities would

stay along one of these curve as long as the corresponding isotope was completely burnt out, and then make a transition to the curve of next higher temperature and finally land in the main sequence. On this picture such a star should spend a comparatively long time within each of these bands and undergo a more rapid gravitational contraction during the transition from one such region to another. As is well known these variable stars from a one-parameter sequence, all their characteristics being dependent on the vibration period. Thus the knowledge of this period fixes the position of the star on the R—L diagram. In fig 3. the region of pulsating stars in shown by the shaded area, the width of each area being proportional to the number of stars observed. It is seen that there are definite concentrations of the stars near the regions where the nuclear reactions of light elements become important. The three regions corresponding to cluster, Cepheid and long-period variables might be associated with the B^{10} and Li, Be, and perhaps the D—reactions respectively. Gamow goes even further in explaining the line of the pulsating stars as a limit to the distribution of red-giants in the R—L diagram. According to him this line is to be interpreted as the limit above which the evolution is purely gravitational (until the star gets into the main sequence) and below which it is due to nuclear reactions. Because of the short time scale of gravitational contraction the number of stars observed above this line must be statistically small, and this explains the gap between this line and the main sequence. The pulsative instability of the stars near this limiting line can be explained as due to the conditions existing during the transition from the state of thermonuclear evolution into the state of purely gravitational contraction.

This theory, charming as it is, meets with the difficulty that the abundance of the lighter elements in red giants does not appear to be sufficient to retard the process of contraction suitably, and it may be still necessary to assume that either pure contraction and some other unknown source of energy plays a part in the evolution of giants.

7. *White dwarfs and Novae*

In connection with the Vogt-Russell theorem it has already been remarked that the mass and a parameter denoting chemical composition can be chosen as independent numbers characterising a star. For stars in the region to the left of the main sequence we can take the hydrogen content as the parameter of this chemical composition in so far as nuclear reactions are concerned. From the theory of nuclear reactions it follows at once that a star to the left of the main sequence can contain little or no hydrogen, for if it did the state of high temperature and density would, inspite of gravitation, induce sufficient energy generation to prevent contraction.

Before understanding the evolutionary significance of white dwarfs it is necessary to get some theoretical ideas about them which, thanks to the work of Chandrasekhar, are very satisfactory. They represent senility, almost the approach to the final state of a contracting star in which all the energy, gravitational, nuclear or what not, has been exhausted and radiated away into space, and nothing more can happen to it. Within them the electrons are degenerate jammed together as closely as the quantum laws permit. It has been shown that the radius and density of a star in this state are determined by its mass (and H-content if any). If the mass of a star does not exceed the value $M_0 = 5 \cdot 7 M_\odot / \mu^2$

(μ=molecular weight and equal to 2 for no hydrogen) i.e. $1{\cdot}4\ M_{\odot}$, the final state by contraction will be a sphere of completely degenerate (partially relativistic) electron gas. For such masses less than $M_{\odot}$, each mass gives a definite value R_{min} for the final radius the least value 0 or R_{min} corresponding to M_0 itself. For masses larger than M_0 the critical conditions will not be reached, and as far as present knowledge goes such a star might contract indefinitely. Another interesting point in connection with stars of mass $\geqslant M_0$ might also be noticed. For the mass lying between $5{\cdot}7\ M_{\odot}/\mu^2$ and $6{\cdot}6\ M_{\odot}/\mu^2$, the degeneracy of an electron gas will always begin at a certain stage while for still heavier stars the electrons will always remain in the state of an ideal gas. The evolutionary significance of these ideas will be discussed in the last section.

As intermediate states between the main sequence and white dwarfs are the novae, according to ideas put forth by Biermann. This theory is based on the following facts:

(i) For a normal nova outburst the energy generated is small as compared with the thermal energy content of the stars.

(ii) The luminosity of a nova before and after the outburst is the same within the limit of errors of observation.

(iii) As far as the best observations go, the final state after an outburst is intermediate between the main-sequence and white dwarf states. The first two observations which are mutually compatible show that the outburst does not materially alter the inner structure

of the star, and this shows that, in view of (iii) the star was also in the intermediate state before the outburst.

The origin of the outburst itself has been ascribed by Vogt to the fact that the onset of degeneracy would automatically liberate the great quantity of radiant energy previously trapped in the gas, since degenerate gas has very small opacity.

8. *Evolution of Stars*

If we accept the evolutionary hypothesis and postulate the energy sources as in section, 3 it follows that small and large masses should have a rather different evolutionary history, since the mass of a star during its whole life history is almost invariant changing by less than 1 per cent.

Consider first a star of small mass. This would start from the main sequence, and for its further evolution the H-content might be taken as the parameter. The energy-generation would be due to the N-C cycle and the luminosity would increase by nearly a factor of 100 as the H-content is decreasing. The existence of the empirical mass-luminosity relation can be interpreted as a statistical correlation intrinsically due to the fact that the star spends most of its life time in the low luminosity part of its evolutionary track. This track based on the N-H reaction is shown schematically in Fig. 4 for the sun. After the hydrogen content has fallen below a certain limit the star will start a contraction which steadily increases in speed. When the H-contents falls to nearly 0·002 per cent the nuclear energy liberation becomes negligible as compared with the gravitational. The evolutionary track due to contraction, is shown further in the same figure, and gives rise to a continuous increase in luminosity during a comparatively long period of

time. The last stage of contraction will now essentially depend on the mass. For masses $< 1{\cdot}4\,M_{\odot}$ the contractive evolution begins to deviate because of the beginning of the formation of a degenerate electron gas in the central region. The rate of contraction will considerably slow down, and the star reaches the white dwarf stage where it acquires a long lease of life. Going still further in evolution

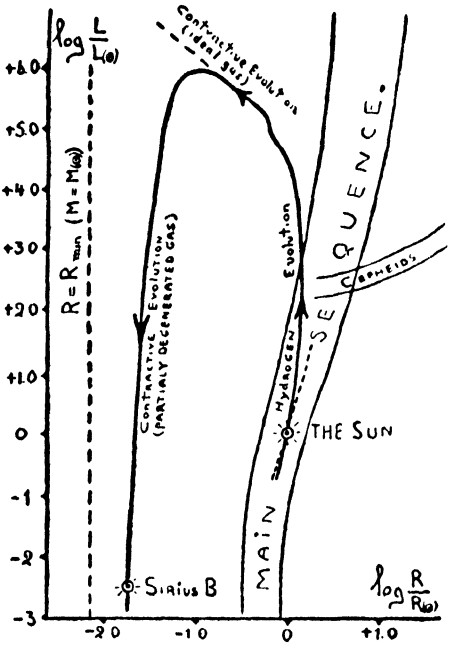

FIG. Evolutionary track of a light star.

Fig. IV

after the white dwarf stage, the increasing exhaustion would result in the outer non-degenerate layers becoming thinner, and the star would shrink and grow fainter and cooler becoming "a yellow dwarf" and ending as a "black dwarf." For stars with masses larger than $1{\cdot}4\ M_{\odot}$ (but small) the process of gravitational contraction is not limited by any

maximum density and such stars are apparently destined to unlimited contraction with central density and temperature rising above any given value. Fig. 4 also shows, according to Gamow, that white dwarfs are at present far from the finite stage of contraction, as the difference between the actual track for a star of mass $M_{\odot}$ and the dotted track $R=R_{min}$ indicates. Another very interesting suggestion made by Gamow is that stars of mass between $5{\cdot}7M_{\odot}/\mu^2$ and $6{\cdot}6\ M_{\odot}/\mu^2$ can explain, while they are getting into a degenerate state, the formation of "super-novae" by the process of neutron-formation.

We now come to consider the evolution of large masses. The first stage of evolution for these viz., the red giant state, and the transition through the pulsating state to the region of blue giants in the main sequence appear fairly simple to understand. The second stage as to what to happens to these when they go over to the left of the main sequence does not appear to be quite clear at present. If one postulated that they met the same fate as stars of masses greater than the Chandrasekhar-Landau limit of $1{\cdot}4\ M_{\odot}$ viz. contraction to arbitrarily large densities, we ought to find dense states of large masses; but these have never been observed. Two ways, perhaps not mutually exclusive, have been suggested to meet this difficulty Gamow has pointed out that such contraction cannot take place indefinitely because, on account of the angular momentum of the stars, the centrifugal forces soon become large and cause the breaking of such a massive star into several small pieces (see Fig. 5) with the masses below the critical value. These pieces will then continue to exist indefinitely in the form of white

dwarfs. Such an explanation would amount to the drastic assumption that existing white dwarfs do not represent a finite stage of evolution of a single star but are fragments of the explosion of heavy stars. The other way is based on the suggestion of Chandrasekhar that all stars of large mass when they come near the region of white dwarfs actually cast off their masses on account of excessive radia-

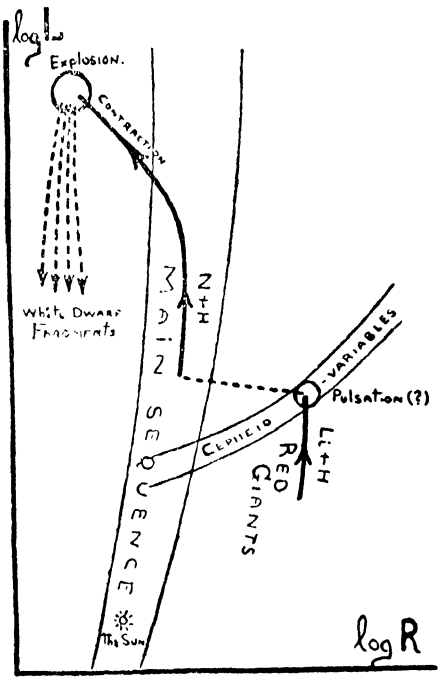

Fig Evolutionary track of a heavy star

Fig. V

tion pressure, as is observed in the Wolf-Rayet stars. After casting off their mass, these stars would reach the white dwarf stage. This suggestion like that of Gamow also makes the white dwarf stage not a finite one but the result of a catastrophic change.

While the results based on the carbon cycle energy-generation can be considered quite satisfactory for the main-sequence stars, the above considerations relating to giants and white dwarfs are not quite satisfactory and there appear some contradictions which will now be pointed out. The first difficulty is presented by the existence of stars of very high luminosity like the blue giant γ-Cygni near the top of the main sequence ($M=17\ \odot$) and the red super giant) ζ-Aurigae. These giants radiate as much as 1000 erg/g. sec. or more, and at this rate the preponderant initial hydrogen content would be completely consumed in 10^8 or even 10^7 years (i.e. in a time much shorter than even the age 10^9 years usually given to the stars). The simplest explanation of this would perhaps be that these are comparative young stars formed long *after* the separation of the galaxies (on the expanding Universe hypothesis). In view of the fact that even at the present time the mass of interstellar matter is commensurate with that of the stars, there is perhaps intrinsically nothing against such an assumption. But it has to face the difficulty that in star-clusters to which a common origin is to be ascribed there exist together giants and faint main- sequence stars which cannot certainly be equally old. Moreover why should only stars of great mass be younger than the galaxy, and why should there not be stars to the right of the main sequence having low luminosity and going over into stars of the solar type or fainter types? The second difficulty relates to the white dwarfs. Such a star having the mass of the sun, and negligible hydrogen content would require for its formation, through the process of normal evolution, at least 10^{11} years i.e. periods longer than the age of the galaxies. The suggestion of Gamow that white dwarfs known at present do not represent the finite stages

of normal evolution of smaller masses but fragments of larger stars broken into pieces would no doubt remove this difficulty, but it would be hard to assume this unless it can be shown independently that the present white dwarfs *are not* the result of the normal evolution of a star of mass $< 1{\cdot}4\ M_{\odot}$ starting from the main sequence. Another way of escape out of the difficulty suggested by DeSitter is to assume that the white dwarfs are really older than the galaxies, and being dense "hard nuts to crack" they actually came through the period when the galaxies were all together and had not begun to separate. This again appears difficult to understand if the idea were applied to Sirius A and Sirius B, components of a double star and the latter a white dwarf.

In conclusion we might say that while we know why the main sequence stars are there shining, we do not know why the giant stars still shine, and why the white dwarfs are already there.

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THE SOLILOQUY

By

C. R. Myleru, M.A.

Modern dramatic criticism, and also the practice of present-day playwrights are definitely against the use of soliloquies in dramas. They are condemned as old-fashioned, childish and conventional. The soliloquy might have come in handy for Shakespeare to reveal the workings of the mind of the villain Iago, and also incidentally to indulge in his poetic outbursts, but, is it natural, asks the twentieth century dramatist. Do people soliloquise when they go shopping or run to catch trains or even when they get married? On these grounds all soliloquies have been completely banished from modern plays, and especially the realistic ones dealing with every-day life. If an unwary playwright should introduce one or two of these unfortunate soliloquies, he is immediately branded as out-of-date, and medieval.

But before we examine the question in detail let us see what is a soliloquy. It is the speech in which a character speaks aloud without, or regardless, of the presence of hearers, directly, to the audience. Very often in Elizabethan plays we will have the villain for example laying aside his mask and baring his soul to the audience in a speech delivered to them in confidence. We can also include under this head the 'asides,' which are common in old plays. These were the means employed by dramatists to take us down into the hidden recesses of a person's nature, and to reveal the motives of conduct which could not be disclosed in the course of ordinary dialogue. Such knowledge would be necessary

for the spectators to understand the characters and their actions completely. The dramatist is at a disadvantage when compared to the novelist; the latter can dissect his characters and reveal their inmost thoughts, but the dramatist can have no chance of doing it. That is why the old playwrights had recourse to soliloquies. (It is curious how even when there is no necessity, some modern novelists, make use of soliloquies in their novels!) While the characters are thinking aloud, we are permitted to over-hear what they say. It should not be taken that they are addressing their remarks directly to the audience, though some actors might recite their soliloquies in that style.

The soliloquy played an important part in ancient Greek Drama. In Aeschylus we have the bound Prometheus proclaiming his woes to the heavens, before the daughters of Ocean come to comfort him. Even in Sophocles and Euripides there are several long speeches which are spoken at large in the manner of soliloquies; they are not directly addressed to the chorus. But even when speeches are addressed to the chorus, they are in the nature of confessions of the inmost thoughts of the chief characters. In French Drama also the same system is followed; the chorus has shrunk to a single attendant for each of the chief characters, who always accompanies his hero or heorine, and hears all that is said by the chief figures. Thus the clever French dramatists, while avoiding all semblance of the soliloquy, profited by all its advantages. These confidants were colourless creatures, drawn vaguely and existed for the sole purpose of being talked to. Victor Hugo dismissed these pale figures from his plays; he was therefore driven back to the soliloquy. The argumentative monologue of the king in "Hernani" is one of the longest soliloquies in all dramatic literature. It is full of Hugo's swelling rhetoric

and soaring figures of speech. Shakespeare and Moliere, born-playwrights that they were, knew instinctively how valuable the soliloquy could be to them. They never worried about the naturalness or otherwise of the convention. Whatever was acceptable to their audiences, they made use of without any hesitation. In Shakespeare we find his chief characters again and again revealing their intimate thoughts and desires through their soliloquies. Almost always these are helpful in making us understand clearly the workings of the mind of his more complex characters. If these soliloquies were not there, we may not be able to follow some of the actions of some of his more intricate creations. But for these self-revealing passages we may not be able to understand the character of some of his men and women. Shakespeare makes use of the soliloquy most in his "Othello." He uses it again and again to let Iago reveal his own villainy, as if he did not want the groundlings to have any doubts about the wickedness of his honest Iago!

But neither Shakespeare nor Moliere distinguished between the proper use and abuse of soliloquy. There is soliloquy which reveals character, and that which informs us about the further development of the plot. The former is certainly on a higher plane, which is absolutely necessary when depicting deep conflict of emotions or psychological conditions. "It lets a tortured hero unpack his heart; it provides a window to his soul; it gives the spectator a pleasure not to be had otherwise." Professor Bradley remarks in his "Shakespearean Tragedy" "in listening to a soliloquy we ought never to feel that we are being addressed; in this respect, as in others, many of Shakespeare's soliloquies are masterpieces; in some the purpose of giving information lies bare, and in one or two the actor openly speaks to the audience." Moliere was as bad Shakespeare in this res-

pect. They did not even make sure that there was no one else present on the stage, when some characters were soliloquizing: Romeo overhears Juliet's soliloquy from the balcony ; in Moliere's "Miser" also there are such situations!

The soliloquy has been defended ably by many writers. William Congreve in his Epistle Dedicatory to the "Double Dealer" puts up a stout fight in favour of soliloquies. "I grant that for a man to talk to himself appears absurd and unnatural: and indeed it is so in most cases; but the circumstances which may attend the occasion make great alteration. It oftentimes happens to man to have designs which require him to himself, and in their nature cannot admit of a confidant. Such for certain, is all villainy; and other less mischievous intentions may be very improper to be communicated to a second person.....when a man in soliloquy reasons with himself, and weighs all his designs we ought not to imagine that this man either talks to us or to himself; he is only thinking, and thinking such matter as were inexcusable folly in him to speak. But because we are concealed spectators of the plot in agitation, and the poet finds necessary to let us know the whole mystery of his contrivance, he is willing to inform us of this person's thoughts; and to that end is forced to make use of the expedient of speech, no other better way being yet invented for the communication of thought." Victor Hugo in the "Miserables" declared that it was wrong to believe that the soliloquy was unnatural, because often a strong agitation speaks out aloud. Prof. Bradley says; "Neither soliloquy nor the use of verse can be condemned on the mere ground that it is unnatural. No dramatic language is natural."

It is curious how when modern audiences allow many unnatural conventions on the stage, the soliloquy alone has

been consigned to the limbo of the past. In certain kinds of plays like light-comedy, the comic-opera, the poetic-play the fantasy etc., the soliloquy still plays an important part. Only in realistic prose-drama is the soliloquy completely tabooed. But even here it can be allowed in certain circumstances; for example when a mischievous character is plotting his schemes, or a man is thinking aloud about his engagements for the day, or a woman is cursing her fate when things go awry nothing is so natural as to soliloquize. Merely because the Elizabethans used it, we should not think it to be old-fashioned, and therefore reject it. It was certainly a convention in those days to have soliloquies in plays. At the present day it has become the convention not to have soliloquies! Conventionalism either way is not sound; will it not be better to leave it to the convenience and ability of writers to use what technique they choose to make their plays effective ?

"THE ROAD TO MANDALAY"

By

K. NAGARAJAN.

Along this fascinating road, for ages past, have passed and re-passed, countless Indians from the coast of Coromandel. This statement ignores in advance the criticism of the meticulous-minded that Mandalay itself was only a recent creation, having been built by King Mindon in the attempted fulfilment of a dream. The road, however, has always been there and led to Ava and Amarapura, whose very names breathe romance. It held an irresistible lure for Indians and, from the deltaic regions in the south to the upper reaches of the Irrawaddy, travellers and traffickers, bards and Buddhist monks, princes and peasants from all over India have moved in an unending stream.

It all began long ago and the beginnings are lost in the mists of antiquity. The *trek* across the Assam frontier must have begun long before King Asoka sent his missioneries to Burma to preach Buddhist gospel. There Buddhism found a favourable field for growth. There it grew and flourished and helped to link the two countries more securely than a mere military conquest or political association could have done. Tamilnad's connection with Burma is several centuries old. Rajendra Chola, runs a well-authenticated tradition, led an expedition to Burma and proved the might of Tamil arms on the banks of the Irrawaddy. Not very long ago, there were discovered outside the city walls of

Pegu, two stone pillars erected by the Chola king to commemorate his victory. One of them used to stand in front of the District Court of Pegu, a preserved monument. There is a theory that Kidaram, one of the Chola conquests, was identical with Pegu and Kidaram is unmistakably a Tamil name. King Anahwrata, greatest of the kings of the Pagan dynasty, for his greater glory, sent to India for a wife and married Panchakalyani, a princess of Vaisali, and Kyanzhitta, the builder of the beautiful Ananda pagoda at Pagan, was her son. All Burma's legends and folk-lore are derived from India; the names of her towns and rivers—the Irrawaddy, for instance, and Ussa, the ancient name of Pegu, which was colonised from Orissa, (I am leaving out of account for the moment Chauthalon, Burmese for 'single stone,' which Chettiars have rechristened as Sivasthalam and made into the abode of the God Subramania)—attest a long and almost integral connection with India. The Talaings are believed to derive from the people of Telingana, who crossed over in large numbers, while the Corganghis doubtless came from Coringha, near Coconada. Burma has always been hospitable to her western neighbour, and it is undeniable that the intermingling of Indian and Burman has been full, free and complete. The Indians met a definite economic need; they provided the drive and the organising energy which were apparently beyond the easy-going art-loving Burmese. India and Burma were doubtless meant to live in neighbourly intimacy; the Geological Survey of India reveals the interesting fact that the terrain of Upper Burma is very similar to that of Assam. All things point to a close and considerable contact between the two countries going back to pre-historic times, a fact worth remembering at a time

when twentieth-century man would play at sundering those whom God, in his wisdom, has joined.

In the unceasing stream of traffic with Burma have mingled, for longer than one cares to remember, the Chettiars or, to give them their traditional name, the *Nagarathars* of the ninety-six *oors*. It is a far cry from their sun-baked homeland in the south country to the basins of the Sittang and the Salween. It is true that nowadays one can cross over in the space of a few hours; one can board an Imperial Airways liner or a K.L.M. flying boat at Calcutta and land at Mingladon aerodrome in time for breakfast at the Strand Hotel on Rangoon's river-front or to do an early stroke of business in Moghul Street or Fychte Square. But the 'temerarious' souls among the Chettiars who would essay the (to their minds) not unperilous flight across the Arakan Yomas or the pretty paddy-fields of Hanthawaddy, can be counted on the fingers of one hand. Air-travel is still a novel form of locomotion and the Chettiars are not bitten by the modern speed-bug and they do not long to get there before anybody else. Life is long, at all events, reasonably long enough, and undue haste, when you come to think of it, is undignified, and only upsets the digestion and discomposes the nerves. They prefer to go about their business in the way their ancestors did and for the thrill of putting a girdle round the earth in lightning speed they have no taste.

This does not mean, however, that the Chettiars are not adventurous. Adventure for the sake of adventure is not their *metier*. But of risks, whether physical or financial, in the realm of business, they are wholly unafraid. They have all along been true to the old saw which exhorts the business man to seek his fortune by trading beyond the seas. In the old days, before the turbine screw was in-

vented, these merchant adventurers worshipped the tribal gods, knelt for a blessing before their elders and, bidding farewell to their family and friends, set sail from some Coromandel port and, hugging the coast, reached Rangoon after many weeks, the discomforts of the voyage by no means diminished by their enforced subsistence upon the home-made rice and curry, rendered flat and tasteless by the action of the sea-wind. In this way, they traded with Malaya and ultimately found their way to the Gulf of Martaban, on whose shores, by all accounts, the first Chettiar firms were started. Once landed, they opened their ledgers and commenced business, sustained by an infinite trust in Heaven and the confidence of the local population, to whom their proved integrity was the main passport. Wherever they went, they carried with them the sense of hospitality for which their community is noted and the mild, gentle-mannered Chettiars soon found an abiding place in the affections of the Burmans. They usually laboured for terms of three years and then returned home for a three-year period of rest before going back to resume their business beyond the seas.

Herein lies the romance of Chettiar business. Romance and banking! It may seem a strange combination, as though the bamboo-mats on which they squatted could turn into magic carpets on which one could fly and the figures in their ledgers could turn into fairies and knights-in-armour. But if grit and guts, the readiness to take risks, great and small and the determined quest for the goods which make for beauty, quality and independance in life are the essence of romance, the Chettiars had it in ample measure. At all events, with no hint of the Biblical exhortation, they succeeded in making two blades of grass grow where there was only one

or none before. And that is their magnificent record in Burma.

It all followed in the wake of the opening of the Suez Canal. On the quayside at Port Said stands a statue of Ferdinand de Lesseps. The statue, with equal propriety, could stand in front of the Sule Pagoda Wharf or the Brooking Street jetty in Rangoon. For de Lesseps was the wizard who brought prosperity to Burma. Inspired by the researches of the Saint Simonites and with the active assistance of his friend, the Khedive Mohamed Said, he set to work and, undeterred by opposition or ridicule, succeeded in cutting open a canal, of which Napoleon had dreamed and of whose immense possibilities Palmerston had more than a hazy notion. The canal was opened in 1869 and that dates the commencement of Burma's commercial prosperity. The markets of the West were clamouring for rice and more rice, far more than the East could supply. Lower Burma had a plentiful rainfall and was admirably suited for the cultivation of rice but she had never till then grown more than what was necessary for domestic consumption. But when the canal was opened she sat up and took notice. There were vast areas of malaria-ridden swamp awaiting the operations of the pioneer. An immediate programme of land reclamation on a colossal scale was taken in hand.

All this meant money and a lot of it at that. Government was either unable or unwilling to give the financial backing needed but they actively encouraged the employment of private-owned capital for the purpose. The Chettiars came forward and advanced the capital required and enabled to open up the province to agriculture. Thanks to their timely aid, cultivation went up a hundredfold: as

much as seven million tons of paddy were cultivated every year of which nearly half was regularly exported. Rangoon harbour was crowded with shipping waiting to carry the nutritious paddy stocks to the markets of Europe. All Burmese economy, in the last analysis, is based on agriculture and nearly ninety per cent of the population depend upon the land for their livelihood. Profits went up and there was prosperity all round, and the smile on the Burman's face grew larger and the lilt of his *pwe* dancing livelier.

It is only fair to add that the Chettiars and other Indians shared in these benefits. The Chettiars had a remarkably developed banking organisation which played a very important part in the economy of Burma. In the words of Sir Harcourt Butler, "Without the assistance of the Chettiar banking system, Burma would never have achieved the wonderful advance of the last 25 to 30 years. The Chettiars provide the necessary finance to the agriculturists in practically every village in the Province, and while enabling the Burman to greatly increase his production, they have, at the same time, undoubtedly inculcated ideas of thrift and economy by their insisting on regular payments as regards both principal and interest. The Burman to-day is a much wealthier man than he was twenty-five years ago and for this state of things the Chettiar deserves his share of thanks.....I feel confident that whatever future developments of banking may do for Burma, the Chettiar will always hold his own and prove himself in the years to come, as he has done in the past, the real backbone of the Banking system throughout this Province.' The Burman was not wanting in appreciation either. Chettiar firms were dotted all over the province and the utmost friendliness prevailed between the Chettiars

and the Burmese. In spite of the high profits which they were enabled to earn, the Chettiars retained their characterestic simplicity and spent large sums in charity. To them might have been addressed Burns' lines:

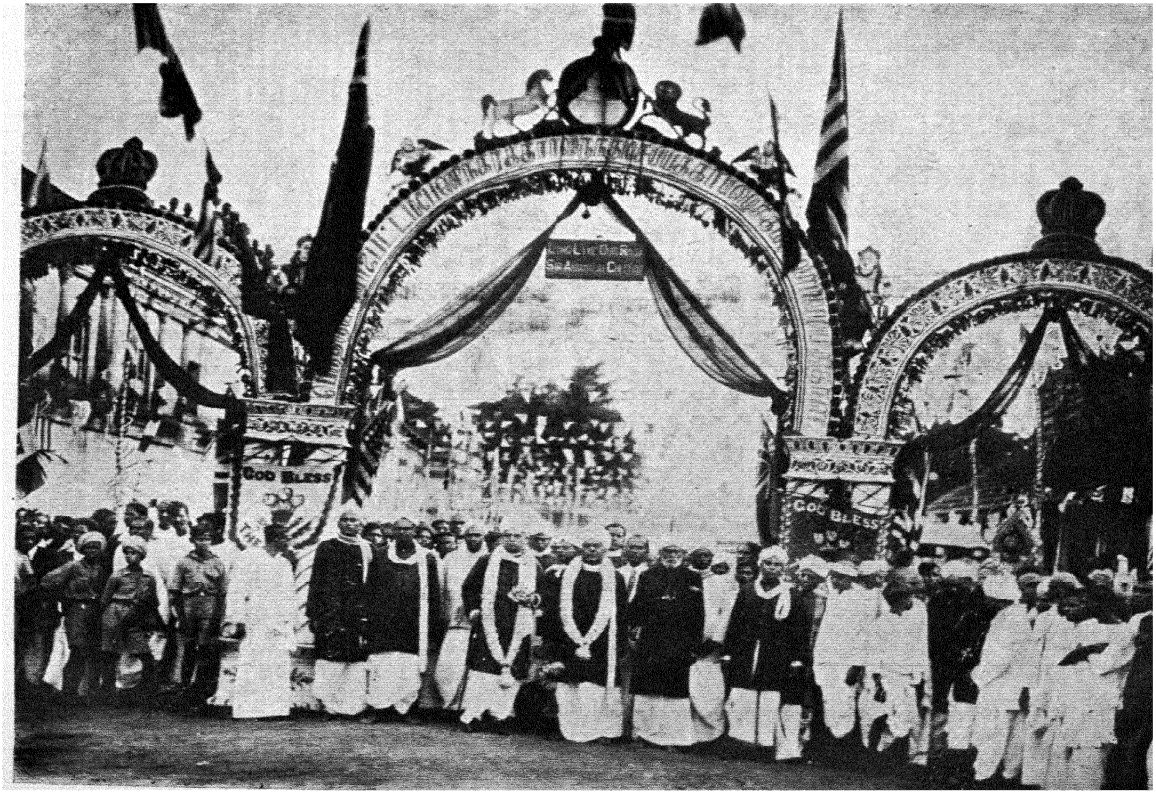
> To catch dame Fortune's golden smile,
> Assiduous wait upon her;
> And gather gear by every wile,
> That's justified by honour:
> Not for to hide it in a hedge,
> Nor for a train attendant,
> But for the glorious privilege
> Of being independant.

"And", I may add, with apologies to the spirit of Robert Burns for the baldness of the amending prose, "for bringing a ray of sunshine into the drab lives of their poorer fellowmen."

We have good authority for saying that most of the charitable institutions in Burma, barring those of a religious character intended to secure spiritual merit, were presented by Indians; and in this laudable effort, the Chettiars have done their bit. In their own homeland, they habitually spend large sums of money for the extension of the amenities of life. Until recently, these were of a stereotyped character, such as, the building of tanks and temples (these latter according to the most exuberant Dravidian formula), of choultries, where the wayfarer could get food and shelter, and the promotion of fairs and festivals, beloved of the peasantry. South Indian art and architecture have in them some of their most discerning patrons, and though the rococo palaces in which an earlier generation delighted may not have been the last word in architectural

beauty, they, at any rate, provided the artisans and labouring men of Chettinad with the means of livelihood. On occasion, the Chettiars will fling their money about and forget to count the cost and organise a festival and turn the countryside over to gaiety and general jollification. As they did, for instance, when the Nagarathars of the ninety-six *oors* decided to celebrate the honour of hereditary Rajah conferred on the subject of this memoir, Rajah Sir Annamalai Chettiar.

For, on a memorable April afternoon in 1929, in the village of Kovilur, in the heart of Chettinad, occurred a remarkable gathering of clans. From every one of the ninety-six *oors* they came, flocking to participate in the honour which was being done to the man who, more than anybody else, had helped to put his community on the social map of India. The broad, water-besprinkled streets were hung thick with festoons, over which dangled innumerable fairy lamps in every shade of the rainbow, over rows and rows of tables, laden with the best cheer which the country could afford. Men of light and leading from all over the presidency had assembled to join in the demonstration, and the Chair was appropriately filled by Rajah Sir Annamalai's old friend, The Right Hon'ble V. S. Srinivasa Sastriar, whose appreciation of the Rajah's public spirit had been heightened into positive admiration by his magnificent endowments in the cause of education. For it was a well-known fact that the Rajah had changed the direction and quickened the tempo of the eleemosynary activities of his community. Bearing in mind the establishment of the Minakshi College, and its early conversion into the nucleus of the Annamalai University, the Right Hon'ble Srinivasa Sastriar had previously sent a telegram of congratulation which, as conveying



NAGARATHAR RECEPTION TO RAJAH SIR ANNAMALAI CHETTIAR AT KOILUR ON APRIL 1930

the general sentiment, could not have been better expressed —"A noble deed nobly rewarded."

The Kovilur meeting was a landmark in Nagarathar history. Never before, within recent memory, had there been such a gathering of clans, or such a demonstration of unrehearsed affection for a leader of the community. Rajah Sir Annamalai, however, did not rest on his laurels. It will not be proper or possible to treat of the other benefactions of the Rajah or of his other services in the public cause within the limits of this article. His services to the community in regard to their interests in Burma—and, in this particular, they were identical with the interests of the country in general—can more appropriately be indicated here. It was not very long before a situation arose which laid under contribution Sir Annamalai's untiring energy and practical wisdom for the preservation of their carefully built-up interests in Burma and to this end, the Rajah devoted himself fully, freely and unreservedly.

When the Statutory Commission visited India, Sir John Simon conceived a bright idea and that was that Burma should be seperated from India. He was charmed with the province, its vernal woods, flowing rivers and its forests of virgin teak, all her untapped natural resources, and as a *quid pro quo* for the pleasure he had received, resolved on the snapping of old ties. The idea, once broadcast, took root, grew and became a rather noisy bee in the bonnets of a few people. Separation became a burning question at the time of the Round Table Conference. There were many in Burma who looked with definite disfavour on the idea. Mr. Ramsay MacDonald, the Premier, prescribed a test which met with general approval. He proposed to leave the decision to Burma herself. In a historic

declaration, he said, "The first step is to ascertain whether the people of Burma endorse the provisional decision that separation should take place.....The people of Burma will be in a position to decide whether, or not, they are in favour of separation from India. His Majesty's Government consider that the general decision might best be taken after a general election at which the broad issue had been placed before the electorate" and, he expressly stated, that in the event of Burma deciding to remain within the Indian Federation, "it should be remembered that if an Indian Federation is established it cannot be on the basis that the members can leave it as and when they choose." It was a time when generous ideas were in the air and the principle of self-determination so presented for practical action was calculated to satisfy all parties. Indian leaders considered it the best way of solving the problem and stood aside, waiting to see the sequel. An election was fought on the broad issue propounded by the Prime Minister and it resulted in a resounding victory for the anti-separationists. This was a rather smart smack in the face for those who had sworn that the Burmese, as one man, were clamouring for separation. Doubts were cast—vague, indefinite elusive uncertainties, impossible to lay hold of and assail—on the manner in which the election had been run. It was alleged that the issue had not been properly placed before the people and His Majesty's Government decided to ask the Council which had been elected to decide afresh on the issue. They gave their verdict in a special session of the legislature convened for the purpose in February, 1935. 37 of the elected representatives voted for remaining within the Indian Federation, while 31 voted against, but by a piece of jugglery to which legislatures with a strong nominated bloc are peculiarly susceptible, by add-

ing the votes of non-official members, the figures given above gave place to 47 for, and 37 against, separation.

Before this, a memorandum signed by 44 of the elected representatives had been sent up to the Government, pleading for retention within the Indian Federation. The Burmese representatives who gave evidence before the Joint Select Committee, including Dr. Ba Maw, sometime Premier of Burma, were emphatically in favour of "the federal alternative as being in keeping with the clear mandate we have obtained from the country."

And yet separation was decided on. The question was hotly debated in Indian circles whether India should not enter the field against separation, and the general decision was that India should not queer the Burman pitch by any action on this side of the Bay of Bengal. The Nattukkottai Chettiar Association in Burma was greatly perturbed, and it was mainly as a result of Rajah Sir Annamalai's attitude, which was in conformity with the general view of the Indian leaders, that the Association stood aloof.

Detachment in regard to the issue as to separation did not dispose of the matter. The recommendations of the Joint Select Committee gave rise to apprehensions that the future of Indians in Burma would be gravely jeopardised. There was no cleavage of opinion in any particular among the Indians in Burma as to the dangers inherent in the position envisaged by the Joint Select Committee, and it was decided that steps should be taken to safeguard the position of Indians in Burma. An All-Burma Indian Conference was held at Rangoon on the 29th and the 30th December, 1934, and it was presided over by Mr. Mirza Mohamed Rafi, Mayor of Rangoon who had been associated with the

Burma Round Table Conference. Mr. S. A. S. Tyabji, who was recently in India at the head of a Delegation from Burma to protest against the Indo-Burma Immigration Agreement, was the Chairman of the Reception Committee. Various resolutions were passed and a Delegation was appointed to proceed to England for the purpose of making representations to His Majesty's Government with a view to securing adequate safeguards.

The Delegation left for England in February 1935. Meanwhile, The Government of India Bill had been published and the apprehensions expressed at the Rangoon Conference were found to be justified. The provisions enabling the Burmese legislature to impose restrictions on the rights of Indians to enter Burma and on the right of alienation of land were calculated to cut at the root of Indian business in Burma. That Indians would be subject, in the future, to highly discriminatory treatment was a conclusion from which there seemed to be no escape.

From the start, it was clear that the position called for careful handling. The delegation held several discussions in Bury Street among themselves and the task of negotiating a satisfactory amendment of the Bill fell upon the shoulders of Rajah Sir Annamalai Chettiar.

Rajah Sir Annamalai actually arrived in London on February the 23rd, and lost no time in getting into touch with the India Office and leading members of Parliament. He met the Right Hon'ble the Secretary of State and Mr. R. A. Butler, the Under Secretary, both of whom he was able to impress with the strength of the Indian case. He also took an early opportunity of meeting Earl Winterton and discussing with him the questions agitating

the Delegation. Very early in the proceedings, the delegation had the advantage of a thorough examination of the position with Lord (then Sir Malcolm) Hailey, and it looked as though modification was possible of the clause relating to land alienation and, as to Indian immigration, all that the Government apparently had in mind was the conferment of the right to restrict the immigration of unskilled labour into Burma.

In addition to the two points indicated already, Sir Annamalai was definitely of the opinion, that it was a matter of the first importance to Chettiars, that they should have separate representation in the Burmese legislature. The enormous interests which they owned in Burma were held to justify the reservation of a seat for the Nattukkottai Chettiars' Association, Burma.

While in London, Sir Annamalai's attention was drawn to a serious omission in the safguarding provisions of the Bill. While a certain degree of security in regard to the carrying on of trade and business and connected matters was guaranteed to British Indian subjects, no such safeguard was provided in the case of subjects of Indian States similarly situated in regard to Burma. Knowing the commitments of the Chettiars of the Pudukotah State, and of the large numbers of men from the States of Western India who had been carrying business in Burma for generations, Rajah Sir Annamalai was quick to realise the gravity of the omission and he forthwith took the matter up with the Secretary of State. The omission was repaired by the Government themselves introducing the necessary amendment.

Several informal discussions were held with the India Office authorities who displayed, in the words of the Rajah, "a gratifying readiness to appreciate the Indian case and to

do what they could do to safeguard Indian interests in Burma." His discussion with Mr. Geoffrey Peto, M.P., Mr. Kirkpatrick, M.P. and the Right Hon'ble Major Hills were particularly helpful.

The discussions disclosed that the Government were not unalive to the risks involved in leaving the clauses on land alienation unrectified. These clauses were so framed as to give the Burmese legislature freedom to promote legislation prohibiting the sale or mortgage of lands to persons who were not agriculturists. Sir Annamalai drew pointed attention to the large accumulations of land in the hands of Indians, as a result of circumstances, purely fortuitous. To any one who knew the real position, it was crystal clear that land was the last thing which the Indian business men wished to own in Burma, and that it was their main purpose and preoccupation to get rid of the lands which had, so to speak, come unsought into their possession. Rajah Sir Annamalai was able to convince the Secretary of State that Indian landowners in Burma were not land-grabbers and that, though as landlords, they had been markedly considerate to their tenantry with whom their relations were, on the whole, extremely cordial, they did not fancy the *role* which accident had thrust upon them. He pointed out that the restrictive legislation foreshadowed would result in an artifical restriction of the land market and a serious reduction of land values. He suggested that the desired protection of agriculturists from the consequences of their improvident dealings with land could be achieved by preventing the sale or mortgage of land in the hands of the agriculturists to anyone who was not an agriculturist himself. The suggestion commended itself to the Secretary of State and the clause in question was amended in the sense indicated.

Clause 340 disturbed the delegation a good deal. It began well, it conceded to Indians the right to reside in Burma and to carry on trade or do business, without any restriction whatsoever: it put the Indians exactly in the same position as subjects of the United Kingdom in regard to these and cognate matters—but with a difference. The clause contained a proviso that all the rights conceded by the clause were subject to "any restriction on the right of entry" or "any condition lawfully imposed as a condition of entry" which the legislature of Burma might impose. Therein lay the rub. The clause seemed designed to have the effect of taking away with one hand what had been given by the other. Representations were made to the Secretary of State about the unfairness of such a provision and the reply was given that it was felt that there was an uneconomic excess of cheap, unskilled Indian labour which flooded the Burmese market and that the clause was designed only to enable legislation restricting the immigration of unskilled labour from India. Rajah Sir Annamalai and Mr. Haji drew attention to the fact that there was nothing to show that Indian labour was assuming menacing proportions but, on this head the Government was firm; but, at the same time, they made it perfectly clear that it was not at all their intention to strike at other Indians, who would be at perfect liberty to come and go as they please. This assurance was repeated at the formal interview which the Delegation had with the Secretary of State.

The delegation was strongly of the opinion that, in that case, the matter should be placed beyond the possibility of doubt by a suitable amendment of the proviso. Lord Winterton and Mr. Godfrey Nicholson were good enough to table amendments in the sense that the Burmese legislature may promote legislation designed to restrict the

immigration of cheap unskilled labour. When the clause came up for discussion, the Attorney General, Sir Thomas Inskip dealt with Lord Winterton's amendment and observed that "it passed the wit of parliamentary counsel or draftsmen to devise a form of words" which would adequately define the phrase "unskilled labour" and that therefore the best plan would be to instruct the Governor to reserve any Bills which contain racial discrimination and to reserve also Bills which contain restrictions upon professional or business men who, while India and Burma have been united, have carried on business in either country." Sir Samuel Hoare, the Secretary of State, referring to the discussions which he had had with the delegation said that he was able to convince them "that the best way of meeting their anxieties was to adopt the method of the Instrument of Instructions." After such a full and clear statement of intention, the delegation felt that there was no further need to be anxious on this score. Moreover, when the Instrument of Instructions was under consideration in the House of Commons, in November 1936, Mr. Butler observed that the fears entertained "on this score by Indians who wished to enter Burma may be quietened in view of the contents of Paragraph XX of the Instrument of Instructions." He added that "the reason that we cannot make a simple rule is that we have to make this differentiation in regard to unskilled labour while, at the same time, we do not want to stop the free entry of Indians in general." It was assumed that these assurances given by such high authorities would, in the words of Mahatmaji "have the effect of promissory notes." The delegation had not the slightest suspicion then that a day would come when these assurances would be ignored and that Government would take its stand on the letter of the law which was, after all, like advancing

a plea of limitation to defeat a just debt. It may be a promissory note, but some people always ask, "Is it in the bond?"

Rajah Sir Annamalai, while he was in England, pleaded for separate representation of the Nattukkottai Chettiars' Association in the Burmese Legislature. He was able to present his case with such reason and moderation that the Government readily accepted his suggestion. In moving the amendment Mr. R. A. Butler, the Under Secretary of State said "The Chettiar Association have a very important position in Burma. It is composed mainly of merchant bankers, who perform services absolutely vital to Burma. It occupies a very important position in the national life and performs duties which Burma can ill afford to lose."

It may be worth recording in this connection that after Rajah Sir Annamalai had left, Mr. R. A. Butler told the present writer (who had the privilege of being associated with the delegation and particularly with the Rajah all through) that it was a pleasure to conduct talks with the Rajah who had always "put his case moderately" and hoped that his labours will be appreciated in India.

Mr. Butler's hope was justified. On his return to India the Rajah was the recipient of letters and telegrams expressing the warmest appreciation of his work.

A special meeting of the Nagarathars was held at Kovilur where a resolution expressing the community's appreciation and gratitude was formally passed. The *Hindu* was appreciative and stated in a leading article "that the concessions that have been gained are valuable. They, in fact, make it clear that the authorities in England are convinced that every one of the claims made by Indians is wholly justifiable."

Since separation new problems have arisen and the Rajah has always been ready to tackle them as and when they arose. In 1937, an attempt was made to tax agricultural income which had accrued to Indians in Burma in 1936. This was indefensible as, under the Indian Income-tax Act, agricultural income is exempt from liability for income-tax and in the 'previous year,' which was the accounting year Burma was a part of India. The Rajah was almost the first to perceive the point and he took the matter up in his capacity as the President of the Nattukkottai Nagarathar Association with the Central Board of Revenue and also submitted a memorial to His Excellency the Governor-General-in-Council. It is gratifying to be able to record that the Government of India directed the cancellation of the levy.

Land legislation became a vexed question in Burma and came to be taken in hand in 1938. The question was whether occupancy rights were to be given to Burmese peasants and what steps should be taken to protect them from the consequences of their improvident dealings with their land. The System of landholding in Burma is *ryotwari* and virtually modelled on the Madras system. Rajah Sir Annamalai Chettiar and his fellow-Nattukkottai Chettiars were in entire sympathy with the promotion of schemes calculated to improve the economic position of the Burmese peasant. But they pleaded that the methods adopted should be such as to achieve the object and at the same time be above reproach. He cited the example of the Malabar Tenancy Act and indicated that the remedy lay in the direction of providing for something like an option of renewal on a fair and equitable rent, to be settled by the Revenue Officer assisted by a kind of local jury, and

for equitable enhancement. The main thing to be guarded against was unconditional or improper ejectment. One point which Sir Annamalai has always stressed is that the Indians ought to be prepared to part with their lands in their possession at the earliest opportunity—a view in which the Indian community are in entire accord.

Many and various are the practical problems which Separation has brought to the fore and these require to be studied with care and dispassion. Rajah Sir Annamalai keeps an alert and watchful eye on them and has been ever ready and willing to take steps for their preservation.

The need for vigilence and vigorous action has never been greater than at the present moment. We have all heard of the Indo-Burma Immigration Agreement which was recently concluded between the Government of India and the Government of Burma. The whole matter is, in a manner of speaking, *subjudice,* but there can be no harm in saying that the whole country is cursing it by bell, book and candle. The strongest criticism to which there has, so far, been no answer is that the agreement runs counter to the assurance given in and outside Parliament that the checks on Indian Immigration would be limited to the case of unskilled labour.

A public meeting was held in Madras on the 28th of July to condemn the agreement. Sir Mahomed Usman presided and expressed his disapproval in no uncertain terms. Kumararajah Sir Muthiah Chettiar, Rajah Sir Annamalai's son, who has already made a name for himself by his philanthropy and public spirit, subjected the agreement to a scathing analysis. A strong and influential Committee has been appointed to take steps to obtain a rectification of the agreement. Rajah Sir Annamalai, naturally, is on this

Committee where his intimate first-hand knowledge of affairs is found to be of great practical help. Along with other members of the deputation, he waited on His Excellency the Viceroy and presented the case for India forcefully and yet fairly.

A Delegation from Burma was in Simla recently and Bombay and Bengal have taken up the matter vigorously. It is hoped that the joint labours of the various bodies which have taken up the matter will result in the substitution of an arrangement which will be in consonance with justice, equity and good conscience. Sir Annamalai's own feeling is that "someone has blundered". The Burmese people acting in consultation with Indians would have been able to produce an arrangement fairly and reasonably reconciling their different claims. The Burmese, he is convinced, have nothing but the liveliest affection for the Indians, based upon an intercourse which goes back through the ages and will not readily consent to cut the painter regardless. They are not at all likely to contemplate with equanimity the cessation of the free flow of thought and commerce which has characterised the relations between the two countries. And, as for the Indians themselves, they can never forget what Burma and the Burmese have meant to them, and whatever happens, mingling with the wind in the palm-trees and the tinkle of the temple-bells, the voice of the kindly Burmese people will be wafted over the waters of the Bengal Bay.

"Come you back to Mandalay,
Where the flyin'—fishes play,
An' the dawn comes up like thunder outer China
'crost the Bay!"

THE LIBRARY MOVEMENT IN INDIA—SOME ASPECTS

By

K. Nagaraja Rao M.A., B.L.

The Library Movement means the education of the masses with the aid of Libraries and the scope of the subject is confined to popular public libraries and other subjects like the Commercial, Special, National, University, Prison and Hospital Libraries are excluded. The oft-quoted dictum of Carlyle "The true University of these days is a collection of books" is only a half truth. "A collection of books is neither more nor less than—a collection of books, no more a library than a heap of bricks is a building. The books, *qua* books are little or nothing—they must be made productive by the work of the Librarian, books selected, classified and catalogued and intelligently displayed. That is a library" (Stanley Jast:—*Libraries and Living,* page 4).

It was in the year 1910 the modern Library Movement began in our country when that enlightened ruler and sagacious statesman, the late Sayaji Rao Gaekwad brought the American Librarian, Borden to introduce and plan modern libraries in his state. To him belongs the credit of having inaugurated the Library Movement in our country. Libraries were long ago recognized as important auxiliaries to any system of national education in the European countries and the State financed and maintained libraries which became effective instruments of adult education and centres of learning. On account of the cultural value and immense influence on the people the library

movement in the West converted a great majority of nationalities into literate citizens who were fully able to appreciate the significance of political and social rights they were capable of enjoying under democratic governments. A brief review of the progress of Libraries in a few European countries may help us to understand the problem better.

Belgium is the oldest country to have developed the public library in the 14th and 15th centuries. So early as 1772 Maria Theresa opened the Library of the Dukes of Burgundy and in 1792 the National Convention decreed "There shall be close to every school a public library and a small museum of national history." The Teaching League took an active part in the 19th century, in 1920 every Commune was obliged to start a library if 1/5 of the electoral body demanded it. In 1929 for a population of 8 millions there were over 3·8 million books and 2,188 public libraries.

Equally interesting is the progress of Bulgarian Libraries which were founded in 1856 and paved the way for future democracy. "The Public Libraries were miniature departments of Education, who appointed teachers, provided poor students with text books and clothing, founded the Bulgarian Academy of Sciences at Braila.....Bulgarian national drama and theatre were fostered within the walls of the libraries"—Bostwick—"Popular Libraries of the World" pages 36 and 37. Portions of state lands were set apart out of revenues, of which the libraries were maintained.

In 1920 68 per cent of the population of the Soviet Union were illiterate and the work of the Commissariat of Education was the education of adult population and "creation of centres for the liquidation of illiteracy; political, cultural clubs and reading rooms (Lenin Corners); workers and peasants' houses; permanent and itinerant libraries;.....

quick learners help the slower; semi-illiterates the illiterates." Good (W.T.) "School Teachers and scholars in Soviet Russia" pages 61-63. Thus over ten million people were taught to read and write and the love of books was such that even in lobbies of Cinemas there is a Reading Room to keep the visitors occupied in the intervals of performances, and the number of literates has come up to 90 per cent in recent times because the Soviet Libraries were an active social and educational force.

In England the Public Library Act was passed in 1850 and from that time onward the state has undertaken the maintenance and control of libraries. By 1927 with the benefactions of Andrew Carnegie the whole country was covered with a network of county libraries, the next stage being the establishment of Regional System of Co-operation and National Central Library. Sir Frederick George Kenyon, Director, British Museum, in his Message to Indian Library Association states "You in India can profit by our experience. It may take generations to form a library system to cover this vast country. The lesson of Librarians is mutual help and common service to entire nation and mankind."

When compared to this state of affairs elsewhere the Library movement may be said to be still in its infancy in our country. Judged by the literacy test in the last decade which is only 8 per cent for the whole of India (though a few states fare better) the gulf separating the educated and the uneducated is so enormously wide and no society or nation can be said to be civilized or enlightened under such conditions.

The Indian peasant is steeped in ignorance, superstition and bigotry in addition to his proverbial poverty. A com-

pulsory (not optional as it is now) system of primary education can surely eradicate the evil but without the aid of libraries, even this will be useless. The Government Reports of Education Departments have often deplored the lapses into illiteracy in the stages of primary education. The dictum of Loe Strachey (Editor of the Spectator)—"To educate people and not to provide them with tools to work with (books) is obviously an absurdity, if not a crime" still holds good. The only solution and immediate need of the hour is the establishment of village libraries whereby the wastage of money on primary education could be avoided and full benefits be reaped by the villager. The economic, cultural and political advancement of our country is closely connected with the education of the masses and libraries play the most important part in this nation-building activity. It is for the State to maintain and build up as many libraries as possible or to initiate legislation to enable local authorities to raise funds by taxation.

Let us examine if this movement is entirely foreign or if there are traces of libraries in our country in ancient days. Long ago our venerable sage and lawgiver Manu declared that to carry knowledge to the doors of the poor was the greatest act of charity a nation could be capable of doing and knowledge was imparted in very ancient times by word of mouth before the days of printing.

Literature and learning were the sole monopoly of the priestly classes who carried the whole of the Vedas in their memories and were thus Ambulatory Librarians. Even to this day we find traces of them in the Dwivedi and Trivedis of Gujarat. The secular literature was spread by the bards who were entertained at royal courts and sang the exploits of warriors. It was from the amalgamation of these epics we get the Mahabharata.

From the accounts of the Chinese pilgrims Fa-hien, Hiuen Tsiang and I-tsing of the 5th and 7th centuries we get some description of libraries in the Universities of Nalanda, Taxila and Pataliputra. The Nalanda University had a library in a nine storied building with 300 apartments.

In the Inscriptions of Nagai published in 1928 (Hyderabad Archaeological Series No. 8 pages 7 and 40) under the Chalukyan king of the 11th century we find "Equipment of a Library (Sarasvati bhandara) with Librarians who were called Sarasvati bhandarikas." There were six of them who with six other teachers were teaching a body of 252 students. King Bhoja is said to have had a big library.

Under the Mohammadan rule we find emperors taking interest in Hindu books and Kalilah Damnah was translated into Persian as Anwar-i Suheili. Jalaluddin, founder of the Khilji dynasty, appointed the reputed poet and scholar Amir Khusru as his Imperial Librarian and raised him to the status of a peer. In the Bahmini dynasty there was a big library at Ahmednagar. Mohammad Gawan who lived in the 15th century was the Andrew Carnegie of those days. He was a minister and poet who built a number of libraries. At Bijapur there was a library under the Adil Shahi kings.

Fergusson an English architect who visited the place in the 19th century concluded from the ruins that it must have been a fine library.

Among the Moghul kings Great Akbar was an enthusiastic bibliophile, who acquired the library of his minister Faizi and also the Library of the Gujarati king whom he conquered. It was in his reign we have the practice of illuminating books with pictures and much attention was paid to sumptuous bindings. The recent work of historic importance throwing light on miniature painting and book

decorations of the ancient Persians is that publication of the Oxford University Press under the editorship of Pope (Survey of Persian Art, Volume III). Humayun also was a lover of books. There seems to have been some system of classification also. Books were divided into three groups (1) Poetry, Medicine, Astrology and Music, (2) Philology, Philosophy, Sufism, Astronomy and Geometry, (3) Commentaries, traditions, theology and Law. It is too much to expect that the equipment, methods and ideals of modern Library service were prevalent in our country long ago.

Coming to recent times in the pioneer State of Baroda there are over 1,100 Village Libraries for a total of 3000 villages in the State and the system of State grant is as follows. In District towns the Government gives a grant of Rs. 700 provided the people raise Rs. 700 and local boards contribute an equal sum of Rs. 700. In the case of less important towns the amount is Rs. 300 and for villages 100 with equal contributions from the people and local boards. Similar rules apply for buildings also (Rs. 1000). On marriage occasions a small fee is collected for libraries. The travelling libraries are maintained solely by Government. With its network of village and town libraries, Baroda is the most advanced state in our country and serves over 82 per cent of the state population.

Another American A. D. Dickson reorganized the Libraries of the Punjab in 1915 and started training classes. In 1929 there was a Librarians' Club in Lahore which ultimately developed into the Punjab Library Association and *Modern Librarian* is the leading journal in the field now. In 1932 the Indian Library Association was formed which has held four conferences. The compilation of a Union Catalogue of Scientific Periodicals, a Scheme for inter-loan

of books, expansion of Dewey System to suit Indian subjects are some subjects on which it is at work. It has also taken up the establishment of provincial copyright libraries in the provinces.

Much useful work has also been done by the Library Associations of the Provinces of Madras, Bombay, Bengal Bihar and United Provinces. The Andhra Desa Library Association has been organizing libraries amongst the Andhras north of Madras. The All Kerala Library Association is doing much in the States of Travancore and Cochin.

The Governments of the Punjab, Bombay, Bihar, United Provinces and Madras are doing some efforts for establishing libraries in rural parts; but still much remains to be done and there is enough scope for private philanthropy to undertake this work of national reconstruction.

THE CARTESIAN 'COGITO'

"A Critical Evalution"

By

P. S. Naidu, M.A.,

Mind-matter dualism, it has been argued, is the hidden rock on which many systems of European thought have been wrecked. It has raised so many insoluble problems that one looks aghast at the dead wall to which one is led up if its implications are uncritically accepted. Courageous attempts have been made to break through this wall by denying the one or the other element in the dualistic partnership, or by reducing one to the status of a mere function or even an appearance of the other. But these attempts have been sorry failures. What is ejected out of the front creeps in by the back door. From Plato down to Bergson dualism has persisted in some form or other. Mind and Matter; thought and extension; substance and attribute; reality and appearance; phenomenon and noumenon;—these are a few of the many forms which the dualism has assumed. Of these mind-matter dualism is the most refractory type. We do not propose to tackle this problem in this very short paper, but shall attempt to deal with something which is much simpler, but at the same time very important for a general understanding of the problem in its proper perspective. We shall deal with the metaphysical origins of this problem in Cartesian philosophy.

Dualism of mind and matter has been a most unwelcome legacy to the long line of European thinkers. It

haunted the minds of philosophers and psychologists, and produced bizarre hallucinations and strange delusions. Its remote origins are, no doubt, lost in the dim past of ancient Greek speculations, but its immediate ancestry may be readily traced to the 'father of modern philosophy'. Renes Descartes it was who gave it philosophic standing, and since his time it has been a thorn in the side of the philosopher.

There are critical thinkers who believe that it is not the method of doubt, not the '*cogito ergo sum*', but the dualism of mind and matter that is the foundation for Cartesian philosophy. It is a datum, and not a deduction, say they. The steps in the proof, though styled deductive, by which Descartes passes from the self to the external world on the one hand, and to God on the other, are so many immediate intuitive apprehensions, and not syllogistic deductions. Each step in the demonstration, Descartes himself holds, shares the compelling character of the '*cogito*'. We are prepared to admit this, but we are forced to agree with the critic who says that unless a dualism is postulated as a pre-condition of the demonstration, the conclusion cannot be obtained. Descartes contends that the '*cogito*' is an axiom in the strictest mathematical sense. Even so, all that the Cartesian deducation can establish is that there is a material world and that our knowledge of it is not deceptive. How that knowledge is possible at all is not made clear.

The whole difficulty arises out of a subtle unanalysed fallacy in the '*cogito*' itself. When Descartes argued, "I think ; therefore, I am, " he created an unbridgable gulf between the subject who thinks and the object of his thought. Thereafter a reconciliation between subject and object could be attempted only through some such highly mechanical and artificial device as the '*Deus ex machina*' of Occasionalism.

The situation became so distressing that Spinoza had to adopt very desperate measures to rescue the foundations of metaphysics. As an alternative to occasionalism Spinoza chose the device of raising the methodological principle of universal Cartesian doubt to the status of a meta-physical principle. He stated it in the form so well known to us, 'All determination is negation.' But in doing so he emptied his central metaphysical concept of all content. It is true that dualism of the Cartesian type is eliminated here, but the conception of the absolute which Spinoza arrived at by thinking away all its determinations is so significantly empty of any content that a learned philosopher remarked that it is 'the *empty idea of being,* which idea is indistinguishable from the *idea of empty being.*' If, therefore, we exclude from the absolute completely the positive element which the relations of the finite supply, we must find ourselves confronted by an unknowable absolute—an absolute which because it leaves the finite unexplained is philosophically useless, and which because it excludes the finite from itself is faced by it as an other, and so ceases to be absolute. This is the final conclusion if we accept the rigorous exclusion of determination championed by Spinoza and others in the same line of philosophic thought.

But, even so has Spinoza succeeded in maintaining consistently the position reached by systematic deduction from his metaphysical principle? Alongside his empty absolute he postualtes 'God' with innumerable auspicious qualities. The dualism which Spinoza sought to overcome by reducing thought and extension to the subordinate status of attributes of the absolute now reappears in another form. And this persistent dualism may in the last resort be traced to the Cartesian *'Cogito'.*

How are we to break through this dualism? Leibnitz, the third in the line of European rationalistic succession, attempted to resolve the difficulty by taking up relation into substance itself, and by attempting to reconcile the idea of substance as a continum with that of substance as composed of discrete elements. We have seen already that Descartes created a gulf between subject and object, and then struggled to bridge it by interactionism. The cartesian system is predominantly logical, and so efficient causation has no place in it. Yet efficient causation is introduced by Descartes and made to function in an illogical manner. In Spinoza efficient causation has no place at all. Has not Spinoza definitely thrown out interactionism, and chosen logical ground and consequence instead of cause and effect as his guiding principles? But this discarded element suddenly makes its appearance in the Spinozistic doctrine of *modes*. Leibnitz shrewdly noticing these defects in his predecessor's systems, proposed to take up efficient causation into his principle of sufficient reason. But in the Monadology of Leibnitz the principle of contradiction plays an important part. And Leibnitz is unable to bring this principle into harmony with efficient causation. And finally we are landed in the grand Leibnitzian doctrine of 'Pre-established Harmony'. Moreover the Leibnitzian denial of the reality of space is in response to the demand made by the very definition of the Monad itself. The philosophical quagmire into which our thinker lands himself may be traced to his incapacity to resolve the two principles of contradiction and efficient reason in a higher synthesis. If he had treated these as merely two aspects of self-consciousness he would have had no difficulty at all in his metaphysics.

And that takes us back to the beginning of our story. The blame for all the ills that European rationalism is heir

to may be laid at the door of Descartes. The Cartesian *Cogito,* and the assumption that the rationality of the universe may be deduced from this principle are the sources of all these difficulties. It was open to Descartes to have made the right start by taking the rationality of the universe or the veracity of God as the indispensable first principle or the unquestioned datum. Then the *scio,* and not the *cogito* would have been the ruling doctrine in Cartesianism. And in the *scio* Descartes would have found such a vital union betwen subject and object as would have made the dualistic position absolutely impossible. The cogito necessarily resolves into a subject who perceives his own ideas which may or may not be true representations of the reality outside, whereas in the *scio* we have a subject who knows objects. Representationism could have been completely avoided by making the fact of knowledge instead of the fact of thinking the central point in the datum.

The cogito with interactionism as its prop challenges parallelism and brings this into prominence, and finally evolves into pre-established harmony. Throughout the course of this evolution the principle of efficient causation championed by science is making its appearance at critical points in a most inconvenient manner. All these unreconciled and irreconcilable logical and psychological principles may be resolved in a higher synthesis if we make 'I know' instead of 'I think' the starting point for a rationalistic philosophy.

ORIGIN OF BURMESE COMPETITION IN MADRAS RICE MARKET

By

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For a long time the city of Madras and the coastal districts to the north do not appear to have been self-sufficient in the matter of food supply. An English writer of the 18th century refers to its dependence on foreign supplies of food grains and the consequent vulnerability to an economic blockade:

> "Madras, with most other places on the Coast of Corromondel (which is in general barren and does not produce grain enough for the subsistence of its inhabitants) is obliged to be yearly supplied from the more fertile coasts of Orissa and Bengal, with vast quantities of rice, which is the chief food of the most of the people in the East Indies; so that an Enemy that is superior at sea, may easily distress them very much, by taking the vessels laden with rice coming from the Northward."[1]

Among the records of the East India Company we find statistics of the import of "rice, wheat and all other grain and pulse" from 1796-97 to 1828-29. These statistics prepared by the elder Mill, in his capacity as the Examiner of

1. A Narrative of the transactions of British Squadrons in the East Indies during the late war: By an Officer who served in those Squadrons (1751), p. 30.

India Correspondence, does not give the import figures for rice separately, but it is certain that the bulk of it consisted of rice. The following figures give the periodical averages of import in quantity and value of grains from "the several ports of Bengal to the several ports and places on the Coromandel coast" from 1796-97 to 1828-29.[2]

Years	Period Years	Average No. of Bags	Average No. of Maunds	Average Value
				Rs.
1796-7 to 1800-1	5	3,56,189	7,12,378	6,93,047
1801-2 to 1805-6	5	5,55,495	11,10,990	11,12,813
1806-7 to 1810-11	5	6,24,916	12,49,812	13,29,812
1811-12 to 1815-16	5	3,55,124	7,10,247	7,12,208
1816-17 to 1820-21	5	97,732	1,95,464	1,95,464
1821-22 to 1825-26	5	2,87,794	5,94,364	8,63,735
1826-27 to 1828-29	3	39,364	78,306	1,24,523

A closer study of the statistics shows that these imports came to meet a real want since they had been the heaviest in years when the Presidency or parts of it were experiencing a drought or famine, as in 1806-7 and 1807-8, in 1812-13 and 1813-14 and in 1823-24 to 1825-26. The imports were confined to the city of Madras (and its vicinities including Chingleput and North Arcot Districts) and to the northern districts such as Godavary, Kistna, Vizagapatam and Ganjam. In the south, Tanjore was acting as a great granary and was even exporting to Ceylon. On the West Coast, Canara

2. Compiled from the Report of the Select Committee of the House of Commons, 1832, Appendix No. 109.

was exporting rice to Arabia and Bombay.[3] The Ceded Districts received their supplies mainly from Mysore. The markets of Tanjore and Canara would have met the internal demands had there been an adequate development of inland communications. However, up to about 1825 rice imports from Bengal were regular. " A large fleet of *dhonies* regularly plied between the Coromandel Coast and Bengal conveying salt to Calcutta and returning with cargo of grain. Their chief resort was the port of Coringa from which place grain could be distributed not only throughout the Northern Circars but also through Hyderabad.[4]

In the twenties, a new source of supply for rice sprang up from Burma, which ultimately displaced Bengal as an exporter. It subsequently assumed such proportions during the economic depression that prevailed in the Madras Presidency during the years 1825-54[5] that an analogy as to its effects can be found only in the Burmese imports of rice in the recent depression. History repeats itself.

The development of rice trade in Burma reads like a romance. In 1826 the provinces of Arakan and Tenasserim were annexed by the British. At that time they were so thinly populated and undeveloped that it was seriously con-

3. Evidence of Mr. Hodgson to the Select Committee of the House of Commons, dated May 1830.

4. Henry St. G. Tucker: Memorials of India Government, p. 461.

The important part played by the port of Coringa (near Cocanada) in the commercial intercourse with Burma is seen from the fact that even to-day Telugu labourers from whichever part they come are called Corangees by the Burmese.

5. Thomas and Natarajan: Economic Depression in the Madras Presidency (1825-54), (*Economic History Review,* Vol. VII No. 1.)

templated whether they should not be restored to the Burman king. But in the subsequent thirty years the two provinces witnessed unparalleled economic development under the aegis of British rule.[6] Vast tracts of virgin soil were brought under the plough and sown with paddy. The total increase in the cultivated area in Arakan alone between 1826 and 1855 was 250 per cent.

STATISTICS SHOWING THE GROWTH OF PADDY CULTIVATION AND LAND REVENUE IN ARAKAN (1826-55)

Year	Area of assessed cultivation (Acres)	Land Revenue Rs.
1826	66,227	2,32,250
1835	133,952	5,28,320
1845	233,769	6,84,556
1855	353,885	12,77,290

A similar development took place in Tenasserim also, where the land revenue from cultivated area rose from Rs. 26,760 in 1825-26 to Rs. 8,33,000 in 1855-56. In 1843 the acreage under cultivation was 1,00,657. In 1855-56 it rose to 1,81,681. Meanwhile population also grew but not at a pace to substantiate the truth of the Malthusian law. While the density per square mile increased from 5·5 and 2·5 in 1826 to 20 and 7 in 1855 in Arakan and Tenasserim respectively, the area under cultivation increased at a faster pace in the newly developing country.

6. Col. A. Fytche, Chief Commissioner, British Burma and Agent to the Governor-General: Memorandum on the comparative progress of the Provinces now forming British Burma under British and Native Rule, 23—8—1867.

An increase in the two factors of production, land and labour, under British political organisation resulted in intense exploitation of resources. Till then these provinces had few ports of importance and the number of vessels which called at those ports were few and far between; now they saw the rise of Akyab in Arakan and Moulmein in Tenasserim. The former reached a population of 20,000 during the period and the latter from a fishing village became a port of 60,000 inhabitants. In 1855 the value of trade of Arakan amounted to Rs. 187,69,980 and that of Tenasserim to Rs. 83,63,050. The increased production of rice found an outlet in the markets of Madras and northwards.

A number of factors helped to give a fillip to the Burmese export trade in grain. Firstly, the landholders in British Burma had numerous advantages over those in Madras. The swamps of Arakan required but little manual labour to ensure abundant crops. The land tax was no more than a fourth of what it was in most parts of the Presidency.[7] Waste lands were granted on very favourable terms. Lands were divided into 5 classes according to fertility and were given rent-free for periods varying from 4 to 34 years. After that assessments starting with a minimum of 6d. per acre were levied and they increased at a progressive rate within a period ranging from 8 to 64 years as the case might be, until the maximum of 1s. 6d. per acre was reached. Even at that stage one-fourth of the holdings was permanently held free of assessment.[8]

Secondly, the prices that ruled in the markets of the Madras Presidency were higher than those obtainable in the

7. Madras Public Works Commission Report (1852), p. 129.
8. Nassau Lees: Land and Labour of India (1861).

home market; and the higher the price in the Indian market due to scarcity or famine, the greater the incentive to export from Arakan. Thus, for instance, in 1846 rice was selling at Arakan at 1 rupee per maund while in Madras it fetched 1 pagoda per maund; in other words it was 2½ times as great.[9]

Thirdly, the freight charges from Arakan to Madras were not considerable. Paddy freight took the position of a ballast to vessels which returned to Madras to take salt to Calcutta. Freight facility was even a greater advantage in those days when inland communications were undeveloped.

Fourthly, grain from Arakan was a commodity on the free list, except in the port of Madras, where it was subject to a duty of 5 per cent. The home grown produce, on the other hand, was subject to a duty of 3 per cent *ad valorem* on all inter-portal shipments as well as on internal transit of grain from one place to another.[10] This was an important factor in keeping supplies from Tanjore and the southern districts off the markets northward of Madras. The "protection of distance" that domestic production would otherwise have enjoyed was thus denied to them.

Finally, the frequent famines to which the country was subject in those times disposed the Government to encourage this import trade, inspite of the fact that they were fast wedded to *laissez faire*. In 1824 when famine threatened the Presidency, Sir Thomas Munro, the then Governor,

9. *Friend of India*, 8—1—1846.

10. CIV Regulation II of 1812; Sections 4 and 17, clauses 8 and 13.

threw the official *laissez faire* policy to the winds and said that State interference was permissible when "the lives of a great population are at stake."[11] He therefore recommended a reduction in the price of salt taken to Bengal on condition that the controllers of the carrying trade agreed to return with a cargo of rice.[12] This was in effect a bounty to the Arakan trade. Next year, finding this inadequate, he granted a direct bounty of Rs. 30 per garce of rice imported, which according to his estimate involved the Government an expenditure of 3 to 4½ lakhs of rupees per annum.[13] This was a temporary measure, but it no doubt introduced the thin end of Burmese competition. When these preferences were repeated in 1832, as the coming famine of Nandana year (1833) cast its shadows before,[14] they opened the flood-gates of foreign competition.

The Arakan imports which thus came to succour stayed to compete with local production. Although the cheap import was not a cause of the depression, it was one of those factors that kept the prices low and held up economic recovery unduly. In 1843 the Collector of Rajahmundry drew the attention of the Board of Revenue[15] to this disturbing element and the Board, convinced that it was an important factor deserving their consideration,[16] addressed the Dis-

11. Minutes of Sir Thomas Munro, 23—1—1824. Also, *vide* B. Natarajan: Economic Doctrines of Sir Thomas Munro, Father Carty Commemoration Volume.

12. *Ibid.*

13. *Ibid.*

14. From the Government of Madras to the Board of Revenue, In Consultations, 17—12—1832.

15. Settlement Report of Rajahmundry District for Fasli, 1252-53.

16. Proceedings of the Board of Revenue, 3—4—1844.

trict Collectors of Ganjam, Vizagapatam, Masulipatam and the Collector of Sea Customs at Madras to make detailed enquiries into the subject. In 1844, Sir Henry Montgomery, who was appointed to enquire into the causes of economic depression in the Northen circars, wrote in his report: "The present price of paddy will not be exceeded so long as the unrestrained import of Arakan grain is permitted, for no sooner does the price of home produce begin to rise to a standard remunerating the landholders than the market is flushed with this foreign rice and home-grown grain is a drug. The evil to this is annually increasing and demands speedy correction by the imposition of suitable restrictions to this importation."[17] During the 10 years between 1833-34 and 1843-44, the total value of paddy and rice imported into Madras Presidency from Arakan was Rs. 1,08,14,248 of which Rs. 62,43,540 was the share of the six ports north of Madras, and Rs. 45,70,708 the share of Madras.[18]

The Arakan trade in rice just at this time received a fillip from another source. The Supreme Government at Calcutta passed the Act VI of 1844 with the object of abolishing the *sayer* or the transit duties that were hampering internal trade and of bringing the customs tariff at Madras in a line with the other ports of India.[19] But this measure far from removing the inter-portal duty within Madras Presidency had the effect of raising it so as to conform to the All-India customs tariff; and therefore still kept off grain from districts like Tanjore and Canara which could come mainly by sea, as inland communication was in a parlous condition. This inter-portal duty imposed by the new Act was not

17. Montgomery Report, (Mss) 28—5—1844.
18. Madras Government consultations, 16—2—1846.
19. Notification of the Government of India, 16—3—1844.

only inequitable, being a uniform rate on rice and paddy, it also amounted to 10 to 15 per cent *ad valorem* on rice and 20 to 30 per cent on paddy and acted as "a tax heavy enough for protection" to the foreign interests.[20] Further, although the said act authorised the levy of a higher duty on foreign goods or goods brought in foreign bottoms,[21] its provisions were inapplicable to imports from Arakan as Arakan was then under Bengal Government and therefore was a British province and "not strictly foreign."

The question of giving the home-grown grain some protection with a view to relieve the distress of the peasants thus received an added force. But the Government was against it.[22] They held that prices in the home market were not materially influenced by imports, "as foreign grain to any extent has been imported hitherto only when prices were high."[23] Further, they believed that the inferior quality of Arakan rice as an article of food would always act as a limitation on its consumption on a large scale The most weighty consideration, however, was that such a restriction by cutting off the supplies of an essential article of food in times of famine, would, they feared, aggravate its horrors. Although more than one Collector suggested that at such times the prohibitive duties might be relaxed,[24] the Government preferred to watch the working of the Act VI of

20. From the Collector of Ganjam to the Board of Revenue, 21—8—1845.

21. Sections 16 and 17.

22. Madras Government Consultations, 2—2—1846.

23. Madras Government Consultations, 16—2—1846.

24. From the Collector of Rajahmundry to the Board of Revenue, 11—12—1845. In Consultations 26—12—1845; from the Collector of Vizagapatam to the Board of Revenue, 29—11—1845, In Consultation, 8—12—1845.

1844 for one or two years more. In 1848, the continued downward trend of agricultural prices at home convinced them of the necessity to take some action inspite of all doctrinaire opposition to Protection. Hence the Act VII of 1848 was passed, which made the imports of grain from Arakan liable to a protective duty. But this did not have the intended effect, on account of evasions. Vessels taking salt to Chittagong after unloading at that port obtained port clearances in anticipation of goods to be shipped at some of the adjoining ports and then with great facility ran into any one of the ports of Arakan and took a complement of rice cargo. With the document for port clearance obtained at Chittagong they entered the Madras port free of duty.[25] Thus on account of irregularities at the Customs Office at Chittagong, Arakan rice evaded the duty imposed by the Act of 1848 and flooded the Madras market "greatly to the prejudice of the Madras grower."[26] The Madras Government addressed the Government of Bengal on the subject, requesting the latter to correct the irregularities. But the Act itself did not remain on the Statute book for long. In 1858-59, the preferences and discriminations based on the old colonial system were done away with and the whole tariff underwent complete revision. The necessities of the Mutiny again raised the tariff wall, but all these measures were of little avail when Burma was annexed to the Indian Empire. Although subsequent growth of population and development of communications and irrigation works improved the lot of the Madras ryot, the price for his produce

25. From the Board of Revenue to the Government of Madras, 20—4—1851.

26. From the Board of Revenue to the Government of Madras, 5—5—1851.

was determined by the prices prevailing in Burma.[27] The export duty on rice levied in later days undoubtedly had the effect of worsening the position of Madras in relation to Burma. The free import of Burmese rice in Madras had disastrous effects during the recent depression. But the phenomenon is a century old.

27. P. J. Thomas: Recent Trends in the Price of Rice in Madras (Paper to the Indian Rice Committee).

THE ROLE OF A UNIVERSITY

By

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A university differs from a high school, secondary school, elementary school, guild school, and other such institutions engaged in the same mission of education, in that it caters, or ought to cater, to the cream of a nation's intelligentsia, including therein of course, the leaders in every form of art, and not merely people who think. Naturally, five striking things will be found in it.

The first will be the nature of its *alumni*. These will be carefully selected in an ideal university, *only* those fit to profit by university education being taken, and *all* those fit to profit being somehow gathered together. In the university of Nalanda, for instance, there was a preliminary test of ability, corresponding to the responsions in Oxford, in which it has been left on record, by Yuan Chwang, that 70 or 80 per cent would fail. There will, of course, be no outcry regarding the 'slaughter of the innocents,' as, in a well-constituted society, all will agree that those innocent of knowledge should be refused admission, at the outset, instead of being admitted and slaughtered, after a good deal of waste of time, money and energy. Since the idea will be to collect the very best talents in the nation, even those who cannot afford to pay, but are eminently suitable for university education, will be sent up by local committees

to undergo the kind of education, whether in arts or in science or in fine arts or applied science, they are suited for. In an ancient Indian University, the problem was simple, as every student, rich or poor, had to *beg* for his food, as the daily routine. It is obvious that no modern country can afford to allow its geniuses and men of talents to run to waste. Of course, *everybody* will have a right to be admitted to a school and there should even be compulsory education up to the school final standard, for both boys and girls in a combined literary and vocational fashion. Universities alone will cater only to select and suitable persons.

The second distinguishing feature will lie in the asking and anwering of profound questions. Here, too, Yuan Chwang remarks that, in Nalanda, they engaged in discussions from morning till night, the old and the young mutually helping one another, and tutors unable to answer questions being obliged to hide themselves, for shame. Naturally, the conscript classes, common in some Indian Universities, will disappear, and Upanishadic classes, of free discussions between tutors and pupils, will take their place. It follows that a professor cannot have a herd of students, and that the maximum he would be allowed to attend to would be only 10 to 12, so that individual attention and personal discussion would be easy.

Thirdly, teachers and students will live together in the hostels, and have a kind of family relationship, as in ancient India, students attending on the teacher and he on them, mutual nursing in time of sickness being one of the incidents. Thus, they will grow to understand and love one another, and the relationship will cease to be one of routine, as is too often the case now. Perfect equality and a love of freedom and independence will be the hallmark of students and professors alike. Of course, several hygie-

nic, moral and religious precepts would also be thus taught, besides good manners, and the ancient Indian ideal of getting three-fourths of one's education (viz., one-fourth from the teacher, one-fourth from the fellow students, and one-fourth from oneself, the remaining one-fourth having already been supposed to have been given by the parents at home) will be realised.

Fourthly, there will be a periodical and careful weeding out of the unfits and misfits among the students, admitted by error, and of the unfits and misfits among the professors, appointed by error. As Kautilya remarks, a student or teacher without the requisite equipment or discipline is no good. Discipline is of two kinds, artificial and natural, and the study of arts or sciences can bring maximum profit only to those who are possessed of such mental faculties as obedience, hearing, grasping, retentive memory, discrimination, inference, and deliberation. A pupil not possessing such faculties will not only not profit by university education, but will also diminish the profit derived by the rest, like one rotten tooth or fruit spoiling the healthy teeth or fruits. As Kautilya remarks again, natural discipline alone will count vitally, artificial discipline, that is, discipline by punishment, sufficing only to correct acquired errors, something like imported cases of plague being curable by superficial methods, like fumigation, exposure to sun, etc., endemic cases not being curable in those ways. Just as unfit students should be periodically weeded out, by notices to quit, which would be no disqualification whatever, by itself, for civic or other employment, professors and lecturers who are found, in practice, to be useless for teaching, should also be given notices to quit, from time to time, unless they are found fit for research work, in which case, they should be put on that work. Even the best of truths come

to nought, when taught by incompetent teachers, just as the best of seeds will come to nought if sown at the wrong season by a person ignorant of cultivation.

The fifth feature is that a university education aims not so much at making a man capable of earning a living, which very necessary job will be taken on by the high schools, but at producing first-rate scholars and men and women of culture devoid of prejudice of caste, class, colour, creed or country; people who welcome knowledge from whatever quarter it is got; who have no false values either regarding themselves or about things around them; and who are valuable members of society and servants of humanity, ready to place their knowledge, experience, reason, wealth and strength at the disposal of their fellow-beings, and to help the poor, the ignorant, the oppressed, the wicked, the degraded and the depressed, to get out of their miserable state, and thus leave the world a shade better than they found it. They would not swear either by matter or by spirit, and would be so harmoniously developed in body, mind and soul, that, while regarding this life as a field of action and sacrifice, they will not accept either the extreme view of one school that life in this world is a myth, and, so, we need not make any effort to improve it, or the extreme view of another school that death is the end of everything and that we should concentrate merely on eating, drinking and making merry or other selfish activity as long as we live.

If we survey the Universities of India to-day from this point of view, we may be disposed to cry out with Bernier: "Is it possible to establish in India model academies and colleges properly endowed? Where shall we seek for founders, or, should they be found, where are the scholars? Where are the benefices, employments, offices of trust and dignity

that require ability and science, and are calculated to excite the impulses and hopes of young students, which are likely to be given to the products of these academies and colleges?" In a nation like ours, overrun with a cry for communal representation in every benefice, employment, office of trust and dignity requiring ability and science, where the best, even though absolutely free from communal prejudice, caste superiority complex, racial arrogance etc, are forced to await their communal turn, and allowed to rust till then, it is obvious that the last difficulty mentioned by Bernier is a colossal, and almost insuperable, one. Alas, for knowledge, as Karna exclaims in *Karna Bhara* of Bhasa, mere lapse of time is enough to make it not only useless, but out of date and pernicious, and while the best man, classified communally in spite of himself, is waiting for his turn, he may not remain the best when his turn comes, and may, indeed, be among the worst by then.

At present, in many universities all over the world, more attention is paid to the material side, and less to the spiritual side. Most research is for destructive purposes, like the discovery of deadly weapons against present and future enemies, than for constructive purposes. And national or racial arrogance is tacitly encouraged, even books on history and science being vitiated by this virulent germ. Nor is the education imparted by the professors of our modern universities always of the broadest variety or imbued with a desire to expound Truth in its thousand facets. Indeed, sometimes, it reminds one of the education imparted by Aurangazeb's old tutor.

The emperor Aurangazeb had an old tutor, Mulla Shah. Hearing that his pupil had become the emperor, the old Mulla rushed to see him, expecting huge rewards and appointments. Aurangazeb refused to see him for 3 months.

Finally, he was so pestered by the Mulla that he saw him, but only to tell him the following home truths: —"Pray, what is your pleasure with me, Mullaji? Do you pretend that I ought to exalt you to the first honours of the State? Let us examine your title to any mark of distinction. I do not deny that you would possess such title if you had filled my young mind with suitable instruction. Show me a well-educated youth, and I will say that it is doubtful who has the stronger claim to his gratitude, his father or his teacher. But, what was the knowledge that I derived under your tuition? You taught me that the whole of Frankistan (Europe) was no more than some inconsiderable island of which the most powerful monarch was formerly the King of Portugal, then he of Holland and, afterwards, the king of England. With regard to the other sovereigns of Frankistan, such as the king of France and him of Andalusia, you told me that they resembled our petty rajahs, and that the potentates of Hindustan eclipsed the glory of all other kings, that they alone were Humayuns, Akbars, Jehangirs, or Shah Jahans, the happy, the great, the conquerors of the world and the Kings of the world,* and that Persia, Uzbek, Kashgar, Tartary, Cathay, Pegu, Siam and China trembled at the names of the kings of the Indies Admirable Geographer! Deeply-read historian! Was it not incumbent upon my preceptor to make me acquainted with the distinguishing features of every nation on earth, its resources and strength, its mode of warfare, its manners, religion, form of government and wherein its interests principally consist, and, by a regular course of historical reading, to render me familiar with the origin of states, their progress and decline, the events, incidents or wars owing to which such great changes and

*These are the meanings of the names of the sovereigns.

mighty revolutions have been effected? Far from having imparted to me a profound and comprehensive knowledge of the history of mankind, scarcely did I learn from you the names of my ancestors, the renowned founders of this empire. You kept me in total ignorance of their lives, of the events which preceded and the extraordinary talents that enabled them to achieve their extensive acquisitions. A familiarity with the language of the surrounding nations is necessary in a king, but you insisted on teaching me to read and write Arabic, doubtless conceiving that you placed me in an everlasting obligation for sacrificing so large a portion of the time to the study of a language wherein no one can hope to become proficient without 10 or 12 years of close application. Forgetting how many important subjects ought to be embraced in the education of the prince, you acted as if it were chiefly necessary that he should possess a great skill in grammar and such knowledge as belongs to a Doctor of Law, and thus did you waste precious hours of my youth in the dry, unprofitable, and never-ending task of learning mere words. Were you not aware that it is during the period of studenthood that the memory is so retentive that the mind receives a thousand wise precepts, and is easily furnished with such valuable instruction as will elevate it with lofty conceptions and render the individual capable of glorious deeds? Can we read our prayers or acquire knowledge of the law and the science *only through the medium of Arabic*? May not our devotions be as acceptable, and solid information communicated as easily in *our mother tongue*? You gave my father, Shah Jahan, to understand that you instructed me in philosophy, and indeed, I have perfect remembrance of your having, during several years, *harassed my brain with idle and foolish propositions*, the solution of which yields no

satisfaction to the mind, propositions which seldom enter into the business of life; extravagant reveries conceived with great labour, and forgotten as soon as conceived; their only effect is to fatigue and ruin the intellect, and to render the man head strong, intolerant and insufferable. Oh, yes, you caused me to devote the most valuable years of my life to your favourite hypotheses and systems, and, when I left you, I could boast of no greater knowledge in the sciences than the use of many absurd, obsolete, and uncouth terms calculated to discourage, confuse, confound and appal a youth of the most virile understanding; terms invented to cover the vanity and ignorance of pretenders to philosophy; of men, who, like yourself, would impose the belief that they transcend others of their situation in wisdom, and that their dark and ambiguous jargon conceals many profound mysteries known only to themselves. If you had taught me that philosophy which adapts the mind to reason, and will not suffer it to rest satisfied with anything short of the most solid arguments; if you had inculcated lessons which elevate the soul and fortify it against the assaults of fortune, tending to produce that enviable equanimity which neither insolently elated by prosperity nor basely depressed by adversity; if you had made me acquainted with the nature of men; accustomed me always to refer to first principles, and given me a sublime and adequate conception of the universe and of the order and regular motion of its parts; if such, I say, had been the nature of the philosophy imbibed under your tuition, I should be more indebted to you than Alexander was to Aristotle, and should consider it my duty to bestow a very different reward on you than Aristotle received from that prince. Answer me, sycophant, ought you not to have instructed me on one point at least, so essential to be known by a king, viz., on the reciprocal duties between

a sovereign and his subjects? Ought you not also to have foreseen that I might, at some future period, be compelled to contend with my brothers, sword in hand, for the crown and for my very existence, such as, you must well know, has been the fate of the children of almost every King of Hindustan. Did you ever instruct me in the art of war, how to beseige a town, or draw up an army in battle array? Happy for me that I consulted wiser heads than thine on these subjects! Go. Withdraw to thy village. Henceforth, let no person know either who thou art or what has become of thee."

How to avoid such useless and pernicious teaching? First of all, incompetent teachers, like this Mullah, should never be appointed as professors, and, if appointed by error, should be weeded out, as unfits and misfits at the very earliest opportunity. Secondly, proper text-books, in the language of the pupils, carefully selected by well-known scholars of repute, should be prescribed in all subjects. Thirdly, regimentation in education should be avoided, and the aim of education should be clearly laid down as the development of human personality and culture, instead of providing for future "hands" in factories, "bayonets" in war, and what not. Fourthly, there must be periodic exchange of professors between universities in the same country and in different countries. And lastly, there must be an international board of world-famous scholars to periodically inspect, through some of its members, and report on the workings of all universities every five years, persistently bad or useless universities being liable to be closed down on such reports.

THE NĀGĀNANDA HERO IN MODERN TIMES

By

P. Pānchapagesasastri, Siromani, M.O.L.

Of the several famous plays in Saṁskṛt, King Śrī Haṛsa's *Nāgānanda* stands unique; for it presents a blend of the principles of the two great religions of India, namely, Hinduism and Buddhism and presents a hero, Jīmūtavāhana by name, whose dominant characteristic is a matter of dispute between two schools of Rasa. Ānandavardhana finds him a *Śānta* hero. Dhanika would have him a *Dayāvīra.*

Rules of Saṁskṛt dramaturgy require that Love or Heroism should be the dominant Rasa in a drama. In this play neither is prominent; nor are they clean forgotten. *Śṛṅgāra* is fully developed in the first three acts. Jīmūtavāhana is not desirous of conquest. He spurns material wealth and worldly pleasures. Noble deed of benevolence and selfless acts of charity अहिंसा and परोपकार are his ideals and these two virtues form the cardinal tenets of Buddhism as well as Hinduism.

Śṛṅgāra and *Vīra* not being the main Rasa, what then is the Rasa of the play one has to enquire. The Ānandavardhana school claims Śānta to be the chief Rasa but Dhanika claims Jīmūtavāhana a *Dayāvīra.*

In this paper an attempt is made to show how the two views may be easily reconciled.

A resume of the story at this point will be helpful. Jīmūtavāhana, a Vidyādhara prince, banishes himself from

his kingdom and spends his life in the forest in the service of his aged parents. In a Gaurī temple there he meets Malayavatī, a Siddha princess. Love at first sight, separation and reunion with consent of parents occupy the next acts of the play. Mitrāvasu, the brother-in-law of the hero, butts in during the honey moon with the news of the invasion of Jīmūtavāhana's kingdom by Matańga, his foe. The loss is welcome to the hero. He dissuades Mitrāvasu from marching an army against his enemy.

One day, strolling on the beach, the hero sees a serpent, named Śaṅkhacuḍa, on his way to satisfy the appetite of Garuḍa. Moved with pity the hero offers himself; but the serpent would not permit the substitution. But fortune favours the hero. Śaṅkhacūḍa steps aside to worship Śiva preliminary to sacrificing himself to Garuḍa and Jīmūtavāhana steps in quickly, dons the red garments and is therefore taken up by Garuḍa for his victim. On his return Śaṅkhacūḍa finds Jīmūtavāhana gone and begins a search with the help of the blood streak on the road while on the way Jīmūtavāhana's family join him in his search. They trace him only to find him all but dead. Śaṅkhacūḍa tells Garuḍa the story of the substitution. Immediately Garuḍa repents his cruelty and promises to abstain from killing serpents thenceforward. The Goddess Gaurī hears the piteous moan of Malayavatī and helps Jīmūtavāhana back to life. Garuḍa for his part, succeeds in getting Indra to bring back to life the serpents he had eaten. With this general rebirth, the prince becomes the king of the Vidyādharas.

Now for the reconciliation of the two views. Ānandavardhana defines *Śānta* as the "bliss arising from the control of desires." By knowing the Truth or by Tattvajñāna (i.e.

the transitory nature of all life) the seeker after the Truth controls desires. He is moved by compassion for others. His frame of mind then is that of a *Śānta* and therefore he is prepared to sacrifice his transitory life for the good of others.

This *Śānta* is prominently present throughout the play. The play opens with a reference to Jīmūtavāhana's doings to keep his people contented and happy. He feels he has done all he should and proposes to go to the forest to render service to his parents. He crowns his deeds of charity with the giving away of the Kalpaka tree and renounces his kingship to do his duty by his parents in spite of advice to stay on. When his brother-in-law gives him the bad news that his foe was in occupation of his land he is most unconcerned. He has no foes other than his passions. The brother-in-law offers to go upon the foe but Jīmūtavāhana answers that he pities Mataṅga, for he has been conquered by his passion for wealth and adds he is more to be pitied than punished. The brother-in-law receives this advice in derision and is admonished by a reference to the Sun who, even while in the act of setting, is the object of praise by many because He expects no return for His services from the several objects He enlightens and His life-long endeavour is doing good to others.

The hero sacrifices his person to save a serpent. Here again he does so because he knows life is transient. A soldier dying in battle is no hero; for he sacrifices himself in hope either to get victory and become more famous or to get to a better Loka. Even Śāṅkhacūḍa offering his life to Garuḍa is no hero; for he does so in fear of the royal command. If he hesitates to permit Jīmūtavāhana to step into his place, it is because, as he himself says, he wants to

safeguard the honour of his family. Without a knowledge of the Truth none can be a hero. Jīmūtavāhana has nothing but contempt for Vāsuki with two thousand tongues, for, not even one of the tongues was useful to make him say that he would sacrifice himself first before agreeing to an arrangement for the death of his subjects. He ascribed this failure on the part of Vāsuki to love for his own filthy and perishable body. Verily did Śaṅkhacūḍa admire the conduct of the hero opposed as it was to that of great sages like Viśvāmitra.

Jīmūtavāhana offers to be the prey for Garuḍa in place of Śaṅkhacūḍa. When he is away for a minute he dons the red robes and offers himself to Garuḍa. Garuḍa gulps him little by little. Jīmūtavāhana enjoys as more and more bits of his flesh are taken by Garuḍa. No pain results; but great joy is felt by the hero. His countenance beams with gratitude to the devouring Garuḍa, the benefactor. Garuḍa marvels to see the beam in the eye of his victim and stops eating further. But Jīmūtavāhana eggs him on to eat the remaining flesh and drink the effusing blood. Then Śaṅkhacūḍa appears. This disturbs the hero for he is afraid that he might not succeed in sacrificing his entire body. His mother who felt that his beauty was being mutilated he answers there can be no beauty in what is called a 'body' as a 'body', according to him, consists of nothing but fat, bones, flesh and blood.

In each one of these points Jīmūtavāhana shows he has mastered the Truth and he is realising his Self. The hero is not content with his own knowing the Truth and acting thereon. But he would try to convert others who come in contact with him to the realisation of the Truth. On this basis he got Garuḍa out of the darkness of Ignor-

ance in which he was. The hero thus shows himself a true *Śānta* in having realised the Truth and having renounced first the desire for wealth, then kingship and later sacrificing his body. Here is *Śāntarasa* in its perfection.

Others argue that, though the hero renounced his kingdom and sacrificed his life he cannot be called a true *Śānta.* A true Śānta, according to them, would seek solitude for purposes of meditation with a view to final freedom from birth. But Jīmūtavāhana does not like the solitude of the forest and rejects it as it does not afford him an opportunity to serve and help his fellow creatures. He is mad for a life spent in duty to parents and social service. Again, a true *Śānta,* though he would like to do good to others, would never persist long in any course. But Jīmūtavāhana persists in doing good to others from first to last. He insists on saving *Śaṅkhacūḍa* even against his wish. He argues with him and seeks every means to do him service. He takes advantage of Śaṅkhacūḍa's temporary absence and steps into the slaughter-slab in his place. When *Śaṅkhacūḍa* comes back Jīmūtavāhana feels his noble purpose was about to be defeated. He prays for thousands of births in preference to final emancipation so that he may do social service.

Again a true *Śānta* cannot be a lover. But the hero falls in love with Malayavatī and his *Śṛṅgāra* with her is fully developed in both its aspects (*Vipralambha* and *Sambhoga*) in the first three acts of the play. Lastly if Jīmūtavāhana had been a true *Śānta* he should have ended his life and attained Mokṣa. He should not have been restored to life and reinstalled as king with Malayavatī as his queen.

Therefore Jīmūtavāhana is rather a *Dayāvīra* (i.e. a cosmopolitan philanthropist keen on doing good to others)

and not a true *Śānta. Vīrarasa* is of many kinds. In all types of *Vīrarasa* "enthusiasm" is a common feature. If heroes like Rāma in the *Mahāvīracarita* who are keen on conquest are called *Yuddhavīras,* Jīmūtavāhana who is persistent in doing good to others may be called a *Dayāvīra.*

The case is thus one of *Śānta* versus *Dayāvīra* in the *Nāgānanda.* But the two views may be easily reconciled. Seen from the view point of the Mahāyāna school of Buddhism this *Dayāvīra* is *Śānta* itself. King Śrī Harṣa, the author of the play, lived when Hinduism and Buddhism had learnt to accommodate each other in the same land and Harṣa himself in the latter part of his life is said to have had a leaning towards Buddhism. So in this play, the author, with a view to illustrating the main doctrines of Buddhism अहिंसा and परोपकार — selected a character reputed in legend for his benevolence and generosity as the hero of the play and portrayed him as Bodhisattva himself. So in this Buddhist play the hero's characteristic is *Śama* according to the Mahāyānist view.

According to Mahāyānists, emancipation is achieved by what they call प्रज्ञापारमिता or *Discriminative Knowledge* and this प्रज्ञापारमिता gets to be strong by what they call दयापारमिता and दानपारमिता (i.e. "acts of compassion and benevolence"). A true Mahāyānist having attained the प्रज्ञापारमिता would not desire Emancipation for himself. He would like to have it only after the whole universe gets it. According to the Mahāyānists, Buddha himself has not yet attained Emancipation as the universe has not yet got it. Moved by unbounded compassion to his fellow creatures, a Mahāyānist is keen on deeds of charity and benevolence to others for they are only an expansion of his Self.

Viewed in this light, Jīmūtavāhana may be called a true *Śanta* not only because he has attained the प्रज्ञापारमिता (i.e. he has realised the 'transcientness' or the 'voidness' of the universe) but also because of his great anxiety to find out opportunities for social service. His obstinate persistence to work for universal good and his longing for newer and newer births are more easily explained. A Mahāyānist is per force led by his own logic to court a long series of births in order to help the universe to Emancipation. Jīmūtavāhana's perpetual advice to Garuḍa who devoured him is based mainly on this Truth. He knew that Garuḍa's sacrifice of his life in the absence of प्रज्ञापारमिता or True Knowledge would not help him to Emancipation. As a true Mahāyānist he was anxious that Garuḍa should live well, reform himself, use his kingly influence on his subjects and help himself and them to attain True Knowledge.

The objection to the hero's wedded life may not be valid. The objection to wedded life is that its distractions may hinder *Tattvajñāna.* But there are shining instances like the great Janaka who realised Tattvajñāna even as a householder and a king with all the wealth of a great king. Jīmūtavāhana, endowed with a very strong feeling of renunciation from birth, enjoyed married felicity in perfect detachment. When Mitrāvasu's father told him that he had chosen Jīmūtavāhana as his son-in-law did not Mitrāvāsu say that he was glad because the bridegroom was every way noble; but sad because he was likely to abandon his wife immediately he got an opportunity to do a philanthropic deed? True, Jīmūtavāhana was very much attracted by Malayavatī; but even within ten days of the wedding he abandoned her as he had a noble chance of saving Saṅkhacūḍa by sacrificing his life. Did he not feel that his wedding with Malayavatī was useful to him and that it helped

him to two red garments in which he became immediately acceptable to Garuḍa? In this case *Śṛṅgāra* subserved *Śānta* and ennobled it. Again he felt that the joy caused by the touch of the slaughter-slab was superior to the joys of wedded life. Who can hold that in Jīmūtavāhana's case wedded life was an obstruction to Tattvajñāna? Though he was newly married, he rose above worldly temptations and became, in Garuḍa's words Bodhisattva himself. Perhaps this was the truth the poet sought to emphasise when he introduced the scene of Jīmūtavāhana's married life which he could have avoided with perfect ease.

The objection that if Jimūtavāhana were a true *Śānta* he ought to have ended his life and attained *Nirvāṇa* has already been answered. He was not a Hīnayānist who would care only for his own Emancipation. He was a Mahāyānist and so he prayed for many births to help others also to attain Tattvajñāna. So he was, at the end of the play, restored to life. As in this case so in many other works Indian writers do portray the tragic element in life but the last scene does not end in death; for according to them, death in one life is but the beginning of another in a series of lives the soul has to pass through before attaining Emancipation. Further, the poet shows here a truth that good actions always bring a reward greater than expected. Jīmūtavāhana sought to save one serpent by sacrificing his life; but he actually saved his own life and also generations of serpents of the past and of the future. Jīmūtavāhana, the *Dayāvīra,* is thus not different from Jīmūtavāhana, the *Śānta.*

Further, even without bringing in the Buddhist way of thinking, critics like Ānandavardhana establish that Jīmūtavāhana, in spite of his great enthusiasm, is only a *Śānta* and not a *Vīra.* They contend that the essence of *Śānta* is complete negation of 'egoism' while the *Vīra* is

essentially 'egoistic.' Jīmūtavāhana's enthusiasm is of a peculiar kind. It is free from "egoism" because all his actions are utterly selfless. His enthusiasm free from 'egoism' is not opposed to *Śānta* but it nourishes it. Jīmūtavāhana is thus a *Śānta* par excellence.

Lastly opinions that *Śānta* cannot be a Rasa in poetry and drama have no place as many works like the *Nāgānanda* have *Śānta* not only as one of the Rasas delineated in them but have it as the dominant Rasa. From the *Nāgānanda* and similar works critics have established that like *Śṛṅgāra* and *Vīra Śānta* also may be the main Rasa in poetry and drama.

Jīmūtavāhana's is a life consecrated to service for others. As if to remind us of old world heroes the illustrious Founder of this University, Rajah Sir Annamalai Chettiar, has striven hard and saved well in order to serve nobly. He has been an example of service and sacrifice. If Jīmūtavāhana gave away the Kalpaka tree, the Rajah has planted a tree of Knowledge and given South India a temple of Learning so that all irrespective of caste or creed might enjoy the fruits thereof. In the service of his country and his countrymen the Rajah has established choultries to feed the poor, provided filtered water to ward off disease, built hospitals to restore those stricken with disease to health and happiness and renovated and constructed temples to lift them to God. Above all he has helped generations of people to all kinds of education so that the thirsty might drink deep of the fountain of Learning, cast off mental as well as physical dirt and reach heaven by scaling the heights of Knowledge. May he live long to promote the ancient culture of this land and continue to support in an ever increasing measure all Samskṛt studies in this part of the country!

THE ANCIENT INDIAN THEATRE

By

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Every genuine drama is intended to be staged and the true dramatist conveys his appeal through a double medium, the ear and the eye. He is a complete master so far as the former is concerned; but as regards the latter, the nature and equipment of the theatre and its varied accessories no less than the artistic skill of the artistes constitute very serious limitations on the work of the dramatist. Hence every true artist will certainly take stock of the varied visual aids he can command, when he conceives and perfects his work of art. The appreciation of a drama cannot have any pretence to completeness, unless and until one knows also the nature of the stage and its equipment where the drama is to be presented. This aspect of the study of the drama it seems, has been completely forgotten and with it we have also forgotten our theatrical traditions, even if we had any. The question therefore deserves to be asked: had we any such tradition? The answer to this question is definitely in the affirmative. On the theoritical side we have in the first place the valuable work of Bharata, called the Nāṭya-śāstra and in the second place the numerous stage directions, found scattered about in the extant Samskrit plays, though unfortunately no serious attention seems to have been paid to them in interpreting dramas. On the practical side we have the peculiar mode of acting Samskrit dramas which is current in Kerala even to-day. These necessarily

would show that we perfected a stage technique long long ago, though we did not care to keep up the stage tradition living, except in Kerala. The subject, then, is very important and it has a practical bearing in that it helps us to appreciate our national heritage of dramatic literature better; but it is at the same time not an easy one to deal with. A full and detailed exposition of the subject requires an intensive study of the following: (i) The *Nāṭya Śāstra* of Bharata; (ii) the chapters dealing with *Nāṭyagrhas,* in the various *Śilpa-śāstras;* (iii) a study of the existing *Nāṭyagṛhas,* particularly those in Kerala figuring as an adjunct to our temples (iv) the reconstruction of the stage and the theatre from the stage directions available in the older dramas; and (v) the study of the acting, as it now obtains in Kerala. It is proposed to make an attempt in the following pages to set forth the information that we get from the *Nāṭya Śāstra,* so far as our theatres are concerned.

According to Bharata, the theatre may be rectangular or square or triangular in shape. We could easily conceive of the former two types of theatres, but not the third type. The triangular theatre must have been very rare and that is also the impression that we get from Bharata. Following the usual practice of Samskrit writers, these three types are again classified under three heads of *Uttama, Madhyama* and *Adhama,* as well as *Jyeṣṭha, Kaniṣṭha* and *Avara.* The size of the theatre may vary widely: there are two units of measurement laid down for *Nāṭyagṛha,* namely *Hasta* and *Daṇḍa,* and of these *Hasta* itself varies from 24 to 32 *Angulas.* This will give us some idea of the practical differences in the size of a theatre. It is laid down that a theatre may have one of the following measurements: 108 or 64 or 32 Hastas, the breadth being given only for the rectangular theatre which

is half the length. For the square theatre there is no need to give the breadth and from the description of the triangular theatre it appears to be an equilateral triangle. From the measurements given it would be seen that the rectangular theatre may be of three dimensions: 108 by 54 or 64 by 32 or 32 by 16 *Hastas* or *Daṇḍas;* the square theatre, 108 or 64 or 32 *Daṇḍas* or *Hastas* per side. The biggest theatre will thus be the rectangular theatre of 108 *Daṇḍas,* and the smallest one will be the triangular theatre of 32 Hastas. Hence from the point of view of size we have six kinds of theatres and from the point of shape, three types or in all we may have eighteen types of theatres. Of these eighteen kinds, Bharata lays down for human beings the rectangular theatre of the medium size, that is the theatre having the measurements 64 by 32 *Hastas,* or the square or triangular theatre of 32 cubits, while the theatre of major measurements is reserved for Gods. And in fixing up the medium theatre for human beings, he is guided by practical considerations. For, when the theatre is very long, the effect of intonation will be lost upon the audience at the extremity, which, indeed, play a great part in representations. Similarly, when the theatre is very small, words, when spoken loudly, would be reverberated and echoed. As regards facial expression also there is defect: when the theatre is very big, it is not properly caught by the audience, and, when too small, the effect is lost. Thus Bharata's preference of the medium type of theatre is perfectly normal and natural.

All the parts of the theatre with which we are now familiar are found mentioned by Bharata also: we have the green-room, the stage and the auditorium, the size and disposition of which change according as the shape and size of the theatre differ.

The green-room is located in the hindermost extremity of the theatre, as it is even now; and it is separated from the auditorium by the stage, and has no direct entrance from that. In the rectangular theatre of 64 *Hastas,* the green room will be 16 by 32 *Hastas* according to one school, or 8 by 32 according to another school (See Pl. I Fig. i). That is to say the breadth of stage will be 1|8 or 1|4 of the whole length of the theatre. The latter seems the more authentic of the two opinions, for the Samskrit dramas have generally a large number of characters taking part therein and secondly only a few characters are on the stage at the same time; and, therefore, unless the green room is pretty big, it must necessarily be very crowded. Again, the practical convention, obtaining in these parts, indicates the same thing. For, the green room itself has to be partitioned into two, one for ladies and the other for men; otherwise they have to be promiscuous in the same place, which is not consistent with our sense of decency. From the green room there are to be two entrances into stage, and between the two entrances there will be the wooden panel, composed of two horizontal wooden pieces and four vertical ones, as Abhinavaguptapadacarya would have it. This wooden panelling is called by the term *Ṣaḍ-dāruka* (See Pl. I Fig. ii) and in actual practice it corresponds to the pre-scenium of the Grecian theatre. The *Ṣaḍ-dāruka* forms the ornamental background against which the actors act. In the square theatre (see Pl. II Fig. i) the green-room has one-fourth the length of the theatre as its breadth: that is, its size will be 8 by 32 Hastas. and as before it occupies the hinder-most part of the structure. As before here also, there is the *Ṣaḍ-dāruka.* The shape of the green room in the triangular theatre does not appear to be clear. Apparently it must be of the shape either of a triangle or a trapeze (See Pl. II Fig. iii). If it

be the former, its size will be 16 Hastas a side and will be an equilateral triangle. From the point of view of the reference to doorways, it seems that the stage must be located right in the centre of the triangle as in the case of the square theatre, thereby creating an irregular rectangular green room behind at the base of the triangle

The stage is the most important part of the theatre, and about this fuller details are available, thought it cannot be said to be complete or very clear. The stage is found divided into two sections, the front called the *Rāṅgapīṭha* and the back, called *Raṅga-śīrṣa*.

The *Raṅgaśīrṣa* in the rectangular theatre lies between the green room and the Rangapitha (See Plate I, Fig. i). Regarding its size, there are two opinions. According to one commentator, it will be as big as the *Raṅgapīṭha* itself and the two together will be as big as the green room. According to the other school, it will be half the size of the green room and these two together will be as big as the *Raṅgapīṭha*. Thus based upon this difference, the *Rāngaśīrṣa* of a rectangular theatre will be either 8 by 32 or 16 by 32 Hastas. Whatever its size, the *Raṅgaśīrṣa* stands between the green-room and the *Raṅgapīṭha,* and it serves as the ante-chamber for the green room and the back room for the stage. Though the actual function of the *Raṅgaśirṣa* is not very clear, it appears evidently to be the space where the actors in costume can await their time of appearance and from where the actors could be prompted. In other words, this part of the stage area gives the actors some space for taking rest, prevents them from being exposed to the audience on their arrival on the stage and serves to beautify the stage, for it is flanked in front by the elevated *Raṅgapīṭha* with its wings,

called *Mattavarini*, (See Plate I, Fig. i). Hence one may assume that one has to descend from the *Raṅgapīṭha* to the *Raṅgaśīrṣa*, which latter seems to be on a level with the green-room. From the point of view of the audience, the most prominent feature of the *Raṅgaśīrṣa* will be the *Ṣaḍ-dāruka* which stands right in the centre and from the point of view of the actors it serves as the tiring room.

The *Raṅgaśīrṣa* in the rectangular theatre (See Plate II, Fig. i) differs from the same in the square theatre, in that while it is co-extensive with the green room and the stage in the former both in front and back, it is co-extensive with the green room only in the latter but not with stage, if we may accept the interpretation of the commentator. This supports our interpretation to some extent regarding the purpose of the same. It may be pointed out that the *Raṅgaśīrṣa* becomes a useless thing in the square theatre, unless its purpose is as we have made it out. Here also it is said there must be the *Ṣaḍ-dāruka*. It will be noticed that, while in the rectangular theatre the *Raṅgaśīrṣa* is co-extensive with the green room, it is not so in the square theatre (See Plate II Fig. i). Here arises an interesting question as to how to screen off the sides beyond the stage proper. If it is not screened off, this could be of no use to the actors concerned, as we have explained it, and if it is to be screened, how is it to be done and with what material? Are we to locate here the *Mattavārini* which in the rectangular theatre is co-extensive with the front line of the stage, but here with the back line? It may possibly be that the numerous pillars mentioned in the course of Bharata's text might serve as the *Mattavāriṇī*: but presumably the subject is not clear. Coming to the triangular theatre, we have no information regarding the *Raṅgaśīrṣa*. As a matter of fact, Bharata does not speak of any *Rāṅgaśīrṣa* for this kind of theatre.

From what has been said it will be clear that the *Ranga* consists of two portions, the front portion, called the *Rangapīṭha* and the back portion called the *Raṅgaśīrṣa* which, so far as we now could make out, serves the purpose of a tiring room for the actors in costume.

The *Raṅgapīṭha* or the stage proper is the most important part of the theatre. At the back of the stage the audience sees the ornamented *Sad-dāruka* and on either side the *Mattavariṇis* the ceiling of the stage being held up by beautifully wrought pillars, adorned with all the skill of the sculptor and the painter. We also learn from the description that the stage is on a level different from that of the green room on the one side and the auditorium on the other. The *Raṅgapīṭha* in the rectangular theatre (See Plate I, Fig. i) stands between the *Raṅgaśīrṣa* and the auditorium and extends throughout the whole breadth of the structure, thirty-two *Hastas* long and eight *Hastas* broad. At either extremity of the same are the *Mattavāriṇis,* (See Plate I, Fig. i) which are adorned with four pillars, eight Hastas square and one and a half Hastas high. To the height of the *Mattavārini* must the stage be raised; and this raised space, or the front of the stage, is to be constructed of wood or burnt brick and adorned with dovecots, altars with rail patterns, floral designs etc: in other words, this forms an ornamented foot-board. It will thus be clear that the *Raṅgapīṭha* will be one and half cubits higher than the floor level. The question now is this: whether the *Raṅgaśīrṣa* is to have the same level with the *Raṅgapīṭha* or with the green room. We have already explained that it ought to be on a level with the green-room, so that it might be used also as a tiring room for the actors. There are of course differences in views on this subject, noticed by the commentator, but unfortunately the text is not clear. However the text

makes one thing very clear: that the actors' part of the theatre must be of two levels and that the green-room must be of a lower level: it is described as *Śailaguhākāra.*

The disposition of the stage in the square theatre (See Plate II, Fig. i) is strikingly different. The stage is composed of the four square bits in the centre when the whole floor area of the theatre is divided into sixty-four equal parts; and when this marked out we get a plot of ground, twelve by thirty-two *Hastas.* Behind this and in continuation thereof there is the *Raṅgaśīrṣa* (See Plate II, Fig. i) measuring four by thirty-two Hastas and still behind is the green-room adorned with the *Ṣaḍ-dāruka* and measuring eight by thirty two *Hastas.* It will be seen thus that the *Raṅgapīṭha* stands right in the centre in the square theatre, (See Plate II, Fig. ii). As regards the triangular theatre, the directions are still meagre. The text lays down that the *Raṅgapīṭha* must be located in the centre and that it must also be a triangle (See Plate II, Fig. iii). This suggests that the green room of the shape of a trapeze will be located at the base of the triangle and from the inner side of the trapeze will jut out the stage of the shape of a triangle. As before, here also there might be two entrances into the green room, the interspace being flanked by the usual *Ṣaḍ-dāruka,* corresponding to the praescenium of the Grecian theatre.

The auditorium takes half of the rectangular theatre, (See Plate I; Fig. i.) the other half being utilised for the green room and the stage. Reference is also found made to the different levels in this half, the stage being one and half Hastas higher than the green room. Here, then, the green room and the auditorium will be on the same level, the stage being on a higher level. The elevated nature of the stage thus enables the audience to see clearly what happens on

the stage. In the square theatre on the other hand, the area set apart for the audience is slightly over a third of the whole structure, the area of the same being twelve *Hastas* by thirty-two, (See Plate II, Fig. i). To make up for the lesser seating space in this kind of theatre, provision is made for gallery arrangement, (See Plate II, Fig. i) each tier rising by a cubit and a half, (See Plate II, Fig. iv) the gallery itself being built of bricks and wood. This is a particularly interesting feature, in as much as here have we the earliest reference to a galleried seating arrangement. In the triangular theatre, there is no specific mention of the auditorium. There is certainly no gallery arrangement for seating; but it is worth while to mention the fact that unless some such arrangement is available the seating capacity will be very little. Now comparing the rectangular theatre and the square theatre as regards the disposition of the stage and the auditorium, it will be found that while the stage is higher than the auditorium in the former, the auditorium is higher than the stage in the latter. This, then, is a unique point of difference.

The stage, as has been described, has clearly four divisions: the green room, the back stage, the front stage, and the auditorium. We have also seen that there are two specific features on the stage namely the *Ṣaḍ-dāruka* and the *Mattavāriṇis,* the former figuring as the ornamental background for the stage and the latter figuring as the ornate sides of the stage. We also learn from the text that the stage has its own roof and the stage area is adorned by a number of graceful pillars. There is, however, given no direction which would show that the auditorium had any roofing or that it had any enclosure. One is inclined to think that there was none: otherwise there would certainly have been some reference to side doors from the green room. In these

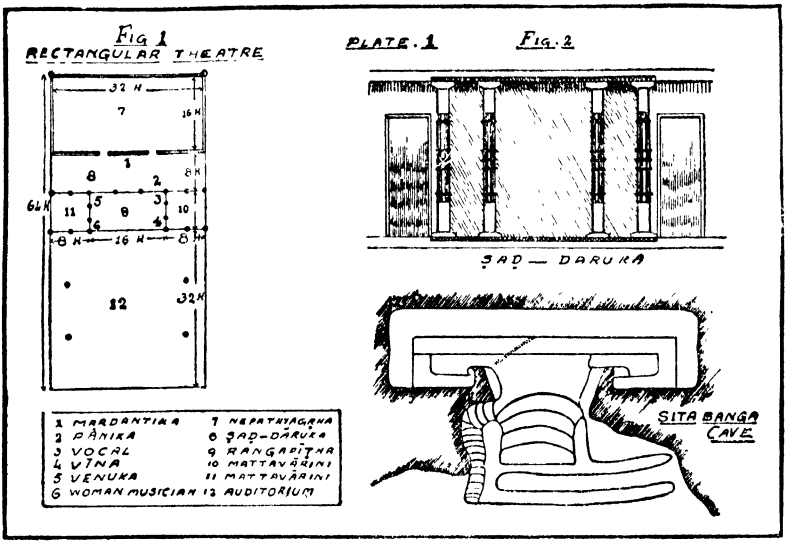
Fig 1
RECTANGULAR THEATRE
32 H
16 H
8 H
64 H
16 H
32 H
1 MARDANTIKA
2 PĀNIKA
3 VOCAL
4 VĪNA
5 VENUKA
6 WOMAN MUSICIAN
7 NEPATHYAGRHA
8 ŚAD-DĀRUKA
9 RANGAPĪṬHA
10 MATTAVĀRINI
11 MATTAVĀRINI
12 AUDITORIUM
PLATE. 1
Fig. 2
ŚAḌ — DARUKA
SITA BANGA CAVE

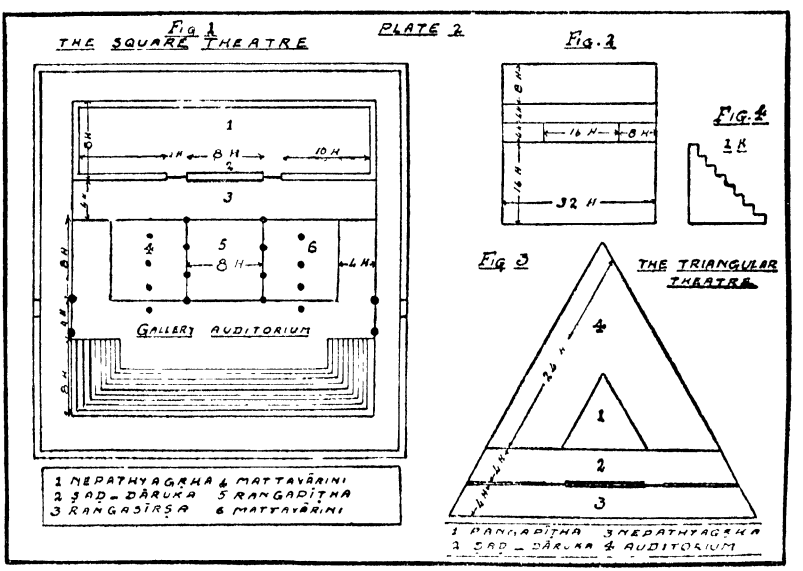
Fig 1
THE SQUARE THEATRE
PLATE 2
8 H
8 H
10 H
4 H
8 H
GALLERY AUDITORIUM
1 NEPATHYAGRHA
2 ŚAD-DĀRUKA
3 RANGAŚĪRṢA
4 MATTAVĀRINI
5 RANGAPĪṬHA
6 MATTAVĀRINI
Fig. 2
8 H
16 H
8 H
16 H
32 H
Fig. 4
1 K
Fig 3
THE TRIANGULAR THEATRE
1 RANGAPĪṬHA
2 ŚAD-DĀRUKA
3 NEPATHYAGRHA
4 AUDITORIUM

features our theatre bears some resemblances to the Grecian and Roman theatres, which we may now notice briefly.

The arrangement of the Athenian stage is very simple: it consisted of a round orchestra, and a low rectangular skene with a projecting Paraskenia and a low platform stage. Between the skene and the auditorium lies what is termed the Prosckenium which is understood as the back wall of the stage in front of which the actors act or as pillars in front of the stage between the actors and the audience or as the stage. In these respects this agrees with our theatre, particularly in our having the *Mattavārini* and the Ṣaḍ-dāruka. In early days the skene alone formed the stage, the auditorium not forming part of the theatre: the two were distinct parts. But, when the Romans borrowed the same, the two were connected together, the *paradoi*—the passage —being closed by what is termed Vomitoria. In the Roman theatre we find a roof over the stage which became an ornamental one when the whole structure including the auditorium came to have roof. In this respect also this agrees with our theatre. Thus when we compare our theatres with the Grecian and Roman theatres, there is something which is common ; and the resemblances become striking when it is further pointed out that we do not know the exact function of the Mattavarini and the practical basis of the differentiation between the *Rangaśīrṣa* and the *Rāṇgapīṭha.*

Bharata's text also emphasises that the structure must be adorned with sculptures and paintings. Ample provision is found made for music, both instrumental and vocal, (see Plate I, Fig. i, for the seating of musicians). The structure must again be accoustically perfect and must have excellent ventilation. It will thus be seen that when Bharata lays

down the nature of the ancient Hindu stage, he does so with a practical eye into the details—an aspect that is proved by the discovery of a pre-Christian cave at Ramgarh, (See Plate I, Fig. iii) carrying an inscription which has been rendered by Prof. Jules Block thus:

> Poets venerable by nature kindle the hearts, who....
> At the spring festival of the vernal full moon,
> When frolics and music abound, people
> Thus(?) tie around their neck garlands
> Thick with jasmine flowers.
>
> —(*ARA.* 1903-4).

SOME HINDU ECONOMIC IDEAS AND PRACTICES

By

V. G. Ramakrishna Aiyar, M.A.

We often claim as original many ideas and practices which were known to our ancestors. Those who study the economic thought in the nations of antiquity are often struck by its 'modernism'. A sympathetic study of the ideas and practices of the ancients is necessary for intelligent and sound progress. The religious books of ancient India—the Ramayana, the Mahabharata, the Smritis, the Puranas and specific treatises like the Arthasastra of Kautilya are replete with information bearing on many a modern economic controversy. Economic thought of ancient India, in terms of modern economic science is badly needed as a service to human knowledge in general and as a step towards a proper understanding of the indigenous problems. It will be of course, unscientific to try to reconstruct a full fledged economic science out of material supplied by past experience and ideas. But nobody can deny that for the study of specific economic problems like collectivism, currency regulation, Social Policy and Finance, we may refer with advantage to past experience.

The Hindus have always taken a less materialistic view of life which has, therefore, retarded their industrial progress to a large extent. Moral or religious codes have usually played a greater part in shaping their thought and outloook. Oriental economic ideas, it is interesting to note, were developed at a time when the civilizaion of the West was in its infancy. The economic concepts of the Hindus

are the ideas of an ancient civilization based upon an agricultural economy and they were drawn from the writings of priestly law-givers. The lives of the people were largely determined by these writings, and these writings have come down to us exerting a powerful influence even on our time. A study of Hindu economic ideas and practices is therefore useful.

The central idea of Hindu Government and education was the fulfilment of the law. Such a situation meant a minute regulation of everyday life and it follows that the material for this study is mostly drawn from rules of conduct or laws. A study of those regulations of the Hindus which are significant as indicating the character of their economic thought shows that the following subjects were the most important. Agriculture, occupations, interest and usury, labour and wages, property taxation, inheritance, weights and measures, adulteration, monopoly and the poor.

Among the most striking regulations of the Brahmanic law were those concerning interest and usury. Money lending by the higher castes was closely restricted. Brahmins and Kshatriyas could not lend at interest. In case of loans made without security, the following terms were legal; for gold, double value, i.e., 100 per cent; for grain treble the original price; anything sold by weight might be sold at eight times the original value. Various kinds of interest payments were distinguished; there might be compound, periodical stipulated, corporal and use of pledge—corporal interest being that paid in labour, use of pledge referring to cases in which the lender made use of some security like cows, for example. Thus the fact is apparent that among the ancient Hindus, interest was closely connected with some concept of a just price. At the death of the king or the jubilee

year interest should cease, a *tabula rasa* when debtor and creditor should be equalised.

Among the ancient Hindus, there were careful regulations against false weights and measures and against adulteration. Provisions against speculation and monopoly were even more stringent. Competitive markets were practically impossible, and so we see even to this day that there is no one price in the Oriental shop, and so these minute regulations about weights and measures were necessary lest the consumers should be exploited. According to the Institutes of Vishnu, the King was to keep the whole produce of mines. By Brahmanic law, a hired workman who abandoned his work before the term had expired, was to pay the whole amount of stipulated wages to his employer and a fine to the king. On the other hand, if an employer dismissed a workman whom he had hired before the expiration of the term agreed upon, he must pay the full amount of the wages stipulated and a fine to the king, unless the workman was to blame.

As regards the economic significance of the caste system, it was, as an Italian economist puts it, 'division of labour gone to seed.' It stood for rigidity of society and for permanent inquality among social classes—an attitude which means a point of view in economic thought. The four castes had specific functions in society. That some elasticity was possible in the social system of the ancient Hindus appears from the fact that in the time of distress each caste might follow the occupation of one below it. In general, however, the most severe separateness was to be maintained. In the earlier stages of national development, the principles underlying the structure of the Greeks and the Romans were the same as those of the Hindus. In India,

however the distinctions became rigid and stereotyped; in Europe society was soon able to throw off the shackles.

The growth of the caste system, the organisation of rural India on the basis of village communities, and the fatalistic outlook on life of the Indian cultivator reflect the strong influence of Geographical environment, past and present.

The insistence of the Holy Books of Hinduism upon the sacredness of the cow can be traced back to the time when the economic feature of the early Aryan pastoralists of India's savannahs was bound up with the preservation of their cattle. Although with the rise of cultivation, this early necessity has long since vanished, so tenacious is tradition that the whole creed of cow worship with its elaborate ritual and legend still persists. A religion which once aimed at promoting the survival and betterment of its devotees, now under changed conditions hinders the material progress of India's agriculturists. Owing to religious scruples concerning breeding, control and slaughtering, stock-raising on modern scientific lines for milk, beef or even for hides and tallow is almost unpractised. In India there are more than twice the number of cattle in the U.S.A. and yet except for erratic and meagre supplies of milk, they are of no use as a source of food. As draught animals, their value has been depreciated by centuries of uncontrolled breeding and lack of care and attention, and when dead either through age or disease, their hides are small and inferior in quality. Allowed to wander at will, they are a nuisance to the farmer and his crops.

Economics, Geography and Religion are much more closely connected than we usually suppose. In India where

everything is done on a superlative scale, religion has for thousands of years dominated man's mind so completely and absolutely that it has become an integral part of everything the Hindu says and thinks and does and eats. In other countries, too, religion has often interfered with the normal development of life but not to the extent we find in India. The priestly caste of the Brahmans was the first to live upon the products of other people's labour, whether bestowed as voluntary gifts or sacrifices to the gods. His was a perilous life. For the reverence and sanctity accorded to him as representative of the god was easily upset. In a very real sense, his income was 'payment by results'. He must deliver the goods, produce rain or fair weather when needed, for the crops, stop pestilences and other troubles. Something could be done by skilled prophecy, e.g., he could 'produce' rain when rain was coming and perform effective rites of fertilisation in spring time. But any calamitous failure was taken to prove incapacity or malice. Even to-day the ordinary Hindu agriculturist recognises his dependence upon the natural resources and the fecundity of Nature for his successful livelihood. It is not too much to say that this fecundity of nature was the first consideration in the great religions of the world, whether of Ra, Zeus, Ammon, Mithra or some other sun-god or some female deity of fertility, such as cybele or ceres or Shakti. All the chief Hindu festivals relate to points in the sun's progress during the year and this sun-worship cannot be detached from the worshipful regard to the generative processes in the vegetable and animal world. Earth has been regarded by the Hindu as the mother-element, and the idea of the mother-goddess has prevailed in India from ancient times. The modern current slogan 'Bharat Matha Ki Jai' points to the persistence of this belief.

The account given in the *Golden Bough* of the worship of Adonis indicates how far the older magic had survived in the early religions of the East. The "Gardens of Adonis" were "baskets or pots filled with earth, in which wheat, barley, lettuces, fennel and various kinds of flowers were sown and tended for eight days chiefly or exclusively by women. Fostered by the sun's heat, the plants shot up rapidly, but having no root, they withered as rapidly away and at the end of eight days were carried out with the images of the dead Adonis and flung with them into the sea or into springs. The rapid growth of the wheat and barley in the gardens of Adonis was intended to make the corn shoot up; and the throwing of the gardens and the images into the water was a charm to secure a due supply of fertilising rain. In India this custom still survives and is observed methodically all over South India soon after the harvests. Thus we find a reciprocity of services between God and Mammon religion and industry. The gods gave protection against enemies in war, promoted vegetation and animal fertility and gave 'luck' in agriculture. In return the people got treasures for their temples, food and other necessaries and comforts for themselves. In India a large increasing part of such treasures as did not rust or decay came to be deposited in the temples. The wealth and leisure thus secured to the temples and the priestly castes stimulated among them the beginnings of culture in literature, science and the fine arts of music, sculpture, architecture, painting, dancing, etc. thus laying the foundations of many of the higher crafts and industries that spread in secular life.

ĀTREYA RĀMĀNUJA: HIS LIFE AND WORKS

By

Prof. R. Ramanujachari, M.A.

Ātreya Rāmānuja, popularly known as Appullār, was the spiritual *guru* and the maternal uncle of Vedānta Deśika, the renowned scholar and outstanding exponent of Viśiṣṭādvaita Philosophy. In the line of Śrī Vaiṣṇava Ācāryas commencing from Bhagavān Rāmānuja, the author of Śrī Bhāṣya, Ātreya Rāmānuja was the fifth. His predecessors in that office were his own father, grand-father and great-grand-father. Thus Ātreya Rāmānuja and his lineal ancestors enjoyed the proud privilege of being the accredited exponents of Viśiṣṭādvaitic thought to the four successive generations that followed Bhagavad Rāmānuja. Some of the most eminent thinkers and men of letters of later days were also scions of this illustrious stock. The celebrated Gopāla Deśika of Kumbakonam and the poet Venkaṭādhvarin may be cited as examples.

The materials for writing the biography of Ātreya Rāmānuja are disappointingly scanty. It is, however, learnt on reliable authority that he was born at Conjivaram in the year 1220 A.D. (in the month of Citra of the year Vikrama). At the close of each chapter of *Nyāyakuliśa* he refers to himself as the son of Padmanābhārya. His father must also have been known as Rangarāja, as is evident from the traditional account.[1]

1. Caitrārdrāsambhavam kāñcyām Raṅgarājagurossutam |
   Supratiṣṭhāmśamātreyam Rāmānujagurumbhaje ||

His great-grand-father, Praṇatārtiharācārya (also called Kadāmbi Accān), a nephew of the celebrated Bhāṣyakāra was his most trusted and loyal disciple. He was an able exponent of Viśiṣṭādvaita Philosophy. So great were Praṇatārtiharācārya's scholarship and his powers of argument and exposition that he was named *Vedāntodayana* (the Udayana of Vedāntic thought).

Along with Sudarśana Bhaṭṭa, whose *Śruta-Prakāśikā* (a commentary on the *Śrī-Bhāṣya*), *Tātparya-Dīpikā* (a gloss on the *Vēdārtha-Saṁgraha*), and *Śuka-Pakṣīya* are remarkble for their learning and polemic ability, Ātreya Rāmānuja studied the *Śrī-Bhāṣya* and other vedāntic works under the eminent Vātsya-Varadaguru. From his own father, Ātreya Rāmānuja learnt the inner significance of the *mantras* held sacred by the Vaiṣṇavites. He was a bold and original thinker. In recognition of his extraordinary skill in dialectics, the title 'Vādi--Hamsāmbuvāha' was conferred upon him.

Tradition, as preserved by his descendants, speaks of him as the author of three books, of which *Nyāyakuliśa* alone is now available, the others having been irretrievably lost. It is a matter for great regret that even the names of these books have been forgotten. In his *Tātparya-Candrikā*, the famous gloss on Rāmānuja's *Gītābhāṣya*, Vedānta Deśika quotes in the course of his comments on verses 14 and 15 chapter XVIII, Ācārya Vādihamsāmbuvāha as saying :

> Vaiṣamye sati karmaṇāmaviṣamaḥ kim nāma kuryāt
> Kimvodāratayā dadīta Varado vāñchanti cet durgatim.
> kṛṭi.

Evidently this is a quotation from one of the missing books. Judging from this fragment, one is led to believe

that the work from which this has been extracted was, in all probability, a religious lyric, (*stotra*) in praise of the Lord.

Vādi-hamsāmbuvāha was fortunate in his pupil. His nephew and disciple, Vedānta Deśika again and again speaks of his own extraordinary good luck in having had such a preceptor and expresses his deep sense of gratitude for what his *guru* had done for him. In one place, he says that his guru trained him as the trainer of birds would train a parrot.[2] In another context in the same work, he owns that in his writings he is merely giving outward expression to what his Ācārya had inscribed in his mind.[3] Even when due allowance is made for Vedānta Deśika's self-effacing modesty, the fact still remains that he owes much to Ātreya Rāmānuja. Readers of *Rahasyatraya-Sāra* will remember that its author refers to a great knack that his uncle and *guru* had of expressing highly abstract thoughts in an exceedingly simple manner with the aid of homely similes that enabled the listener to go straight to the heart of the matter. To explain the mystic significance of the praṇava he would ask his pupils to remember the oft-quoted verse from the Rāmāyaṇa:

" Agrataḥ prayayau Rāmassitā madhye sumadhyamā |
Pṛṣṭhatastu dhanuṣpāṇiḥ Lakṣmaṇonujagāma ha" ||

First went forth Rāma; Sītā with her delicate waist, in the middle; Lakṣmaṇa, bow in hand, brought up the rear.

2. இப்படி.....கீழும் மேலுமுள்ள பாசுரங்களெல்லாம் வேதாந்தோதயா ஸம்பிரதாயமான மடப்பள்ளி வார்த்தையை ஆசார்யன் பக்கலிலே தாங்கேட்டருளினபடியே கிடாம்பியப்புள்ளார் அடியேனைக் கிளியைப் பழக்குவிக்குமாப் போலே பழக்குவிக்க அவர் திருவுள்ளத்திலிரக்கமடியாகப் பெருமாள் தெளியப் பிரகாசிப்பித்து மறவாமற் காத்துப் பிழையறப் பேசுவித்த பாசுரங்கள்.
(*Rahasyatrayasara*).

3. வெள்ளப் பரிமுகர் தேசிகராய் விரகாலடியோ முள்ளத்தெழுதிய தோலையிலிட்டனம்.—(*Rahasyatrayasara*).

The three letters of the *Pranava,* respectively stand for the Lord, His consort, and the individual soul.[4]

The author of the *Gitā* declares that he who shrinks away from God thinking that He, by His infinite perfections, is far above finite souls is the worst of men (*narādhama*). Ātreya Rāmānuja was likewise convinced that we should approach the Lord in the spirit of the *gopis* of old who entertained no doubts about His accessibility. He used to express his agreement with the passage in the *Gita* which condemns faint heartedness on the part of the devotee.[5]

Nyāyakuliśa (the Thunder-Bolt of Reason) is a standard work on Viśiṣṭādvaita Vedānta. It is frequently referred to, and cited as an authority, by Vedānta Deśika in his *Nyāya-Siddhāñjana, Nyāya-Pariśuddhi, Tattva-muktā-kalāpa* and other works. It is written in stiff prose interspersed with *kārikas* used whenever sententious summaries or pointed exposition are needed. In each of the thirteen sections into which the book is divided, the author tackles a definite philosophical problem and establishes the standpoint of Viśiṣṭādvaita after refuting the views of the rival philosophical systems. It is highly polemical and shows the author's mastery over the entire range of Indian thought. A perfect master of the art of controversy, his logic is invincible, a veritable thunderbolt (*kuliśa*) to his philo-

4. இதில் ப்ரதம பதத்தில் அர்த்தங்களை அர்ஜுனரதத்திலும், '**अग्रतः प्रययौ रामः**" என்ற ச்லோகத்திலும் கண்டு கொள்வது..... இது.....அர்த்தானுஸந்தானத்திற்குக் குறிப்பாக வப்புள்ளா ரருளிச் செய்தவிரகு.

5. இவ்விடத்தில் ஸர்வேச்வரனுடைய பரத்வமாத்திரத்தை அறிந் தகலுகையாலே நராதமனென்று பேர்பெற்ற பிறந்துகெட்டானிற் காட்டில் இடைச்சிகளைப் போலே விவேகமில்லையாகிலும் ஸௌலப்யத்தை யறிந்து அந்நலனுடை யொருவனே நணுகு மவனே பரமாஸ்திக னென்றப் புள்ளாரருளிச் செய்யும் பாசுரம்.

—(*Rahasyatrayasara*)

sophical opponents. A brief indication of the topics discussed may be given.

From the point of view of Vedānta the most important problem is perhaps the question whether the Upaniṣadic texts which speak of what exists as a fact (*siddhārtha*), Brahman or Ātman, are authoritative or not. If, as the Prābhākara school of Mīmāmsā maintains, something to be done (*kārya*) is the ultimate significance of every proposition, the Veda must have such a thing (*kārya*) or an action for its final import. The entire body of the Upaniṣadic texts dealing with Brahmam or Ātmam would lose all validity, and the ground would be cut from under the feet of the Vedāntin. Hence, the first chapter addresses itself to the task of refuting the Prābhākara view.

To prove that the Vedas are in their very nature (*svataḥ*) valid, the author, in the manner of the *Bhāṭṭa* Mīmāmsakas, seeks to establish in the second chapter the doctrine known as *svataḥ-prāmāṇya-vāda* (the self validity of knowledge). In demonstrating this position the main controversy is with the Naiyāyikas who are advocates of *parataḥ-prāmāṇya-vāda* (the theory of validity from outside).

In the third chapter, Rāmānuja repudiates the Prābhākāra and the Advaitic accounts of error, known respectively as *akhyāti* and *anirvacanīya-khyāti*, and maintains *yathārtha-khyāti*, a doctrine peculiar to the Viśiṣṭādvaitin. According to this view all judgments reveal only what exists (*sat*).

Vādi-hamsambuvāha establishes, in the fourth chapter, the thesis that *jñāna* is self-luminous (*svayamprakāśa*). The ground is prepared for this doctrine by the refutation of the views of Kumarila Bhaṭṭa, Murāri Miśra and the Naiyāyikas in regard to this matter. *Jñāna* is like the lamp which dis-

pels darkness and reveals objects and does not require for its own manifestation another lamp. By its conjunction with objects, *jñāna* reveals objects; but, in regard to its own manifestation, *jñāna* does not depend upon another *jñāna*.

Unless the view that God is inferred (*ānumānika*) is abandoned the scriptures would lose their validity. If god is known through inference, then, on the well-known principle that the śāstras are valid only with regard to matters lying beyond the scope of the other pramāṇas (*Aprāpte śāstram arthavat*), in respect of God, the scriptures would become futile. To establish their prime usefulness Ātreya Rāmānuja refutes the Nyāya theory that God is ānumānika.

Next he shows that the soul is an entity different from the body, senses, mind (*manas*), vital breath (*prāṇa*) and intellect (*buddhi*), that it is distinct from every other soul, that it is an agent (*kartā*), that it is a knower and the object of self-consciousness (*aham-pratyaya*). As a preliminary to the establishment of this thesis, he subjects the Cārvāka and the Advaitic conceptions of the soul to a rigorous examination.

For a proper understanding of Vedantic passages, such as, "Satyam, Jñānam anantam Brahma," it is essential that the true nature of *sāmānādhikaraṇya* (the grammatical coordination of words in a sentence) must be grasped at the very outset. Consequently the author takes up for consideration the definition of *sāmānādhikaraṇya* furnished by the grammarians, examines the interpretations put on it by the Bhedābhedavādins and Advaitins, and in the end establishes what he considers the correct interpretation. *Sāmānādhikaraṇya* is defined by the grammarians as follows:— Words having different *pravṛtti-nimitta* (reasons of application or significations), but referring to an identical object

(i.e. words having connotational difference and denotational identity) may be said to stand in the relation of *sāmānādhikaraṇya*. Different words may stand in the relation of co-ordination, if there are different reasons for their application and if they refer to one and the same object. The first part of this definition aims at showing that there can be no co-ordination between synonyms like 'pot' and 'jar'; because the reason for applying the term 'pot' to an object is not different from that prompting the use of the word 'jar'. The second part serves to point out that there can be no co-ordination between words referring to wholly different objects, e.g., pot and cloth. It rules out such meaningless co-ordination as 'the pot is cloth.'

The problem of causality which has evoked very keen controversy is next tackled. The Nyāya-vaiśeṣika view of causality known as *asat-kārya-vāda* (the view that the effect has no existence before it is brought into being, but orginates afresh) is subjected to a penetrating criticism and *sat-kārya-vāda* (the doctrine that the effect pre-exists in its cause in a latent form) established. The upaniṣadic text declares that by knowing one thing everything becomes known; and in illustration of this it cites the case of clay and says that by understanding it all objects made out of clay, such as jars and cups, are understood. Clearly, the idea conveyed here is that when the material cause is known its manifold effects are thereby known. And this would be impossible if the cause and the effect were totally different.

The question of the precise nature of *sāmānya* (universal) has long been the battleground of philosophers. The *Nyāya-Vaiśeṣika* elevates *jāti* to the rank of a distinct principle. On this view, *jāti* is the generic property perceptible equally in all the particulars (*vyakti*) of a class. It is eternal, unitary, ubiquitous (*anekānugatam*) and

directly apprehended. It is not a mere product of the imagination as the Buddhists contend, but a factor of reality existing out there in the objective world.

The tenth chapter takes up the question whether *śakti* (potentiality) should be recognised as a distinct category or not, and answers it in the affirmative after refuting the Nyāya-vaiśeṣika arguments in favour of the opposite view. In this regard, the Vśiṣṭādvaitin is at one with the Bhāṭṭas and the Prābhākaras.

In this chapter the Nyāya conception of *abhāva* (non-existence, negation) is criticised and the view that *abhāva* is not distinct from, but is merely a variety of, *bhāva* (existence, affirmation) is upheld. *Prāghabhāva* (anterior non-existence) is only another name for the unending series of previous states; *dhvamśābhāva* (subsequent nonexistence) is the name for the unending series of subsequent states. If this theory is borne in mind, the scriptural passage "In the beginning this was non-existent (*asat*)" could be assigned its primary meaning.

The most prominent among the doctrines that differentiate Viśiṣṭādvaita Vedānta from all other schools of Vedāntic thought is its view that the entire cosmos comprising souls and matter constitutes the body (*śarīra*) of Brahman. For understanding the exact significance of this description of the cosmos it is necessary to know what precisely is meant by the term *śarīra*. In the *Śrī Bhāṣya* the body is defined as follows:—

"That substance which, in respect of the activities in which it can engage, is capable of being completely controlled and supported by, and which exists for the sake of, a conscious entity is the body of that conscious entity."

The twelfth chapter discusses the question whether this is a single definition or a collection of three definitions and concludes that it is a single definition; for each of the three definitions into which it is resolved is found to be defective in some respect or other. *Ādheyatva, vidheyatva* and *śeṣatva* are all essential elements in the definition of the body. That this is so would follow from a careful study of the celebrated *Antaryāmi Brāhmaṇa* where the doctrine that the universe is the body of God is clearly formulated.

Is it at all possible for the soul whose intrinsic nature is to be self-luminous (*svaprakāśa*) to be entangled in samsāra? What is the conception of ultimate value? These are the two questions Vādi-hamsāmbuvāha raises in the last chapter.

THE MODERN SUPERSTITION OF RACE

By

Dewan Bahadur K. S. Ramaswami Sastri, B.A., B.L.

'Race' is a magical word which means anything or nothing and which Hitler alone, as the supreme head of the much-advertised supreme race in the world, pretends to understand. The so-called Nordic race has got long skulls but so have many Negroes and the Ainos and the apes. For a long time past we have had too much emphasis on the physical basis of the concept of race. Generally the character of the hair and the skin, and the shape of the nose and the head and stature are emphasised. The famous nasal index is the relation of the breadth of the nose to its length. Long heads are called dolichocephalic and round heads are called brachycephalic. We are also told about the blood test and are informed that there are four different kinds of blood when tested by serums. The properties of these four kinds of blood are entirely unknown. Further serologists say that these tests do not enable us to determine race. Nor do we gain much from the colour gradations viz., white, yellow, brown, and black. Further, there is no *really* white, or yellow, or brown or black human being. G. B. Shaw says with his usual cynical wit that a really *white* man would be a horrible sight. What we have is a gradation of tint.

This does not mean that there are no broad divergences of physical features. But they form a slippery basis for classification. The mystical belief in race based on such a

physical basis alone is sure to lead us into error and unproved and unprofitable assertions. We have every reason to stand aghast at the pompous and current myth of the Nordic race. But what shall we say of the endeavour of English thinkers to find the roots of British greatness in a Germanic past, though to-day Britain and Germany are the bitterest foes engaged in a deadly death-grapple? Saxonism became almost a religion and the phrase "Anglo-Saxon" received unparalleled and enormous propaganda. Even the battle of Hastings was rechristened as the battle of Senlac. Bishop Stubbs said in his lectures on *Early English History* "It is to Ancient Germany that we must look for the earliest traces of our forefathers, for the best part of almost all of us is originally German, though we call ourselves Britons, the name has only a geographical significance. The blood that is in our veins comes from German ancestors." What is the good of identity of blood when there is non-identity of heart?

The search for racial traits has gone on not only in the realm of politics but also in the realm of art. The Germanic races were supposed to have a genius for democracy. And yet Germany herself is under the heels of a Dictator! Taine went so far as to say; "vice and virtue are products like sugar and vitriol." This is surely eccentricity which has gone beyond limits. Once we get into the labyrinth of innate and inborn racial traits, there is no getting out at all. Granting that there are same broad divergences of physical characteristics among the major human groups, what can any one infer therefrom about mental and aesthetic and moral and spiritual characteristics being derived from such physical traits? How can you affirm any relation of cause and effect between them even if you are able to show any degree of co-existence?

The race-enthusiasts have their counter-part in climate-enthusiasts. These pin their faith to latitudes and longitudes and altitudes. They explain, everything in terms of heat and cold. We have, in addition to such race-mystics and climate-mystics, a third brand of mystics—the food-mystics. These are satirised in Samuel Butler's *Hudibras* in the famous lines:

> " Was ever Tartar fierce and cruel
> Upon the strength of water gruel ?
> But who can stand his fire and force
> When first he rides, then eats his horse ? "

In addition to these mystics we have gland-mysticism. The thyroid and other glands seem to have taken the place of the goods of old. We must thus steer clear of all these discordant and dangerous types of selfish and materialistic mysticism. Religious mysticism leads to gentleness and peace and love but these mysticisms, and especially race-mysticism, lead to brutality and war and hate.

In fact, theoretically speaking a race may be composed of many nations, and a nation may be composed of many races. The race concept is a museum-concept. It is not a live concept at all. But the nation-concept is a living concept. Sir Arthur Keith says well that several hundred years of a common history and a common way of life have often welded divergent races into one nation. We must get out of the clutches of a merely materialistic anthropology. We must not try to gauge the contents of brains by measuring the length or the breadth or the circumference of the skull or talking learnedly about diameters of skulls or cephalic indexes. Warring groups of men have often been welded into a culturally homogeneous group by the iron-hand of Time. In such homogeneity

cultural fusion is of greater importance than physical fusion.

The concept of race is thus a mere modern superstition, Yet in its name, thousands of Jews have been massacred or exiled or suppressed in Germany and elsewhere. In its name, the Nordic race is out to "civilise" the world and build universal peace on the basis of universal war! Germany is to-day a dreadful whirlpool of racialism and nationalism and militarism. If one admires the German, he calls him Nordic ; if one hates him, he calls him a Hun !

I plead for a recognition and realisation of the mental and moral and spiritual elements as being far more important and vital than the purely physical elements in the concept of race. I plead for the subordination of *Kultur* to *Culture*. I plead for a self-manumission from the tyranny of the absolutist and occult and mystical ideas of race. The cultural pattern is of much greater importance than the physical pattern. Spinoza says well: "In regard to intellect and true virtue, every nation is on a par with the rest and God has not in these respects chosen one people rather than another." Why should we disturb the supposed deceased anthropoid ancestor of *Homo Sapiens*? Let us get on with ourselves as we are:

> " Act, act in the living present
> Let the dead Past bury its dead ".

I deprecate also the modern tendency to exalt in the name of science the biological fusion of races. Even science declaims against free and unrestrained and promiscuous cross-fertilisation of races. The data in respect of this matter are so uncertain that different scientists draw different and diverse and even contradictory and mutually destructive inferences from the same data. The data themselves are

often so doubtful and unverifiable and unreliable. Even if some of them are clear there are other hidden and unknown factors whose efficacy is unknown. Much more tangible and effective than the fusion of blood is the fusion of cultures. The basic culture, if it is strong, assimilates congruous elements in other cultures with which it comes into contact and is invigorated and strengthened by such contacts.

Let us thus clearly realise that the race-concept must be lifted from a Zoological concept to a cultural concept. The Zoological concept will lead to clashes and conflicts. The cultural concept will lead to contacts and connections. The former leads to such phrases as "the white man's burden", "the yellow peril" etc. But the latter leads to mutual respect and mutual assimilation. It does not create superiority and inferiority complexes as the former has always done and is doing and is sure to do hereafter as well. When very unequal cultures meet there may be a possibility of the domination or supersession of one culture by another. But where fairly equal but diverse cultures meet, there will be no such trends but there is sure to be assimilation and enrichment.

Modern India has come into the clutches of the tentacles of the race-concept. It is supposed by some persons that all the Brahmans in South India are Aryans and that the rest are Dravidians! But taking the tests of hair and skin and stature and nasal index and cephalic index, as propounded by the anthropological experts, many Brahmins will have to be classified as non-brahmins, and many non-brahmins will have to be classified as Brahmins! Dr. Risley says that the original Dravidian inhabitants of India were persons whose "stature was short, complexion very dark, hair curly and nose broad". Most of the South Indian non-brahmins do not correspond to this description. We have got

Dravidian traits in North India and Aryan traits in South India, and we have got Dravidian similarities in Brahmins and Aryan similarities in non-brahmins, if we attach much importance to the anthropological emphasis on physical characteristics. The "Dravidastan" protagonists are not really supported by the experts in the science of anthropology.

I am therefore disposed to attach little importance to the physical patterns in the Indian race-concept and much importance to the mental and moral and spiritual pattern in the concept. Tested by such a test, all the Indian communities belong to one cultural pattern, even though different sections pursue different religions. They pursued only one religion viz., Hinduism, till conversions to other world-religions made headway. But the cultural unity has not really been broken by religious diversity in India. Ahimsa and Bhakti and introspective meditation and deep faith and spirituality are found in the Indians *en masse* despite the diversities of denominational religion. Mr. Jinnah's reference to two nations has no real basis. It is not religion that is the real basis of nationhood. The real basis is the cultural nexus. Thus the population of India belongs to one race and one nation and one culture, and Indian unity is indivisible and invincible.

THE FUSION OF ARYAN AND DRAVIDIAN ELEMENTS IN MALAYALAM LANGUAGE AND LITERATURE

By

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The subject of this paper has several facets, of which it is proposed to deal with only one at present.

In Malayalam there exists a peculiar variety of literary dialect, called "manipravāiam", the like of which has not yet been met with in any other language in India or elsewhere. Numerous works of superb poetical excellence are extant in that dialect, and the period of its heyday has been reckoned by many scholars as the Golden Age in the history of Malayalam poetry. It is, however, significant that the works so far discovered in that dialect are confined to certain particular literary gènres,—their authors being mostly the Brahmins (Namboodiris) of Kerala. Apart from the appreciation of classical poetry in Malayalam, a thoughtful study of the dialect under reference would be of help in understanding the true nature of the fusion of Aryan and Dravidian elements in the language and literature of Kerala.

The name "manipravalam" is familiar to all as connoting an admixture of Sanskrit and Dravidian works in poetic diction. In Malayalam, however, it has a restricted and distinctive sense. Here, for one thing, *only such words are counted as Sanskrit as are used in their original grammatical forms*—declined and conjugated exactly as in Sanskrit—all

Sanskrit words shorn of their Sanskritic terminations being treated just as Malayalam words merely.

A combination of "native" and "loan" words in their original grammatical forms may sound somewhat odd or bizarre in other languages. Imagine, for instance, the opening lines of "Paradise Lost" written in a dialect which is a mixture of English and Classical words inflected exactly as in the respective languages from which they are derived something like this:—

Of hominis disobedience et the fruit
Of that forbidden tree, whose mortal gustus
Introducat mortem into the world
* * * * *
Canta, Heavenly Muse !

But in the high-class "manipravalam" of Kerala, there is absolutely no such discord or clumsiness of effect; and that is the beauty and wonder of it! Sanskrit words, with their original declensional and conjugational forms intact, are so artistically welded with words of pure Dravidian descent as to yield the effect of "linked sweetness long drawn-out." An authoritative treatise on the subject, entitled "Leela-tilakam", which is believed to have been written nearly six centuries ago, sets forth in detail the rules relating to the choice and arrangement of Sanskrit and Dravidian words in poetry. Its authorship is attributed to a Kerala Brahmin (Namboodiri), who was evidently an illustrious scholar in Sanskrit and Dravidian language alike, and possessed an intelligent command of the grammatical and critical apparatus of Sanskrit. In the first section of the book, dealing with the characteristics of "manipravalam", he takes special care to emphasize that the selection and marshalling of Sanskrit and Malayalam words should be guided by con-

siderations of smoothness and euphony. "Manipravalam", if it should justify its name, should present such a pleasing array of Sanskrit and Dravidian words as to be hardly distinguishable from each other. It should indeed be a necklace strung with rubies and corals—the ruby (*mani-*) being Malayalam, and the coral (*pravalam*) Sanskrit, according to "Leelatilakam". They merge almost imperceptibly into one another, thanks to their mutual likeness in tone and colour. Such a smooth and easy amalgamation of Aryan and Dravidian elements is the supreme test of standard "manipravalam". Rare or unfamiliar words should be sedulously avoided in both languages, and words of common occurrence in them should be preferred,—the true criterion of success in diction being *Rasa* (sentiment). It is interesting to note in passing that the best "manipravalam" is that which embodies more of Malayalam and less of Sanskrit words, and is marked by outstanding *Rasa*. Such, be it remembered, is the dictum laid down by the Brahmin author of "Leelathilakam", and such indeed "manipravalam" actually was in its palmy days. Examples of it are legion in the literature of the centuries immediately preceding and succeeding "Leelathilakam". Gradually, however, the sound precepts of "Leelathilakam" came to be discarded, and "manipravalam" deteriorated into an incongruous medley of harsh-sounding and out-of-the-way words indiscriminately taken from Sanskrit and Dravidian languages, the Sanskrit element predominating over the Dravidian, in flagrant violation of all sense of proportion and harmony. It had been explicitly stated by the author of "Leelathilakam" that the diction in which Malayalam words were comparatively small in number, and *rasa* was deficient, was positively inferior. Likewise, if either the first half or the second half of a quatrain, or its last line, were to consist exclusively of Sanskrit words, then too, the diction was con-

sidered to be definitely inferior. (By the way, the term "manipravalam" was generally applied to verses written in Sanskrit metres those written in Dravidian metres being known as "paattu.").

It is a particularly unique feature of the ancient "manipravalam" of Kerala that it admitted *pure Malayalam words declined and conjugated with Sanskrit terminations,* as if they were pure Sanskrit words. This could not have possibly happened in any language in the world! Even the peculiarities of Sanskrit syntax were copied in pure Malayalam. Thus the words for "food" and "sleep" in Malayalam (*oonu,* and *urakkam*) are seen declined as a compound, Sanskrit Dual Accusative.... "oonurakkau". The verbs, "pokkamchakre", "pinnitethas", seen in an old "Sandesa-kavya" are really Malayalam verbs conjugated like their counterparts in Sanskrit. "Kezhantee" is a Sanskrit Present Participle formed from the Malayalam verb, "kezhuka" (to weep). Sometimes, the qualifying and the qualified words are declined alike as in Sanskrit. Instances of such singularity of behaviour of "native" words in "manipravalam" may be seen scattered about in the older poems, but not in the later ones, as the genius of the Malayalam language began to assert itself more and more in the course of its evolution. At first, no doubt, Sanskrit Grammar superimposed itself on Dravidian; but before long Sanskrit came to be stretched on the Dravidian "Procrustes bed", from which, however, it came out well adapted to the disposition of the Dravidian tongue.

In other words, the Aryan with his cultural superiority was domesticated by the Dravidian, in this land of Parasurama. The history of "manipravalam" is the history of the fusion of the two races, and it shows how the Aryan and the Dravidian took to each other more kindly in Kerala than,

perhaps, in any other province in South India. Here in Kerala, it is abundantly clear from linguistic and literary evidence (let alone, for the present, evidence furnished by other departments of human activity) that the Aryans and the Dravidians endeavoured in right earnest to come together as closely as possible in a spirit of mutual trust and goodwill. It is their mutual adjustments and compromises in this process that are reflected in the development of our "manipravalam."

Mention has already been made of the fact that the authors of most of the "manipravalam" works hitherto known are Brahmins (Namboodiris) who are generally held to be Aryan in descent. There is ample internal proof in their writings to establish that they were profoundly erudite Sanskrit scholars, and that nothing could have been easier for them, if they so desired, than to give expression to their poetic talents through the medium of pure Sanskrit. Equally easy would it have been for them to write exquisite poetical works in pure Malayalam (as, indeed, the author of that most beautiful of all Malayalam poems, "Krishna-Gaatha", *did*)—the command of pure Malayalam displayed by them in their compositions being even to-day the envy and despair of our poets. Yet they chose to write their best poems neither in pure Sanskrit, nor in pure Malayalam, but in the particular dialect which is a sweet admixture of both. And they interlarded their diction profusely with words in their original Sanskrit grammatical forms, sometimes levelling even pure Dravidian words to such forms. If their intention was merely to write for the delectation of members of their own community, it is obvious, they would have more naturally written in Sanskrit, just as the Norman-French authors of England during the twelfth and thirteenth centuries generally wrote in the Norman-French

language, rather than in pure English, the language of the "natives" of the country. Evidently, it was not the object of the Brahmins to write poems meant exclusively or mainly to be read by members of their own community. On the other hand, they were presumably more interested in leading by the hand the other less learned classes on to the fair fields of classical literature. This is the reason, as one may rightly infer from the peculiar character of the composition in "manipravalam," why we notice so many elements of popular fascination in them. Sanskrit vocabulary and grammar, administered in short and sweet doses, would be taken in by the average reader without much effort. He would thus be initiated into the intricacies of Sanskrit Grammar in the course of his joyous poetical studies, almost without his own knowledge. Who can deny that it was precisely what the authors would have rejoiced to see? There is a common notion prevalent among our people that the Brahmins of Kerala were persistently hostile to the Sanskrit education of other communities; and many traditional stories are also current in support of such a notion. But the fact about "manipravalam", sought to be explained in this paper, should not be lost sight of in any discussion of the above notion. We are not talking of Vedic studies, but only of secular Sanskrit education. And it would be worth while to consider in a purely academic spirit how far the Brahmin authors of our "manipravalam" works could be regarded as enemies of popular Sanskritic studies.

There is one fact more to be borne in mind in a survey of "manipravalam". This literary kind has hitherto witnessed the output of no serious epic or dramatic composition, but only of *Champoos*, *Sandesas* and other lovelyrics, and didactic and devotional verses and versesequences galore. *Champoos* are Kavyas written partly in prose and partly in

verse. In the "manipravalam" *champoos,* however, the place of prose is taken by verses composed in various Dravidian metres! This curious feature cannot reasonably be attributed to the contempt which the Brahmin authors of *Champoos* felt towards the Dravidian verse-forms, as some critics have alleged, but to their desire to propitiate Malayalee readers by offering them in plenty something which was familiar and dear to them through long usage. To them the so-called prose of *champoos* would thus be an additional source of attraction. Above all, *champoos* deal with stories or episodes taken from the *Ramayana and the Mahabharata,* which were already well known to the people, or with events of topical interest, or with an imaginary story intended merely as a frame-work for academic delineation of the passion of love. In the *Sandesas* (message-poems) which in technique are modelled exactly on Kalidasa's "Cloud Messenger", the first half is taken up by poetical descriptions of places and scenes of the Kerala country, so familiar to the reader, and the second half by a reminiscential delineation of all aspects of love. The lyric poetry in "manipravalam" can, in respect of quantity, quality and variety, easily stand comparison with that of Elizabethan English literature. The heroines in most of the lyric poems in "manipravalam" (including the *Sandesas*) are non-Brahmins. From all these facts, it would not be wrong to make an inference about the *popular* character of "manipravalam" works.

There is a theory that "manipravalam" is traceable to the comic compositions of the poet Tōlan, meant to be recited by the Clown (Vidooshaka) in *Koothu* and *Kootiyattam,* as old as the first century M.E. But in those compositions the obvious aim of the author was to produce comic mirth by incongruous combinations of Sanskrit and Malayalam words,

and by the parody of Sanskrit verses and Sanskrit diction. What a far cry from such buffonery of Tolan to the poetical heights of Champoos like the *Ramayana, Bhasha-nyshadha, Bana-yuddha, Kama-dhana, Chellor-nadhodaya, Raja-ratnavaleeya, Koti-viraha,* etc. to Sandesas like *Unnu-neeli-sandesa,* and to the lyric fragments scattered about in *"Leela-tilakam"* and others being published and yet to be published from old-palm-leaf manuscripts (some of which the author of the present paper has edited and is still engaged in editing). Surely, one cannot help exclaiming when face to face with this fertile field of Malayalam poetry "Here is God's plenty".

The sweetness and harmony of "manipravalam" persisted right down to the period of Thunchath Ezhuthachan (eighth century M.E.) who has been been called the father of modern Malayalam in the sense in which Chaucer has been called the father of Modern English. By his time the tendency had become marked to free Malayalam from its subordination to Sanskrit. "Manipravalam" had been definitely vitiated by indiscriminate thrusting-in of discordant Sanskrit words, and by the callous neglect of the pure Dravidian element. Naturally there followed a reaction in favour of the latter. Thus in modern Malayalam, the Dravidian element has come to its own. Of Sanskrit vocabulary, there is much even to-day in the Malayalam language—much more than in other Dravidian languages. But the genius of the Dravidian language has ultimately triumphed in Malayalam too !

Rev. Caldwell is right when he says: —"One of the most marked characteristics of the Malayalam language, as we now find it, is the quantity of Sanskrit it contains. The proportion of Sanskrit words adopted by the Dravidian languages is least

in Tamil, greatest in Malayalam." Likewise, the intermingling of Brahmins and non-Brahmins has been more intimate in Kerala than in the other parts of the Dravidian country, whereof our "manipravalam" is but an index. At the same time, it has to be added, to avoid the possibility of a misunderstanding, that the Dravidian element is the bedrock on which our language and literature have been built up to-day. What Archbishop Trench has said about the respective contributions of Anglo-Saxon and Latin to the making of English is applicable to Malayalam, if we substitute Dravidian for Anglo-Saxon, and Sanskrit for Latin, and read the passage as follows:—"All its joints, its whole articulation, its sinews and its ligaments, the great body of articles, pronouns, conjunctions, prepositions, numerals, auxiliary verbs, all smaller words which serve to knit together and bind the larger into sentences, these, not to speak of the grammatical structure of the language, are exclusively Dravidian. Sanskrit may contribute its tale of bricks, yea, of goodly and polished hewn stones, to the spiritual building, but the mortar, with all that holds and binds these together, and constitutes them into a house, is Dravidian throughout." The same is true of the indigenous strength and importance of our society , however much and in whatever ways Aryan influences may have contributed to its moulding in the course of the centuries of contact between the two great races on this side of the Western Ghats.

VIGNETTES FROM THE HISTORY OF THE CHIDAMBARAM SHRINE

By

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I. Early Traditions.

The great Sabhanayaka Shrine of Chidambaram (*par excellence, the Kōil*) round which the ancient town has clustered and to which our Annamalai University and settlement bear a strong spiritual filiation, goes back to the earliest days of Saiva and Vaishnava reaction against the dominance of Jainism and Buddhism in the land. According to tradition, the temple was of divine origin, and its nucleus was divinely installed. Its most ancient votaries, Vyāghrapāda (He of the tiger foot) and Patanjali (He of the serpent form) held to be an incarnation of the thousand-headed Ādiśēsha, form the earliest links in the religious traditions of the shrine.

The legendary account of Patanjali is closely connected with the mystic dance of the Lord Siva, which taught a lesson to the proud Rishis of the Táruka forest, puffed up with conceit of Vedic learning (and held by a commentator to be followers of Mīmāmśa), made them alive to the great glory of Siva converted them into His fervent devotees. Vyāghrapāda, the son of a Brahman hermit living on the banks of the Ganges, was advised by his father to go to Tillai, a vast wilderness covered with trees of that name (*Excoecaria Agallocha*) and find the Parabrahma (Supreme Spirit) in

that sacred spot. He bathed in the Sivaganga *tīrtam* and worshipped a *Lingam* established under the shade of a banyan tree by its bank, and thus arose the shrine of the *Mūlasthāna*, the earliest nucleus of the temple. Vyāghrapāda soon found that he could not climb the lofty trees in the early dawn, to select fresh flowers for his daily worship of the God, prayed to the Lord and got from Him the boon that his feet and hands might become those of a tiger, armed with strong claws and he be furnished with tiger's eyes, so that he might easily climb and see the flowers in the dark of the dawn; he thus became known as 'the tiger-footed and six-eyed'; and a part of the present town came to be known as Tiru-Puliyūr (Sacred Tiger Town); and also Perumbaṛṛapuliyūr.

Some time later, the great Ādisēsha assumed the form of half-man and half-serpent, in order to see once again Siva performing the mystic dance in Tillai, and there met Vyaghrapada. He also made for himself a hermitage nearby and installed a Lingam by a tank, which continue to this day as the Anantīswara Shrine and the Nāgachēri tank, at the west end of the town. Likewise, Vyāghrapāda had installed a Lingam of his own at a little distance towards the south-east of the *Mūlasthāna*.

The traditions of these two great devotees go back to times earlier than the epoch of the legend of the Pallava King who was cured of leprosy by bathing in the Sivaganga tank and changed his previous name of Simhavarman into Hiraṇyavarman (the golden-bodied) as a consequence. He repaired and added to the nucleus shrine. This early royal patron of the shrine has been equated with the Pallava ruler, Simhavarman II, (or III) who reigned probably between 550 and 575 A.D.[1] One of the later traditions of the place has

called this king a Chola (Stanza 12 of the *Kōyilpurāṇam*). The picturesque story of his being commissioned by Vyāghrapāda to guard Vyāghrapura and his being given the flag of the tiger-crest, is embodied in the *Kōyilpurāṇam* of Umāpathi Sivāchārya, a Saivite scoliast of the later thirteenth and early fourteenth centuries. He is said to have belonged to the Dīkshita community and his *śamādhi* in Koṛṛavangudi (between the Chidambaram railway station and the University campus) can even now been seen. Umāpathi is the author of a good portion of the basic literature of *Śaiva Siddhānta, viz.,* the eight works beginning with the *Sivaprakāśa*; he has also given a graphic account of the life of the great *Śēkkiḻār,* the author of the *Periyapurāṇam, (Liber Sanctorum)* and of the work of Nambi-Āṇdār Nambi in his two compositions, entitled "Śēkkiḻār Nāyanār Purāṇam," and "the Tirumurai-kaṇda-purāṇam." The former of these two deals with an age when the memory of the great Chola rulers, Kulottunga I (*acc.* 1070), and Kulottunga II (*acc.* 1133), must have been relatively fresh in Umāpathi's mind. Therefore, his account of Śēkkiḻār, who was a contemporary of these kings, can be held to be much more historical in its perspective than the other work dealing with Nambi Āndār Nambi, whose age can be fixed at the early eleventh century, if not at the close of the tenth.

Umāpathi became the supreme theologian of the Tamil Siddhanta and is held to have learnt his wisdom from his master, Maraigñāna Sambanda, who belonged to a lower

1. Hiranyavarman was a surname of Mahendravarman I as mentioned in an inscription at Conjeevaram—*Subject Index to the Annual Reports on South Indian Epigraphy* 1887-1936 (1941), p. 27, Col. 1.

caste and was expelled from his own community for having partaken of food with his master. He forms the last of the quartette, known as the *Samaya-Kuravar* and the *Santhāna Āchāryas* of the *Saiva Siddhanta Darṣana*. His *Kōilpurāṇam* embodies legends which are in point of time long antecedent to those of the Saiva Nāyanmārs, described by Śēkkiḻār and Nambi-Āndār Nambi and may be said to constitute a portion of the oldest epoch of South Indian Saiva legends. Ārumuga Nāvalar of Jaffna, a great Tamil scholar and Saiva pietist of the last century, edited the *Kōilpurāṇam* and gave his own valuable commentary on the significance of the mystic dance of the Lord. According to one opinion, the comprehension of Patañjali among the earliest devotees of Siva indicates the absorption in the Saiva teaching of the system of Yoga thought of which he was the founder.

II. Later Traditions.

Most striking among the numerous associations of the 'Great Four' among the Saiva saints, is the legend connecting the temple with Māṇikkavaçaga's victory over the Buddhists in the great disputation, described in the sixth canto of the *Tiruvādavūrar Purāṇam*, which is an amplification of some sections of the Madura *Stalapurāṇam*. Therein we read how the great Saint of Vādavūr was summoned from his retreat to confute the aggressive Buddhistic teachers who had come over to Chidambaram with the king of Ceylon at their head. The Chola King urged the saint to vanquish the Buddhistic disputants in an irrecoverable manner, saying that it should be the Saint's care to establish the truth of the Saiva wisdom; and afterwards it would be his royal duty to extirpate the Buddhists. Māṇikkavaçaga vindicated the supreme power of Siva "seated as the Teacher in the shade of the beautiful banyan tree, teaching the laws

of right," and as the Dancer in Tillai's beauteous golden hall with the girdle of the tiger skin (*i.e.*, human passion) wrapped round him and wearing the serpent necklace (*i.e.*, the guile and malice of mankind) and crushing under his foot the Demon Muyalagan, which is the embodiment of human depravity. This disputation might refer to the last epoch of the struggle of the Saivites with the Buddhists who continued to linger for a number of years in isolated centres in the Tamil country, like Negapatam, and received frequent reinforcements from Ceylon. The legend can be attributed to about the ninth century.

Yet another attractive and heartening legend which has grown round the shrine is that of Nanda, the Ädi-Drāvida saint, who obtained final beatification in front of the Dancing Lord, passing into eternity when in a state of ecstatic devotion. The story of Nanda's piety is a very popular theme; and snatches of songs from the *Nandanār Charitra Kīrtana* of Gopalakrishna Bharati are on everybody's lips in the Tamil country. The *kīrtana* story has deviated in several respects from the version given in the *Periyapurāṇam*. The inclusion of Nanda among the traditional Sixty-three Saints should be regarded as being supplementary to his inclusion in a decade of Sundaramūrthi Nāyanār's *Tēvāram*, which can be ascribed to the first quarter of the ninth century A.D. The legend is certainly older than that date. Stressing on the great moral value of this legend, one can repeat the words of Sir William Wilson Hunter, when extolling the shrine of Jagannath, that as long as the towers of Chidambaram exist, so long will there be in the land "the perpetual and visible protest of the equality of man before God."

In addition to the great prominence enjoyed by the shrine in the *Tēvāram* hymns, and particularly in the writ-

ings of Māṇikkavaçaga whose *Tiruvaçagam* (*Holy Utterance*) was said to have been first recited in the temple itself and whose *Tiruchchitrambalakkōvai* was composed in its honour, one can note the pleasing and intensive association of the shrine with the redaction of the Tamil hymnal literature under the patronage of the Chola monarchs. The whole of the *Tēvāram* hymns, being the first of the collection of works held to be canonical by the Tamil Saivas, was put together in one book by Nambi Āndār Nambi (*cir.*, A.D. 975-1035), an Ādi Saiva Brahman of Tirunāraiyūr. This collection is known as the *Mūvar Adaṇgan Murai* and was divided into seven books by Nambi. He comprehended the two works of Māṇikkavaçagar into an additional eighth book, and a number of *Tiruvisaippās* by nine different authors and the *Tirumandiram* of *Tirumūlar* as the ninth and tenth books. The Chola king requested Nambi to put together one more book, consisting of miscellaneous poems and including some of his own works. The *Periyapurāṇam* was added, later on, as the twelfth book. Nambi Āndār Nambi invented the peculiar metre and music according to which the great songs of this collection have since been sung. With the help of the Chola Abhaya Kulasēkhara Maharajah, he composed, in front of the Kanakasabha, the metre for all these—a divine voice having proclaimed that the knowledge of the metre had been already communicated to a maiden born of the family of the blessed Tirunīlakanta Nāyanār, who was thereupon brought before the shrine and made to give out the songs with appropriate notes and music. The Chola monarch had all these Tirumurai songs with their appropriate *paṇ*, engraved on copper plates and then had them formally recited in the orthodox manner in the shrine of God Tyagaraja of Tiruvārūr.

The *Periyapurāṇam* of Śēkkiḻār is replete with fanciful and miraculous legends; but it is possible to trace in it the various epochs in the religious history of early Saivism. The poet was angry that the courtiers of the Chola monarch should admire a heretical Jaina work, the *Jīvaka Cintāmaṇi* and the king thereupon requested him to write down the lives of the Tamil saints. Sēkkiḻār then went over to Chidambaram and composed in the beautiful thousand-pillard *mantapa* of the shrine, his famous *Purāṇam,* which reached a total of 4,253 stanzas. It was recited before the Chola and expounded by the author from day to day for a whole year. It was claimed to be a veritable *Fifth Veda* in Tamil and given its place as the twelfth book in the Saiva Canon. The author was honoured with title of *Tondar-Śīr-Paravuvār* (the singer of the glories of the saints)—and adorned with the crown of knowledge (*Gnanamudi*) and saluted by the Chola monarch. Umapathi's account of this must be "read in the original for one to realise the gusto with which that author celebrates this epoch-making event in the history of South Indian Saivism." The Chola monarch referred to was Anapāya who covered the Pērambalam with fine gold and who is equated with Kulottunga II.

The *Tiruviḻayādal Purāṇam* of Perumbaṟṟapuliyur Nambi can also be associated with Chidambaram, as its author was the spiritual disciple of a certain Vinayaka who belonged to Māḷigaimadam in Chidambaram and who perhaps assumed the name of Puliyūr Nambi to indicate his devotion to the shrine of Nataraja. This work is held to be far more authoritative and truer to history than Paranjoti's much later version of the "Sacred Sports", as has become evident from its text as edited by Dr. Mm. V. Swaminatha Iyer, ' the Prince of Tamil Scholars.'

Thus we find that, in the hymnal age of the history of Saivism, Chidambaram played a most important part. In the next age of the development of Saiva Siddhanta which has been termed the 'exegetical period' in the evolution of Tamil literature, we witness again the close association of the shrine with one of its four great teachers, Umapathi Sivacharya. The detailed complex of the Siddhanta philosophy is very difficult to understand; but a sort of incomplete sectarian organisation early grew round its literature and its monasteries which have been efficiently functioning as schools of theology and learning in which the monks are trained and priests learn their art. A number of these monasteries are situated in the Tanjore delta and several of them have filiations with Chidambaram.

III. The Cholas and their Patronage of the Shrine.

The Temple goes back in its nucleus to Pallava times though no records even of the early Cholas of Tanjore, not to speak of the Pallavas, are forthcoming from the place. Copies of inscriptions belonging to the twenty-fourth year of Rajendra Chola I (1012-1043) and the forty-seventh year of Kulottunga Chola I (*acc.* 1070) are found on the temple walls; two short records that are claimed to belong to the tenth century Cholas have been discovered in the local Anantīswara shrine; but the earliest genuine inscription engraved in the great temple is dated in the third year of Vikrama Chola (1118-1133).

But we have other evidence that the earlier monarchs of the Vijayalaya dynasty of the Tanjore Cholas were great patrons of the shrine. The Brahadīsvara Temple at Tanjore seems to have been an offshoot from the Nataraja shrine. Parāntaka I, Vira Narayana (A.D. 907-947), the great ancestor of Raja Raja Chola (985-1013 A.D.), was distin-

guished for his devotion to the Chidambaram shrine; and he either built or repaired the golden hall at that place. Rajaraja was equally attached to God Kanakasabhapathi; and very probably he owed his titles, *Sri Rajaraja* and *Sivapādaśēkhara,* to the authorities of the Chidambaram shrine, which is designated the Temple (*Kōyil*) in the *Tēvāram* hymns, the *Tiruvisaippa* and the *Periyapurāṇam.* The name *Ādavallān* (one who is able to dance) was given to one of the principal deities in the Tanjore Temple, from that of the Chidambaram deity. Several variants of this particular designation are found in the inscriptions; and from two of them (Nos. 65 and 66 of the Tanjore inscriptions) it is clear that "the names of the god as well as of the temple at Chidambaram, and their various synonyms, were very commonly borne by men and women during the time of Rajaraja." The chief deity of the Tanjore Temple was known as *Ādavallān,* as well as *Dakshina Meru Vidangan.* These two names are applied in the *Tiruvisaippā* to the Chidambaram deity and subsequently to the Tanjore god.

The wall round the innermost shrine, comprehending the *Rahasya,* the *Chit Sabha* and the *Kanaka Sabha* and the other *prākāra* wall enclosing the *Mulasthāna* shrine, are both known by the name of *Vikrama Śōḷan Tirumāḷigai.* The inner of the two walls is also known as *Kulōttunga Śōḷan Tirumāḷigai* in four records; perhaps it was built by the father Kulōttunga, and either repaired or rebuilt by the son, Vikrama who might have called it after his father. Certainly, Vikrama should be credited with the construction of the outer *prākāra* wall. Perhaps also, the *Mūlasthāna* shrine was renovated about this period and its inscriptions were transferred to the prakara wall of the innermost enclosure.

Most of the inscriptions refer to the Chola kings of the twelfth and thirteenth centuries and later dynasties. Mostly

they register grants of lands for temple service and offerings and for the maintenance of feeding houses and *agrahāras* in the locality. All land gifts made to the temple were required to be engraved on its walls. Up to the time of Vikrama Chola these were made out in the name of Chandēswara, evidently pointing to the earlier importance enjoyed by the *Mūlasthāna* shrine, with the image of Chandēswara by the side of its Linga. It may be remarked at the same time that the *Tēvāram* hymns have been always sung only in the shrine of the *Mūlasthāna*. The prominence given to the Nataraja shrine in later inscriptions accounts for the substitution of the caste committee of Dīkshita priests in the place of Chandēswara, and this change suggests one of the reasons why the Dīkshitas have come to be regarded as the practical owners of the temple.

Besides Parantaka who covered the *Dabhra Sabha* with gold, we find a Chola Princess, Kundavai, who belonged to a later age, claiming credit for a similar act. Kulottunga I is mentioned by his title of Jayadhara in an inscription in the shrine, which is of some historical value. Kulottunga II is held by his court poet to have covered the Nataraja shrine with gold ; and this credit, as in the case of the inner *prākāra* wall, may well be shared between his father Vikrama and himself. The *praśastis* of Kulottunga II tell us that he "wore the crown in such wise as to add lustre to Tillainagar." An inscription of his seventh year from Tiruppurambiyam (350 of 1927) explicitly mentions, for the first time, his renovation of the temple and town of Chidambaram, though in a record of his third year, he gets a title based on this achievement. Kulottunga is said, in this inscription, to have worshipped the Dancing Siva of Chidambaram, in company with his queen, and to have removed the little God Vishnu from the court-yard of the sacred hall

of *Tillai;* he claims to have built numerous structures, including gopurams with seven tiers and also the shrine of the Goddess Śivakāmi Amman, which "delighted her heart so much by its size and its splendour that she did not think any more of the sacred mountain (Himalaya) that gave birth to her." These are recorded in briefer form in the *Rājarāja Śōḷan Ulā* and in the *Takkayāgapparaṇi* and much more detailedly in the *Kulōttunga Śōḷan Ulā*, of the famous poet, Kavichakravarti Ottakkūttar, whose memory is kept green even to this day, not only in literary tradition, but also in the name of the village Kūttanūr on the banks of the Arisil river in the Tanjore district.

The hundred-pillared hall to the west of the holy tank is claimed to have been built by one Naralōkavīra, *alias* Ponnambala Kūttan, a feudatory of Kulottunga I and of his son Vikrama, whose epigraphs share some of the best literary qualities of the Chola imperial *praśastis.* The powerful Kulottunga III (1178-1216) has several inscriptions of his, engraved on the temple walls which credit him with the construction of the *mukhamantapa* of the Nataraja shrine and the *gopura* and the enclosing verandah of the Sivakāmi Amman shrine. Even in the declining days of the Chola power in the thirteenth century, we find that Chidambaram enjoyed patronage at the hands of both the Chola overlords and their vassals. The most prominent figure in this connection is naturally Kōpperunjinga, a contemporary of Raja Raja III (1216-1246) and an over-grown feudal vassal of his. This chief who belonged to the family of Kādavarāyas and ruled from Śēndamangalam in the middle of the present South Arcot District, became an independent ruler in 1243 and counted his regnal years from that date. His titles included the name of *Aḷagiyasīyan* and *Kanakasabhāpathi Sabhā Sarvakārya Sarvakāla Nirvāhaka,*—a title that

was justified by his close association with the shrine. Several of his epigraphs are found on the temple walls. He is credited with the construction of the east *gōpura* of the temple according to a trilingual inscription from Tripurāntaka in the Kurnool district, wherein we read that he decorated the four sides of the tower with "booty acquired by subduing the four quarters." It is on both sides of the gateway of this *gōpura,* in the panels of the projecting pillars, that we find rich sculptures of dancing figures depicting the 108 postures, described in the *Bhāratīya Nātya Śāstra.* 93 of these have descriptive labels in *grantha* characters engraved on them. These have been illustrated with the corresponding verses occurring in the *Sastra, in the Annual Report for South Indian Epigraphy for* 1914. The book on '*Tandava Lakśaṇam* or *The Fundamentals of Ancient Hindu Dancing* (by B. V. N. Naidu, P. S. Naidu and O. V. R. Pantulu, 1936), gives a very instructive account of the sculptures of the dancing figures represented in the gateway of the east *gopuram* as well as those found in the gateway of the western *gōpuram.* The 108 classic postures seem to have been sculptured on all the four gopurams, but the explanatory labels are found only in the eastern and western towers.

In this connection may be mentioned similar figures of dancers and musicians, sculptured in continuous relief all round the basement of the thousand-pillared hall and in a well-preserved ring running along the basement of the pillared and storeyed corridors enclosing the courtyard of the Sivakāmi Amman shrine. Kopperunjinga's inscriptions are also found on the walls of the Tillaiamman temple[2] (Srī

2. This ancient temple was renovated about three decades ago by the family of our Raja Sahib.

Kōyil of Pidāri Tiruchchitrambala Mākāḷi). The tradition is that the Goddess who represented an earlier indigenous cult, was danced out of the Tillai shrine by God Nataraja in his famous *Ūrdhva-Tāṇḍava* dance in the *Nritta Sabha* of the temple which has been deemed by Fergusson to be a most precious piece of workmanship in sculpture and as containing dancing figures, "more graceful and more elegantly executed than any other of their class, so far as I know in Southern India." In the Bhimēsvara temple at Śingāratōpe, a suburb of Chidambaram, we find another inscription of Kōpperunjinga. One of his chiefs Śōla Kon, *alias* Perumāl Pillai, set up three pillars in the great shrine for the merit of his master.

The powerful Pandyas of the thirteenth century who overshadowed the Cholas, continued the *role* of their predecessors. Jatāvaraman Sundara Pandya I (acc. 1251) was anointed victor-hero and celebrated the *Tulābhāra* ceremony at the great shrine; and epigraphs of his found engraved on the eastern and western *gōpuras,* describe some of his achievements. A few of the succeeding Pandyas performed likewise in Chidambaram their *abhishēka* and commemorated their victorious campaigns. It is noteworthy that the Pandya fish-crest is engraved in the ceiling of the gateway of the great southern *gōpura.*

Among the benefactions to the temple made in those days may be mentioned the foundation of feeding-houses and the initiation of systematic ceremonial offerings of food to the God known as *pāvādai,* observed even to this day, according to which boiled rice of a determinate quantity is spread evenly over a plank measuring about 6' x 4'. in front of the God and distributed among the priests. One of the earliest feeding-houses of which mention is made, was the

Arapperunjelvi Śōlai, in the western street called *Mudikondaperumāḷ Tiruvīdi,* perhaps named after Kulottunga III, who took the crowned head of the Pandyas. The settlement of the Śōḻa Śāliyars (or weavers) who are even now a numerous community of the locality, is mentioned in a Pandya record of Māravarman Vīra Pandya (*acc.* 1262). Another grant of Jatāvarman Sundara makes mention of an *agrahāra* donated to 108 learned *bhattas* settled in a village known as Vikrama Pandya Chaturvēdimangalam situated on the western side of Perumbaṟṟappuliyūr, who were to be maintained from the income of the village of Puliyangudi. A similar record mentions the grant of 116 *vēlis* of land in Ādūr, *alias* Jananāthanallūr, to 108 Brahmans who were to pay four *kalams* per *vēli* every year to the temple of Tillaināyaka. Yet another record speaks of a shrine built in honour of Aḻagiya Tiruchchitrambala Udaiyār at the hamlet of Koṟṟavangudi (*alias* Pavithramāṇikkanallūr) near the University campus.

IV. The Vicissitudes of the Temple under later rulers

The association of the Vijayanagara monarchs with the temple is sufficiently striking, though not as intense as in the case of the Cholas and the Pandyas. King Devaraya II (1422-1446) has an inscription, dated *Saka* 1349 (*i.e.,* 1428 A.D.) on the north wall of the Karpaka Vināyakar shrine near the west *gōpuram,* which should interest the student of history as it embodies an account of the method by which temples were then supported and controlled by rulers. It should be a matter of common knowledge that the great Krishnadeva Raya built the north *gōpura* about *Saka* 1438, *i.e.,* 1516 A.D., in commemoration of his victorious northern campaign and advance in triumph to Simhadri-Pottunuru where he planted a pillar of victory, after

which he made a pilgrimage to the shrine of Ponnambalam and ordered the building of this tower. A striking and well-formed stone image of his is still preserved in a niche on the western side of the gateway of this *gōpura*. Achyutaraya was noted for his many benefactions to the shrine of Govindaraja. The Pāsupatiswara Temple at Tiruvētkalam[3] (renovated about a quarter of a century ago by Diwan Bahadur Ramaswamy Chettiar, an elder brother of the Rajah Saheb of Chettinad) contains an epigraph dated *Saka* 1488, recording the grant of that village (the village adjoining the University on the east), by Achyutappa Nayak of Tanjore for the merit of his overlord, King Tirumala I. Later Vijayanagara rulers like Sriranga II (1578-1586) and Venkata I (1586-1614) are mentioned in some epigraphs in the temple; one of them on the south *gōpura*, dated *Saka* 1510 (A.D.

3. This village is credited by local tradition as being the place of Arjuna's penance and the present by God Siva of the *Pāśupatāstram* to the Pandava hero. The temple itself dedicated to Siva has been sung by Saint Appar and Saint Sambandar. The latter refers to the village as being situated near the sea, where the chanting of the Vedas and the performance of the Vedic sacrifices went on; and the former describes the shrine as the abode of the *Vētanār*, i.e., the Hunter, Siva as Kirāta. It is held by learned opinion that the image of Kirātārjunamūrti in this temple shows unmistakable affinity with Pallava stone sculptures of the seventh century A.D.; and there is reason to believe that it is the same image that Appar saw and the presence of which led him to celebrate the temple in his hymns as the abode of *Vētanār*. There are two other images of remarkable value and antiquity in the temple, namely, those of Arjuna and Pārvathī. The image of Arjuna is later, but may not be far removed in point of time from that of the Kirātarjunamūrti (Vide '.Three South Indian Metal Images—A Study' by T. B. Nayar, 1934, *Annamalai University Journal*, Vol. III, No. 1).

1588), makes mention of Namassivāya Udaiyār, the superintendent of all the small services in the shrine. The student of Tamil literary history may remember, in this connection, Guru Namassivāya, who devoted himself, at the instance of his teacher, Guhai Namassivāya to holy work at Chidambaram and composed the *Paramarahasya Mālai*, the *Chidambara Venba* and other works. The head of the *mutt* founded by Guru Namassivaya continues to enjoy temple honours even at the present day.

A ruler of Cochin, Maharaja Rama Varma of the family of Śēramān Perumāḷ Nāyanār, has left a record in the temple, dated *Saka* 1498, providing for food offerings to the God. An epigraph of *Saka* 1515, (*i.e.*, 1593) informs us that the districts of Devāmandala Śīrmai and Vīranārāyana Śīrmai, Terkunādu, Vadakkunādu, the five villages grouped round Asuvur, and all others that had been enjoyed by the temple of Chidambaram from early times, had been made tax-free and fresh provision was made for a huge quantity of food offerings daily under the name of *Kondamanāyakan Kattaḷai.*

Achyutappa Nayaka of Tanjore, as mentioned above, made a gift in 1566 of the village of Tiruvētkaḷam to the Tirumūlasthāna temple at Chidambaram for the merit of the Vijayanagara King, Tirumala Raya and also several further endowments to it. Two other epigraphs of *Saka* 1493, refer to a gift of land made by one Aḷagapperumāḷ Pillai to Chidambarēswara for the merit of Achyutappa. It can be safely asserted that the temple received further endowments during the lifetime of that Nayak. Vīrappa Nayak of Madura is credited with having built the outermost stone-faced wall of the Chidambaram temple, which is even now called *Vīrappa Nāyakan madil.*

So the temple flourished, if any good flourishing could have been possible in the dark days that followed the disruption of Nayak rule in Tanjore and Gingee, the weakening of the Maratha Raj in Tanjore and the assertion of Muslim and European dominance in the Carnatic. During his southern campaign (1677-78), Sivaji is said to have contemplated the restoration of many Hindu shrines that had fallen on evil days; and we have evidence that he reconsecrated and enlarged the shrine of Tiruvaṇṇamālai and restored the celebration of the great *Kārthigai* festival. Sivaji occupied the Chidambaram district in the course of this campaign. He stayed for some time in the neighbourhood of Chidambaram and Bhuvanagiri (literally, Bhuvanēkavīran Paṭṭanam) for effecting a reconciliation with his brother, Vyankoji of Tanjore, with whom he spent some time on the banks of the Coleroon; but we do not know of any gift to or association with the shrine effected by him. In the darker days of the eighteenth century we have got only to note that the temple suffered serious reverses in the course of the Anglo-French wars in the Carnatic and later during the invasions of Haidar Ali of Mysore.

In 1749 the ill-fated expedition of Captain Cope against Dēvikōttah had to take shelter in the Chidambaram pagoda on its retreat. In 1753, the French took possession of it as well as the neighbouring Bhuvanagiri which was then a large weaving centre and partly fortified. They were in occupation of the shrine for several years till 1760 and buttressed the outer walls with bastions and embrasures and otherwise greatly strengthened the western gopura gateway. The importance of the French occupation of the temple lies in its conversion into a military base. A sketch of the fortifications planned, begun and carried out to some extent by the French, is given by the eighteenth-century historian,

Robert Orme, (*Vide* Vol. III of his *History of 'Indostan,* being a Collection of maps and plans to accompany that work.. Plan entitled 'Chillambarum and showing the fortifications intended and begun by the French) and is well worth a close study, as it discloses the alignment of the bastions and batteries projected for strengthening the outermost wall, as well as for the utilisation of the storeyed corridors that lined the inside of the second wall and that have now gone to ruin in many portions. In January 1754, there was an abortive attempt made by the English to force the French garrison which held the pagoda to surrender it; but the attacking party was completely routed. It was only in 1760 (20th April) that the English and their Nawab Muhammad Ali Walajah Bahadur, were able to secure the surrender of the town and the fortified pagoda. A party of English troops combined with a body of men under Krishna Rao, the *killēdar* of Tyagadrug, pressed on the place from the south and north respectively, while two eighteen-pounder cannon were taken up the Coleroon on *catamarans* from the English squadron lying at anchor off Dēvicottah.[4]

4. The chiefs of Dēvicottah, known by the hereditary title of *Śōḷa Kōn,* corrupted into *Śōḷaganār* flourished since the time of the powerful and dreaded Śōḷagan, chief of that Island fortress under Krishnappa Nayaka of Gingee (*Cir.* 1600). He was attacked by Raghunatha Nayak of Tanjore as being a rebel and taken captive along with his family and thrown into prison. He was very cruel in his punishment of victims; and his cruelty has been described by Father Pimenta, who perhaps visited his fortress. Yagna Narayana Dikshita has referred to the sons and relatives of this Śōḷaga in his work. Śōḷaga and his descendants had an intimate association with the temple and claimed the right to be crowned in the Rajasabha in the thousand-pillared mantapa. The present representative of the family, who is a poligar, lives in an adjoining village in the jungle at the mouth of the Coleroon,

We may suppose that there was an intermission of the worship, services and festivals in the shrine during the period of its military occupation by the French. Nor was it destined to enjoy unbroken peace even after its recovery by the English for the Nawab in 1760. In the course of the Second Mysore War (1780-1784) when Sir Eyre Coote marched to the southward from Cuddalore in June 1781, preparatory to engaging Haidar Ali, he attacked Chidambaram whose fortified pagoda had been for some time under the occupation of the enemy. The latter had taken care to surround the pettah on the west side of the temple with a mud wall; and the place was garrisoned by about 3,000 poligar peons. The pettah was quickly occupied by the English who burst open the outer gate on the west by a vigorous fire but found further advance into the pagoda impossible (18th June 1781). Thus the first attempt of the English to capture the fort failed and Coote retired to the neighbourhood of Porto Novo, where he gained the glorious victory that turned the tide of this critical war.[5]

Dēvicottah was abandoned after some time and has completely disappeared under water, except for some small relics. It is perhaps identifiable with the Jalkotta of the Muhammadan historians, who described the Muhammadan invasions of South India in the fourteenth century.

5. The fortified pagoda of Chidambaram was the main objective of Coote in the campaign that culminated in the great victory of Portonovo. The failure of the English to carry the pagoda by assault to which reference has been already made is well described by Colonel H. C. Wylly, C. B., in his Life of Sir Eyre Coote, K.B., (1922 page 220). The small number of Europeans in his force and his natural desire to save them for more important enterprises had made Coote endeavour to take the Pagoda with sepoys and small artillery. The failure of Coote and the repulse of his forces greatly elated Jahan Khan, the cap-

It was in this period of trouble that the sacred Idol of Nataraja was removed from the Ponnambalam shrine and taken over to Tiruvārūr for protection under the Raja of Tanjore. An inscription in *grantha* characters in the form of a *'sloka'* in the thousand-pillared mantapam refers to this fact and says that it was in the year *Saka* 1695, Kali 4874 (in the month of *Māśi Krishnapaksha, mūla nakshatra, thriyothasi thithi*) that Nataraja came to Chitsabha from Tiruvārūr.

V. The Twin Vishnu Shrine of Govindaraja[6]

It may be, perhaps, instructive at this place to trace the fortunes of the twin shrine of Govindaraja associated from the early times with Sri Sabhanayaka. We know that the Vaishnava deity was praised in song by two of the Ālwārs, Tirumangai and Kulasēkhara and that the worship of the God was in those days conducted by the Tillai Mūvāyiravar. The Vishnu shrine was held in veneration by the Pallava

tain of the enemy troops; and the latter so magnified his success that Haidar Ali at once made up his mind to destroy the English power. He made a forced march of 100 miles in 2½ days and placed himself between Coote and Cuddalore and began to fortify a position, hemming in the British army into an equilateral triangle formed by his camp, by the sea and the Porto Novo river. In the battle the British fleet which was in the roads could not take any part except a small schooner; towards evening when his troops had begun to retreat, Haidar took shelter in Chidambaram but Coote's cavalry was numerically too weak to pursue the enemy.

It was in Chidambaram also that Haidar confined some English prisoners that he later on sent to his capital.

6. A connected account of the Vaishnava shrine was given for the first time by Dr. S. K. Aiyangar, the veteran historian, more than two decades ago in connection with an important suit.

monarch who was a contemporary of Tirumangai and probably Nandivarman II, and was known by the name of Tillai Tiruchchitrakūtam. The *Tirukkōvaiyār* of Māṇikkavacaga informs us that the God was in a recumbent posture and rested on Ādisēsha and that his shrine was adjacent to Tiruchchitrambalam in front of the Siva deity. Further, we learn from Vaishnava literature that the Vishnu deity was thrown into the sea and the shrine itself was vacated in order to enlarge the courtyard of Śiṟṟambalam by a Chola monarch, who is called Śennikulōttunga in the *Life of Ramanuja* by Pillailōkam Jīyar. This monarch has been identified with Kulottunga II, known also as Anabhaya and Tirunīṟṟu Śōḻa (1135-1146) and this act of the Chola has been described by the poet, Ottakkūttar in two of his works. The date of this act of desecration has been proved by an elaborate process of reasoning by Rao Saheb Pandit M. Raghava Iyengar, to be 1127 A.D. (*Saka* 1049). The great Vaishnava Apostle, Sri Ramanuja, certainly heard of this desecration of the Vishnu shrine and of the subsequent transportation of the image by some *bhaktas* to Lower Tirupati. Some time after this, he went over to the latter place where he had the image consecrated and enshrined.

We hear of the next great reconsecration of the Vishnu shrine in the temple in 1539, in the reign of Achyutaraya, under the inspiration of a famous Vaishnava teacher, Doddāchārya *alias Mahācharya* of Sholinghur. This was effected, according to the *Prapannāmṛitam* by one Ramaraya of Chandragiri, incorrectly supposed to be a brother of Krishnadeva Raya, but in reality a lieutenant of Achyuta who actually consecrated the shrine. This is further supported by the *Vāsudēva Charitai* (composed in 1543 A.D.) of Varadaraja, in which the author says that Govindaraja worshipped by the *dēvas*, with Uma's Lord dancing by his side, was res-

tored to his former shrine and praised by Achyuta in some verses. We know further that Achyutaraya built several parts of the Vishnu shrine; and the words used by Varadaraja in his book seem to imply that it was rebuilt after the old model, having perhaps been abandoned all the time. This writer might have actually witnessed the reconsecration ceremony itself. The alleged restoration of the shrine by the Brahman general, Gōpanārya, associated with Kumara Kampana, in the task of the restoration of Srirangam and Madura in the fourteenth century is incorrect.

In *Saka* 1565, *i.e.*, A.D. 1643, Sriranga Raya of the Aravidu dynasty, then ruling from Vellore, renovated the *mukhamantapa* and the *gopura* of the shrine and the *vimanas* of the goddesses Pundarīkavalli and Sūdikkodutta Nāchchiār and also of the *mantapa* in front of Tiruvāzhi Ālwān (Inscription No. 271 of 1913) and gave away five villages in rent-free grant for the benefit of the Sri Vaishnavas of the place.

Krishnappa Nayak of Gingee (*Cir.* 1600) was a zealous patron of Vaishnavism, like his master Venkatapathi Raya of Vellore. He settled definitely the bitter controversy that had been raging over the question whether the shrine of Vishnu should have the Vaishnava symbols placed in front of it, to which the Saiva priests strongly objected. According to the Jesuit writer, Father Pimenta, who has given a succinct account of what he saw in the temple when he visited the place in 1597, the protest ended in the violent death of some of the objectors and the work of construction was carried on to its conclusion. The Sanskrit work, *Prapannāmiṛtam,* claims that the Vaishnava scholar Mahācharya defeated in scholastic disputes the Saiva scholars of Chidambaram, among whom was included even the famous

Appayya Dīkshita, so well known for his devotion to God Nataraja.

In the last decade of the eighteenth century, there arose a renewed dispute between the two shrines, leading to the stoppage of the worship in the Vishnu shrine for some years and even the walling up of its entrance. It was settled by the arbitration of the Nawab's *faujdar* of the district and confirmed by a *parwana* of Nawab Omdut-ul-Umarah Bahadur of the Carnatic, dated 1797, which defined the respective rights and claims of both the parties.

After the establishment of British rule over the district when swords were turned into plough-shares and battle-axes into pruning hooks, the disputes between the two shrines were fought out in the law courts, off and on, with varying fortunes. Now the main points of contention have been settled fairly amicably and the managers of the two shrines have agreed to work harmoniously, largely through the mediating efforts of the Rajah Saheb of Chettinad, who renovated the ruined *mantapa* in front of the Vishnu shrine, repaired the shrine itself which was in a dilapidated condition, reconstructed the *gōpura* and the *vimāna* over the *Garbagraha* and reconsecrated the *sannidhi* itself in the summer of 1934.

Thus we may summarise the vicissitudes in the fortunes of the Govindaraja Shrine in these words : "In the eighth century, the Vishnu shrine was consecrated by a Pallava ruler,—most likely Nandivarman II—praised by Tirumangai Ālwār. In the first half of the 12th century, it was desecrated by a Chola, most likely Kulottunga II ; in the first half of the sixteenth century, it was renovated by Achyuta Raya of Vijayanagara; and towards the close of that century it received the patronage of Krishnappa Nayak of

Gingee; and later it was further enlarged by Sriranga IV. In 1934 the shrine itself which was in a ruined condition was renovated at a considerable cost through the munificent generosity of the Rajah Saheb of Chettinad, as noted above.

Thus it appears from the history of the shrine that it has been fated to undergo a critical change in its fortunes every four centuries.

VI. The Growth of the Temple in Recent Times.

Lord Valentia, an English nobleman of high rank, who visited the shrine in 1803, gives a very good picture of the temple as he saw it then: He thus wrote:—"The gateway by which we entered had lately been repaired by a devout widow, at the enormous expense of forty thousand pagodas. The whole of the architecture had a more ancient appearance than Tanjore or Ramiseram. Facing the entrance they were erecting a portico of one hundred fluted pillars, in some parts three, in others five deep; the roof was not yet laid on. We then proceeded in a winding direction to the entrance of the most holy temple. This building is more ancient, and the style much purer than the others around it; even the carved figures shewed in the artist a more just attempt at proper action than is to be found in the rest. A small temple facing us on our return, was of the same architecture and the carved figures had equal merit." This last was evidently the Nritta Sabha.

The widow referred to above, was the wife of the great philanthropist, Pachaiyappa Mudaliar of Conjeevaram (1754-1794), who was Dubash for some years for the East India Company at the Tanjore court and who devoted his extensive wealth for religious and educational charities, including among them large benefactions and *kattalais* for the Sri Sabhanayaka Shrine. He started in 1791-92 the

second *Brahmōtsava* of the shrine, by name Ani Tirumanjanam, which he arranged to be celebrated on an equally grand scale with the *Ārudhrā Darśanam*. He built the car-stand, renovated the temple cars and revived the car festival which had fallen into desuetude for some time. He arranged for the starting of a Sanskrit seminary at Chidambaram and persuaded his rich friend, Manali Chinniah Mudaliar, grandson of the famous Dubash of Lord Pigot, Manali Muthukrishna Mudaliar, (who constructed in Madras the shrine of Chennakesava Perumal and Chennai Mallēswaraswami about 1763) to endow large benefactions to the Sabhanayaka Shrine, which included the maintenance of flower gardens and the plating with silver of the *Panchākṣara* steps leading into the innermost sanctum.

Pachaiyappa had also planned the reconstruction of the east *gopura* which had become dilapidated; but as he died before he could undertake the work, his widow and his sister who carried out his will, took care to complete that injunction, as noted by Lord Valentia. A stone image of Pachaiyappa and another of his sister and mother-in-law, by name Subbammāḷ, are to be found in niches on the southern side of the gateway of the east *gōpura*. The many-sided charities of Pachaiyappa were first detailed in a number of songs about 1840 by great Tamil scholars like Malavai Mahalinga Iyer, Head Tamil Pandit of what was then known as the Madras University, subsequently the Presidency College, and Mahavidwan Sabhapathi Mudaliar of Conjeevaram.

Likewise, the rich Nattukottai Nagarathar community comprehended a thorough renovation of the great shrine in their schemes of reconstruction of South Indian temples; and a considerable sum of money was devoted to this purpose by the family of the Rajah Saheb which began the work of re-

construction in the seventies of last century on a lavish and magnificent scale, and the result has been the renovation of all the gopuras, the restoration of almost every shrine to greater grandeur of appearance and ornamentation, including the gilding of the roof of the Kanakasabha, the repair of the enclosing walls, the broadening of the stone steps and corridors of the sacred tank and above all the construction of the magnificent corridors round the second *prākāra*, recalling to mind the spacious splendour of the Rameswaram corridors. Besides these the charities of the family have provided for a number of *ubhayams* and *kattaḷais* in the temple and for the reconstruction of the cars and for the provision of a great quantity of lamps, vessels, *vāhanas* and other appurtenances, many of them of silver, for use in the service of the deities. There was a great consecration ceremony conducted under the auspices of this noble charity in 1891. The work of renovation in several other parts of the temple was continued for over a quarter of century after this date. Three generations of the family of the Rajah Saheb have devoted themselves to this great task of the restoration of this ancient shrine to more than its pristine glory. Metal images of the parents of the Rajah Saheb, holding ever-burning lamps in their hands have been installed in the Kanakasabha, in token alike of their religious devotion and magnificent generosity.

The Rajah and his elder brother, Diwan Bahadur Ramaswamy Chettiar, have likewise developed the town and increased its amenities for cultured life. Schools for the propagation of Vedic and Agamaic learning and for the revival of *Tēvāram* singing and studies, and magnificent choultries, which have practically thrown into shade and idleness, by their huge feeding, earlier foundations,

and Gorakshaśālas and flower-gardens may also be mentioned among their many-sided benefactions. Modern amenities like the well-equipped high school, started a quarter of a century ago by Mr. Ramaswami Chettiar, the protected water-supply which has scared away foul diseases like cholera and elephantiasis from the town, also due to his generosity, and the building of a town-hall for the expression of the common life of the citizens and named after the Rajah Saheb, as Annamalai Town Hall these show to what extent the Rajah's family have devoted themselves for the exaltation of the shrine and the improvement of the town, to which has been added practically another town and temple of learning in the shape of the University settlement, which may be called the most expressive of the Rajah's innumerable and wide-spread charities and may be claimed to be the most potential for good as well as the most fruitful among them all. It will not therefore be inappropriate that the Rajah of Chettinad should be honoured, like his royal and semi-royal predecessors in the patronage of the temple, with the titles of *Sivapāda Sēkhara* and of *Kanakasabhapathi Sabha Sarvakārya Nirvāhakā.* Let us hope that, under the Rajah's fostering care, the twin towns of Chidambaram and Annamalainagar, the one conserving the culture of the past and the other endeavouring to realise the aspirations of the Tamils and their cultural development, may grow in strength and usefulness and expand, as of old, so as to take in all the neighbouring hamlets like Sivapuri (reminisdent of the settlement of Jaffnese Saivites[7] taking refuge from persecution in their own home) Vikrama Śōḻanallūr and other surrounding villages as it did in the golden days of Chola rule.

7. A part of Chidambaram, round the tank of Gnānaprakāsar, a scholar of the 17th century, has been associated with a Jafinese settlement; and God Kanakasabapathi has ever been their chosen deity.

STELLAR DISTRIBUTION.

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The major problem in modern astronomy is that of the stellar distribution, representing the form and extent of our Universe—the great assemblage of stars, clusters and nebulae segregating towards the Milky Way as their fundamental plane.

The problem has been approached in various ways:— The individual distances of special types of stars, for instance, the cepheid variables, whereof the regular period of variation is directly related to their intrinsic luminosity, which combined with their apparent brightness gives an accurate measure of the distances of these usually very remote objects. Though lying near to the galactic plane and at great distances, their number is too small to fix the form of our Universe. With cepheid distribution is associated that of the globular clusters, wherein the periods of the faint cepheids have determined the distance of these remarkable objects. The globular clusters, however, do not exceed more than some ninety in number and are found to lie in all directions within a sphere enveloping our galaxy, and so are

no guide to the actual form or density prevailing within the Galaxy. Another line of study lies in deriving the distances from the known mean luminosity of stars of various spectral types. Then, again, the stream motions found to prevail in certain directions have revealed other characteristic features of our Universe. Another promising method, and that considered in this paper, is the star density, or numbers of stars down to various magnitudes per square degree, in different parts of the sky. The studies made at Mt. Wilson Observatory have (contribution No. 301, 1925) been incorporated with the exhaustive star counts by Van Rhijn and published in 1929 (Pub. Kapt. Ast. Lab. Groningen, No. 43,) detailing the number of stars per square degree according to galatitude (the galactic latitude measured from the galactic equator) towards the north and south galactic poles, and for galongitude (galactic longitude) reckoned eastward along the galactic equator from its intersection with the celestial equator in Aquila.

The abridged *Tables I a — e* give, for the photographic magnitudes 6, 9, 12, 15 and 18, the star density in numbers per square degree at each 30° interval of galatitude (β) and at every 30° in galongitude (λ), the latter being the average values for the three 10° intervals of galongitude centred at the given directions. This smooths out the effect of local inequalities, whether of condensations (bright patches) or of obscuring clouds (dark patches). The average for each whole circle of galongitude round each galatitude parallel is given in the final column. It may be remarked that galactic latitude $-2°$ is actually the richest belt; but, as this is the evident effect of the actual galactic clouds, the values for $\beta=0°$ should give the truer representation.

In order to derive the forms of these stellar spheroids, it will suffice owing to the uncertainties in our premises to assume a generally uniform distribution of the stars, and we therefore take the cube roots of the density numbers to connote the relative boundaries of the respective spheroids in the several directions. These values appear in *Table II a—e* for the same magnitudes as in *Tables I a—e*, with the quantities for the whole circles in the final column, as before; the intermediate directions, however, in galongitude are confined to the significant directions $\lambda 150° - 330°$ and $\lambda 60° - 240°$, *viz.*, the lines approximately towards and away from the galactic centre, and those at right angles thereto. On the assumption of average uniform distribution of these stars in space, the numbers in *Tables II a—e* represent the outlines of their containing spheroids. The ratios between the values for the corresponding points for the several magnitudes in such case define the relative proportions of the spheroids between each three—magnitude stage.

Combining the like galatitudes N. and S. of the galactic equator, we derive *Table III*, giving the corresponding ratios for each magnitude considered. The last two columns give the overall ratios for the range of 12 magnitudes —from 6th to 18th pmg—both for triple and for single magnitude ranges.

The Table shows that the distance ratio has a slight but steady increase between each magnitude as the galactic equator is approached; while, at the same time, there is a falling off in this ratio with increasing distance down the magnitude scale.

The planes of condensations found by Van Rhijn from the star counts vary with their brightness, and hence with

their numbers. For the lucid stars, i.e., to 6th (phot) magnitude, the north pole of their plane lies at (1900) $\alpha 188^\circ \cdot 2 (12^h - 33^m)$, $\delta + 26^\circ \cdot 5$. This difference indicates the trend of the stars from the local Cluster into those of the main galactic stream, as their distance increases. These spheroids are plotted in Figures 1 $a-b$ and 2 $a-b$, showing their forms respectively on the galactic plane and that vertical to it; the outlines for the 12th pmg are repeated in the "b" diagrams, these latter being on a smaller than the "a" scale, in order to embrace the much greater expanse in the 15th and 18th pmg. In both sets of diagrams the actual $\sqrt[3]{N}$ values have been plotted for each 10° intervals of galongitude and galatitude (for the latter, even closer within the $\beta \pm 20^\circ$ zone and derived from the Van Rhijn tables for these closer intervals) rather than for just the 30° intervals appearing in the abridged Tables I and II. The vertical sections in Figs. 2 $a-b$ are chosen along the perpendicular planes $\lambda 150^\circ - 330^\circ$, [approximately towards and away from the galactic centre ($\lambda 326^\circ$)] and $60^\circ - 240^\circ$, crosswise, *viz.*, along the path of galactic rotation. The noticeable "dents" here and there in the vertical sections are evidently due to the presence of obscuring clouds: in the 12th pmg outline, at $\lambda 330^\circ$, $\beta \pm 10^\circ$ (Ophiuchus) and $\lambda 150^\circ$, $\beta - 15^\circ$ (Taurus); in the 18th pmg, a like effect appears at $\lambda 240^\circ$, $\beta + 20^\circ$ (Antlia). Conversely, the apparent "bulges" predicate bright galactic patches as that at $\lambda 60^\circ$, $\beta - 10^\circ$ (Lacerta) for the 18th pmg, and that extending at $\lambda 330^\circ$ southward in galatitude from $\beta - 10^\circ$ (Sagittarius to Grus) for the 12th pmg. The vertical outlines for the 18th magnitude (Fig. 2 b) at $\lambda 240^\circ$ and 330° are farther out than their opposites (compare the right and left hand sides in the figures). This shows a distinct "trailing", due, may be, to galactic rotation and also the presumed arm towards the

galactic centre. The same effect appears though to a lesser extent, in the 15th magnitude.

Having derived the comparative forms, the next step is to interpret their scale in distance units. In this connection, we may adopt the results obtained at Mt. Wilson (Contr. No. 281, Seares, 1924) deriving Table IV (a) and quoted by Russel Dugan and Stewart, "Astronomy" p. 665, where the distances near the galactic poles are stated to be about three-quarters of those tabulated, and at the galactic equator an eighth greater than tabled. This table may be expressed empirically by the formula $R=9\ (1{\cdot}46)^m$, where m is the tabulated (visual) magnitude and R the distance in radials; a radial is the distance represented by a parallax of 1″ arc, or 206,265 astronomical units ($19{\cdot}16\times10^{12}$ miles), and commonly known under the uneuphonious and somewhat inaccurate term "parsec". The mean luminosities follow in the last column from the consequent relation $L=81/1{\cdot}2^m$.

The galactic planar values appear in Table IV b, where the formula has been extrapolated down to the 18th (visual) magnitude, while the intermediate values are entered for the photographic magnitudes 6, 9, 12, 15, and 18, for which Tables I and II are entered. The first two columns in Table IV b give respectively the visual and photographic magnitudes related by the formula, visual magn.$=0{\cdot}3+0{\cdot}9$ (phot magn.). The fourth column gives the corresponding parallaxes (π). The final column gives the mean luminosities (L) of the stars of each magnitude following from the consequent empirical rule $L=100/1{\cdot}2^m$; whence it appears that there is a decline of 2½−fold or 1·0 magnitude in real brightness with every 5 magnitudes decline in apparent brightness.

Though it is well known that the apparent brightness (magnitude) of a given star is no index whatever of its distance, yet, taking the stars in their thousands down their successive magnitudes, their average distances may be accepted, as tabled. In order to correlate the distances in Tables IV with those implied in Table II a—e and illustrated in Figs. 1 and 2, we may compare the star density prevailing in our part of the Galaxy. By "star density" is meant the number of stars in a given volume of space, as distinct from "stellar density" which concerns the density conditions prevailing within any given star itself. Recent studies, summarized by Bok (Ap. Jnl. Monograph. "Distribution of the Stars". Univ. Chi. Press, 1937) indicate an overall mean density from 0·05 down to 0·04 solar mass per cubic radial. Within our Local Cluster (see later) the star density ranges from about 0·06 solar mass per cubic radial in our neighbourhood; i.e., 17 cubic radials per solar mass (cp. "Concise General Astronomy", Walkey and Aiyar 1940, p. 238) down to 60% of this in its outer regions (cp. Oort's finding, 0·038 solar mass per cubic radial, Bok, loc. cit.). Adopting 0·04 star density, or 25 cubic radials per star as an overall value, we have, for a 5:1 oblate spheroid, the simple relation between its volume and its apparent superficial area as seen by us from within, viz., between $\frac{4}{15}\pi R^3 \times 0{\cdot}04 = 4\pi(57{\cdot}3)^2$. Where R is the equatorial radius of the spheroid (5 times the polar radius). This yields a round value of 110 radials represented by a star density of one star per sq. deg. The consequent polar scale being 64 radials for the same star density in the Tables I and II.

The outline for 12th magnitude approaches the boundary of our Local Cluster, some 1500 radials across, and having its north pole at (1900)$\alpha = 178^\circ$ ($11^h - 52^m$),

$\delta = +31^{\circ}\cdot 2$ (Seares, Mt. Wilson Cont. No. 347, 1927). This assemblage of stars evidently embodies an inner core represented by what is known as Gould's Belt, outlined mainly by the two great helium (B type) star groups of Orion and Centaurus-Scorpio, and which seem to indicate a circulation round a centre over 200 radials away in Carina, and just possibly marked by the supergiant star Canopus (see "*Concise General Astronomy*", as above, pp. 269-272). The reality of the group motion in Centaurus-Scorpio has recently been questioned (Smart, M.N., R.A.S., Vol. 100 p. 60, 1939). The evident existence, however, of the Local Cluster should predicate the probability of some circulatory motion within itself—the B type stars in particular show such a tendency (cp. G. Stromberg, Mt. Wilson Cont. No. 492, 1934). This core, tilted some 18° with the main galactic plane, flattens this slope to within 13° (C. Mc Cuskey. Ap. Jnl. Vol. 89 p. 575, 1939).

Though doubted by some, the existence of such a cluster is evident, a general galactic rotation has been established mainly from the apparent radial velocities of the globular clusters—at a speed of some 170 miles sec. round the galactic centre, 10,000 radials away in the direction (1900) $\alpha 17^{h}-40^{m}$, $\delta -30^{\circ}$ ($\lambda 326^{\circ}$, $\beta 0^{\circ}$), so Plaskett and Pearce conclude (M.N., R.A.S., Vol. 94, p. 679, 1934). More recently, the globular clusters are themselves found (Camm, Ap. Jnl. Vol. 89, p. 45, 1939) to rotate round this centre; allowing for this rotation, that of the Local Cluster is accelerated to some 250 miles per second. The shearing effect of this latter rotation is apparent in the elongation and lopsidedness in the lengthwise and crosswise sections in Figs. 2 a—b., along the path of rotation, which is towards Cygnus. This is borne out by the independent studies summarized by Bok (Ap. Jnl.

Monograph, as above), finding our cluster to be elongated in the approximately same direction, viz., the line, $\lambda 62°-242°$.

These studies also show that the star density, which is constant up to about 600 radials out from the Sun in other directions, drops rather suddenly from 200 radials until 800 radials in the perpendicular direction line, i.e., towards and away from the galactic centre. The resumption in this direction of the normal star density at 800 radials out marks the main galactic densities beyond our Local Cluster.

Table IV(b) however, takes no account of the since discovered absorption of light within our galaxy; for which the most acceptable overall value may be taken to be that derived by Stebbins (Com. Nat. Acad. Sc. No. 111, 1933) as $0^{m}\cdot 36$ (=28%) loss for every "Kiloparsec" viz., 1000 radials, traversed. Incorporating this effect, the revised rule for distance (in the galactic plane) becomes $R=10 \times(1\cdot 45)^{\,m-\,00036}$ This relation is plotted in Fig. 3 to derive the revised values of Table V in place of those in Table IV b. The luminosities (Table IV a) remain unaffected since the absorption affects the apparent brightness only.

Did the absorption and distribution functions hold so far the stars at the galactic centre, 10,000 radials away, would appear of 22nd (visual) magnitude. Such, however, is not the case. The polar and equatorial distance scales have been adjusted in the diagrams Figs. I a–b and 2 a–b to the relation pointed out under Tables IV incorporating the absorption distances given in Table V. The resulting trend towards a 1:5 flattening bears out, for our part of the Universe, and generally, the discoid form adumbrated by Sir William Herschel for what was then deemed to be our whole Universe.

Again, we may derive from Tables II a—e and V, the (direction (λ_c) and distance (R_c) of the centroids of the distribution spheroids on the galactic plane, in Fig. I a—b, by simply (within present limits of accuracy) treating each 10° galongitudinal sector as a triangle of area $N^{2/3}$ with its 10° apex at the Sun and its centroid $\frac{2}{3}$ ($N^{1/3}$) out, whence, summing the moments $N^{2/3} \times \frac{2}{3}$ ($N^{1/3}$) $= \frac{2}{3}N$ round the circle, we get tan λ_c in the usual way. The distance R_c of the centroid follows by dividing the resultant by $\Sigma N^{\frac{2}{3}}$ (viz., the total area). The results appear in Table VI, giving both the direction and distance of the centroid in each case, together with the increase-ratio for the last three-magnitudes intervals.

With the exception of the 9th phot. mag. (where local effects evidently prevail to deflect the direction,), there is a progressive trend eastward in the galongitude of the centroid with increasing distance. This is doubtless due to the increasing effect of the main galactic distribution as we leave the Local Cluster. To this is evidently due the sudden outward shift of the centroid between the 12th and 15th magnitudes, where the change is about double that between the other intervals. This is because the Local Cluster seems to disappear beyond the average distances of the 12th magnitude stars.

Next, we compare the mean $\sqrt[3]{N}$ values at the galactic equator in Tables II a—e for the five pmg's 6, 9, 12, 15 and 18, the increase-ratios in Table III, with the Table V values for R corresponding to the equivalent visual magnitudes, read from the curve in Fig. 3, together with the increase-ratios for these latter over the same 3—magn intervals. The comparison appears in Table VII.

The first two columns in the Table give the photographic and visual magnitudes, the next two columns give the

cube-rooted densities and their equivalent distances by the equatorial conversion factor 110 (see under Table IV b value of 110 for star density of one). The fifth column gives the three—magn increase-ratio (Table III), while the last two columns are read from Fig. 3, as stated, representing Table V. The agreement between the distance (cols. 4 and 6) for these independent lines of approach is a measure of the correctness of the adopted density of 0·04 Solar mass per cubic radial, and the absorption factor (·00036 mag/1000 radials), while the agreement between the ratios (cols 5 and 7) shows how far correct is the assumption of approximately even star density, taking the stars on the whole within their magnitude spheroids.

It should be noted that, in view of the dispersion in actual parallaxes about their mean for a given magnitude, the mean distance in radials for such magnitude is actually greater than entered (Tables IV, V) as correspondent to the mean parallax. To give a simple example; the mean of the five parallaxes 0″·08, ·09·10, ·11, ·12 (a dispersion 20% on either side of their means) is 0·10, corresponding to 10 radials distance; whereas the mean of their corresponding distances 12½, 11⅑, 10, 9⅑, 8⅓ radials is 10·235 radials or 2·35% more than would appear in the Tables. This discrepancy lessens as the number of intermediate measures increases.

In conclusion, it should be remembered that the evident, but at present unknown, inequalities of light-absorption prevailing along the galactic belt, necessarily vitiate any detailed findings which, therefore, must not be pressed beyond their general aspect.

TABLE I

(a) 6th phot. mag. = 5·7 Vis. mag.

β/λ	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°	All°	λ/β
+90°													·039	+90°
60	·048	·050	·050	·044	·038	·038	·046	·045	·033	·034	·046	·051	·044	60
30	·083	·063	·049	·059	·049	·039	·048	·045	·046	·078	·083	·071	·059	30
0	·150	·196	·146	·123	·120	·124	·203	·304	·231	·161	·121	·103	·166	0
—30	·045	·052	·070	·076	·079	·079	.063	·051	·049	·052	·059	·055	·062	—30
—60	·069	·049	·021	·019	·036	·047	.044	·048	·052	·048	·044	·052	·045	—60
—90													·042	—90

(b) 9th phot. mag. = 8·4 Vis. mag.

β/λ	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°	All°	λ/β
+90°													0·72	+90°
60	0 87	0·86	0·88	0·88	0·81	0·75	0·78	0·85	0·91	0 95	0·93	0·88	0 87	60
30	1·69	1·38	1 26	1·28	1·15	1·31	1·45	1·16	1·20	1 31	1·17	1·38	1·32	30
0	4·27	4·56	3·11	2·69	3 66	3·58	2·84	3·80	4·56	3·36	2·97	3 44	3·55	0
—30	1·24	1·24	1·43	1·31	1·26	1·49	1·47	1·20	1·07	1·05	1·38	1·53	1·29	—30
—60	0·95	0·84	0·83	0·79	0·78	0·91	0·90	0·88	1·06	1·08	0·95	0·97	0·91	—60
—90													0·83	—90

(c) 12th phot. mag. = 11·1 Vis. mag,

β/λ	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°	All°	λ/β
+90°													10·2	+90°
60	12·2	12·0	12·3	13·4	13·2	12·0	12·0	13·2	14·1	13·1	12·1	12·1	12·6	60
30	28·6	24·5	20·1	20·3	22·9	24·0	23·1	23·6	26·3	24·9	21·2	24·0	23·4	30
0	79·4	108·0	54·1	37·4	74·1	105·5	100·0	132·8	139·1	100·0	72·4	58·9	89·1	0
—30	24·4	28·6	28·4	18·5	18·9	26·9	25·7	22·6	23·1	25·3	31·1	30·0	25·1	—30
—60	15·6	14·7	12·3	13·8	14·7	12·8	13·8	15·0	14·6	15·7	15·1	14·0	14·5	—60
—90													13·2	—90

(d) 15th phot. mag. = 13·8 Vis. mag.

β/λ	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°	All°	λ/β
+90°													95	+90°
60	132	118	109	107	106	105	110	130	139	133	127	133	120	60
30	404	255	200	222	244	267	263	280	407	380	261	331	295	30
0	1023	1349	490	471	1148	1585	2042	3140	2974	2733	1686	764	1660	0
—30	261	326	307	146	133	261	341	302	316	404	494	369	302	—30
—60	134	118	114	120	123	124	130	135	151	166	162	148	135	—60
—90													105	—90

(e) 18th phot. mag. = 16·5 Vis. mag.

β/λ	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°	All°	λ/β
+90°													617	+90°
60	940	864	719	580	529	567	656	794	905	919	955	977	794	60
30	3211	2058	1647	1370	1391	1610	1738	2692	3861	3090	3043	4074	2512	30
0	15971	16096	5843	6407	9988	9848	24356	49736	38019	36588	22908	10391	20893	0
—30	2121	2171	2026	1193	1015	2011	3441	3020	2570	2951	3286	2733	2399	—30
—60	666	558	650	612	636	753	741	782	905	819	807	878	933	—60
—90													501	—90

TABLE II

(a) 6th phot. mag. = 5·7 Vis. mag.

β/λ	60°	150°	240°	330°	All°	λ/β
+90°					0·340	+90°
60	0·368	0·336	0·356	0·359	·353	60
30	·398	·366	·356	·436	·390	30
0	·581	·493	·673	·495	·550	0
—30	·373	·429	·371	·389	·396	—30
—60	·366	·330	·364	·353	·356	—60
—90					·348	—90

(b) 9th phot. mag. = 8·4 Vis. mag.

β/λ	60°	150°	240°	330°	All°	λ/β
+90°					0·896	+90°
60	0·952	0·933	0·948	0·977	0·955	60
30	1·114	1·047	1·050	1·053	1·096	30
0	1·659	1·540	1·562	1·437	1·526	0
—30	1·075	1·080	1·063	1·114	1·088	—30
—60	0·944	0·921	0·959	0·985	0·970	—60
—90					0·940	—90

(c) 12th phot. mag. = 11·1 Vis. mag.

β/λ	60°	150°	240°	330°	All°	λ/β
+90°					2·17	+90°
60	2·29	2·36	2·36	2·30	2·33	60
30	2·90	2·84	2·87	2·77	2·86	30
0	4·77	4·20	5·05	4·17	4·47	0
—30	3·06	2·66	2·83	3·14	2·93	—30
—60	2·45	2·45	2·47	2·47	2·44	—60
—90					2·36	—90

(d) 15th phot. mag. = 13·8 Vis. mag.

β/λ	60°	150°	240°	330°	All°	λ/β
+90°					4·57	+90°
60	4·90	4·74	5·07	5·03	4·94	60
30	6·35	6·25	6·55	6·40	6·66	30
0	11·05	10·46	14·64	11·90	11·85	0
—30	6·88	5·10	6·72	7·90	6·72	—30
—60	4·90	4·98	5·13	5·45	5·13	—60
—90					4·72	—90

(e) 18th phot. mag. = 16·5 Vis. mag.

β/λ	60°	150°	240°	330°	All°	λ/β
+90°					8·52	+90°
60	9·53	8·09	9·26	9·85	9·26	60
30	12·72	11·16	13·90	14·49	13·60	30
0	25·23	21·52	36·78	28·40	27·55	0
—30	12·95	10·05	14·46	14·86	13·39	—30
—60	8·24	8·60	9·22	9·31	9·78	—60
—90					7·95	—90

TABLE III

β Magn.	6th	9th	12th	15th	18th	Overall 3-pmg.	1-pmg.
± 90°	2·67	2·47	2·05	1·77		2·21	1·30
± 60	2·71	2·48	2·11	1·89		2·28	1·32
± 30	2·78	2·74	2·23	2·02		2·42	1·34
0	2·78	2·93	2·65	2·33		2·66	1·39

TABLE IV (a)

Magn.	π	R	Lumy.	Magn.	π	R	Lumy
6	0″·0120	83	27	10	0·00266	376	13
7	·00820	122	23	11	·00184	543	11
8	·00562	178	19	12	·00126	793	9
9	·00387	259	16	13	·00088	1135	8

Formula $R = 9\,(1{\cdot}46)^m$ $\qquad$ Lumy $= 8\frac{1}{1{\cdot}2}\,m$

TABLE IV (b)

magnitude					*magnitude*				
Vis	Phot	T	R	L	Vis	Phot	T	R	L
5·7	6·0	0".0116	86	37	12·0	13·0	0"·0011	900	12
6·0	6·3	·0107	93	34	13·0	14·1	·00079	1270	10
7·0	7·4	·0073	137	29	13·8	15·0	·00057	1750	$8\frac{1}{2}$
8·0	7·6	·0050	200	24	14·0	15·2	·00054	1850	$8\frac{1}{4}$
8·4	9·0	·0045	220	22	15·0	16 3	·00038	2600	7
9·0	9·7	·0035	285	20	16·0	17·4	·00026	3800	$5\frac{3}{4}$
10·0	10·8	·0024	420	17	16·5	18·0	·00021	4700	$5\frac{1}{4}$
11·0	11·9	·0016	625	14	17·0	18·6	·00018	5600	$4\frac{3}{4}$
11·1	12·0	·0016	625	14	18·0	19·7	·00012	8000	4

Formula $R = 10\,(1{\cdot}45)^m$ Luminosity $L = \frac{100}{1{\cdot}2}m$

Visual mag = 0·3 + 0·9 (Photo. magnitude)

TABLE V

magnitude				*magnitude*				*magnitude*			
Vis	Phot	T	R	Vis	Phot	T	R	Vis	Phot	T	R
5·7	6·0	0"·0120	82	10·0	10·8	0"·0025	400	14·0	15·2	0"·00069	1450
6 0	6·3	·0105	95	11·0	11·9	·0018	550	15·0	16·3	·00050	2000
7·0	7·4	·0080	125	11·1	12·0	·0018	570	16·0	17·4	·00038	2650
8·0	7·6	·0054	185	12·0	13·0	·0013	770	16·5	18·0	·00033	3000
8·4	9·0	·0046	215	13·0	14·1	·00095	1050	17·0	18·6	·00029	3500
9·0	9·7	·0038	270	13·8	15 0	·00074	1350	18·0	19·7	·00022	4500

Formula $R = 10\,(1{\cdot}45)^{m-{\cdot}00036}$

TABLE VI

P.m.g	Vmg	λc	Rc	Rc×110 Rdls	Increase Ratio
6	5·7	247·3	0·05	5·5	——
9	8·4	350·2	0·03	3·3	——
12	11·1	253·0	0·50	55·0	3·2
15	13·8	260.4	2.80	308·0	5·6
18	16·5	251·7	7.85	865·0	2·8

TABLE VII

P.m.g	Vmg	$3\sqrt{N}$	$3\sqrt{N}\times110$	Ratio	R	Ratio
6·0	5·7	0·55	61		81	
				—— 2·78		——2·65
9·0	8·4	1·53	168		215	
				—— 2·93		—— 2·65
12·0	11·1	4·47	492		570	
				—— 2·65		—— 2·37
15·0	13·8	11·85	1300		1350	
				—— 2·33		—— 2·22
18·0	16 5	27·55	3030		3000	

Fig. 1-a

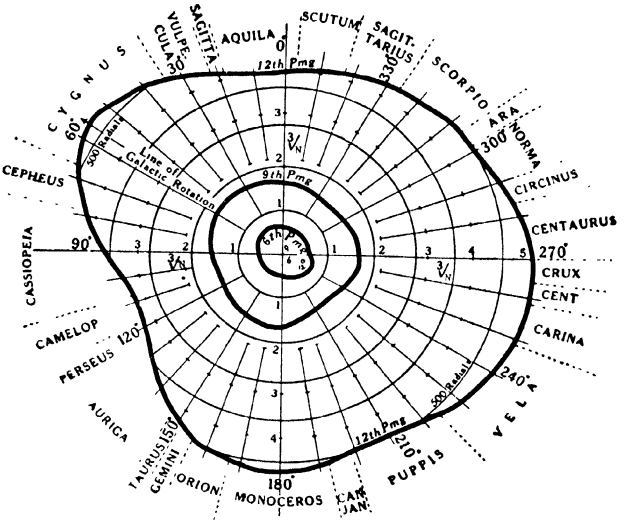

AQUILA
SCUTUM
SAGITTA
VULPECULA
SAGITTARIUS
SCORPIO
ARA
NORMA
CIRCINUS
CENTAURUS
CRUX
CENT
CARINA
VELA
PUPPIS
CAN JAN
MONOCEROS
ORION
GEMINI
TAURUS
AURICA
PERSEUS
CAMELOP
CASSIOPEIA
CEPHEUS
CYGNUS
Line of Galactic Rotation
12th Pmg
9th Pmg
6th Pmg
3 V_N
500 Radials

Fig. 1-b

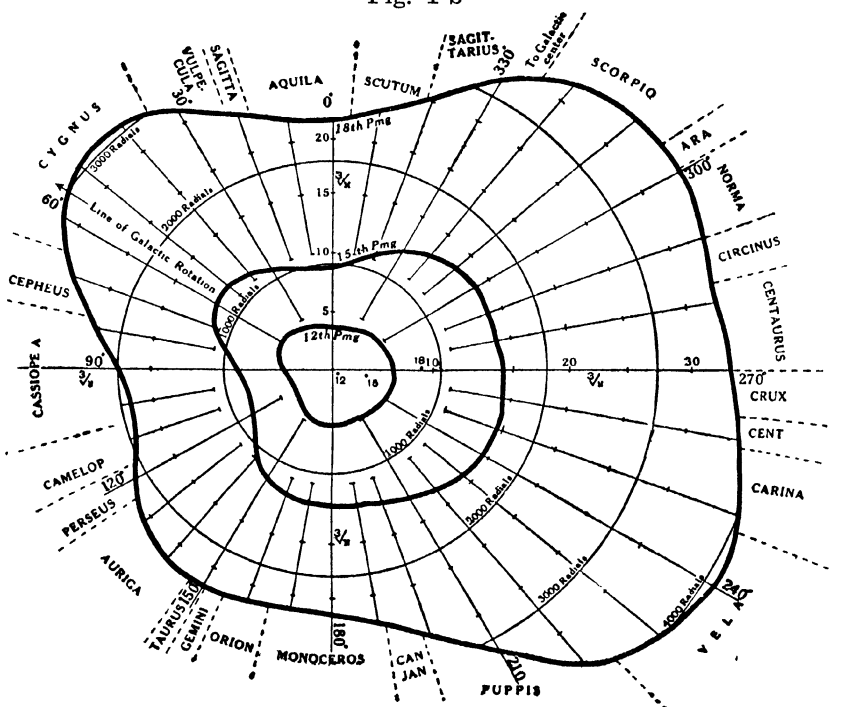
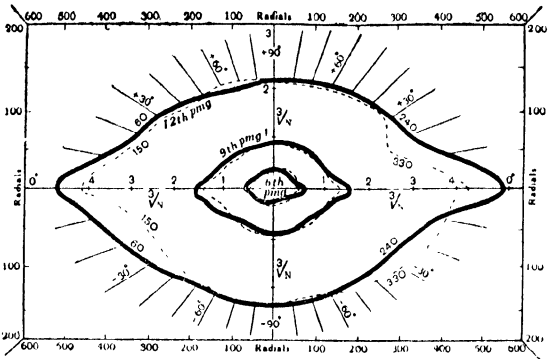

AQUILA
SCUTUM
SAGITTA
VULPECULA
SAGITTARIUS
To Galactic center
SCORPIO
ARA
NORMA
CIRCINUS
CENTAURUS
CRUX
CENT
CARINA
VELA
PUPPIS
CAN JAN
MONOCEROS
ORION
GEMINI
TAURUS
AURICA
PERSEUS
CAMELOP
CASSIOPEIA
CEPHEUS
CYGNUS
Line of Galactic Rotation
18th Pmg
15th Pmg
12th Pmg
3 V_N
500 Radials
1000 Radials
3000 Radials
4000 Radials

Fig. 2-a

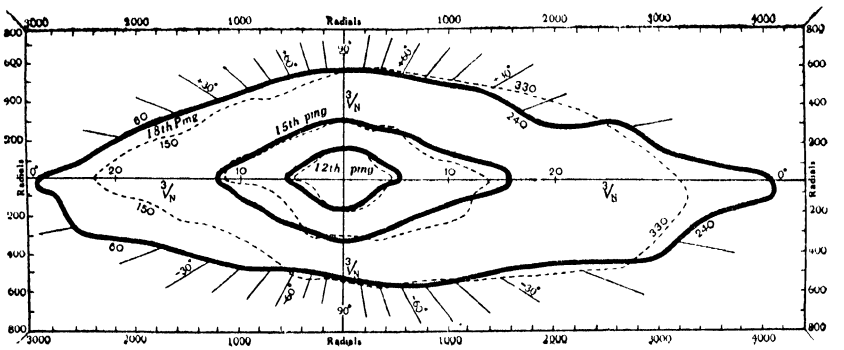
SECTIONS OF STAR SPHEROIDS



λ
68° —— athwart } galactic
150° .... away from } centre

λ
240° —— athwart } galactic
330° .... towards } centre

Fig. 2-b



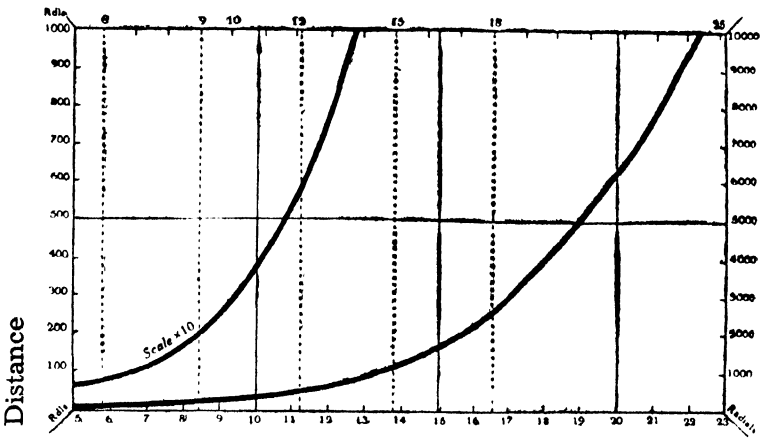
λ
60° —— athwart } galactic
150° .... away from } centre

λ
240° —— athwart } galactic
330° .... towards } centre

Fig. 3

(Magnitude—Distance)

$m-0\cdot00036$
$R=10\ (1\cdot45)$; m=Visual Mag.
Photographic mag.$=10/9$ (Vis. Mag.) $-\frac{1}{3}$
Visual Mag.$=0\cdot3 + 0\cdot9$ (Photo. Mag.)



The left hand curve and margin show tenfold enlargement

GALACTIC COORDINATES.

By

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Introductory

From the first appearance of accurate star catalogues, star positions have been recorded in the order of their passage across the meridian or successive culmination at the highest points of their celestial path—once every 23 hours 56 minutes nearly. This so called "right ascension" is measured as time eastward from the point where the Sun's ecliptic path ascends across the celestial (i.e. sky trace of the terrestrial) equator. The height of each star's culmination marks its declination, measured in degrees etc., north or south of the equatorial line.

What spoils this useful method, however, are the movements of this equatorial reference and the secular drift of the ecliptic (terrestrial orbital) plane's intersection with the celestial equator, due to the various motions of our Earth and their perturbations. These entail some 300 terms in computing the "ephemerides" or reduction of a star's actual position at a given date. This is the case even after the

simplification by Bessel's Tables, published early in the 19th century, wherein the reduction numbers provide for the aberration of light, nutation in latitude and longitude along the ecliptic, and the precession of the equinoxes. These tables welded the shackles of this recurrent toil of Sissyphus, whereof the hill gets a little steeper at every epoch. So, the observations of Lacaille, Bradley, Mayer and Lalande (1750-1800) were imprisoned within the wabbling cage of terrestrial co-ordinates at mean epochs.

In seeking an alternative, one might imagine a conference of deputies from the members of the Solar System, presided over by those from the Sun, to decide the question of star positions. In such a conference, the claims for our terrestrial coordinates would soon be outvoted by the greater claim submitted for the orbital plane of either Jupiter or Saturn, or, better still, the invariable plane of the Solar System (lying in between these two): or again, the equatorial plane of the Sun as the ruler of our Solar system and reckoning along from its intersection with the invariable plane.

Fundamental Plane.

We have, however, in common with the other worlds, an even more fundamental plane of reference, namely the fundamental plane for all the solar systems in our Universe, and marked out by the Milky Way or Galaxy.

Reference to such a plane would fix the star positions once for all, with only their annual variations to be worked out, namely, aberration, parallax and proper motion; the first two, in virtue of our orbital revolution, and the third due to the stars' own motion. The Sun's motion in space would set up a cumulative change, easily allowed for. As things are now, hours, if not days, of work are needed to

disentangle the motion of a star, against the work of minutes, when referred to the galactic plane which is the more natural reference for stellar motions. To take an example, the laborious calculations for the century and a half from 1800-1950 have impressed on the star ε Orionis a total motion of 7 minutes 36·85 seconds in R.A. and 6′ 31·0″ in declination—a total motion of 114′·4 or 6864″, whereas the actual annual proper motion of this star (according to the General catalogue 1936) is 0″·000—exactly zero—Whence the labours of reduction through the 150 years are spent to produce an entirely fictitious result.

Right ascension and declination coordinates are unavoidable for determining the position of the Sun, the Moon and the planets and the "clock" stars. A good star map suffices for the coordinates needed to find stars in an equatorial telescope. Though precise galactic positions are needed for any such star catalogue when replacing the shifting equatorial coordinates, approximate star positions can be derived from an accurate network of galactic coordinates at conveniently close intervals. We here adopt the contractions "galatitude" and "galongitude" for the galactic latitude and longitude respectively.

Sir John Herchel (*Outlines of Astronomy*, 1849) writes thus of the galactic circle: "The circle is to sidereal astronomy what the invariable ecliptic plane is to planetary astronomy". Unfortunately this circle is not precisely defined in the sky, and various poles have been found for it, according to the particular object referred to, though these are in close agreement.

Historical.

The first reference to the galactic plane was by Sir William Hershel (Phil. Trans., collected Science Papers,

Vol. I, 1875) in his well-known section of the sidereal system in a plane at right angles to the galactic circle having its north pole at the then R.A., (α) 186° (12^h—24^m), declination (δ) +32°.

Later on, F. G. W. Struve (Etudes d' Astronomie Stellaire, 1847), mainly using Bessel's catalogue within the zone ±15° declination adopted the G.N.P. (1875) at R.A. 12^h—38^m declination +31°·5. Sturve, as well as Sir John Hershel (outlines of astronomy, 1867), analysing the star counts of Sir William arranged the star gauges according to the distance from the north galactic pole, then taken to lie at R.A. 12^h—47^m (191¾°), declination +27° (Outlines of Astronomy 1851).

In 1862, Argelander (Bonn Durchm. III) adopted a galactic pole at (1800) R.A. 12^h—36^m declination +28°·5 based on the counts of that notable catalogue of 324,000 stars. This however, limited to stars north of declination −2°, covered only just over half the galactic circle, omitting the southern and most relevant part of the galaxy. Heis, using the Bonn Durchm, adopted (1855) $\alpha 12^h$—40^m δ +27° for his Atlas celestis, and catalogue (1872).

The first extensive use of galactic coordinates was that by A. Marth (Mon. Not. R.A.S. 33, 1872-73) who, setting the G.N.P. at (1880) $\alpha 12^h$—40^m, δ +30°, reduced the galactic coordinates for the leading stars in or near the Milky Way. Twenty years later (Mon. Not. R.A.S. 53, 1892-3), he applied these same coordinates to all stars down to 6·0 magnitude on the Harvard Photometry and 6·2 magnitude in the Uranometria Argentina, within 20 degrees of the Galactic equator; Among others, K. Lundmark and O. Jaske adopted Marth's data for their drawings of the Milky Way.

Houzeau (Uranometria-Generale, 1878) placed the pole at (1880) $\alpha 12^h-49^m$, $\delta+27^\circ\cdot5$; This pole was adapted by Seeliger (Sitz. d. Math. Phys Akad. Wissen, 14, 1884).

Next year, Gould (Uranometria argentina 1879) made his classic study, based on the galactic clouds, placing the pole at (1875) $\alpha 12^h-41^m$, $\delta+27^\circ\cdot3$.

Two years later Schoenfeld (Viert. d. Ast. Gesell, 16, 1881), revising Houzeau's data placed the pole at (1880) $\alpha 12^h-41^m$, $\delta+28^\circ\cdot7$.

Wolf (Pub. Ast. Obs. Konigstuhl. Heidelberg I 1902) used the galactic nebulae to place the pole at (1875) $\alpha 12^h-53^m$, $\delta+28^\circ\cdot7$.

Next in order, we have Newcomb's exhaustive study (Carnegie Inst. Pub. No. 10, 1904), based on 47 Galactic clouds, together with Heis' star Atlas (1872) and Gould's Uranometria, whence he placed the pole at (evidently 1875), $\alpha 191^\circ\cdot1$, $\delta+26^\circ\cdot8$ including the well-known Cygnus-Aquilae Branch, excluding which the 42 remaining galactic clouds gave $\alpha 192^\circ\cdot8$, $\delta+27^\circ\cdot2$ as the pole.

Two years later, Kobold (Der Baudes Fixsterne—systems, 1906) derived the pole at (1880) $\alpha 191^\circ\cdot2$, $\delta+28^\circ\cdot0$ for 33 bright galactic patches, based on Houzeau's work, already mentioned. Stroobant (Annales del' Obs. R.De. Belgigue, 11, 1908) placed the pole at (1900) $\alpha 12^h-46^m$, $\delta+28^\circ$.

Professor J. C. Kapteyn published (Gron. Pub. 18, 1908) an extensive table of galactic coordinates, using Gould's pole, above stated, reduced to epoch 1900, and reading to the nearest whole degree at 10^m interval in R.A., and 1° in declination.

Prof. E. C. Pickering (Harvard Annals 56, 1912) published galactic tables for each $40^m(10^\circ)$ in R.A. and 10° in declination, the coordinates reading in degrees and minutes of arc. A converse table reading equatorial coordinates from the galactic was also given for the like 10 square degrees network. The pole adopted was at (1900) R.A. $12^h-40^m(190^\circ)$, $\delta+28^\circ$; which apparently is the adoption of Argelander's pole reduced to epoch 1900.

In the same year E. Hertzsprung (Ast. Nach 4600, 1912) published findings of the galactic pole for various celestial objects segregating towards the galactic plane, such as eclipsing binaries types O and N stars, giant (c, ac type) stars, cephied variables and the Gaseous nebulae. The various poles appear in Table I.

Herschel's pole ($\alpha 12^h-47^m$, $\delta+27^\circ$) was adopted in a compact galactic table by Walkey (Mon. Not. R.A.S. 74, 1914) giving the coordinates to the nearest $0^\circ\cdot1$ at intervals of 1 hour around the 24 hours in R.A. and at each 10° from $+90^\circ$ down to -90° in declination.

In the following year, R. T. Innes, a consistent advocate of galactic coordinates, and one who published numerous examples in their application, published (Union Obs. Johannesberg, Circular 29, 1915) a table of galactic coordinates in degrees and minutes at 20 minutes (5°) intervals in R.A. and 5° in declination. Innes adopted Newcomb's branch-included pole viz., $\alpha 191^\circ\cdot1$, $\delta+26^\circ\cdot8$, assuming this for the 1900 epoch. He gave also the parallactic angle-viz., the angle of intersection between the parallels of galatitude and declination at each interval, or between the vertical of galongitude and the R.A. meridian (measured anticlockwise from the galactic to the terrestrial circle). While giving the declination from $+90^\circ$ down to -90°, the right ascensions

were condensed into the first 12 hours, the coordinates for the remaining R.A. hours being derived by reversal.

C. V. L. Charlier of Lund Observatory (1916) derived the pole of the B (helium) type stars at (1900) $\alpha 184^\circ \cdot 3$, $\delta +28^\circ \cdot 7$; but these stars belong rather to our Local Cluster inclined at some 13° from the galactic plane. Their pole does not enter into our present consideration.

W. Gyllenberg. (Medd. Lund, Ser I, IV, 1916) found the pole of the O type stars at (1900) $\alpha 12^h\ 45^m$, $\delta +27^\circ \cdot 1$.

A Pannekock published (Annals Leiden, XI, 3, 1920) a table set to Marth's (1880) pole at $\alpha 12^h\ 40^m$, $\delta +30^\circ$ giving the galactic coordinates for each 20^m (5°) in R.A. and 5° in declination.

Graff (Ast. Nach 5090, 1921), basing his studies on photometric measures of the galaxy, placed its north pole at (1925) $\alpha 12^h\ 50^m$, $\delta +26^\circ \cdot 7$.

In a study of star counts, F. H. Seares (Mt. Wilson Contr. 347, 1927) found the pole from counts of stars (indicating 143 million stars) down to the 18th magnitude, to lie at (1900) $\alpha 193 \cdot 6$, $\delta +26^\circ \cdot 7$.

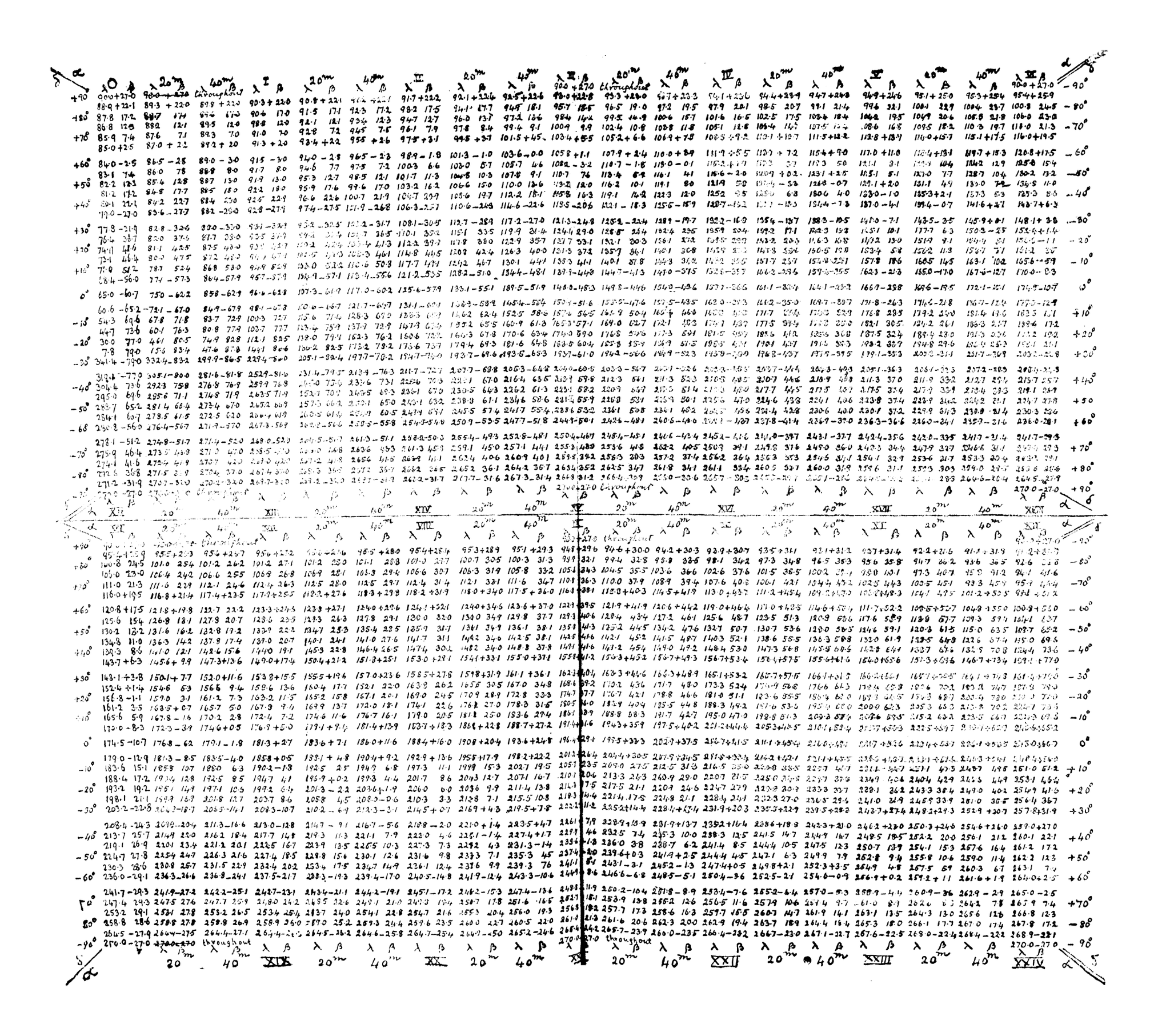
These star counts were reviewed by P. J. Van Rhijn (Gron. Pub. 43, 1929) in the light of fuller data (estimating 216 million stars to 18th phot, magn.), and he set their pole at (1900) $\alpha 12^h\ 55 \cdot 4^m$, $\delta +25^\circ \cdot 29'$. Accompanying tables give separately the galatitude and galongitude to the nearest whole degree for each hour from 0^h to 24^h R.A. and every degree in declination from pole to pole. Van Rhijn's pole for stars (say 6000) down to the 6th phot. magn. was placed at (1900) $\alpha 12^h 33^m$, $\delta +26^\circ \cdot 5$, these bright stars are however too local to carry galactic significance.

In the same year, P. Emanualli (Publ Specola Vaticana, 14, App. I, 1929) published extensive tables set (as Inne's above-mentioned) to Newcomb's branch-included pole $\alpha 191°\cdot1$, $\delta+26°\cdot8$, taken to be for epoch 1900, and giving to the nearest $0°\cdot1$ the coordinates for each 10^m ($2\frac{1}{2}°$) in R.A., (together with a subscribed table of interpolation for each minute) from 0^h to 24^h and for each degree in declination from 0° to +90° and then from 0° to −90°. A supplementary table gives the co-ordinates (to nearest degree) at 1 minute R.A. and 1 degree declination intervals round the N and S galactic poles viz., R.A. 12 to 13½ hours, declination+20° to +34°, and R.A. 0^h to $1\frac{1}{2}^h$, declination −20° to −34°.

A research by R. Trumpler (Lick. Obs. Bulletin 420, 1930) on 334 open star-clusters, which objects segregate towards the Milky Way, found their pole to lie at (1900) $\alpha 192°\cdot6$, $\delta+27°\cdot7$.

The most extensive table published of galactic coordinates is one by J. Ohlsson (Lund Annals 33, 1932) giving, as closely as $0°\cdot01$, the coordinates at each $4^m(1°)$ of R.A. from 0^h to 24^h and for each 1° in declination from the equator to the pole, southern declinations to be obtained by reversal of the tabular entries. The parallactic angle also appears, together with a subsidiary table for conversion to another galactic pole. At the back of the work is reproduced a chart by W. Gyllenberg showing stars down to the 4th magnitude, set to galactic coordinates, the equatorial reticule being superposed for conversion. The mention of such chart leads us, in concluding the historical aspect, to the note on other graphs or charts for deriving galactic coordinates.

A graph published by Nort (Recherches Utecht, VII, 1917) was based on the pole at (1900) R.A. 12^h-43^m, declination+27°.



Another graph is that published by J. A. Pearce and S. N. Hill (Publ. Domin. Astro-Ph. obsey, Victoria B.C., Vol. IV, No. 4) based on the Harvard pole at (1900) $\alpha 190°$, $\delta +28°$.

Maps of the constellation boundaries in galactic coordinates were published by O. Seydl (Publ. Obs. Prague, 5, 1928) using the Harvard pole, $\alpha 190°$, $\delta +28°$.

An interesting set of graphs were published by Dr. J. M. Baldin of Melbourne (Mon. Not. R.A.S. 89, 1929), enabling one to read off galactic coordinates, or equatorial, the one from the other, also the distance and position angle of the Solar apex ($\alpha 171°$, $\delta +28°$). The galactic pole adopted is again the Harvard one at $\alpha 190°$, $\delta +28°$.

Departure Point.

A table of galactic coordinates entails the choice of a departure or zero point for galongitude. Various fixed points have been adopted or proposed. Marth, Kapteyn, Pickering Walkey and Van Rhijn adopted the ascending node of the galactic circle on the celestial equator in Aquila with the galongitudes measured eastward thence towards Cygnus Cassiopeia etc. along the galactic equator. This departure point is chosen for a fixed epoch (1900) so as to avoid precessional changes. Innes and Emanuelli, overlooking this epochal fixture, criticised this choice needlessly on the false charge of precessional change. They chose their zero from the galongitude of Prof. W. W. Campbells' solar apex at (1900) $\alpha 270°$, $\delta +30°$, as symmetrically dividing as much of the stellar motions as reflect our Sun's motion in space. This point lies some 23 degrees farther, along the galactic equator from the other zero point.

S. Wicksell, investigating proper motions (Medd. Lund Ser II 12, 1915) and W. Gyllenberg, on the distribution of

O type stars (Mell. Lund. Ser. II 13, 1915 and I, 75, 1917), measured their galongitudes from a point on the Milky Way approximating to the principal vertex of peculiar motion $-(1900)\alpha 18^h$, $\delta+18^\circ$ (so Charlier, Cal. Lect. 1926)—which choice has the advantage of symmetrical division of the stars' peculiar motions.

The International Astronomical Union, which in 1922 (Trans I A.U. Vol. I, 1922) adopted the ascending node of the galactic on the celestial equator, changed their zero galongitude to the star α Cygni (1900), $\alpha 20^h\ 38^m$, $\delta+44^\circ\cdot 9$, lying just north of the galactic circle.

C. V. L. Charlier (Medd Lund II, 14, 1916 and 19, 1918) on the other hand directed his zero galongitude approximately towards the anticentre of the Local Cluster represented by the brighter B type stars, at (1900) $\alpha 245^\circ\ 33'$ $\delta+55^\circ\ 37'$.

Lastly P. Collinder (Lund Annals, 2, 1931) measured the galongitude of the open star-clusters from Shapley's centre of the globular clusters (Mt. Wilson Contr. Nos. 152, 157, 1918) approximately at $\alpha 17^h\ 30^m$, $\delta-30^\circ$.

Fortunately, whatever galongitudinal starting point be chosen, the conversion from one departure to another—with the same pole—involves merely changing all the galongitudes by the difference in galongitude between the two origins, the galatitudes remaining unchanged.

Choice of Pole.

The fore-going account of various poles found for the galactic plane, and the consequent uncertainty within narrow limits, entail the choice of the most representative position where on to base any table of galactic coordinates.

The most relevant findings appear in Table I (given at p. 445) all reduced to the 1900 epoch.

These points are likewise plotted in Fig. I following covering an area of 8 degrees (32 min.) in R.A. and 4 degrees in declination. The figure includes (as falling within its area) some poles excluded from Table I, being ineligible for deriving the mean.

Considering the independence of the researches and the diversity of the objects concerned, the concordance in their poles is remarkable, and indicates the cosmical significance, of the galactic concentration and fundamental plane thereby defined. The findings for the Galactic Belt or Clouds (Milky-Way) are grouped together and yield a simple mean of (1900) $\alpha 191^\circ \cdot 7$, $\delta + 27^\circ \cdot 3$, Newcomb's pole tabulated is the weighted mean of his two findings, both with and without the branch, the former being given double weight.

Next follow the Star-count poles, whereof those based in the B.D. (covering about half the galactic circle) as also Seares' should each carry half the weight, of Van Rhijn's revision (which includes that by Seares). These weights yield a mean at (1900) $\alpha 192^\circ \cdot 4$ $\delta + 26^\circ \cdot 5$.

The third group, comprising specific galactic objects yields a mean pole at (1900) $\alpha 192^\circ \cdot 3$, $\delta + 27^\circ \cdot 3$. It should be remarked that the trend of the eclipsing binaries, and consequently their pole may be the mere illusion due to a possible parallelism of their orbital planes with the galactic in which the association of these systems with the galactic belt would be the mere selection by eclipses due to our line of sight within the galaxy. Their pole therefore, lying far away from the rest, has been assigned only half weight in the given mean. Combining these means, we get a final value for (1900) $\alpha 192^\circ \cdot 1$, $\delta + 27^\circ \cdot 0$. In view of their

general agreement, the weighting of certain results makes no appreciable difference from the simple unweighted mean of the twenty entries, yielding 191°·9,+27°·2. We may therefore accept the north pole of the galactic as lying for epoch 1900, at $\alpha 192°$ (12^h-48^m), $\delta+27°\cdot0$. It is noteworthy that the mean of each group agrees with this value in whole degrees. This point appears (as it happens) at the exact centre of Fig. I, the area covering the various poles mentioned. It is unfortunate that general usage of the Harvard pole at $\alpha 190°$, $\delta+28°$ and consolidated by Ohlsson's extensive tables based thereon, led the International Astronomical Union (1935) to adopt this pole which, as shown by the open circle in Fig. I, lies outside the run of the plotted poles and fully two degrees away from what must be accepted as the true pole.

Formulae.

We may now consider the process of transition from equatorial to galactic coordinates.

Fig. II, illustrates the outside of the celestial sphere with its north pole at P and crossed by the galactic equator with its north pole at G. The point C with equatorial coordinates α, δ, needs to be transformed to its galactic coordinates, β, λ, where λ is the galongitude measured along the galactic equator from Ω its zero point of intersection with the celestial equator. The intersection of the latter with the ecliptic is at γ the zero of right ascension the positions of P, Ω and γ being for the 1900 epoch. We need to solve the spherical triangle PCG—whereof PC=90−δ, also PG, or the inclination (ι) of the galactic to the celestial equator being 90° less the declination 27° of G i.e., (90°—27°) =63°. The R.A. of G, we know, is 192°, that of Ω is 282°, while that of γ is 0° or 360°. The R.A. (α) of C in the figure is measured as usual eastward from γ (hence round behind the sphere) to C.

Hence angle CPG=α—192° ; in our figure as drawn, the R.A. and declination of C are roughly 20^h ; 45°.

By the usual formulae:

$$\text{Cos CG}=\cos \text{CPG}\cdot\sin \text{PG}\cdot\sin \text{PC}+\cos \text{PG}\cdot\cos \text{PC}$$

$$\text{Sin PGC}=\frac{\sin \text{CPG}\cdot\sin \text{PC}}{\sin \text{CG}}$$

which in our nomenclature becomes.

$$\text{Cos}(90^\circ-\beta)=\sin 63^\circ\cdot\cos(\alpha-192^\circ)\sin(90^\circ-\delta)+\cos 63^\circ\cdot\cos(90^\circ-\delta).$$

Whence $\sin\beta=\sin 63^\circ\cdot\cos(\alpha-192^\circ)\cos\delta+\cos 63^\circ\sin\delta$
$=0\cdot89101\cos(\alpha-192^\circ)\cos\delta+0\cdot45399\sin\delta.$

$$\text{Also, Sin}(90^\circ-\lambda)=\frac{\sin(\alpha-192^\circ)\cdot\sin(90^\circ-\delta).}{\sin(90^\circ-\beta)}$$

$$\text{Whence Cos}\,\lambda=\frac{\sin(\alpha-192^\circ)\cdot\cos\delta}{\cos\beta}$$

Introducing an auxiliary angle γ=CPΩ=(α−282°) or (α+78°), we may transpose these formulae into the perhaps more convenient forms:

tan λ=0·45399 tan γ+0·89101 tan δ sec γ and sin β=0·45399 sin δ 0·89101 cos δ sin γ which is fully given by its sign. The quadrant of λ is fixed by the sign of tan λ, while λ and γ both fall either in the first or fourth quadrants, or in the second and third quadrants.

Galactic Parallactic Angle.

In modern studies, the proper motions (μ) mainly according to spectral type, need frequently to be referred to the galactic plane. This entails the transposition of the

direction (ψ) of the proper motions from the celestial north polar zero to the galactic (north) pole. This is simplest done in correcting ψ by the parallactic angle-called φ by Ohlsson. The value of φ the angle PCG in Fig. 2—or the angle which the R.A. meridian makes with the galactic polar vertical, is found directly by the formulae.

$$\sin \varphi = \frac{\sin \cos\lambda}{\cos\delta} = \frac{0{\cdot}89101 \cos\lambda}{\cos\delta}$$

Hence we derive the angle (ω) of the direction of μ measured anti-clock-wise form the north galactic polar vertical, viz., $\omega = \psi + \varphi$.

Otherwise, the direction ω may be found direct (as ψ from resolving $\mu\alpha$ and $\mu\delta$) by getting the components of μ parallel to and vertical to the galactic equator.

Thus $\mu\lambda = (\mu\alpha \cos \varphi + \mu\delta \cdot \sin \varphi)$ Sec. β.

and $\mu\beta = (\mu\delta \cos \varphi - \mu\alpha \sin \varphi)$.

all symbols (expressed in seconds of arc $\mu\alpha = \mu\alpha_1 \times 15 \cos \delta$ as usual.

Fig. 3 illustrates the application.

Partly because the parallactic angle φ is actually needed for proper motions and so applies to individual stars, and partly because if applied to the R.A. and declination reticule, these would need to be taken at closer intervals than here to be really useful, this parallactic angle has not been computed for the present table. It can be readily computed from the formulae here given or from the table given in Ohlsson's tables, already mentioned.

Coordinate Table.

Owing to limitation of time and space, also pending the verdict of Astronomers, the coordinates have been calculat-

ed to the nearest 0°·1 only and at intervals of 20^m (5°) in R.A. and 5° in declination, as sufficient for the present purpose. A general acceptance would then justify computation to (say) 5^m intervals in R.A. and 1° in declination—it should be noted that 4^m (1°) intervals, though closer would involve only five-eights of the work, since the whole degrees are symmetrical about the chosen pole. The galongitudes are measured from their adopted zero at the intersection of the celestial and galactic equators in Aquila ($\alpha 232°$ $\delta 0°$). Adoption of the Solar apex ($\alpha 270°$ $\delta 30°$) reduces all galongitudes by 23°·2, while α Cygnus as zero involves reduction by 51°·0.

In order to save space and repetition the practice of some previous tables has been adopted so that the upper and left hand margins enter respectively the R.A. arguments up to 12 hours and from the north to the south pole in declination, while the lower and right-hand margins combine the arguments from 12 hours to 24 hours R.A. and from pole to pole in declination, though with the declination signs reversed. Hence, to use the table beyond 12 hours R.A. (i.e. using the lower margin), the λ values need to be changed by $\pm 180°$ and the β values reversed in their sign. For convenient use the final R.A. hours column in each page has been repeated to open the following page; whence too the table begins with the 12 hours/24 hours column duly inverted and the changed $\lambda \pm 180°$ and $-\beta$ as just described, so following on into the earlier hours in R.A.

Since the popular adoption was confessedly tentative, awaiting a more certain derivation, it is now submitted that the mean position here derived from the numerous independent researches may be taken as good as ever likely to be found. Hence-forth, popular usage need no longer condone the use of a manifestly wrong position—however great the

wrench from custom and laboriously compiled tables. Fortunately, the commendable fore-sight in adding auxiliary tables in Ohlsson's extensive tables, abovementioned, has (with the implied provision of needful change) provided for the easy transition to any other pole from that (190°, +28°) there given.

Should, what is at present deemed a vain wish, ever be realised in the adoption of galactic coordinates for the stars in general, the order of their cataloguing should best follow Sir J. Herschel's method of distance from the galactic north pole—though in each star's order of increasing distance there-from, rather than by zones. While, with the present terrestrial coordinates, the order of R.A. is, by its very nature, the proper catalogue order, galongitudes carry no such significance in any galactic list. Whereas galatitude, do carry a real significance in the steady increase of star density towards the galactic plane, while a like decrease sets in onward to the south galactic pole.

TABLE I.

		1900	
		α	δ
Galactic belt (7)			
1. Herschel (1851)	..	192°·3	+26°·5
2. Houzeau (1878)	..	192°·5	27°·4
3. Gould (1879)	..	190°·6	27°·2
4. Schoenfeld (1881)	..	190°·6	28°·6
5. Newcomb (1904)	..	192°·0	27°·0
6. Houzeau-Kobold (1906)	..	191°·5	27°·9
7. Graff (1921)	..	192°·2	26°·8

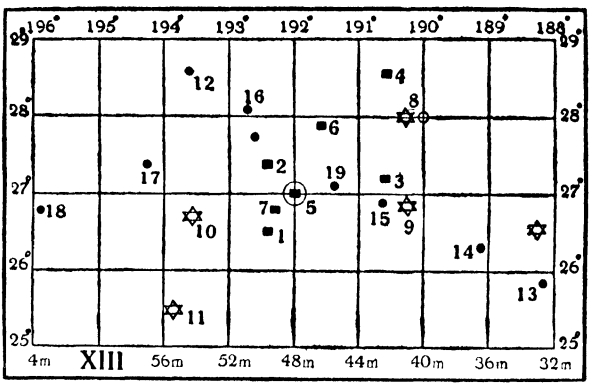
		1900 α	1900 δ
Star Counts (4)			
8.	Argelander B.D.* (1862) ..	190°·2	+28°·0
9.	Heis B.D.* (1872) ..	190°·3	26°·9
10.	Seares (1927) ..	193°·6	26°·7
11.	Van Rhijn (1929) ..	193°·9	25°·5
Galactic objects (9)			
12.	Wolf (1902) nebulae ..	193°·6	+28°·6
13.	Hertzsprung eclipsing Binaries†.	188°·2	25°·8
14.	Hertzsprung (1912) a-ac-stars..	189°·1	26°·3
15.	Hertzsprung type O" ..	190°·7	26°·9
16.	Hertzsprung gaseous nebulae ..	192°·7	28°·1
17.	Hertzsprung type N stars ..	194°·2	27°·4
18.	Hertzsprung Cepheid variables..	195°·9	26°·8
19.	Gyllenberg (1916) type O stars.	191°·3	27°·1
20.	Trumpler (1930) Open clusters.	192°·6	27°·7

The entries of table I above appear in order of their date of investigation, under each of the three groups, Galactic belt, Star counts and Galactic objects. All positions are reduced to the 1900 equinox. Newcomb's pole, presumably referring to 1875 epoch, has been reduced accordingly to 1900, for which the branch included result is given double weight (thus giving the main stream 3:2 weight) Argelander's and Heis' results (*) based on the B.D., (so omitting nearly half the galactic belt and that the southern and most significant section) are assigned half the normal weight. So too Seare's result incorporated with Van Rhijin's is assigned half the weight of the latter. The eclipsing binaries (†) pole too, for the reason stated already should carry alike reduced weight. Hertzsprung's poles for his six set of galactic objects are entered in their order of increasing Right Ascension. The simple unweighted means for each group are respectively 191·°7

+27°·3, 192°·0+26°·8, 192°·0+27°·2, combining to a mean value α191°·9 δ+27°·0. The simple mean of all twenty entries together yields the virtually like value of 191°·9+27·2 the close agreement of which with the weighted mean (192°·1+27°·0) quoted in the text, shows the striking concordance in the negligible effect due to weighting.

Figure 1

(Interior of Celestial Sphere)

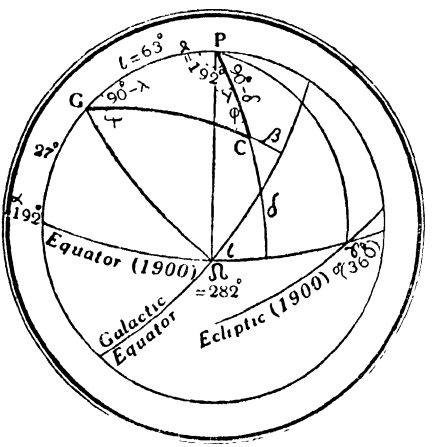


The above diagram (on polyconic projection) shows the twenty (1900) polar positions entered in Table 1, and covers an area of eight degrees in (1900) R.A., from $12^h\ 32^m$ to $13^h\ 4^m$ (lower margin) or 188° to 196° (upper margin), by four degrees (+25° to +29°) in declination. The seven Galactic belt poles are denoted by squares, the four star-count poles by stars, while the poles of the nine galactic objects appear as circles; all are shown solid and are numbered in their order of descriptive entry in Table I. Besides these, are shown Van Rhijn's pole ($12^h\ 33^m$+26·5°) for the 6th magn. star-counts, also Stroobant's pole, ($12^h\ 46^m$+28°) adopted for the galactic belt and evidently as the mean of Houzeau's (2) and Schoenfeld's; (4) The additions appear in open figures and are not numbered since they

are excluded from Table I, not being original findings. The I.A.U. i.e., Harvard, Pole ($12^h\ 40^m+28°$) evidently the whole degree derivation from Argelander's reduced to 1900 epoch (8) appears as an open circle standing outside the run of the other poles. The position finally adopted ($12^h\ 48^m+27°$)—which as it happens, coincides with the weighted mean of New-comb's poles (5) is shown by the large circle at the exact centre of the diagram.

Figure 2

(Exterior of Celestial Sphere)



P = North celestial pole.
G = North galactic pole.
C = Point for transposed coordinates.
Ω = Ascending node of the galactic on the celestial equator (1900); $\lambda=0$.
η= Ascending node of the Ecliptic on the celestial equator (1900); $\alpha=0$.
α = Right ascension of C.
β = Galatitude of C.

γ = Auxiliary angle = $\begin{cases} \alpha+78^\circ \\ \alpha-282^\circ \end{cases}$

δ = Declination of C

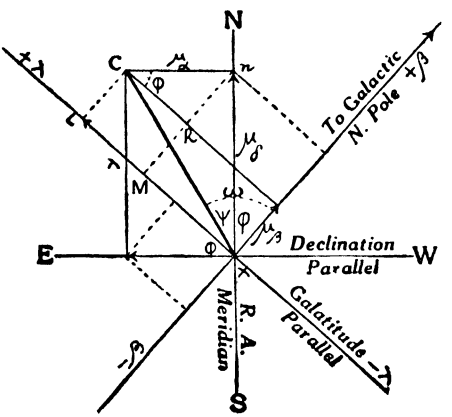
i = 63° = inclination of the galactic to the celestial equator.

λ = Galongitude of C.

φ = Galactic paralliactic angle.

Figure 3

(Interior of Celestial Sphere)



μ = Star's proper motion.

$\mu\alpha$ = ,, in right ascension.

$\mu\delta$ = ,, in declination.

$\mu\lambda$ = ,, in galongitude.

$\mu\beta$ = ,, in galatitude.

φ = galactic parallactic angle.

ψ = direction of μ in terrestrial coordinates.

$\omega = \varphi+\psi$ = direction of μ in galactic coordinates.

The dotted lines illustrate the algebraic equation between terrestrial and galactic coordinates, thus:—

$$\mu\lambda = \mu\delta \sin\varphi + \mu\alpha \cos\varphi = XM + ML.$$

$$\mu\beta = \mu\delta \cos\varphi - \mu\alpha \sin\varphi = (Mn - nR.)$$

Whence $\mu\lambda^2 + \mu\beta^2 = (\mu\delta \sin\varphi)^2 + (\mu\alpha \cos\varphi)^2$

$$+2\mu\delta \sin\varphi\, \mu\alpha \cos\varphi + (\mu\delta \cos\varphi)^2 + (M\alpha \sin\varphi)^2$$

$$-2\mu\delta \cos\varphi\, \mu\alpha \sin\varphi.$$

$$= \mu\alpha^2(\sin^2\varphi + \cos^2\varphi) + \mu\delta^2(\sin^2\varphi + \cos^2\varphi)$$

$$= \mu\alpha^2 + \mu\delta^2.$$

*

THE CULTURAL VALUE OF LANGUAGE

By

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The Emperor Aurangzeb is said to have complained to his tutor Mulla Shah, that the teacher had wasted precious hours of the emperor's youth 'in the dry, unprofitable, and never-ending task of learning mere words.' The study of the structure and mechanics of language is not a barren and profitless memorizing of dull declensions and confusing conjugations. It is not a mere matter of musty documents and mouldy dialects. The devoted study of language brings the students into contact with the living stream of human consciousness whose beginning no man knows and whose end no human intelligence can predict. For, modern research has conclusively proved that language is a magic speculum in which are mirrored the fortunes of communities and of nations, their greatness and their littleness, the width and variety of their life or the narrowness of their outlook, their tastes and their preferences, their beliefs and their doubts, their culture and their degradation.

Properly understood language is not merely a means of communication between living beings including within its scope signs and gestures. It is neither the mere expression of thoughts by means of words, nor the instrument to hide one's thoughts as the diplomatist, Talleyrand, would have us believe; nor the subterfuge of the emptyheaded to hide the absence of thought as the Russian, Soren Kierkegaard

maintains. To the logician, Jevons, language is a mechanical aid to thought and an instrument of record and reference. Language is no doubt a staff for the average mind; but it is a constraint on genius. To Madam de Stael, the queen of the Paris *salons,* language is a treasured toy which animates the spirit like music or strong liquors. Often we speak in order to satisfy the craving for sociability. Primitive people often regarded words as potent weapons which could compel the powers to do good or evil. They believed in the efficacy of charms and incantations to bring about evil to their enemies or prosperity to themselves and their belongings. The psychologist regards language as a form of human behaviour. In short, language is the sum of the speech habits of a nation, changing and varying in the course of centuries, enriched by the experience of individuals and nations, continuously flowing and growing, ever advancing to fresh woods and new pastures, a department of human activity as varied as life and as comprehensive as human intelligence.

The very existence, or the reverse, of a refined and cultivated language spoken over a vast area throws light on the government and society of a country. France in the Eighteenth Century was the home of a polished and brilliant language while England in the Thirteenth Century was split up into a large number of dialect areas. This is due to the social and political conditions that prevailed in the two countries. In the Eighteenth Century, France had already enjoyed a long period of settled and centralised government; it had an absolute monarch at the head whose court was the centre of art and refinement. The English court of the Thirteenth Century looked for culture towards France and did not care much for the native tongue. The people lived in isolation, their narrow interests being confined to their

parochial homes. Small wonder then that the English people did not have a common standard language at that time.

The absence of a common language indicates yet another feature viz., the human geography of an area. The linguistic configuration of South India with Malayalam west of the Ghats, Canarese in the Mysore plateau, Telugu in the North East and Tamil in the Eastern plains bears witness to this truth.

Climate, social habits, religion, science and even individual genius have left their unmistakable traces on language. Close and glottal sounds are more in evidence in the language of a cold country while open sounds are more numerous in the speech of warmer lands. The vocabulary of a people is necessarily limited by the facts of their experience and it is significant that many Indian languages have no word for ice while they have many for the sun. An analysis of the phonological structure of any language can prove without a doubt the influence of climate on human speech. The history of language shows that dialects have been broken up and levelled into some sort of standard speech, by war, by large national festivals, by an exogamous system of marriage and by improved means of communication. Standard language reflects in no little measure the work of Dante in Italy, of Chaucer in England and of Luther in Germany. Modern writers in Tamil and other Indian languages have contributed a good deal to the form and expressiveness of their languages. Standard English is a resultant of the songs of the mediaeval minstrels of the fall of feudalism, of the rise of towns and of the strong and centralised Tudor government. Standard speech in Germany bears witness to the influence of the common life of the soldiers coming together from different parts of the country, to the influence of the officials

transferred from place to place and even to that of the touring companies of actors who wandered through town and village. Universities, public schools, royal courts and fashionable society have all helped to chasten and enrich the language of a nation.

Social outlook and social usages find a very clear reflection in the form and development of the Sanskrit language. Though Sanskrit has to its credit the first grammar in the world and the most scientific phonetic system, over no other tongue does the dead hand of ancient authority lie so heavy as over Sanskrit. Instead of setting forth the nature of the language, grammar assumed powers of direction and control and enforced such rigid laws that a large number of its speakers were driven outside its pale. Authoritarian thought in matters of language contributed to the rise of languages derived from Sanskrit. Testimony to this is borne by the Sanskrit drama wherein king, courtiers and learned men speak in one tongue, while women, children, servants and common people use vastly modified forms. The stratification of class dialects and the later rise of derived languages prove the rigidity of the social codes among the speakers of early Sanskrit.

The study of a language reveals equally well the religion and philosophy of a people. Words like church, temple, mosque, synagogue, *koil* and *kshetra* throw a flood of light on the religious ideas of the people. *Church* comes from Greek *Kuriakon,* Lord's house, and the word was probably taken into Germanic by the mercenaries who served in the East. *Temple* comes from Greek through Latin. In Greek *Temeros* meant a sacred enclosure, a piece of ground cut off. Synagogue again comes from another Greek word meaning congregation. The word *mosque* comes into English from Arabic through French and Spanish ; the original Arabic

word *Masjida* means a place of prayer. The Tamil *koil* means a prince's house, while the Malayalam kshetra denotes a field. A place or an abode, a place set apart, a place of prayer, a meeting place, a congregation are therefore found implied in these terms. In English, the influence of Latin Christianity is most clearly marked. It is evident in a large number of loan words, in the changes in the meaning of indigenous words, in new coinages and in the very structure and syntax of Old English prose. It is not surprising to find that English as it is to-day has been profoundly affected, by the great religion which its speakers profess. But when we think of the debt of modern English to the philosophy of Greece and especially to the genius of Plato we are filled with wonder. The English word 'quality' goes back to the Latin *qualitas* which is the translation of a Greek word *qoiotes* coined by Plato to mean "whatness or of-what-kind-ness" i.e. the concept represented by the Sanskrit word *guna*. By this Plato separated in thought the characteristic feature from an object of which it formed the distinctive sign. Again Plato was the first to use the Greek equivalent for analogy, antipodes, dialectic, enthusiasm (the state of being filled with a god), mathematical, synthesis and system. Method, music, philosopher, sophist, theory, type and irony (simulation of ignorance) will not mean what they do but for the genius of Plato. But the new meanings he gave to the words 'idea' and 'ideal' are the most remarkable of all. Before Plato the word 'idea' meant the form and semblance of a thing, being cognate with *idein*, to see. Cicero translated this into 'species' a word connected with *specere*, to see and *speculum*, a mirror. By an extraordinary effort of thought Plato made it possible for us to separate our ideas, notions, thoughts and semblances of them from the things themselves. According to Plato matter is but an imperfect copy of

the ideas or archtypes or perfect spiritual types. These alone persist for ever and these alone are real.

Just as language sets forth the good points of a people it also lays bare their ignorance, worldliness, contempt and hatred. The degeneration of meaning which words like knave (lad), villain (peasant), boor (farmer), varlet (serving man) and menial (one of the household) show, is eloquent of the treatment that peasants and labourers received at an earlier time. The present meaning of 'prejudice' reminds us of man's proneness for wrong impressions while 'resent' and 'retaliate' show that he is more keen to take offence at injury than to be alive to benefits done. The disrepute into which the words 'simple' and 'innocent' have fallen show how ready the average man is to deceive rather than be deceived. The word 'miscreant' (misbeliever) shows the Westerner's animus against the Moslem and 'assassin' is only another form of 'hashashin' a Moslem fanatic intoxicated with hashish. The word 'dunce' is derived from the name of the wittiest of school divines, Duns Scotus, and records merely the popular prejudice against schoolmen. It is no credit to Hindu humanity that it should have given to English, the word 'pariah' and a new meaning to the word 'untouchable.'

If, therefore, language furnishes us with a dependable key for unlocking the treasures of past thoughts, manners, habits and ideas; if it preserves for us the inner, living history of man's soul and the evolution of his consciousness; if, in short, language is a mirror not only of the outer circumstances but also of the inner working of individual and national life; then, the study of language can never be barren or poor in interest; nor can it be lacking in great humanising and cultural value to those who devote themselves to its study with patience and enthusiasm.

THE NATTUKKOTTAI CHETTIARS AND THEIR BANKING SYSTEM

By

Dr. B. V. Narayanaswamy Naidu, M.A., B.Com., Ph.D., Bar-at-Law.

The indigenous bankers play a very important part in the economic life of India. The indigenous banking business is a purely family concern and has become a hereditary calling in particular classes and communities. The Nattukkottai Chettiars are one of the most remarkable banking communities in this presidency and most of them live in the Ramnad District and the Pudukkottah State. The most important centre is Chettinad. "Geographically this tract is an undefined area; but in the regulations that bind the caste of the Chetti community, it is mentioned as the area lying south of the Vellar river, east Piranamalai—a mountain peak that has given its name to the neighbouring village in the north-west corner of the Ramnad district—and west of the sea. A look at the map shows that this tract which, the Chettis say, they selected for their home from the time of their migration from the Chola kindom, lies partly in the Pudukkottah State and partly in the Ramnad district. They have settled down in 78 villages, 20 of which are in Pudukkottah and 58 in Ramnad."[1] The Chettiars are called Nagarathars from the fact that they are grouped for social purposes into nine Nagarams or townships. At

1. Madras Banking Enquiry Committee—Evidence Volume III—page 1170.

the head of each of these townships there is one temple. The nine temples are: —

Ilayathakudi, Mattur, Vairavankoil, Iraniur, Pillayarpatti, Nemam, Iluppakudi, Suraikudi and Velangudi. Their population according to 1921 census was 40,500 and the caste is divided into twenty five 'gothrams' for purposes of marriage and adoption.

They have extensive banking business in various places in the Madras Presidency and in the City of Madras, Ceylon Indo-China, the whole of Burma, the whole of the Malay Peninsula and in parts of Sumatra. Nattukkottai Chettiars have been conducting their business for centuries on certain well-recognised principles and methods. They have high reputation for honesty and the fact that their methods have stood the test of time clearly proves that they have been conducting their business on right principles. They are born bankers and in the words of Mr. E. Thurston "the Nattukkottai Chettis, in organization, cooperation and business methods are as remarkable as the European merchants.....the simple but strict training which they give their boys, the long and tedious apprenticeship which even the sons of the richest among them have to undergo, make them very efficient in their profession and methodical in whatever they undertake to do."

The young Chetti boys from the age of eight get training in the double entry system of book-keeping. The banks are known in Tamil as 'Thavanaikadai' or 'Vaddi kadai.' Agents are appointed to branches every three years and they are paid salaries in addition to bonuses on profits. A few months prior to the expiry of the period of an agent, his successor is sent to him to take charge and learn the work. The agent who is relieved returns to Chettinad,

settles account and after a period of rest seeks re-employment. The agents and staff live in the place of business in close proximity to the borrowers and are in constant touch with the private lives of the borrowers. Hence they are able to lend to persons without security. In a paper read at the Royal Society of Arts, London, Mr. M. M. Gubbay, C.S.I., late Controller of Currency and Financial Secretary to the Government of India spoke of Nattukkottai Chettiars as follows:—

A special type (of indigenous bankers) is that of the Chetti community in Madras. It is known that in many cases accounts can be maintained with these Indian banks on which operations by cheques are permissible and that funds lie with these bankers on time deposits at rates much above those which are available from the banks. I see no reason to doubt the commonly accepted view that both because these private bankers can afford to pay attractive rates of interest as well as because their requirements as to security are less rigid, their participation in the financial life of the community, as a whole, must be on a very extensive scale. Further, they are in intimate daily touch with those with whom they transact business and follow the doings of their clients with a closeness which is denied to the banks. There must be accumulated with these private bankers a store of knowledge and experience of the standing, the moral as well as financial capacity of individual Indian traders and Indian trading firms, their business connections and relations on which if fully organised and systematised might possibly quite suitably rest an expansion of credit facilities from the banks. Thus they fulfil one of the three postulates of credit, namely, proximity of the lender and borrower. They lend money to agriculturists for payment of their kists, domestic expenses and

they also finance merchants and traders. They are able to do extensive business because "they grant easy conditions, lend at any time of the day without reference to hours of business.... They also collect money according to their convenience but do not insist on the prompt and punctual payment on the due dates as the banks."

Chettiar firms in Burma and Malay States are large concerns carrying on banking in several places. There are about 95 firms working in Burma, and, as a class, Chettiars in Burma have no appreciable business apart from banking and money-lending. They have given money for various charities. They have founded a residential school at Kaubo (1929) near Rangoon and they have endowed a lectureship in Banking and Commerce in the Rangoon University. Chettiars in Burma set apart a definite percentage of their commercial profits for private charity and for making gifts to temples.

In December, 1927, when Sir Hercourt Butler was the Governor of Burma he said in a public speech that Burma owed a great deal to the Chettiars. Addressing them he said, "You represent a very important factor indeed in the life of this province. Without the assistance of the Chettiar banking system Burma would never have achieved the wonderful advance of the last 25 to 30 years. The Burman to-day is a much wealthier man than he was 25 years ago; and for this state of affairs the Chettiar deserves his share of thanks."[2]

In December, 1929, the public of Rangoon in their address presented to the Hon'ble Rajah Sir Annamalai Chettiar of Chettinad referred to the part played by the

2. Report of the Burma Provincial Banking Enquiry Committee, 1929-30 Volume I page 189.

Chettiar in the growth and development of agriculture and trade in Burma in the following terms: —

"None can realize better than the people of this province the part which Chettiyars have silently played in the development of agriculture and business and it is a tribute to the upright system of Chettiyar banking and moneylending that no other system of finance has yet been evolved which is capable of giving to agriculture and business in this province the impetus and stability which Chettiyars have achieved."

The Committee appointed by the Government of the Federated Malay States in Kuala Lumpur observed about Nattukkottai Chettiyars' banking in their report in connection with the failure of the scheme of Government loans for purely agricultural business as follows: —

"These people have an apparently inexhaustible capital; their sole reason for existing is to borrow and lend money; they are mild and gentle in disposition; among Europeans and Asiatics they bear a good name for honesty and even for kindliness to borrowers. It is a well known fact that where these money lenders know a Malay of good standing, they often lend him money merely on a note with no security at all. As they have been bankers for centuries they know their business. No government fund can hope to compete with them except to a very restricted extent. They live or their agents live amongst their borrowers and can lay a finger on the pulse of any man's business should they care to lay it. They are men of business, not a Government Department, and they know their business as professionals and not as amateurs."[3]

3. Written Evidence of the Nattukkottai Nagarathars Association, Madras.

The Assistant Commissioner of Income-Tax, Madura, supplied to the Banking Enquiry Committee, information about the wealth of the Nattukkottai Chettiars and he estimated the total at about Rs. 80 crores.[4]

(a) Money-lending (own capital) employed in business:—

	Rs.	
Karaikudi First Circle	.. 9½	crores
Karaikudi second circle	.. 16	,,
Karaikudi third circle	.. 4½	,,
Sivaganga Circle	.. 6	,,
Total	.. 36	,,

(b) Investments in houses and jewels:—

"The Nattukkottai Chetti invests largely in houses and jewels, although this is practically dead capital, the reason being that his credit is built on a peculiar basis. It is the value of his house, the jewellery he possesses and the lands that he owns that determine his credit in the eyes of his own caste-men as well as of others who wish to invest their savings with him. The first instinct of a Chetti who has amassed money is to construct as big a house as he can. We may see numerous massive, spacious and fine buildings in Chettinad, in an architectural style unique in its own way. In Devakottai alone there are said to be 300 houses costing not less than a lakh each and the Officer has seen personally not less than 100 of them. The total amount so spent in houses is estimated at 6 crores and in jewels another amount of 4 crores .. 10 crores

(c) Money-lending capital of the Chettis in Pudukkottah State, many of whom do business in British India, i.e., in Burma and also in this Presidency.

There are 20 villages with a population of 12,000. They are exceedingly rich and finance businesses in South India, Burma and other places. Capital estimated at 14 crores .. 14 crores

Houses 2½ crores and jewels 2 crores .. 4½ crores

4. Written Evidence of Mr. A. Savarinatha Pillai, Assistant Commissioner of Income-Tax Southern Range. M.B.E.C. Vol. III.

Rs. Crores

(d) Investments in agricultural lands, house properties, rubber gardens, tea estates, coconut plantations, etc., in Federated Malay States, Ceylon, Burma and other places.

The ownings in distant places can not even be approximately fixed as there is no information available, but it is understood that the Chettis have very valuable possessions abroad in the shape of rubber plantations, tea gardens, coconut gardens in Federated Malay States, Saigon, Ceylon and in Burma where agricultural lands are also extensively owned. In this Presidency the landed properties owned by Chettis and acquired by them mostly in the course of money-lending business are scattered about in numerous districts. Some of them have large cardamom plantations in Travancore hills. Once upon a time there was a craze among Chettiyars to invest in lands and the sentiment of being landed magnates appealed to them and they acquired portions of zamindari estates, etc. Now, however, they have stopped this kind of investment as they do not find it profitable. Many Devakottai assessees have a large portion of their assets locked up in this form and are at a disadvantage. The total assets in the shape of immovable landed properties can be taken at Rs. 15 crores." .. 15 crores

Total .. 79½ or 80 crores roundly[5]

The aggregate amount of owned capital rolling in business among Nattukkottai chettis is Rs. 50 crores. The borrowed capital is estimated roughly at 50% of owned capital or at Rs. 25 crores of which Rs. 8 crores belong to Chettiar men and women. Hence owned capital is Rs. 58 crores and borrowings is Rs. 17 crores. The working capital of indigenous banks, on the whole, both in the Presidency and outside is estimated at Rs. 75 crores.

The Assistant Commissioner of Income-Tax gives the number of assessees in the four circles of Karaikudi I, II, III and Sivaganga, who with their owned and borrowed capital do business locally and outside. The

5. M. B. E. Report: Evidence Volume III; page 1173.

owned and borrowed capital for 2882 assessees are Rs. 2483·19 lakhs and Rs. 1481·62 lakhs. The difference of nearly 13 crores between the figures arrived at through investigation and by regular assessment to income tax may be due to the inclusion in investigation of those who are not assessed to income-tax.

The amount invested in business in the Presidency can be seen from the following statement submitted to the Committee by the Assistant Commissioner of Income-Tax.—

Name of circles.	Number of bankers doing business locally.	Amount of Capital invested in lakhs.	Borrowed Capital in lakhs.	Volume of business in lakhs.	Expenses in lakhs.
Chettinad.			Rs.	Rs.	Rs.
Karaikudi I	33	238·82	108·72	347·54	10·77
„ II	14	59·03	123·89	182·92	13·31
„ III	74	101·75	53 43	155·18	5·11
Sivaganga	15	113·78	58·90	172·68	3·85
Total	136	513·38	344·94	858·32*	33·04
Trichinopoly I	21	43·85	22·45	66·30	2·59
do. II	12	12·44	2·21	14·65	0·79
Dindigul	19	11·97	25·23	37·20	1·99
Madura, North	4	0·65	2·30	2·95	0·22
„ South	8	18·93	17·53	36·46	4·52
Virudhunagar	10	6·17	5·51	11·68	0·78
Tuticorin	22	17·82	10·76	28·58	1·52
Tinnevelly	11	12·42	28·22	40·64	2·69
Total	107	124·25	114·21	283·46	15·10
Grand Total	243	637·63	459·15	1,096·78	48·14

*Distribution—		Rs
Local money lending	...	217·54 lakhs
Burma	...	313·64 „
Federated Malay States, etc.	...	265·19 „
Ceylon	...	61·95 „

Thus the amount invested in this Presidency by 243 Nattukkottai Chettiar Bankers is Rs. 456 lakhs. The major portion of the capital of those who do local business in Karaikudi and Sivaganga is invested in Burma, F.M.S. and Ceylon.

An indigenous banker who was questioned in the Coimbatore District said that generally, if about a lakh of rupees is to be the out-turn of business at least Rs. 75,000 should be the invested capital. In his case, that has been the proportion. His bank is now fifteen years old but the origin cannot be traced exactly to the correct date. The maximum expenditure incurred by this banker per year is Rs. 3,500. He employs many clerks on decent salaries. In the year 1929-30, his invested capital was Rs. 120,000 and the out-turn of business was Rs. 2½ lakhs. Gradually this amount began to dwindle; and the capital and business out-turn for the years 1935 and 1938-39 respectively were Rs. 80,000 and Rs. 125,000, and Rs. 60,000 and Rs. 100,000. The banker who was examined was able to estimate roughly the business done in the Coimbatore District.

Year.		Business done. Rs.
1929-30	..	1½ crores.
1935	..	50 lakhs.
1938-39	..	20 to 30 lakhs.

The Agriculturists Relief Act of 1938 affected the Chettiar banking business adversely. Roughly estimated the loss incurred owing to the operation of the Act is Rs. 3½ lakhs. The loss was great in the Coimbatore District where almost all the borrowers were agriculturists. Now business with the agriculturists has been reduced considerably. Loans are given only to 'A' class persons whose credit can be relied upon.

Deposits.

Besides his own capital, the Nattukkottai Chettiars' capital consists mainly of deposits received from their own relations and friends and to a small extent from the outside public. In times of stringency they are helped with loans by the Imperial Bank and other big joint stock banks.

A feature of deposits made by persons of the Nattukkottai Chetty community is the depositing of their funds in different shops to avoid any risk. Deposits received by various Nattukkottai Chettiars are mostly from their own community. The Commissioner of Income-Tax Madura, calculated from the figures given by officers in Chettinad that the number of persons who derived income from interests on deposits alone were 823 and the amount so deposited by them was Rs. 4½ crores. If the deposits of those doing business were included, total deposits amounted to nearly 8 crores. It is difficult to estimate the amount of total deposits of the Nattukkottai Chettis. It is only recently that the deposits from the public have dwindled. The deposits are made in urban areas but not in rural parts. In Madras and other places legal practitioners and others who have dealings with Chettiars deposit their moneys with the Chetti firms as a higher rate of interest can be obtained. As in other banks, the normal rules of keeping a proportion of deposits in cash or in forms readily convertible into cash are not observed by Chettiars. So long as the debtors were keeping up their credit, the Chettiars found no difficulty in meeting the obligations of their depositors. But when the borrowers began to delay inordinately, the Chettiars found it difficult to meet their obligations and slowly gave up the system of taking deposits. Enquiry in Devacottah has shown that the Chet-

tiars take deposits only occasionally; even then, deposits are taken only from persons known to them and from their relations, who hold positions in the social sphere. The rate of interest herein differs from the rate of interest on loans. The one reason for their inability to take deposits is due to the fact that they always entertain a genuine fear, unlike joint stock banks, with regard to conditions of payment and the impossibility of keeping the necessary fluid resources.

The deposits of Chettiars are of two kinds—(1) the current deposit in which the 'Nadappu' rate of interest is allowed (2) the 'thavanai' deposit, that is loans repayable after a definite 'thavanai' or period of rest. The period is two months in Madras and Burma and three months, six months or one year in the Federated Malaya States and Ceylon. If the 'thavanai' deposit is not demanded after the expiry of rest, interest is added after completion of each period of 'thavanai.'

The Chettiars adopt a current rate of interest analogous to the Imperial Bank Rate and fix it every Tamil month at each of the important centres—Madras, Rangoon, Singapore, Penang and Colombo—at a meeting of the leading Chettiar bankers. The dealings between Chettiars themselves are governed by the current rate of interest. These rates are much higher than those of the Joint Stock banks. The rates charged on 'thavanai' or fixed deposits are called 'thavanai' rates of interest. "The relation between parties in a *thavanai* transaction is that of a lender and borrower, the loan is made for a fixed and certain period of two months at a rate of interest which is fixed weekly by members of the chetti community for transactions which may be entered into during the ensuing week; the lender cannot demand repayment before the end of two

months for which he has lent the money; if he does not demand it at such time and the borrower does not elect to repay it, the loan is deemed to be extended for another full two months at the rate of interest fixed by the weekly meeting of the community for the then period and so on until the money is repaid." Thus the *thavanai* deposits have continued in Nattukkottai Chetti accounts for a number of years. As regards 'thavanai' rates, Rangoon 'thavanai' rates are fixed for each week, while the F.M.S. 'thavanai' rate is a matter for settlement by the parties concerned in each individual case. Thus there is no fixed rate for deposits as in Joint Stock banks.

Loans.

It is generally said that the indigenous bankers lend only indirectly to agriculturists—i.e., through the village moneylenders but finance trade and industry directly. This is true of the Multanis, Marwaris and the Kalladaikurichi Brahmins. They finance a considerable portion of the inland trade on the personal credit of the merchants, who in turn give loans to ryots. They also advance on produce and discount hundis. But the Nattukkottai Chettis lend to agriculturists direct and also finance trade and industry. The Assistant Commissioner of Income-Tax, Madura, in his evidence to the Madras Banking Enquiry Committee said "It cannot be said that in South India the Nattukkottai Chetti class of money lenders assist in any specific manner the agricultural or trade enterprise. The needy and the poor go to them for loans and if the borrower happens to be an agriculturist, in that sense the Chetti finances agriculture; or if he be a trader or shop keeper in that sense alone the Chetti finances trade. There is no system followed by Chettis to help agriculture or trade as a

profession in the Presidency, although in Burma Agricultural enterprise is backed up by Chetti finance." But enquiry at Devacottah and Coimbatore has revealed that in nine cases out of ten, the Chettiars lend to agriculturists. About 10% of the borrowers are traders. That industry also is financed by these bankers is true from the fact that many cotton spinning and weaving mills in the Coimbatore District have as their managing agents Chetti bankers.

The Chettiars have no set of rules or regulations in common for being followed in the matter of loans. They study the condition of borrowers carefully and this they are able to do because they are in close proximity to the borrowers From the enquiry it is found that their methods of lending are as various as those of money-lenders.

In the case of the agriculturists as in the case of all others, the bankers lend most commonly large sums of money by means of pronotes which form the primary credit instruments. There are printed forms of promissory notes in Tamil and the borrower fills up the form and signs across the revenue stamp affixed to the pronote at the right end. No specific period of return is found in the pronote but 'thavanai' (the period of rest) is noted down. Generally 'thavanais' are for one year or half-year for purposes of calculating compound interest. Sometimes two or three persons jointly execute the bond. If after repeated persuasion by the banker the debtor does not return the loan, the former files a suit in a court of law. Usually the agriculturist borrows in these parts—Coimbatore and Devacottah—as in other parts of the Presidency in the months of Adi (16th July to 15th August) to Masi (16th February to 15th March). The returning of loans is from Panguni to Ani or 16th March to 15th July. Agricultural operations—ploughing, sowing and harvesting—take place between July and

February and afterwards the marketing of crops is financed by the bankers. The Tinnevelly bazaar rate of interest which prevails in respect of transactions between one banker and another will be interesting if studied in connection with the period of loans given to agriculturists. The bankers in that district deal mainly with traders and the fluctuations in the rate of interest will show the stringency of the money market for traders.

The particulars of Tinnevelly bazaar rates are as follows:—

Tamil Month.	Corresponding English Month.	Rate of Interest.
Avani ..	16th August to 15th Sept.	11 Annas or 8¼%
Purattasi ..	„ Sep. to „ Oct.	9 „ or 6¼%
Arpisi ..	„ Oct. to „ Nov.	8 „ or 6%
Karthigai ..	„ Nov. to „ Dec.	8 „ or 6%
Margali ..	„ Dec. to „ Jany.	11 „ or 8¼%
Thai ..	„ Jany. to „ Feby.	14 „ or 10½%
Masi ..	„ Feby. to „ March	1 Rupee or 12%
Panguni ..	„ March to „ April	1 „ or 12%
Chitrai ..	„ April to „ May	1 „ or 12%
Vaikasi ..	„ May to „ June	14 Annas or 10½%
Ani ..	„ June to „ July	13 „ or 9¾%
Adi ..	„ July to „ August	12 „ or 9%

*Madras Banking Enquiry Committee Evidence Vol. III, p. 1164.

During 16th December to 15th January, the rate of interest to traders begins to rise and the highest rate to traders is during the period of Masi, Panguni and Chitrai when the agriculturists do not require any credit for their agricultural operations.

The pronote on personal security is the most-common method of lending to agriculturists. Some Nattukkottai Chettiars lend money on what is known as the *kandu kist*,

or *thandal* system. Only small money lenders resort to this system. When money is lent out, interest is taken in advance and the borrower pays in equated instalments daily or monthly. Default entails the payment of penal rate of interest. The Devacottah and Coimbatore bankers say that agriculturists borrow on this system. But as the agriculturist gets his income in a lump at a certain period of the year, it will not be possible for him to pay the instalments daily or monthly easily. This system of *kandu* loans will be very helpful to small traders.

Next to the pronote, the most common method of lending is the raising of loans on produce like rice or paddy, tobacco leaves and cotton. If on the stipulated date the money is not returned the banker persuades the agriculturist to sell the produce in his custody on that day at the market price and pay back the loan. Sometimes the banker himself sells the produce and claims from the agriculturist the margin, if any, left over.

A still another method of lending which is not so common is what is known as 'pokkiam' or 'othi' by which money is lent out on the security of lands or any other immovable property in lieu of which the banker enjoys the benefits of possession of property till the money is returned or till a maximum period of sixty years. If after sixty years money is not returned, the property automatically becomes the banker's when sued in a court of law. These are the different types of loans prevalent among Nattukkottai Chettiars in the Coimbatore District and in and around Devacottah.

True to the traditions of the great Nattukkottai Nagarathar families, the Rajah Sahib of Chettinad started, very early in life, his individual banking business under the

name and style of "S.Rm. M.A." It grew in importance and in a short time expanded into a number of branches.

As in the case of his charities, here also he turned from the beaten track and to secure efficient control and management, he converted his firms into Limited Companies. In the course of the past ten years, a number of trading concerns have been built up through his instrumentality which are all in a very flourishing condition. These are the Bank of Chettinad Ltd., The Chettinad Bank Ltd., the Chettinad Corporation Ltd., South India Corporation, Ltd., South India Corporation (Madras), Ltd., Madura South India Corporation, Ltd., Burma Commercial Corporation, Ltd. and Trichy and Tanjore Stores, Ltd. These have 60 and more branches and are scattered all over Indo-China, Malaya, Straits, Ceylon, Burma, British India and the Native States. These are all handling a large volume of business and are successfully run.

The Bank of Chettinad and the Chettinad Bank, besides their banking business, own about 100,000 acres of paddy lands in Burma and extensive rubber and coconut estates in Ceylon and Malaya.

The Rajah Saheb owns several villages in South India, the chief of which are an estate consisting of 116 villages called the Chettinad Estate in the Chittoor District and several villages in the Tamil Districts.

ANNAMALAI UNIVERSITY HOSPITAL

By

Dr. N. Rajaram,
Medical Officer.

The problem of medical aid in Annamalainagar began when the Minakshi College, the nucleus of the Annamalai University, shifted to its own building, the Arts Block, from the premises of the Ramaswami Chettiar's Town High School, Chidambaram, in 1923. About a hundred students and four members of the staff came into residence in temporarily improvised structures. Communication with Chidambaram was not easy, and the place itself was a sandy wilderness with palm trees and prickly pear and two small groups of huts. The Rajah Saheb, with his usual solicitude for the welfare of the students tackled the problem of medical aid to the residents of Annamalainagar by establishing a small dispensary in one of the rooms with a part-time medical officer and a compounder. The Sub-Assistant Surgeon and Compounder of the Town Hospital visited the dispensary thrice a week. They were also available for urgent calls.

The strength of the College grew by leaps and bounds; and the number of residents grew consequently; the more so as proper accommodation in the Hostel became available. The part-time arrangements were found to be inadequate and the dispensary was placed on a permanent basis in 1926 with a full-time Medical Officer, Compounder, attender and menials. The accommodation

was also increased by annexing another room for the increasing store of medicines.

Successive medical inspections of the College and the University revealed that in a very large proportion of cases the students had defects in the eye, the organ of which they should take the greatest care. To be of real help to the students, the University deputed the Medical Officer for training in the Minto Opthalmic Hospital at Bangalore in 1931. It then became necessary to increase the accommodation and equipment by providing a dark-room and dark-room equipment. Successive annual reports show that these have been put to good use.

With the rapid increase in the strength of the University and as the University became more and more residential, the need for a good Hospital with provision for accommodating in-patients began to be felt. The authorities readily made arrangements for erecting a building for the purpose and the present Hospital building with accommodation for four in-patients and an isolation ward was completed and occupied in September, 1936. The equipment was increased by a grant of Rs. 2,000. To cope with the additional work arising out of increased facilities the staff was increased by taking in another compounder, one more ward-boy and more menials.

With the admission of women students into the University and the starting of a women Students' Hostel, the need for a Lady Assistant to help the Medical Officer was felt. With the increasing number of the women students the need became greater and in 1940 a midwife was appointed so that she might be useful to the ladies of the locality and took charge in June 1941.

The daily dispensing is mostly for minor ailments such as disorders of the digestive organs, influenza, middle-ear-diseases, tonsilitis, eye-troubles, wounds and bruises. Cases of pneumonia, fractures and dislocations come in occasionally for treatment. The table below gives the annual attendance at the dispensary during the several years and may give some idea of the benefit rendered.

TABLE A.

Year.	In-patients.	Out-patients.
1940.	59	14,422.
1939.	52	12,985.
1938.	—	12,811
1937.	—	14,486
1936.	—	12,151

It may also be mentioned that ever since its inception the dispensary has been useful not only to the residents of Annamalainagar, but also to the inhabitants of the large number of villages all round. And all this medical aid is given free of cost to everyone.

TAMIL CULTURE

By

Rao Bahadur C. M. Ramachandra Chettiar, B.A., B.L.,
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The culture attained by a nation is gauged by the civilisation which it has attained from the past. It is not the production of a single day's work but is one which has been built up step by step by a slow and steady development of thought by its prominent sons. It has been preserved in the literature and arts of the country in the customs and manners of its folk and has been nurtured by its educational institutions founded by its people. Educational institutions of pre-eminence are known as Universities in Modern parlance. Universities in the West are the outcome of a few centuries. But their development and expansion have been quick and all-embracing especially during the past one century. In the East, University education has been a matter of ancient times, a heritage of centuries. The Universities of Nalanda and Taxila are world renowned, but political eruptions have over-flowed and submerged them under their irresistible lava of repression. But culture did not die having been nurtured in the minds of the humble country folk and of the un-ostentatious learned. South India was more fortunately situated and the ancient Tamil culture was preserved by the nature poets of the Sangam age and by the patronage of the enlightened imperial Cholas and Pandyas. After their fall, the holy seats of Saivaism, viz., the hoary maths, protected it from decline and at present the two eminent Universities, the

out-come of modern civilisation, have taken the burden of preserving our ancient heritage. In fact it is not only the ordinary duty, but its main function for a University to preserve the culture of a nation.

When the idea of a University was started about 85 years ago by the present Government their main object was the training of students to befit them as clerks and officers to run the affairs of the state. As ideas advanced further modifications had to be introduced. The original object merely required a system of examination of pupils to grade them according to their attainments for various posts in public service. Nobody thought that culture had something to do with University education. Knowledge became wider and people felt a change in the angle of vision. The heritage of the nation ought not to have been cornered and screened in preference to foreign cultural ideas. Hence research scholarships and professorial chairs were slowly introduced. At the beginning, chairs for foreign arts and sciences were preferred. With considerable difficulty and delay, vernacular culture was recognised and introduced. Readerships and studentships were established and a certain amount of work is supposed to be done in this line in the provincial University.

Tamil culture is great and its literature is vast. It had been hidden in the minds of a few scholars and preserved in the moth-eaten palm leaves hoarded in the nooks and corners of the thatched houses of the village teacher and in the dark niches of ancient maths. It had not reached really the study room of the modern educated scholar with its full import. There was an agitation in the country to place it on a pedestal worthy of it. When the premier merchant prince of Chettinad came forward to light the lamp of

culture near the Sacred Hall of Cosmic Dance, the Tamilians were overjoyed that the time had come when their dreams would be fulfilled. Massive buildings for dispensing learning amongst scholars arose and various subjects of real merit were taught. Students thronged and a full blown University sprang amidst green fields in the midst of sacred soil trodden by the holy feet of the four great Masters of Saivite culture. The people were immensely pleased.

Tamil was given a seat and Lecturers were appointed and a course of study was instituted. Art, Music and Teaching formed the various courses of study. But are they enough? One important branch of Tamil culture was entirely forgotten. Tamil had developed two aspects of life, secular and religious or philosophical. The secular aspect is represented by the Pandits and Annamalai as well as Madras have recognised and made sufficient provision for it with enough patronage. But what about the religious or philosophical aspect? Is it not high time for this aspect to be studied, preserved and developed?

Tamil has evolved a comprehensive system of philosophy known as Saiva Siddanta. The works of the four great Acharyas and of Tirumular give a very well developed system of philosophy equal to none in the land. They are far older than twelve centuries. In the 13th and 14th centuries of the Christian era various ideas enunciated by the ancient saints were codified by the Saint Meikanda Deva and his disciples. They have been consolidated into a series of 14 sacred works. Nobody till now has rendered their full import in English and other world wide languages except by way of a few essays by Dr. Pope and by late Nalluswami Pillai. Recently one or two treatises have

appeared in the shape of theses for University degrees by a few scholars.

It may be said that there is a chair for philosophy at the University of Madras and Saiva Siddanta being one aspect of philosophy, could be very well studied there. Those who know the real greatness of the system of Saiva Siddanta can understand what sort of treatment could be given to it at the hands of a chair which has specialised in Vedantism and allied subjects. True there is a syllabus prescribed by the University for Saiva Siddanta. But it must be noted that till now, no college in the Presidency of Madras has undertaken to prepare students for the examination in that subject. There are not enough teachers to teach the subjects since no encouragement has been shown to it till now. If such be the case, is it not necessary to put forward a strong case for the study of this important subject and to press for establishment of a separate chair for it with the object of introducing study and research work therein?

The Translation of various treatises on philosophy into English, the writing of thoughtful articles, and the devotion of a portion of the University journal for this study are some of the necessary acts to be undertaken at once. A chair, a readership and a few studentships should be created without loss of delay. The only University which can undertake this work is the Annamalai University since it is wedded to nurture the culture of the Tamilians. We hope that the Rajah Saheb the Founder of the University will bestow his serious thought on the subject and will give a practical turn to it thereby earning the praise and the gratitude of his loving compatriots.

MODERN TENDENCIES IN TAMIL LITERATURE

By

M. S. Ramanujam, B.A., (Hons.)

The 19th century died away with its trail ablaze. The political complacency of Britain received its first rude shock and in the twilight was seen the hum of a new life. The long lull of supine inaction in Tamil literature began its downward march, and in the short spell it saw the birth of new veterans, the growth of people into their full stature. The political subordination of India to the British, regarding its cultural aspect, was a blessing in disguise. Earnest savants of English birth and origin scintillated on the Tamil sky and Tamil literature shall always bear the long furrows made by their powerful plough. I mean Dr. Pope and Bishop Caldwell. The birth and growth of a new science, the Dravidian philology, proclaims in mute eloquence, to the Tamils and the rest, the incalculable worth of their indefatigable endeavours for Tamil learning and culture: needless to embark on a cataloguing of their activities, magnificent and beautiful.

The long streaks of the rosy dawn broke on us with a golden promise and the literature of our language stood on the throes of a new birth. The frigid cold of an extended monotony was sought to be substituted with the fragrant blossoms of a new spring and thus proceed our language for 'fresh honours and pastures new.'

Modern Tamil literature, with its many offshoots, though not without signs of hope and promise yet betrays

long lines on her face, signs of senility and stagnation. Theories, really are they opinions, of varied hue, more novel than useful have been propounded. They contain, no doubt some grains of truth amidst sandy waste, but yet they are not un-alloyed. A clear picture of the currents and cross-currents in Tamil literature is as opportune as it is necessary.

The history of Tamil Renaissance, must really be begun with Professor Sundaram Pillai, the author of "Manonmaniam," a Tamil "literature" drama. The morning star of the Revival, with his unerring instinct and deep intuition to sense the charge of the atmosphere, had mingled in his product both the old order and the new, silently leading us to the threshold of the New Dawn. We feel not the change he is working; the deliberate employment of the old meter deludes us of his new spirit, "the spirit of revolution." It is deep enough; he had poured the new wine into the old bottle. "Manonmaniam" is but the properly punctuated warning of the imminent ebullition of a new spirit, the flowering of a fresh manhood. Sri Subramania Bharathi, the poet of national awakening, who came close on his heels, took up the trail and our literature has become a ferment of confused changes. The impetuous youth in him had the better of him; and was but too ready with ever new suggestions and ideals; and their velocity and volume refused to be bound within necessary literary limits. He had not been partly responsible for the beautiful confusion in our literature. Political pressure, visionary ideals unceasing anxieties left his thoughts in a wilderness only to be scattered, unsettled and riotous. His was the riotous license of a prodigal son rather than the mellowed liberation of a soaring poet. A careful and unbiassed, detached and critical study of his poem is bound to reveal the pro-

gressive mellowing of his intellect and some of his early songs do no little violence to Tamil literary forms. They look like scattered rubies over a field (cf. his viruthams and venbas are no more than puerile versifications). His "Kannan Pattu"—not the whole but the majority, has found proper haven. Some of them have attractive forms and arresting ideas, touching the very fringes of the sublime. Students of Modern Tamil literature, in their impatience for things novel, too often err on the side of indiscriminate generalisations; for them the parts are the whole. Instead of a scrupulous analysis, they view them as an amalgam and grievously falter; in the midst of the wood they fail to see the trees.

After Bharathi, Mr. Desikavinayakam Pillai of Putheri is the Tamil poet to be reckoned with in our literature. His is a valuable contribution to an atrophied literature like Modern Tamil. The significance of his poems lies not in the deluding transparency of his form and style, but deeper still. The fusion of the literary spirit with the commonfolk dignity; the endowment of the common intelligibility with a classic significance and cultured elegance; he has thus with extraordinary success, evolved out a useful literary compound. With Bharathi's literary morbidities and emotional excesses well chistled; the classic age, its rigidity hammered out, grammatical conventions relaxed, in its pristine elegance and pure; Sri Pillai's vivacious imagination flooding the field with his effulgent rays; these have made his poetry a regulated whole, where the parts harmonise into a simple and significant unity, presided over by a supreme imagination.[1] "He recreates it and charges the

1. Translations from the "Light of Asia" and Gitanjali and "The River"

fact itself with the Poet's own sense of ultimate values."[2] He feels largely and intensely, thus they smoothly flow in metric dance to merge into a general significance.

New patterns and textures have their attraction when produced by a mill and the mind of an artist as well. The new-found glamour blinds lovers into a sense of security and self-love. This promiscuous propensity has been responsible for the birth of a few heresies in the Tamil literature.

The heresy that matter is superior to the manner of self-expression has not outgrown the stage of profuse polemics. For either side the protagonists are not wanting. There is also a liberal school of thought that strives to strike a golden mean. Agreed as it is, it is idle to deny the importance of form in literature as elsewhere. Do we not find it a distinct pleasure, intellectually apprehended when we quote a stanza from Kamban? Compare this mental state with the frame of mind when we express Kamban's idea not in Kamban's verbal form, but in our own language. The difference in the effect is understandable. To be succinct, form is not a non-existing abstraction, but an integral abstraction that inheres in the poem as such.

Another heresy, too common with us, is simplicity of style. The heresy of simplicity is being overdone. It is in the "imperceptible blending of the plain with the ornate that a great writer is distinguished. He uses the simplest phrases without triviality, and the grandest without a suggestion of grandiloquence." "*Without overflowing full*" is the law of simplicity, and plainness does not mean frugality but unity. Intelligibility

2. Abercrombie: Epic, p. 54.

is an attribute of simplicity and intelligibility in literature is different from apprehension in journalism. The two offices differ in their material operation. In literature anything of worth shall be intellectually apprehended to live the piece and be in the spell, while Journalism does not share these elegant literary manners. Literature, in as much as it is refined thought, is, by its very nature, precluded from making a common cause with the public prophylactics-journals-which are incapable of being worked up to those ecstatic regions of intellectual and imaginative spring.

With the rapid march of political events an idea has been set afoot that political education—an euphemism of high danger in itself—could be easily had if a standardisation could be achieved in the field of letters; something like a socialistic doctrine, but applied for a different purpose; a case of political theory tried in literature. Not going too deep into this 'standardisation' fever, we cannot but be amazed at the sponsors of the idea. It is really a brain-wave. In literature the instruments of operations are too delicate and subtle things, but never brittle. "Words are not like iron and wood, coal and water, invariable in their properties calculable in their effect. They are mutable in their powers deriving force and subtle variations of force from very trifling change of position; colouring and coloured by the words which precede and succeed; significant or insignificant from the powers of rhythm and cadence."[3] The form of matter is the form of thought and the thought is mutable with the change in the subject-matter. Description varies from narration and the differentia is not supererogatory but suffi-

3. G. H. Lewe: Success in Literature, p. 135.

ciently essential. "What are we to say to a man who spends a quarter's income on a diamond pin which he sticks in a greasy cravat? A man who calls public attention on him and appears in a slovenly undress."[4] This standardisation is bound to bring things to a dead level, which is neither proper nor preferable. Style is the man and the variety is but the irrefutable assertion of Nature wedded to beauty against the artificiality of mortal exertions towards a dead uniformity.

The realistic school is the counterpart of the romantic school in English literature. This school maintains with little consistency that anything in literature must correspond to the actual and real in nature. This, obviously untenable, is the upshot; of a comprehensive ignorance of the connotation of the term "Realism" as applied in matters literary. Realism and intelligibility in literature almost point at the same. Anything intellectually lived, felt and enjoyed is a literary reality. We delect in Ilango's portrayal of Kannagi and the burning of the beautiful city of Madura. True, the emanation of the God of fire and his implicit obedience to Kannagi are what we may call supernatural. All the same we feel we are not in a strange world when we skip over "Cilappathikaram." The genius of the poet weaves into the body of his poem a strange element, but in the high voltage of his imagination it turns into a real light, contributing to the general significance. This realism as apprehended imaginatively, sends a thrill into our being; we pulsate with a new life of appreciation and pleasure; we spring into regions of ecstacy and sublimity where life is a smooth-flowing stream of sweet dreams and lovely ideals; it is a dateless world.

4. *Ibid.*, p. 125.

Yet another controversy that has succeeded in generating more heat is the question of language and dialect. The confusion of the distinct departments of these two has led to strange notions about style. The impropriety of raking up the dialect to the sanctimonious pedestal of a language is a sure sign of its decaying manhood. The development of the Malayalam language provides us with the needed corrective. Before the 10th century A.D. Malayalam language was not born. The language of the Cheranadu was Tamil, and by the passage of time, the local dialect of Tamil had grown into a distinct language. Thus a long sweep of land had been seceded to Malayalam, and Tamil had been harnessed to a tiny corner. This historical aspect must be truly grasped by Tamil critics.

The historical sense has been sorely neglected to the disadvantage of all. South Indian history, till very recently, had been but an anomalous heap of disjoined speculations. Thanks to the untiring efforts of Prof. P. T. Srinivasa Iyengar and Dr. S. K. Ayyangar, the ice is slowly giving way. The want of an historical sensibility has been the cause of too many wrong notions. The reactions of unbridled activities in English literature during the days of the Reformation, to the utter disregard of the past, are well-worth noting. "The worst of Renaissance, as of any great general movement, was that ideas were taken up by people who did not understand them. 'But one hath seen and all the blind will see.' And the blind and the deaf went on happily composing arguments about imagination and poetry: so that before long in a century or two from the beginning of the revival of learning, poets were hampered, not by the ancients themselves, but by the doctrines about the ancients."[5]

5. K. P. Ker: Form and Style, pp. 195, 196.

Modern Tamil literature is an ocean of storms and eddies. Ideas, ever new, ever changing enter the portals of our language. Tamil is caught in the vortex of a struggle between the old and the new. People read more about literature than literature itself. They glean in their survey of alien literatures ideas often too attractive and novel and there is a strong impulse for their indiscriminate application into Tamil literature. Votaries of Sanskrit and other learning, writing of modern Tamil literature neglecting the peculiar genius of the Tamil language, are thinking not of poetry in Tamil, but of such English or Sanskrit poetry as was written by Shakespeare or Kalidasa and the conflict of ideas and emotions continue, leading us nowhere.

The absence and the presence of imagination makes all the difference between a good and a bad literature. Well may the naturalistic school gloat on its religious conviction that literature must inevitably reflect and radiate the contemporary thoughts and movements, answering to the lines and tones seen in nature. Obviously they fail to reconcile their sense of frustration with the "higher realities" as squeezed into a poem—a poetic world, an imaginative sphere. This "righteous disdain" for thoughts not in tune with nature is partly a product of confused thought; a false identification of two distinct qualities. This qualitative confusion of imagination and exaggeration is responsible for this heresy "Not manipulation, but imaginative transfiguration of material; not invention but selection of existing material appropriate to his genius; and complete absorption into his being; that is how an artist works."[6] Exaggeration is morbid and sickening. The poetic world

6. Abercrombie: Epic. p. 53.

BHAVABHUTI AND MIMAMSA

By

Mimamsakaratna V. A. Ramaswami Sastri, M.A., Siromani.

The identity of Bhavabhuti, the author of three plays in Sanskrit, with Bhattomveka, the commentator on Kumarila Bhatta's *Slokavarttika* and Mandanamisra's *Bhavanaviveka*, is still a disputed question among the students of Historico-literary Research in Sanskrit. A few scholars who are not in favour of this identity theory assert that Bhavabhuti is nowhere known as a Mimamsaka. It is proposed in this short paper to collect certain evidences from his dramas in order to show that Bhavabhuti is well-versed in the *Purvamimamsa* Sastra as he is in other Sastras—Vedanta, Nyaya, Vyakarana, Sankhya and Yoga.

In the prologues of the *Uttararamacarita* and *Mahaviracarita* Bhavabhuti speaks of his Sastraic attainments by the rare honorific epithet—पदवाक्यप्रमाणज्ञ. It means that he is well-versed in the three Sastras— पदशास्त्र — Vyakarana, वाक्यशास्त्र —Mimamsa and प्रमाणशास्त्र —Nyaya. This reference would prove that Bhavabhuti is a master-mind who has acquired high proficiency in the three important Sastras—Vyakarana, Mimamsa and Nyaya.

Again, Bhavabhuti makes mention of his Sastraic erudition in the verse found in the prologue of the *Malatimadhava*—

The utter disregard paid to the proper literary background, has been responsible not to a few inexactitudes in our literature. The indiscriminate application of the cannons of western literary thought to our literature, without a correct appreciation and deep acknowledgement of the native genius of Tamil, corrodes this cherished progress ever more.[9] Literary, unity and respect for native forms, with progressive but reasonable modification, in tune with its genius, the recognition of a literary Tamil, evolved out of the fusion of the classic and modern language, as apart from the language too often indulged in by the Tamil journals—these aspects need engage the ardent contemplation of every true Tamil lover and scholar. This done, the first flesh of a dim dawn shall soon break into a broad day light.

9. Tagore: Reminiscences, pp. 183, 184.

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The identity of Bhavabhuti, the author of three plays in Sanskrit, with Bhattomveka, the commentator on Kumarila Bhatta's *Slokavarttika* and Mandanamisra's *Bhavanaviveka,* is still a disputed question among the students of Historico-literary Research in Sanskrit. A few scholars who are not in favour of this identity theory assert that Bhavabhuti is nowhere known as a Mimamsaka. It is proposed in this short paper to collect certain evidences from his dramas in order to show that Bhavabhuti is well-versed in the *Purvamimamsa* Sastra as he is in other Sastras—Vedanta, Nyaya, Vyakarana, Sankhya and Yoga.

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Again, Bhavabhuti makes mention of his Sastraic erudition in the verse found in the prologue of the *Malatimadhava*—

"यद्वेदाध्ययनं तथोपनिषदां सांख्यस्य योगस्य च
ज्ञानं तत्कथनेन नैव कथितः कश्चिद्गुणो नाटके ॥"

He asserts that any powerful display of his knowledge of the Vedas, the Upanisads, the Sankhya and Yoga systems in a drama would not contribute to its success, thereby implying that he is well-versed in all these branches of learning but that he is not going to display his Sastraic knowledge in his play. The term *Vedadhyayanam* in the verse is worth our consideration. It does not mean merely the memorisation of the Vedic texts, but a critical and exhaustive study under a guru with the help of *six Vedangas* and the *Purvamimamsa Sastra,* as 'उपनिषदां ज्ञानम्' would mean the knowledge of the Upanisads or the Upanisadic teaching with the help of the *Uttaramimamsa Sastra,* popularly known as the *Vedanta Sastra.* The correct understanding of the Vedic and Upanisadic texts would be possible only if the Vedic student studies these two Mimamsa Sastras properly. So says Kumarilabhatta about the indispensable nature of the study of the *Purvamimamsa Sastra* by a Vedic student—

"धर्मे प्रमीयमाणे हि वेदेन करणात्मना ।
इतिकर्तव्यताभागं मीमांसा पूरयिष्यति ॥"

The true knowledge of dharma is arrived at by the study of the Vedas with the help of its chief accessory—*Mimamsa Sastra.* While speaking of the scope and nature of *tarka* in the first *Nyayasutra,* Vacaspatimisra, in his *Nyayavartikatatparyatika,* extolls the *Mimamsa Sastra* to the high rank of the Vedas on the ground that it helps the Vedic student to a great extent for properly understanding them—

'निश्चयाय तु प्रवर्तमानं प्रमाणं तद्विषयविवेकेनानुगृह्णत् इतिकर्तव्यतात्वे-नोपयुज्यते इति। यथोक्तम्—

"मीमांसासंज्ञकस्तर्कः सर्ववेदसमुद्भवः।
सोऽतो वेदो रुमाप्राप्तकाष्ठादिलवणात्मवत्॥

The first sutra 'अथातो धर्मजिज्ञासा' in the Purvamimamsa Sastra emphasizes the fact that the Vedic student should not leave the residence of his teacher soon after his study of the Vedas without the study of the *Purvamimamsa Sastra.* He understands no doubt, with the help of the *Vedangas,* the meaning of those texts in which there is no ambiguity or room for any discussion, but in instances which admit of more than one interpretation he has to resort to the help of the Purvamimamsa Sastra which removes his doubt by correctly interpreting the passage in question on the basis of certain well-accepted rules of interpretation. This is the signal service that this Sastra renders to the Vedic student who, after returning home from his teacher's residence, is expected to marry and perform the duties of a true householder with a correct understanding of their nature and significance with the help of the Purvamimamsa Sastra. The sutra 'अथात धर्मजिज्ञासा' literally means that the Vedic student after understanding the Vedic contents in a general manner with the help of the *Vedangas,* the study of the Vedas being intended for the correct knowledge of the Vedic contents, has to stay at the residence of his teacher to investigate the dharma—the chief import of the Vedas—by means of well-established rules of interpretation.

अथ=वेदाध्ययनानन्तरम्; अतः=अध्ययनस्यार्थज्ञानहेतुत्वाद्धेतोः, धर्मजिज्ञासा=धर्मविचारः कर्तव्यः—गुरुकुलान्मा समावर्तिष्ट यावद्वेदार्थविचार अवसितः स्यात्।

This fact explains well that the study of the Purva-mimamsa Sastra formed in ancient India an integral part of the Vedic study; and it is no wonder that Bhavabhuti who claimed birth in the family of great *Somapithins* and *pancagnis* studied the Vedas and that his Vedic study would not have been complete without the study of the *Purvamimamsa Sastra.*

The description of his ancestors found in the prologues of the *Malatimadhava* and the *Mahaviracarita*[1] clearly indicates that Bhavabhuti has inherited high traditions of Vedic scholarship and practice of the Vedic sacrifices, references to which are found in abundance in his dramas. Dr. A. B. Keith has already collected and published some of them in the J.R.A.S. (1914) in a short paper with the title *'Bhavabhuti and the Veda.'* The following instances taken from his dramas would give additional weight to the view that Bhavabhuti is a great scholar in the Vedas, the study of which he would have completed with the study of the Purvamimamsa Sastra, as indicated above.

1. अस्ति दक्षिणापथे पद्मपुरं नाम नगरम् । तत्र केचित्तैत्तिरीयाः काश्यपाः चरणगुरवः पङ्क्तिपावनाः पञ्चाग्नयः धृतव्रताः सोमपीथिनः उदुम्बरनामानो ब्रह्मवादिनः प्रतिवसन्ति । तदामुष्यायणस्य तत्रभवतो वाजपेययाजिनो महाकवेः पञ्चमः सुगृहीतनाम्नो भट्टगोपालस्य पौत्रः, पवित्रकीर्तेर्नीलकण्ठस्यात्मसम्भवः श्रीकण्ठपदलाञ्छनः पदवाक्यप्रमाणज्ञो भवभूतिर्नाम जातुकर्णी-पुत्रः कविर्मित्रधेयमस्माकमिति भवन्तो विदांकुर्वन्तु ।

श्रेष्ठः परमहंसानां महर्षीणां यथाङ्गिराः ।
यथार्थनामा भगवान्यस्य ज्ञाननिधिर्गुरुः ॥ (M. V. Carita, Prologue).

अस्ति दक्षिणापथे विदर्भेषु पद्मपुरं नाम नगरम् । तत्र केचित्तैत्तिरीयिणः काश्यपाश्चरणगुरव पङ्क्तिपावनाः पञ्चाग्नयो धृतव्रताः सोमपीथिनः उदुम्बरनामानो ब्रह्मवादिनः प्रतिवसन्ति ।

ते श्रोत्रियास्तत्त्वविनिश्चयाय भूरि श्रुतं शाश्वतमादियन्ते ।
इष्टाय पूर्ताय च कर्मणेऽर्थान्दारानपत्याय तपोऽर्थमायुः ॥

तदामुष्यायणस्य० (Malatimadhava, Prologue).

(1) किन्त्वनुष्ठाननित्यत्वं स्वातन्त्र्यमपकर्षति ।
सङ्कटा ह्याहिताग्नीनां प्रत्यवायैर्गृहस्थता ॥
(U.R. Carita, I. 8 and M. V. Carita, IV. 33).

This Verse explains the well established truth in the the Purvamimamsa Sastra that a *dvija* householder is compelled to perform at any cost the *nitya* and *naimittika karmas* like *Agnihotra* and *Uparagasnana* in the prescribed time till his death, lest he should be liable to divine punishment.

(2) रामः—भवन्त एव जानन्ति—
सर्वदोषानभिष्वङ्गादाम्नायसमतां गताः ।
युष्माकमभ्युपगमाः प्रमाणं पुण्यपापयोः ॥
(M. V. Carita I, 38).

When Rama was commanded by sage Visvamitra to kill Tataka he was hesitating to act since he believed that no woman should be killed under any circumstances. But when sage Visvamitra persisted in his demand, Rama took the opinion of the sage as final and acted accordingly. So this verse explains the great truth (established in the Purvamimamsa Sastra I. 3-3-4) that the opinion of a great man which is known by the term *atmatushti* (intuitive knowledge) is an authority on *dharma* just like the Vedas. Sage Visvamitra, according to Rama, is a high personage free from all human vices and his opinion is, therefore, an infalliable authority on *dharma*.

(3) रामः—अर्थवाद एवैषः, दोषं तु मे कथञ्चित्कथय येन प्रतिविधीयते
(U. R. Carita, I. p. 42. N. S. Edn. 1911.)

Rama means by the term 'अर्थवाद' that the highly eulogistic statements of the citizens about his administration should not be taken in their literal sense though they

are intended as words of praise and compliment. It is established in the Purvamimamsa Sastra, (I. 2. 1) that the *arthavada* section in the Vedas should not be taken in its literal sense and that it mainly means the praise or condemnation of the thing enjoined or prohibited by the *vidhi* or *nishedha vakya* generally associated with the *arthavada* in question.

(4) रामः—अस्ति चेदानीमश्वमेधसहचारिणी मे ।
(U. R. Carita, III. p. 96).

Rama's remark (noted above) indicates what is established in the Purvamimamsa Sastra regarding the joint responsibility (*adhikara*) of the husband and wife in a sacrifice (VI. 1.) 'दम्पत्योस्सहाधिकारः' that neither the husband nor the wife can perform the sacrifice independently.

These references to the Mimamsa doctrines and others[2] to Vedic passages and sacrificial details abundantly found in the three dramas prove that Bhavabhuti is a man of high Vedic learning and culture which he could not have acquired but for his mastery over the *Purvamimamsa Sastra. Would these references not be sufficient to show Bhavabhuti's leanings to Purvamimamsa Sastra?*

2. (a) Vide the Uttararama Carita, (N. S. edition, 1911).
(1) द्वादशवार्षिकं सत्रम् (p. 12).
(2) आत्रेयी—तौ च भगवता + त्रयीविद्यामध्यापितौ (p. 53).
(3) दण्डायनः—समांसो मधुपर्कः + निवृत्तमांसस्तु तत्रभवान् जनकः । (p. 103).
(4) आविर्भूतज्योतिषा + विप्लुतार्था वदन्ति (p. 114).
(5) अङ्गादङ्गात्सृत इव + आशसतीव । (p. 153).
(b) Vide the Mahavira Carita, (N. S. edition, 1926).
(6) अहल्या नाम + एनसो निरमुच्यत । (p. 20).
(7) सन्दिष्टं च मैथिलराजर्षेरस्माभिः—आचार इति यजमानोऽपि यज्ञे निमन्त्रितोऽसि। (p. 14).

VIDYA-DANA

By

Rao Bahadur K. V. Rangaswami Aiyangar.

The endowment of a great place of learning by a single munificent and far-sighted patron has been more common in the West than in India. The great Colleges in Oxford and Cambridge and some of the more important universities in the United States sprang from individual donations, and appropriately bear the names of their benefactors. In India we have had in modern times only two instances of such foundations, both of which owe their being to the enlightened liberality of two merchant princes, J. N. Tata and the Rajah of Chettinad. The aim of the Indian Institute of Science is narrower than that of the Annamalai University. The Institute stands for applied science so far as it relates to India's economic uplift. The Rajah's institution, on the other hand, is a University, dedicated to learning in all its aspects, and is not a mere research institute specialising in applied science. The wider support from the state, which these have received after they were brought into existence, cannot take away from the honour due to the wise founders for providing them.

In some other respects also the two institutions differ. The driving motive of J. N. Tata was to devise a powerful accessory for India's industrial progress. The Tata Institute's aim is severely practical. Pure science and knowledge for its own sake are out of the picture. Work is entirely post-graduate. Instruction is subordinated to in-

vestigation. It is otherwise with the Annamalai University. It has had within its programmes provision, as funds allow, for applied science, and such subjects as oil-chemistry and sugar research have been suggested in schemes for an extension of its activities. Primarily it is dedicated to knowledge for its own sake, with such adjustments of aim as are necessitated by environment and the principle of division of labour among universities. Even when through the pressure of financial restriction, some branches have had to "axed," the development of the University on individual lines, in which it can supplement the work of other universities, is receiving consideration. Its bias is to conserve a special culture, which has a claim on it geographically and historically. The location of the two academies has been dictated by considerations which differ widely and reflect the differing outlook of their respective founders. For the Institute of Science any place, which possessed a suitable climate and access to industrial potentialities was good enough. To the new University for the Tamil districts, which Rajah Sir Annamalai Chettiar of Chettinad provided, a location, sanctified by tradition and religion was essential. It is noteworthy that the first locality to be considered was Madura, which possesses both in an eminent degree, and Chidambaram was finally selected, because it runs Madura close in these respects. Devout Hindu as he is, the Rajah of Chettinad has been true to Indian sentiment in attaching the new educational foundation for which he became responsible to a famous *tirtha* and temple.

For many centuries Indian practice made the teacher the centre of educational activity. It was not a place but a teacher that attracted pupils. Sometimes, many eminent teachers, each of whom will be an attraction to myriads of students, gathered together in a single locality,

drawn to it by its pious associations. This was so in Kasi (Benares). It has remained till to-day, the most eminent centre of Hindu learning, because every great Hindu teacher desires to live in its holy area, and most Hindus, learned or unlearned, cherish the wish to drop their mortal coil within its bounds. When Lord Cornwallis desired, after the provinces of Karra and Allahabad had been acquired by the East India Company, from the Emperor to show the people of Hindusthan that the new power was animated by sympathy for her religions and cultures, he accepted the advice of Jonathan Duncan, the Resident at Benares, to found in the holy city a great Sanskrit College. It was to be under the special charge of the Governor-General-in-Council, who would display their interest in its work by reviewing its activities every year and making all its staff appointments themselves. It is also noteworthy, as characteristic of the Indian way of thinking, that for many years hardly any eminent teachers in Kasi could be found to undertake teaching in the new Sanskrit College, which was so powerfully supported by the Government. At last a *modus vivendi* was discovered by allowing the professors to impart instruction in their own homes. In such conditions, the new institution was virtually equivalent to the endowment of individual teachers, which had been a necessary feature of a system in which the teachers taught without the expectation of fees, solely from a sense of high duty.

Such attractions as a sacred shrine or *tirtha* offers to teachers may be provided by capital towns of territories whose rulers wish to be known as patrons of learning. As "man is of all commodities the most difficult to move," it would happen that even after enlightened kings pass away,

the congregation of learned teachers in their capitals continues for a long time. In South India, Kancipura (Conjeevaram) enjoyed, from the congregation of sacred shrines of all Indian religions and sects within its ambit, in some measure the pre-eminent attraction of Kasi.

The monastery replaced the wandering teacher after Buddhism established itself. The primary duty of the Brahmana, according to Hindu varnasramadharma, was to teach. This obligation remained even when he entered the third and fourth stages of life (*Vanaprastha* and *Sanyasa asrama*). A learned ascetic will become a centre for the diffusion of learning, by attracting a host of disciples, who in their turn will become teachers. Books were essential to proper learning, even in epochs in which the cultivation of the human memory attained unheard of perfection. It would be more easy to collect them within one building than allow them to remain scattered in the possession of individual teachers. Thus, the monasteries which grew around Indian ascetics became in effect colleges of learning, perpetuating the teaching of the original sage, and preserving within their walls great collections of books. It was exceptional for a Hindu ascetic to possess, as the famous Kavindracarya did in the 17th century, A.D., a vast library, without being a member of a *matha.*

The formation of colleges in monastic institutions began with Buddhism. It possessed an organization in its monastic order, rules of discipline, and congregation (*samgha*) which enabled it to display features of permanence, so essential for the continued life of an educational centre. The earliest groups of scholars and teachers, with a fixed habitation, that we can find records of in India are

the Buddhist monks. Long before the advent of Buddhism, centres like Benares (which attracted Hindus from all over India) had Takshasila in the Gandhara country, (the meeting place of Hindu and foreign scholars on the frontier, as Peshawar to-day is the meeting place of merchants from within and without India) had congregations of scholars, some of whom resided permanently in the towns. Many famous personages were sent from distant places to study at Takshasila. When the restraining influence of the powerful empires which met near the Indian frontier on the north-west was withdrawn, and new hordes poured into the area and invaded India, Takshasila lost its pre-eminence. When Buddhism and Hinduism found homes over the seas, places not far away from ports of embarkation (like Tamralipti or Tamluk in the Ganges delta or Valabhi in Gujarat) became convenient localities where Indians of learning and acolytes from over the seas might come together. In South India, Kanci and Amaravati (near Bezwada) came to have such attractions. The famous Buddhist University of Nalanda, in which for ten centuries not only Buddhists but even Brahmanas studied, and the colleges of Valabhi came to distinction as university centres in view mainly of their proximity to sea ports. Once they had established their name, as homes of pious and learned activity, royal patronage came to their help. For royal patronage of Nalanda we have not only the testimony of the Chinese pilgrims, Hiuen Tsiang and I-tsing as well as Hwui Li the biographer of Hiuen Tsiang, but we have the evidence of the inscriptions. A hundred villages, and according to another account 200 villages, are said to have formed the permanent endowment of Nalanda. There were occasional gifts and supplementary endowments by rulers as well as ordinary persons, over and above the revenue

of the villages. The munificent donations of the Guptas were emulated by the powerful Pala kings. Vast buildings, of which detailed descriptions exist in the accounts of the Chinese pilgrims, were erected out of such gifts. Besides the *viharas*, Nalanda possessed a colossal library of manuscripts, which was a powerful attraction to the Chinese pilgrims who made such prolonged sojourns there. According to Tibetan accounts, the quarter in which the Nalanda University, with its grand library, was located was called the *Dharmaganja* (Piety Mart). "It consisted of three grand buildings called Ratnasagara, Ratnodadhi, and Ratnaranjaka respectively. In Ratnodadhi, which was nine-storeyed, there were the sacred scripts called *Prajnaparamita-sutra*, and Tantrik works like *Samaja-guhya* etc." (Vidyabhushan, *Indian Logic*, p. 516). The great university was not restricted to Buddhist studies; for, Hiuen Tsiang studied Brahmanic scriptures at Nalanda. One of its *viharas* was endowed for the continuance of Vedic offerings like *bali* and *caru* (Bosch, cited in Nilakanta Sastri's *Nalanda*, p. 175). The comprehensive nature of its studies is shown in an enumeration by Hiuen Tsiang's biographer: the classics of Mahayana and Hinayana, the texts of "the eighteen sects", the Vedas, logic (*hetuvidya*), grammar (*sabda-vidya*) medicine (*cikitsa-vidya*), works on magic (*Atharva Veda*) and the Samkhya. We are reminded that among the eighteen 'sippavidya' (*silpa-vidya*), which the Jatakas repeatedly say were taught at Takshasila were such subjects as medicine and surgery, astronomy and astrology, archery and military science, magic and divination, accountancy and commerce, and agriculture and cattle raising. (Altekar, *Education in Ancient India*, p. 254 for references).

The wealth of the library, its princely endowments and its sumptuous and numerous buildings were excelled by its numerical strength. The monks in residence are put at anything between 3000 and 5000, of whom about 1500 are represented as competent to expound the Buddhist scriptures. The number of pupils and acolytes must have been greater. The statement of Hiuen Tsiang (*Records*, p. 65) that the number of residents was 3000, must refer to the ordained monks only. It is probable that a considerable number of students found their food and clothing, as they now do in pilgrim centres like Benares, at choultries endowed by the laity in the adjacent town, or in private houses. As the royal donations were lavished, as usually they are, on buildings, it is evident, that with a traditional obligation to entertain *all* guests, the Abbot of Nalanda must have been hard put, with the endowments already named, to meet the expense of even a frugal fare for all the inmates, permanent and casual. But, this was quite in accord not only with monastic rules, but with the Hindu tradition of *brahmacarya*, which limited to ascetic fare those engaged in the search for knowledge.

In a vast country, a few centres of learning like Nalanda could not have met even a tithe of the educational needs of the population. They must have been met by the traditional *gurukula* system by which a *guru* (teacher) taught and shared his meagre fare with his disciples, without expectation of any return. To teach all he knew to a deserving pupil and to house and feed him were religious obligations of the Brahmanic teacher. The numbers of those who could be taught in colleges attached to Hindu and Buddhist monasteries, though very large, when individual institutions are considered, must have constituted but a small part of the number to be taught. The

demand was more than the universities and *mathas* could meet. It was therefore necessary to rely primarily on individual teachers, particularly on those grouped or gathered by accident or the lure of a *tirtha* or temple, in some famous city, or living by themselves at their homes, or moving about the country at the head of their pupils, wandering, teaching and engaging in public disputations, which often brought material recognition and reward to the teachers from which they met the expense of feeding their pupils. As such a way of life was open only to men, the opportunities for the education of women, when the education in the forest home became out of date, led to growing female illiteracy. The discontinuance of *upanayana* for girls, to whom according to certain *smritis,* it had been obligatory in the distant past (*pura kalpa*) was obviously due to the impossibility of maintaining it in spirit and letter. Village education, both primary and advanced, was provided for by endowed temples, mathas or viharas, or colonies of learned men (*agrahara*). Such colonies were a special form of endowment favoured by kings. As we may gather from the names of donees in grants forming *agraharas,* the beneficiaries were representative of different *sakhas* or branches of the Veda, and belonged to different *gotras* (septs). The object of the last provision was to provide for intermarriage within the *agrahara* or colony, so as to fix the inhabitants to it. When such colonies were distributed through a province, they served as well as schools do to-day.

The Hindu temple emerges in history as a place of education later than the Buddhist or Jain monastery. A trend began to manifest itself to regard the surplus income of well-endowed temples as lawfully available for educational purposes. The maintenance of *pathasalas* from temple funds

then began. It was also more convenient to make educational endowments in the first instance to a temple, as there was less likelihood, in an age of faith, of such funds being misappropriated than funds set apart for secular objects. A temple or a village community had also a continuity of life, which exceeded that of the oldest ruling dynasty. Hence, just as endowments for pious purposes used to be made over to village communities or village guilds, so endowments for education were also made to temples. The problem of buildings for lecture rooms and libraries was solved by using temple buildings. In Salotgi in Bijapur district, for example, the minister of the Rashtrakuta ruler Krishna III endowed in A.D. 945 a college for about 200 students, who, along with the teachers, were housed, clothed and fed from the income of the endowment. The College fell into ruin and was rebuilt by a pious and rich person some generations later. (Altekar, *op. cit.* pp. 284-285).

The endowment of the Sanskrit College at Ennayiram (*Ashtasahasram*) in South Arcot is now famous. Its details are disclosed in the South Indian Epigraphist's Report for 1918. As many as 340 students were provided for in this endowment, along with 16 teachers. It was primarily a Brahmana college teaching the Vedas, grammar, rhetoric, Mimamsa and Vedanta. We know of smaller pathasalas attached to temples like Tirumukkudal in Chingleput district (*Epigraphia Indica,* XXI, No. 185) with 60 students, and Tiruvottiyur (*Rep. on S. I. Epigraphy,* 1912, No. 212) with many more students. These accounts relate to endowments of which the records have been discovered by accident. The number of such foundations must have been very large. Their existence is not open to doubt, since none of the endowments which have survived claims to be unique.

The maintenance of *both* primary literacy and of higher learning was thus due firstly, to the obligation to *teach* laid on the first *varna* and to teach *gratis*; secondly to the obligation to *learn* laid on the first three *varnas,* a vocational bias being given to the studies of the second and third varnas; to devolving the duty of *free* teaching on *grihasthas* and *sanyasins,* both of whom were restricted in regard to the wealth they could own; to making pupillage ascetic in its discipline and way of life, so as to reduce its cost; to providing various means by which the hereditary teachers, who had to teach free and feed their pupils, might be remunerated indirectly or endowed, as by sacrificial fees, and religious gifts (*dana*); and lastly, to the endowment of monasteries and the foundation of colonies of householders (*grihastha*) who could both teach and perform sacrifices. By the Hindu code of life, a *sanyasin* could not own wealth, and a householder could not hoard more than what was just enough for three years' expense.

All *asramas* for the Brahmana were thus dedicated to spare living or poverty. If wealth came to him in any one of the *asramas,* it could neither be hoarded up nor used in luxurious living. It could only be expended for the benefit of others, i.e., those whom it was the duty of the Brahmana to teach free and feed free. One can appreciate, in the light of these rules, the injunctions of the *smritis* (lawbooks) giving the first *varna* alone the privilege or duty of accepting gifts of a pious nature (*dana-pratigraha*). The acceptance of a gift (*dana*) meant undertaking certain religious obligations which would purify the donor. Unless therefore the recipient of a gift had sufficient spiritual and personal merit, the acceptance will prove a spiritual drag on him. In works on *Dharmasastra* dealing with religious gifts much stress is therefore laid on the deter-

mination of the fitness or unfitness of the donee. A gift to an undeserving person will not only miss its mark by not getting for the donor the anticipated spiritual merit (*punya*) but it will bring him load of sin (*papa*). The burden of finding a deserving person is laid upon the donor himself. It is noteworthy that among the qualifications laid down in various smritis and puranas for a proper recipient of a gift, birth is only one. Learning and every type of virtue, must be possessed by the donee. According to Vasishtha-smriti (III, 11-12) "an elephant made of wood, a stag made of stuffed hide, and an unlearned Brahmana are only nominally what they appear to be. In any kingdom, if what is designed for the enjoyment of the learned is used up by the unlearned, there springs fear for the country and failure of the rains." The acceptance of a gift does not give the donee the power to make a bad use of it. According to a verse of Manu, cited by Lakshmidharain the *Danakalpataru* (p. 43 ed. Rangaswami) "the Brahmana, who, having the qualification for receiving a gift, receives but distributes it to the undeserving, to him nothing should (thereafter) be donated; and he who (having received a gift) merely hoards it (*sancayam kurute*) and does not put it to pious uses, will not attain ultimate happiness".

The result of the rules relating to gifts in the *smritis* is two-fold: it compels the affluent e.g., kings, wealthy officials and opulent merchants, to seek spiritual merit on various specified occasions in which a gift to a deserving learned and virtuous Brahmana leads to the acquisition of *punya* and the reduction of sin; and it also compels the recipients to use the gifts so obtained not for selfish enjoyment but for pious purposes and the fulfilment of duty as *srotriya*, i.e., performing yajnas, studying and teaching. The elabo-

rate rules defining the different types of gifts, as sixteen major gifts (*mahadana*) etc., and laying down minutely the numerous occasions on which the making of gifts is a duty or a privilege to the economically well-endowed, virtually leads to this, viz., provision of a wide stream of benefaction whose benefits accrue ultimately to students and acolytes. In this sense, all *dana* is really *vidyadana*, the gift of knowledge. The drift of all the smriti rules on the subject is to provide for the public support of free education, upto the highest standards possible. This is implicit in the entire *dana* literature, and it redeems it from aridity and ritualism. It is only those who view it superficially who will miss its purpose and regard it as a cunning device to make easy money for a privileged class.

Vidyadana is used in the Hindu *smritis* in another and narrower sense. In that sense, a large chapter is devoted to it in the *Danakalpataru* of Lakshmidhara, the learned *guru* and prime minister of King Govindacandra of Kanauj (A.D. 1109-1155). This chapter has been "borrowed" intact and reproduced with minor additions by later *nibandhakarah* (digest-writers) like Candesvara, Hemadri and Madanasimha.* The original work has hitherto been inavailable, and seems to have been so for centuries. In South India and the Dâkhan, mediaeval rulers relied largely on Hemadri's *Danakhanda* (which is based on Lakshmidhara's) to justify or describe the value of their frequent pious donations. At one time, to make *all* the *mahadanas* (chief gifts) in accordance with Hemadri was declared in inscriptions to be a duty admitted

*The works on Candasvara and Madanasimha are unpublished. I have used Mss. of these works in preparing my edition of *Dana-Kalpataru*.

as such by every Hindu king. The incidence of the performance of the "sixteen major gifts" or other minor gifts was always the same, till the spirit of the institution was lost, and gifts were made, as a matter of routine, to persons whose only qualification was birth, in the face of the specific and clear warnings against the dangers of making indiscriminate gifts, without making sure that the recipients possessed besides birth the requisite spiritual, mental and moral worth.

Vidya is explained in relation to the rules of gifts (*danavakya*) as both learning and books. Bhatta Nilakantha in his *Danamayukha* (ed. Chowkhamba, p. 244) classifies *vidyadana* as (1) the gift of books (*pustakadana*), (2) the gift of pictures or ikons (*pratimadana*) and (3) the gift of knowledge by teaching (*adhyapanam*). The last is dealt with in our digests and smritis the duties of the members of the first *varna*. The second seems to refer to the gift of ikons of Vidya-devi or the goddess Sarasvati. Nilakantha himself deals in his very brief section (covering only a page as against a whole chapter of Lakshmidhara's *Danakalpataru* and fifty closely printed pages, pp. 492-542, of Hemadri's *Danakhanda* ed. Benares) with only the merit of giving away some kinds of books. The difference between the earlier and later writers is significant. The former wrote in epochs in which books, so necessary for the preservation and propagation of knowledge, were few and difficult to get, as compared with the heyday of the Mughal empire in which Nilakantha wrote. Lakshmidhara's eulogy of the value of great collections of books (i.e. manuscripts) will bring joy to modern bibliophils and librarians. The calligraphist is raised to a high social position. He is to be rewarded not only by gifts but with public marks of honor. The stylus, writing material, indelible

ink and the writing desk are all meticulously described, and with marked gusto. The completion of the transcription of a great book was to be celebrated as a public event, as the Italians of the Middle Ages used to celebrate in civic processions the painting of a Madonna by a painter of eminence like Cimabue.

Books become indispensable when the old methods of oral instruction, for several years continuously, by a single teacher, give place to instruction by several teachers, and a change of literary form which makes books less easy to memorise and to transmit orally. The multiplication of books, and reliance on books in preference to the old public disputations for the communication and publication of new knowledge, will also explain the increased stress laid on the gift of books not only to scholars and teachers, but to temples and *mathas*. The praise of the new type of *vidya-dana* is to be found in the *later puranas* and *upapuranas*, from which the citations in the digests are made. Even in such passage, the references to *vidya* are so worded as to suggest both instruction and aids to study in the way of books. The *Mahabharata* (Anusasana Parva, LXIX, 6, ed., Citrasala) lays down that he who utters (i.e., teaches) to a pupil the divine word (i.e. the Veda) and the righteous (*dharmyam*) sastras (Sarasvati) enjoys a spiritual merit equal to the gift of lands and cows." The sentiment is repeated in another chapter of the same epic (LXXV, thus: "Having studied the Vedas, if one gifts it (by teaching) to a person able to discriminate between right and wrong (*nayaavit*) he has discharged the great duty of a teacher (*gurukarma*) and will, after death, revel in Heaven." The gift of the knowledge of the different sciences and arts (*kala*) either by teaching or by books is repeatedly justified on the ground that a mastery of the

knowledge on which, for good and evil, the whole universe depends, should be ensured to a supplicant:

Sastre yasmaj-jagat-sarvam samsritam ca subhasubham |
Tasmac-chastram praytnena datavyam subhakarmana ||

—*Nandipurana.*

The same sentiment is expressed in other words in the *Devipurana*:—

Vidyaya vartate loko dharmadharma ca vindati |
Tasmad vidya sad deya drishtadrishtaphalarthibhih ||

"Faith is dependant upon mastery of knowledge. Discrimination of right and wrong is the gift of learning. Hence, promulgate learning" repeats the same purana.

A list of the subjects to be taught, in which manuscripts beautifully transcribed are to be given away, will be of interest. Such a list will include the Vedas and their auxiliaries (*angani*), the Siddhantas (Saiva and Vaishnava doctrinal works), Moksha-sastra, the *Ramayana* and the *Mahabharata,* the *tantras* of Garuda, Bala and Bhuta, Astronomy, Medicine, the 64 Arts (*kala*), poetry (*kavya*), music and dancing, philosophy (*atma vidya*), *silpasastra* (the Fine Arts), Agriculture, Logic (*tarka-vidya*), Mimamsa, Dharmasastra and the Puranas. The catalogue is merely illustrative and not exhaustive. The intention is to make *vidya* synonymous with the whole body of accessible knowledge. The gift orally of such knowledge is to be made attractive by proper enunciation, and musical intonation. The professional reader (an artist who is commemorated in Bana's *Harshacarita* and still survives) and his requirements are carefully described. The sections on *vidyadana,* in the narrower sense, supply material, till now not adequately utilised by those who have

written of ancient Hindu education. But, in the wider or narrower senses of the term, the gift of knowledge was deemed a paramount social duty, and was enforced not only by a unique form of social organization into *varna* and *asrama* but by an elaboration of the donative principle and its transfiguration till it became the fundamental basis of a system for the preservation and transmission of knowledge. The recognition by modern founders of colleges and universities of this great social duty is all the more welcome in our country to-day when the old systems have decayed and with them has gone the sense of ancient obligation. But, their number is still so inconsiderable that apart from the spiritual benefits that a Hindu hopes to derive from such enlightened munificence, a duty rests on us to commemorate so pious a service to learning as that of the Rajah of Chettinad.

CIVIL LIBERTY IN WAR-TIME

By

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This subject is of great topical interest to India just now. The importance arises out of the fact that on the advice of Mr. Gandhi, Congressmen have started a Satyagraha movement breaking the law of the land and causing embarrassment to the Government during the present critical time. The reason why this movement has been started is not that Indian leaders were not consulted when India joined the War. It is not based on the ground that Britain has not yet granted Dominion Status to India. It is based on the sole ground that liberty of speech and the Press is being restricted. The Congressmen plead that the liberty of speech and liberty of the Press are being restricted by the Defence of India rules and as Liberty of Speech and liberty of the Press are of the very essence of Democracy they must assert their right to that liberty. These arguments are absolutely untenable and perverse. They plead "The British say they are fighting for the sake of liberty, liberty of speech, of the Press, of Association and of Faith. Why not the British Government allow us to say what we want to say? We must be allowed to express our opinions." Perfectly true. But liberty is not license. There is a difference between the two. There may be occasions in the history of a nation when it will be almost criminal to allow this full amount of liberty to individuals. Liberty is good, liberty is sacred, liberty is the

birthright of everyone; but liberty abused, liberty turned into license, liberty used for the advantage of the enemy is undoubtedly criminal. Mr. Gandhi and his Congressmen do not seem to have recognised the difference between peaceful times and wartimes. They do not seem to have realised that full liberty of speech in wartime might cause great mischief. It may help the enemy to make use of it. It is not necessary to detail how in every civilised country, in every democratic country during the last war this liberty of speech and liberty of the Press had to be curtailed at least to some extent. Take for instance the country where liberty is identified almost with God. The people of the United States of America claim that their country is the birthplace of democracy and that liberty of speech and of the Press is of the very essense of democracy. They further say that it is the priceless gift which their ancestors have bequeathed to them in their Constitution.

But let us for a moment examine what had happened in America in the World War of 1914-18. Students of history are aware of the Constitution of America. When the Constitution was drafted, what is known as the Bill of Rights was introduced as an amendment to the Constitution and the Bill of Rights was made part of the Constitution of that country. The very first clause of that Bill is this:

"Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the Press; or of the right of people peaceably to assemble and to petition the Government for a redress of grievances."

But let us see what the United States of America and their Congress have done with regard to the liberty of

speech during the war. The very Congress which is prohibited by the Constitution itself to abridge the freedom of speech and of the Press passed a number of laws in one way or other restricting the freedom. I shall instance a few of these laws.

1. The Espionage Act of 1917 prohibited the "gathering and dissemination of information regarding National Defences, which may be useful and utilised by the enemy." "False statements intended to aid the enemy and interference with military discipline, and with *recruiting* or enlistment in the military services" were made penal. The punishment provided for such offences were staggering, the maximum being a fine of $10,000 and imprisonment for twenty years.

By the same Act any written or pictorial matter which transgressed the provisions of the Act was declared non-mailable, thus placing great restrictions on the freedom of the Press.

The Espionage Act is still in force. In 1940 a new Act was passed greatly increasing the penalties under it and providing punishment for "harbouring or concealing any person who has committed or is about to commit any offence under it."

2. While the Espionage Act was under consideration several amendments were introduced in both Houses for Censorship but they were all rejected. In the same year 1917, however, the *Trading with the Enemy Act* was passed under which "direct power of censorship over communication between the United States and any foreign country" was granted to the Government. This Act also imposed many restrictions upon Foreign Language

Newspapers. Such newspapers were prohibited from "publishing any item concerning the Government of the United States or any Nation participating in the War or concerning the War itself, unless they had previously filed transactions with the Post-Master General. Such items were not only made non-mailable but also the distribution of such items was made unlawful.

3. Next came the Sedition Act of 1918. Under this Act "making a false statement to interfere with the success of the National Forces, *obstructing the sale of Government* Bonds, inciting various forms of disobedience in the military forces, *obstructing enlistments*, disloyal abuse of Government, the Armed forces and the Flag, *language showing contempt of the form of the Government* of the United States or the Constitution or the military forces or the Flag or the Uniform of the Army or Navy, promoting the cause of the enemy or displaying the enemy Flag, interference with production necessary to the conduct of the War, advocating any of the prohibited acts and favouring by word or act, the cause of any country with which the United States was at war and opposing the cause of the United States" were made punishable.

4. On the top of this there was the *Conscription Act* which compelled people to join the Armed forces of the Country. The American Protective League consisting purely of private citizens was given various powers. There were one lakh of members for this League in 1917 and two and a half lakhs in 1918. They watched and discovered the ablebodied persons who were evading Conscription Act. They made enquiries into suspicious activities. They detected spies, Fifth Columnists, and persons likely to commit sabotage.

5. The Congress of the United States also authorised their President to have absolute control over all communications such as the Telephone, the Telegraph, Cable, Radio and Mails.

These laws and activities were no doubt very much represented in America where they value the liberty of speech and of the Press so much. But the laws were obeyed by the bulk of the nation and those who infringed them were severely punished. And yet these laws were repugnant to the very Constitution of the country. Several laws affecting alients are even now being passed imposing enormous restrictions on their liberty of speech and association and even their rights to be employed in Mills and factories are being taken away.

Now, what is there in the Defence of India Rules against the liberty of speech and the liberty of the Press which goes beyond the laws of the United States. Mark the words in the above Acts: "*disloyal abuse of the Government* and the armed forces" "*showing contempt of the existing forms of government*" "any statement which would aid the enemy or *which interferes with recruitment or enlistment.*" These are punishable under the American laws. Do our own laws go further than these. It would be easily admitted that the Defence of India Rules are certainly milder than the laws of the United States which as stated above worship the very idea of democracy and the liberty of speech and of the Press. Why were these restrictions imposed in America which defies the liberty of speech and of the Press so much. What was it that made the United States pass these laws. The reason is simple and clear. The liberty of the individual is nothing compared with the safety of the whole nation. If a time comes when to allow liberty of speech and of the Press to the fullest

extent might mean the destruction of the country or the subjugation of the whole nation to a foreign power no government, with the slightest sense of responsibility can allow such liberty to the individual. The liberty of the individual can never be more important than the liberty of the whole nation. When a country is defeated and becomes subject to a foreign power, where will be the "liberty" of an individual? In fact, it is in the interests of the liberty of the individual that such liberty should be curtailed if by such curtailing the danger to the nation can be averted or reduced. That is why, in times of war speeches and newspaper publications which are detrimental to the interests of the country are strictly prohibited. Various nations enforce various degrees of restriction of the liberty of speech and of the Press in times of war.

The present Satyagraha movement is based on the ground that freedom of speech is not allowed to the people. This movement is doing a distinct disservice to our country. They will be giving a handle to Hitler to magnify it and carry on propaganda that there is a great revolution in India against the British rule and that Indians are not behind the British in their struggle against Germany. It will give him an impression that this country is full of only passive resisters and hunger-strikers and that he will have an easy time in invading India. The policy of satyagraha, if followed for some more months, may result in a calamity. It is beset with grave dangers. It would adversely affect recruitment to the Army. It would reduce the collection of subscription to the War Fund. It would obstruct the sale of War Bonds. The country's powers of defence will thus be crippled. All this is likely to happen if unrestricted liberty of speech and of the Press which helps the enemy and endangers the safety of our

own country be allowed. Such a liberty in War time and in a crisis like the present will be simply suicidal.

The law of all civilised countries protects the individual from slander and libel even in peace time. Much more, therefore is the necessity for the law to abridge in wartime the freedom of speech and of the Press, which may endanger the safety of the whole nation.

LEGAL BASIS OF INDIAN STATES

By

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Very often the basis of paramountcy comes in for examination. Paramountcy of the British Crown over Indian States "appears to present a peculiar case of conquest operating by assumption and acquiscence."[1]

In order to examine the question of legal basis of Indian States it is necessary to remember that there are at present 601 Indian States, principalities, estates and Jagirs.[2] They have been variously classified in respect of their *de jure* and *de facto* Status:

Lord Oliver's classification is very sound:—

I. Quasi-Sovereign States with treaties in which Sovereignty and rights of internal Government have never been surrendered.

II. Those in which certain rights of interference have been established by treaty and whose independence is thus partial and subject to effective supervision.

III. Great number of petty States the Sovereign Control of which has been taken over by the transference of their vassalage from some other Indian Sovereign

1. Westlake, "*Collected Papers*," p. 214.
2. Vide *Memoranda on Indian States*, 1940.

States which previously exercised or claimed dominion over them.[3]

In respect of their membership of the Chamber of Princes, the Butler Committee divided them into three classes. Sirdar D. K. Sen divided them into seven classes. The Veteran Indian administrator A. B. Latthe suggested a three-fold classification in a dynamic setting:—

I. States which have or may have as full powers of internal autonomy as possible.

II. States which have or may have the same powers of full internal autonomy consistently with their being grouped together to form such units of a Federation.

III. States which have limited jurisdiction and powers of legislation even at present and are not entitled by treaty or usage to full jurisdiction and unlimited powers of legislation.[4]

General Historical Background.

Many Indian States had maintained an independent existence for hundreds of years and some States as Travancore, Jammu, Orchha, and Hyderabad and many of the Rajput and other States have never been conquered or annexed. It is true that some of the Indian States "had been able to establish themselves in a position of practical independence, yielding only a nominal allegiance to the Emperors of Delhi and were able later to secure recognition from the British Power."

3. Foreword to K. M. Panikkar's work on *"Relations of Indian States with the Government of India,* p. VII.

4. A. B. Latthe *"Problem of Indian States,"* pp. 7 and 8.

The Status of some important Indian States *at the time* when *Treaties or Sanads* were contracted with them may here be indicated.

At no time was Travancore conquered and the "Treaties were on the basis of two Sovereign States contracting with each other, one of which no doubt was much more powerful than the other and obtained favourable terms."[5]

Cochin though a friendly State had the Treaty of 1809 after Britain suppressed the insurrection against the British power.

The Nizam of Hyderabad *vis-a-vis* the Moghul Power had the Status of the Elector of Brandenbury or Bavaria. He was treated as a "perpetual Ally"—Nay, the East India Company bowed in compliment by offering 'bags of gold' to the Great Moghul till 1842-43.

The Mysore Ruler owes his Status to a restoration made by Britain Solely in virtue of the powers of the British Government got through *Conquest.*

The Gaekwar of Baroda, except with reference to the province of Okhamandel and the island of Bate wherein Sovereignty was obtained through the grant of the East India Company, was *de jure* Sovereign in his territory through the right of *Conquest* and through functioning as the "farmer" of revenue of territories under the Suzerainty of the Peishwa.

Gwalior had a separate existence in law since the Treaty of Salbai (1782) and the East India Company enter-

5. Reply of Sir C. P. Ramaswamy Aiyar dated 5th August, 1940.

ed into a treaty of alliance and mutual Defence (1803) with Scindhia.

Rising in his stature from a soldier of fortune to that of a *de facto* and *de jure* Sovereign of territories conquered the Holkar of Indore had once a Status in law sufficient to exact tributes from Udaipur, Jaipur, Jodhpur, Kotah, Bomdie, and Karanli.

Dhar rebelled in 1857 and it was later restored after confiscation.

Bhopal's Status in 1817 was that of a Sovereign *de facto* and *de jure.*

Orchha is the only State in Bundelkhand which was not held in subjection by the Peishwa. The Treaty of 1812 recognizes the ancient Sovereignty of the "possessions" of the Rajah of Orchha.

With reference to the Rajaputana States they were taken into 'protection' by the East India Company in their attempt to erect a "barrier against" the Pindarees. These Rajput States had thrown off the Shackles of control by the Moghul Sovereign at the earliest time when it got weak. Udaipur had continued her Sovereignty in spite of plunders and exaction of *Chauth,* while she was taken into the protective system. Jaipur, Jodhpur, Bikaner, and Alwar, had separate Sovereign existence when they became allies.

Maharaja Ghulab Singh's title to Jammu, Ladakh and Baltistan was through *conquest;* he acquired Sovereignty over Kashmir by *purchase,* (Vide Art I and II *Treaty of Amritsar,* 1846).

The Phulkian States of Patiala, Jind and Nabba had 'Sovereign' existence. They got further territories from

the British Government through *Sanads* for acts of loyalty during the Mutiny (1857-58).

Of the Orissa States (26) owing to administrative grouping the Superior States of Keonjhar and Mayurbhanj had not received sufficient recognition in later *Sanads* issued to them unilaterally.

The Kathiawar States have been classified into five classes. The Company's Sovereignty over them had to start with *a dual source* flowing from the Peishwa and the Gaekwar.

The Mediatized Chiefs of Central India were formerly under tributary obligations to Scindia, Holkar, or the powers of Dhar and Dewas and sometimes to all these chiefs. These chiefs owe their present individuality to the big arm of Britain.

Legal Theory

The legal basis of all Treaty and *Sanad* States thus rests on *prior Sovereign Status or rendition* and *restoration* by the Paramount Power. (Examples of the latter:— Mysore, Jhalawar, Benares).

There is authority in legal theory for the view that a weak State which in order to provide for its safety places itself under the protection of a more powerful one and engages to perform in return several offices equivalent to that protection without however divesting itself of the right of Government and Sovereignty, does not cease to rank among the Sovereigns. (Vide *Grotius, Pufendrof* and *Vattel* for this view).

It can only be stated that Indian States—in different degrees and varieties of internal Sovereignty—have long

ago lost their recognition as *persons* of international law. With Shreds of Sovereignty intact, with Rulers who have some rights of foreign Sovereigns while travelling abroad, with subjects who are British *Protected* Subjects while travelling outside their States, the Status of Indian States is *quasi-international.*

While such is their legal basis, it is quite another matter—essentially political cum administrative—whether in the present posse of affairs—national as well as international—paramountcy should continue to be a "hospital with numerous patients incurable but undying." No violence would be done to treaty, *Sanad,* or engagement if the existing 601 States are reduced to 200 as many petty estates and Jaghirs have been the results of British Protection. That would be a matter for *determination* and *decision* by *a Royal Commission* appointed by the British Crown.

WAS ASOKA AN UNQUALIFIED PACIFIST?

By

R. Sathianathaier, M.A., L.T.

A Militarist

Bindusara, the father of Asoka, was a warlike emperor whose achievements fell short of the conquest of Kalinga or Orissa and were to some extent neutralised by a confederacy of Tamil princes—a league which was powerful till its dismemberment about 165 B.C. He died about 273 B.C., and Asoka's career as a militarist followed. Buddhist literary tradition emphasises his bloody fratricidal struggle to secure the imperial throne of Pataliputra, and represents him as *Chanda* (fierce)-Asoka in contradistinction to his later role as *Dhamma* (pious)-Asoka. Even those who discredit that tradition will have to regard him as an undiluted militarist in the light of his own account of the Kalinga war waged by him about 261 B.C.

The Great Carnage

Asoka's Rock Edict XIII describes the terrible carnage resulting from his war with Kalinga and regards its dire consequences as inevitable on the ground that that country was "an unconquered country." He does not tell us why he attempted a conquest unattempted by his father or grandfather. Reading between the lines of the edict in question we are justified in thinking that the Kalinga war was one of pure aggression. The people of Kalinga are not stigmatised in that record as rebels, and if they were rebels, Asoka would have made their rebellion a peg on which to

hang his moralisings. Therefore the theory of Kalinga's revolt is ruled out, and that emperor in the early period of his reign was responsible for a war of unprovoked aggression.

Psychological Reaction

The unmerited sufferings of the people of Kalinga and particularly of those practising *Dhamma* threw Asoka into a reflective mood. He sincerely wept over the woes of Kalinga and realised the criminality of aggressive warfare. What is the character of Asoka's repentance? How far did he abjure militarism and turn pacifist? It is generally supposed that he became an unqualified pacifist, that his new role affected the military strength of the Maurya Empire adversely, and that his successors inheriting his unwarlike policy became its victims; in short, Asoka's unalloyed pacifism destroyed the roots of India's national existence. Our question is whether he hankered after peace at any cost, whether he regarded aggressive warfare alone as sinful, or all warfare including the defensive and punitive varieties of it. If he was only against aggression, all the deductions from the wrong interpretation of his new role are untenable. It is hard to believe that Asoka, a militarist to the core on the eve of the Kalinga war, was transformed out of recognition by that war, that consideration whipped the offending Adam out of him completely, that in his case reformation came in a flood, and that his "Hydra-headed wilfulness" disappeared without leaving its marks on him. Apart from probabilities, what are the facts of the case?

A Qualified Pacifist

Several considerations militate against the assumption that Asoka was transmuted by the Kalinga war into a paci-

fist sans phrase. No doubt he became a sadder and a wiser man and eschewed aggressive warfare. He gave much attention to the establishment of beneficent administrative norms, particularly in Kalinga in order to heal its wounds. His outlook on life changed substantially, and the empire as a whole was the beneficiary of that change. Still Asoka did not cease to be an imperialist. He never contemplated the rendition of Kalinga, the conquest of which had rounded off the Maurya Empire. In Rock Edict. XIII he says: "Devanampriya (Asoka) thinks that even (to one) who should wrong (him) what can be forgiven is to be forgiven .... (The inhabitants of) the forests ... are told of the power (to punish them) which Devanampriya (possesses) in spite of (his) repentance, in order that they may be ashamed (of their crimes) and may not be killed."* In the special Jaugada Edict II it is said with reference to the border tribes of Kalinga that "the king will forgive them what can be forgiven." Further, Asoka exhorts his descendants not to make any *navam vijayam* or new conquest. Thus his new-born passion for *dhammavijaya,* or conquest by righteousness (not by the sword), was not undisciplined, but strictly controlled by the needs of an extensive empire. Morever, he stresses this world and the next in his edicts. Therefore during the major part of his long reign (c. 273-c. 232 B.C.) he stood for non-aggression but not for absolute pacifism, and his sane imperialist outlook, which was the outcome of the Kalinga war, maintained the balance between the spiritual and non-spiritual factors in life—a balance indispensable to the progress and stability of civilisation.

*Dr. E. Hultzsch, *Corpus Inscriptionum Indicarum,* I (1925), p. 69 *Ibid.*, p. 117.

RIGHT TO WORK

By

P. Satyanarayanamurti, B.A. (Hons.),

History of Right to Work.

In ancient times the question of the right to work did not arise at all, since the worker was a slave. During the Middle Ages also things were almost the same. It was only in modern times that some attempts were made to establish this right to work. Thus we find Robert Owen and Fourier making this right one of the important items of socialist agitation. Similarly in the Revolutionary period, French workers were loud in their demand for the right to work. But nothing was done in this direction. The earlier Declarations of Rights in France and U.S.A. at the end of the 18th Century do not contain a reference to the Right to Work. Thus the French Declaration of the Rights of Man said "Men are born and always continue free, and equal in respect of their rights. Civil distinction therefore can be only on public utility. The end of all political associations is the preservation of the natural and imprescriptible rights of man and these rights are liberty, property, security and resistance to oppression." The American Declaration also runs on similar lines. They did not stress the right to work, probably because the problem of employment had not become acute at the end of the 18th Century. With the dawn of the Industrial Revolution the nature of industrial organisation completely changed. Production was no longer carried on in the cottage to order, the

instruments of production being owned by the worker himself. It was carried on in anticipation of demand. Due to the introduction of machinery thousands of workers were thrown out of employment. This problem of unempoyment has become still more acute in the post-war period due to the maladjustment brought about by the Great War. The acuteness was further aggravated by the great depression, and the following figures of unemployed men in the principal countries in 1930 will clarify the position:

U. S. A.	8·3 millions
Germany	4·89 millions
England	2·66 millions
France	0·85 millions
Italy	0·75 millions
Total in the principal countries: —	17·45 millions

This phenomenal figure of the unemployed led everyone to think of the necessity of recognising the importance of the right to work and the need to guarantee it. Thanks to the constitution of the U.S.S.R. which guaranteed the right to work by Article 118 of the Constitution the Right to Work is now assured by the socialist organisation of the national economy, by the steady growth of the productive forces of Soviet society, by the elimination of the possibility of economic crisis and by the abolition of unemployment.

Meaning and implications of Right to work

The right to work can mean in the words of Laski "no more than the right to be occupied in producing some share of the goods and services which Society needs." It does not mean the right to some particular work. A Prime

Minister who has been overthrown has not the right to be provided with the labour of an identical character. Society cannot afford each man the choice of the efforts he will make. It also means that the man who is deprived of the opportunity to work is entitled to the equivalent reward of that opportunity i.e., when an individual is thrown out of employment and no work can be found for the time being, it is the duty of the State to provide him with a maintenance. Every well-ordered State should have a system of unemployment benefit to which the working people themselves would make some contribution. In Laski's judgement "the principle of insurance against unemployment is integral to the conception of the State." To be his best self, man must work and—absence of work means provision, until employment again offers the opportunity to work. (ibid). But a bonus or allowance to which the individual himself has not contributed a certain share does not commend itself to us. It is bound to increase pauperism and demoralise the Working Classes. The lot of the pauper is not to be made better than that of the hard-working independent labourer.

A man has not only the right to work but he has also the right to be paid an adequate wage for his labour, i.e., a wage necessary for "creative citizenship." All men need food, clothing and shelter, a certain amount of leisure and opportunity for education and culture for the development of the best that is in them and no one should be allowed to fall below this standard. "The right to an adequate wage" says Laski "does not imply equality of income, but it does imply that there must be a sufficiency for all before there is superfluity for some."

The right to safety and security, leisure and education are all corolaries to the right to work. Conditions of safety

to prevent any accidents during work is of utmost importance. Material security in old age and also in case of sickness or loss of capacity to work ought to be guaranteed. A certain amount of leisure and education are also essential. Thanks to the Factory Acts which guarantee these to some extent, all these privileges now enjoyed by the workers will ultimately result in the increased efficiency of the great factor of production—labour. In addition to all these, it is better that the worker is also given a share in the government of the industry, because otherwise economic freedom will be incomplete.

Finally the right to work also implies the duty to work. No doubt the worker has several rights over the State and the Employer. But he must also remember that he has got a duty to the employer and the community. He must be ready to work and continue at work until the contract is at an end, while the employer is also under the same obligation to continue until the contract is lawfully put an end to. He has a duty to be reasonably competent and fit for his work and position. He has a duty to be honest i.e., he should not take secret commissions or discounts or exploit his knowledge of the employer's business for his own aggrandisement. He has to perform his work in a spirit of sympathy and co-operation as far as possible. Lastly he has also a duty to maintain reasonable economic peace by not resorting to Strikes on flimsy grounds.

Conceding the right to work

At the present day the importance of guaranteeing the right to work is established beyond doubt. In spite of this view, the Capitalist Society has not been found competent to meet the right demand of the worker. So long as man continues to live he must have the necessary resources for

existence. Work alone provides the great majority of mankind with means of subsistence. But the apparently inexorable laws of capitalist economy drive a considerable section of the working classes to a state of unemployment in a world which is seemingly governed by economic lunacy. Many millions of people live lives of semi-starvation and unemployment because States will not organise access to the natural resources of the World. Vast portions of the World's surface are left untilled because of the false sense of economic nationalism. Similarly until internationalism reaches the stage where international trade is controlled by the Economic Council of a powerful League of Nations, it will be criminal for any country to neglect to develop to the utmost its own national resources and to leave its population to shift for themselves on the precarious circumstances of foreign markets. The problem of unemployment can be solved only by the provision of more work. But this is possible only when there is an effective demand for the goods and services produced by labour. Unemployment is capable of solution by the scientific organisation of production and distribution by rendering effective the demand of the bulk of the population for the commodities produced; by stopping national expenditure on unremunerative purposes; by the better equipment of industrial workers of all grades; by the fuller development of the resources of the world; by the removal of artificial barriers to the free flow of international commerce and by the disarmament of all nations by a powerful supernational League of Nations. The International Association of unemployment organised in 1910 should get more support from all. There should be provision in every country for compulsory insurance against unemployment to which contributions will be

made by the State, the Employers and the workers. Germany under Bismarck led the world in this direction by the provision of Unemployment Insurance by the Act of 1894. By the National Insurance Act of 1911, unemployment insurance was secured in certain groups in England. In the post-war period it was greatly developed in all countries and in 1924 the labour government in England adopted a scheme to solve unemployment. In short compulsory unemployment insurance has been the main future in the post-war period.

Labour should be accorded ready access to employment by establishing employment bureaux subsidised by the State for workers. The earliest private establishment of this kind was started in Germany in 1865. Later on between 1893-1900, 85 such bureaux were erected. Berlin Register established in 1883 worked successfully and in 1908 it secured work for 120,000 men. In 1909 Mr. Churchill introduced the Labour Exchange Bill and by 1915 there were about 401 such exchanges.

"Home Lodging Houses" and "Public Relief Stations" were also started in Germany to improve the lot of the workers during periods of unemployment. Such organisations should be popularised everywhere.

The crux of the problem is, can any economic system guarantee this right to work? Capitalism, in which unemployment is inherent, is the negation of the right to work. Under Capitalism production is carried on in anticipation of demand and the only motive is profit. There is no central planning. Hence economic crises are inevitable, and this results in unemployment. In spite of this great handicap capitalism can try to do something by a careful public works policy and a suitable monetary policy and by

providing unemployment insurance etc. But the real problem will still remain unsolved.

Is the Socialist system then better for tackling the problem of unemployment and for guaranteeing the right to work? According to Pigou a Socialist system with its central planning is better than Capitalism for this purpose, because factors of production can be easily adjusted in a nationalised economy. But this advantage of Socialism over Capitalism is nullified by other drawbacks of Socialism. The proper balance between State authority and individual initiative is entirely and ruthlessly suppressed by Socialism which stands for the omnipotence of the State.

Strange as it may sound Socialism is not social. It is even aggressively anti-social. The summary abrogation of even the most elementary human rights and the starving wages that it pays to its enslaved labourers in Russia are facts made known to the World by convinced Socialists and Communists on their return from the so-called paradise of Soviet workers. Men who went to search for truth in Russia were all bitterly disappointed and disillusioned when they saw the horrors of the Soviet regime.

Another anti-social aspect of socialism is the class-war which if its object materialised would mean the end of all economic organisation. Class-war is an artificial engine, not the natural outgrowth of a working economic system since economically "capital cannot do without labour nor labour without capital."

Above all, under Socialism the incentive for work is lost and consequently there will be a fall in the national

income. The per capita income will go down and the position of the poor will not be universally improved even when you transfer wealth from the rich to the poor. We are one with Sidgwick when he says "I object to Socialism not because it divides product badly but because there will be so much less to divide."

Neither Capitalism nor Socialism can, as they exist to-day concede the right to work. Various and varied have been the suggestions of the Economists. The corporate idea seems to come nearest to conceding this right to work. The corporate State in Italy is based on the idea that the Marxian interpretation of a class-war in Society is fundamentally wrong. Workers and employers are to be considered partners in performing one social function namely, production. And therefore an attempt should be made to bring together labourer and employer in institutions recognised and directed by the State. It is an attempt to abolish the evils of Capitalism not by abolishing private property but by regulating it in the interest of the common good. At present the experiment works because of the dictatorship behind it. It is too early to say whether it can work without the power of the State behind it. But its principle—collaboration between Capital and Labour and not antoganism—is sound.

The corporative Society which results from private initiative of free men organising themselves with the approval of the State, like the one in Portugal is said to be the best. According to this idea individuals have the freedom to associate into groups representing professions recognised by the State. Such corporative bodies are autonomous bodies and stand midway between Individualism and complete State control. They should represent

both employers and employees in equal number and should receive guidance at the hands of the State. These associations may form themselves into national guilds and may be given the authority to regulate wages, hours of work, marketing, insurance and other things which are of common interest. The professional interest can be incorporated into common interests with the necessary amendments which the State may deem necessary. It must be simple, intelligible and free from all undue control from the State. Though even here there are difficulties human as well as technical, they can be avoided if the scheme is worked with proper goodwill on the side of the State and citizens on the one hand and on the bonds of common interests of the employers and employees on the other. Then only the worker's needs and in particular his right to work will be better understood both by the employers and by the State in order that this long cherished right to work might be safeguarded.

Conclusion

The worker with his right to work has now become a force to be reckoned with. In Mexico and Russia, he even succeeded in capturing political power, while Labour Parties were occasionally successful in establishing their governments in some democracies like England and France. The most potentially powerful movement in the coming generations might be organised labour. There is now a definite swing towards socialism in all countries. Radical labour opinion is veering round to communism. If communist dictatorship is to be averted the present capitalist system must be cleansed of its anamolies. Corporative democracy, containing the salutary features of corporativism and Socialism is the only solution for the future polity and economy of the World. Corporative democracy will be a

synthesis of the best elements of all political doctrines, allowing the Capitalist and the worker a large measure of freedom.

In conclusion it must be said that the case for the right to work is immense and it is the duty of the State, whatever economic system it may have, to guarantee this right to the worker. The nature and functions of the State have undergone a thorough change and it is no longer a Police State of the 18th Century. The Social-Service State of the 20th Century is under the obligation to guarantee this right to work in order that it may fulfil its mission.

THE MYSTERY OF THE UNBORN.

(Garbha-Upanishad to Entwicklungsmechanik).

By

R. V. Seshaiya, M.A.,

"The One Spirit's plastic stress
Sweeps through the dull, dense world, compelling there
All new successions to the forms they wear"—Shelly.

Life presents many wonders and riddles, but the greatest of them all is the power of individual development possessed by living creatures. A minute drop of living jelly or protoplasm floating on the top of the yolk in the hen's egg takes gradually the form of the bird and hatches out as the chick in three weeks. The minute fertilised egg or ovum of the elephant gives rise to the baby elephant as a result of a *creative* differentiation of six hundred and fifty days during which new elephant tissue appears at the rate of fourteen pounds a day. Mouse and man alike have similar minute, and apparently insignificant beginnings. The fertilised ovum of the mouse differentiates itself into the baby mouse in twenty one days at the average rate of one-fourth ounce of mouse tissue per day. The human egg, almost invisible to the naked eye, being a mere blob of living matter of about 0·13 mm. in diameter passes through a series of kaleidoscopic changes to attain the human form and organisation in nine months, and is ushered into the world as the seven pound baby.

How does the simple, often microscopic egg, in which no trace of its future destiny can be detected, develop into the complex organisation of the adult? What brings about the differentiation of the various organs of the future adult? And how do the several parts that become differentiated in development get integrated into the unified organism? How comes about the co-ordination of the various events of development in space as well as in time? These questions, which constitute the subject of embryology, have puzzled laymen, scientists and philosopers alike in all ages, and various theories, fanciful and speculative, philosophical and scientific, have been invented in all ages to explain the mystery of development—how the unborn becomes the born.

Among the ancient Hindu writers, the authors of the Garbha-Upanishad, and also Charaka and Sushruta, refer to the problem of human development. The Garbha-Upanishad describes the development of the human embryo as follows:—"It is semi-fluid in the first night; in seven nights it is like a bubble; at the end of half a month it becomes a ball. At the end of a month it is hardened; in two months the head is formed; in three months, the region about the feet; and in the fourth month the region about the stomach and loins and also ankle is formed; in the fifth month, the back (or spinal) bone; in the sixth, the face of the nose, eyes, and ears; in the seventh it becomes united with Jiva (Atma); in the eighth month, it becomes full (of all organs); in the ninth, it becomes fatty."

It will be interesting to compare this account of the development of the human embryo with the findings of modern embryology. Human embryologists distinguish three main periods during the intra-uterine period of

development: the period of the ovum or egg, from fertilisation to the formation of germ-layers, lasting for about ten to fourteen days, the period of the embryo, until the embryo has assumed a definitely human appearance, till the end of the second month; and the period of the foetus. None of the very young developing eggs have ever been observed, the earliest stage that has been observed being about eleven days old. Modern accounts of the very early development of the human embryo are to a large extent inferences from the study of rabbit, monkey and other closely related animals. It is therefore all the more remarkable that the Garbha-Upanishad should have described the appearance of the early stages by suggestive and fairly correct comparisons. "Like a bubble" in seven nights, "Like a ball" in a fortnight are fairly apt comparisons of the early mammalian embryo. At the end of a month the human embryo is about 6 mm., and shows an increase of about fifty times in size and eight thousand times in weight. In the second month the human embryo (8 mm. to 25 mm. in length). develops what is unmistakably a human face, and a very markedly distinct head which forms about one-half of the entire body. "In three months the region about the feet," is quite a correct statement, for the feet become well diffrentiated and are no longer paddle like as in the previous stages. During the fourth month the external sex-organs develop from an indifferent neutral stage to those characteristic of each sex; the head is about a third of the body, for the region about the belly increases in size; the arms and legs are rotated into their final positions, in which the elbows point backward, the knee forwards, and the soles of the feet face downward and away from the body. "In the fourth month the region about the

stomach and loins and also the ankle is formed." In the fifth month the body axis is straightened, the head is perfectly erect and the back is "almost unbelievably" straight, more straight than it ever will be. In the sixth month the eyelids, fused since their formation in the third month, open. "The sixth month foetus, if born, will breathe, cry, and squirm;" it will live for a few hours. "In the seventh month the embryo becomes united with Jiva". The seventh month embryo is frequently able to survive premature birth; the nervous system is sufficiently developed to meet the demands of independent life; the cerebral hemispheres develop to such an extent that they cover almost the whole of the rest of the brain; they begin to show fissures and grooves. Moreover the embryo of the seventh month is sensitive to touch, possesses the sensation of taste, and can probably perceive the differences between darkness and light. The eighth and ninth months are concerned mainly in giving the finishing touches to the foetus preparatory to being ushered into a new world.

One cannot fail to be impressed by the soundness of the observations of the Garbha-Upanishad. They could not have been the creations of mere fancy. But the same cannot be said of the account of Charaka and Sushruta (and Dhanvantari too) who held the view that in the egg or fertilised ovum all the organs of the adult organism were present, and that development was merely the unfolding of what was already present in the egg. A similar view, the preformation view as it is called, was held by many of the European Scientists till about the nineteenth century.

Interesting as some of the observations of the ancient Hindu writers are, they do not constitute the science of

embryology, and we do not seem to have any references to the development of animals. Regarding the causal factors, the prevalent view was that Life or *Prana* is an independent principle which regulates the development of the ovum. "The Life is prior to the senses, for it regulates the development of the fertilised ovum which would putrefy if it were not living, and the senses with their apparatus develop subsequently out of the ovum"—Sankara, *Sariraka Bhasya,* Chapter II, Pada 4, Sutra 9.

For the foundations of Scientific embroyology we have to look to Greece, and in particular to Aristotle who took all knowledge for his province and is recognised as the father of Zoology as of other branches of knowledge. Aristotle's "De Generatione Animalum" deals with the development of animals. Though the observations embodied in it are not all accurate Aristotle's insight and interpretation of the phenomena command our respect. We must mention in particular his criticism of erroneous theories like the preformation theory and the theory of Pangenesis. It is interesting to note that these theories were revived later in Europe, and that Charles Darwin was the exponent of the latter theory.

After Aristotle, the study of the development of animals received no attention, all through the eras of fettered thought, and even long after. It was only during the thirties of the last century that the foundations of modern embryology were laid by the publication of Von Baer's treatise on the Development of animals with observations and reflections. The publication of Darwin's 'Origin of Species' gave an additional impetus, and a host of distinguished workers investigated the various animal types and revealed a wealth of extremely interesting facts

relating to the development of animals. And it came to be recognised that no division of Biology is more fascinating than Embryology. In the words of Minot "The stories which embryology has to tell are the most romantic known to us, and the wildest imaginative creations of Scott or Dumas are less startling than the innumerable and incredible shifts of role and change of character which embryology has to entertain us with in her life-histories."

The story of animal development is briefly as follows:

i. All animals except the lowest begin as fertilised egg, or zygote, as it is called. The egg itself is the result of the union of the sperm or male germ cell and ovum or female germ cell. There are a few cases of animals developing without fertilisation of the egg, which are spoken of as 'virgin birth' or 'parthenogenesis.' The eggs of some animals can be induced artificially to develop without fertilisation.

ii. The fertilised eggs vary in size, and in the amount and distribution of reserve food material or yolk contained in them. The eggs of birds are large owing to the enormous amount of yolk in them. The eggs of most animals are very small.

iii. The first steps in the development of the egg are more or less the same in all animals. The egg divides into smaller and smaller cells without growing in size at all, till there is a ball of small cells instead of a single cell. This process is called segmentation or cleavage and forms the first chapter of development.

The pattern of cleavage, however is not the same in all animals, but varies much, being dependent on the amount and distribution of yolk in the egg. The bird's egg which has a large amount of yolk does not segment as

a whole; only the superficial patch of protoplasm divides and forms a little plate of cells, the blastoderm. Eggs with little or no yolk like the human egg or sea-urchin's egg divide as a whole and into equal parts. In some other animals the egg may divide as a whole, but the products of the division, the blastomeres, as they are called, may not be equal.

iv. The ball of cells resulting from cleavage is usually hollow, enclosing a central cavity, and is termed a blastula. In some animals the blastula is a solid ball, and in others as in the bird it is represented by a plate of cells.

v. The cells forming the blastula next begin to arrange themselves to constitute the chief foundations of the future organism. By the tucking in of some portion, or by the growing over of some of the cells over the rest, or by the splitting of some portions, the cells move into new positions, and a two-layered and then a three-layered embryo is produced. The outer is the ectoderm, the middle is the mesoderm, and the inner the endoderm. These three layers form the material out of which the different organs are subsequently built up.

vi. Next begins the mysterious process of differentiation of tissues and organs. Imagine a lump of plastic material —plastic marble, if that were possible moulding itself into a group of bricks, the bricks arranging themselves gradually into foundation stones, basement structures, then pillars, walls, arches, etc., and finally shaping themselves into a noble and magnificent edifice like the Taj Mahal. 'A miracle' you would say. What the embryologist sees is no less marvellous. The three germinal layers, the ectoderm, mesoderm, and endoderm, become moulded by foldings, ingrowths, outgrowths, thickenings, and finally give rise to

the rudiments of tissues and organs. Out of the ectoderm or outer skin of the embryo arise gradually the nervous system, sense organs, and skin; out of the mesoderm the muscles, blood vessels, heart, the ovaries and testes, and the skeletal structures. In the development of every animal these various processes occur in orderly sequence. To take but one instance, the first indication of the nervous system is a thickening of the middle region of the back of the embryo from one end to the other. This is the nerve plate or neural plate. The sides of this thickening rise up as folds, grow, meet above and form a tube. The tube sinks beneath the outer skin or ectoderm.

The front portion of this tube—the nerve tube—swells up, and later undergoes many changes to form the brain. The remaining portion of the tube is transformed gradually into the spinal cord. Whether it is the embryo of fish, frog, snake, bird or man, the same orderly sequence of events are seen in the early stages of the development of the brain.

vii. Generally as one watches the development of the animal from the apparently simple homogeneous egg into the complex organism, one cannot help the impression that the panaromic representation of the various stages is all preordained, and that the embryo is travelling to a definite goal, the formation of a replica of the parent. Development is an intricate web woven by the three Sisters, the three Fates. At every stage, development is seen to have spun out of the past, and also to be enmeshing the future. The various stages, blastula, gastrula etc., are merely cross-sections in time of one organic process of development.

In some animals the path of development instead of being straight, is devious and the embryo has to assume temporary forms and structures quite different from those

of the adult and unconnected with the main line of development. The butterfly's eggs developing into caterpillar and chrysalis or pupal stages before attaining the form of the butterfly, and the eggs of the frog developing into fish-like tadpoles are familiar examples of this kind of indirect development. There are many other examples of animals travelling a tortuous road in development. It is not always easy to explain why the development should be complicated by the interpolation of larval stages.

Development is generally one of progressive differentiation and increasing complexity of the organism; but this is not always so. Some organisms, after a period of initial differentiation retrace their steps, and undergo de-differentiation or retrograde development. The most striking example is that of the Ascidian or sea-squirt. The adult creature shows no trace of semblance of an animal. It is like a sac, leading a vegetating existence attached to some rock in the sea. The eggs of the Ascidian develop into tadpole like creatures, with the distinct organisation of the back-boned animals. After a period of free-swimming life, the creature settles down on a rock, and a thorough overhauling of the organisation takes place, in which important members of the larval body like eyes, the supporting structure—the notochord etc., are discarded. Thus the tadpole like creature is transformed into the Ascidian. Many parasites and sedentary animals complete their development in a similar manner by putting back the clock of development. The study of the development of various animals reveals another interesting feature. The early embryos of the fish, lizard, bird and mammal are very much alike. The resemblance is not merely in the general form, but also in the presence of some of the in-

ternal organs, and in the general development of the various organs. A human embryo of about four or five weeks is provided with gill slits like those present in the sharks. Such resemblances led to the formulation of the famous Recapitulation theory or Biogenetic law of Haeckel. This hypothesis explains the resemblances between the embryos of the various groups by supposing that development is influenced by the evolutionary history of the race, and that the developing embryo repeats in a general way and in a certain measure the history of the race. The resemblance of the tadpoles of the frog to the young stages of the fish is explained by the fact that the Amphibians or frogs and their allies are evolved from fish-like ancestors.

Such are the general features of animal development. There are endless variations in the details of each and every process in the different groups of animals. But all these do not explain the mystery of development. By saying that the egg becomes a blastula or that the brain is formed out of the outer skin of embryo, the mystery is not solved. Till about the eighties of the last century, students of development concerned themselves mainly with the description of the kaleidoscopic series of transformations undergone by the embryo in the progress of development. The more orthodox adherents to the recapitulation theory interested themselves in interpreting development as an historical process, and investigations on the development of animals served only to reconstruct their genealogy, or visualise their hypothetical ancestors. "Hypotheses" said Goethe, "are the cradle songs with which the teacher lulls his pupils to sleep," and the Recapitulation hypothesis of Haeckel was no exception. But, in the year 1880 Wilhelm Roux broke away from the established tradition of

embryologists and initiated the experimental enquiry into the causal factors of development. He plunged a hot needle into one of the two blastomeres in the two-celled stage of the developing frog's egg. By this action, which he compares to the dropping of a bomb on a newly started factory, the uninjured half of the egg developed into a half-embryo, and later on became a complete embryo. The significance of this result does not concern us now. What interests us now is the inauguration of the experimental method or Entwicklungsmechanik as Roux christened it or the "causal embryology" as Brachet termed it. Thousands of experiments have been made since the time of Roux on the embryos of animals to analyse the developmental processes and discover the causal factors underlying the processes. The place of honour among the investigators of experimental embryology is held by Spemann, the Nobel Laureate.

The new school of embryology has developed a very delicate technique, requiring great skill on the part of the operator. Micro-surgical operations on the minute embryos, like cutting the minute segmenting egg into two or more bits, removing a small part of the embryo, or rudiment of an organ, and grafting it in another place in the same embryo or in another embryo of the same species, or even of a different species, and sometimes into the body of the adult, cultivation of the embryos in *vitro* or artificial cultures with normal environment or with modified or controlled environment, inducing the growth of organs in abnormal situations in the embryo, inducing the production of monstrosities, treatment of embryos with poisons to detect the susceptibility of the different parts of the embryo to poisons,—these are the chief methods

employed by the investigators in the study of causal embryology.

The results of the experimental school of embryology have given us a better insight than before into the organisation of the egg and the latent factors of development.

With regard to the organisation of the fertilised egg we no longer regard it as simple and unorganised as it appears at first sight. But we do not imagine with Sushruta and the seventeenth and eighteenth century preformationists that a miniature replica of the adult organism is concealed in it to jump out of it like 'Jack in the Box', or to unfold like the petals of a flower bud, or 'develop' like the exposed photographic plate.

The visible organisation of the egg includes the double set of chromosomes in the nucleus, and sometimes there is patent a regional differentiation in the cytoplasm surrounding the nucleus, which may be due to the unequal distribution of the yolk and pigment. The chromosomes carry the hereditary factors or genes which are contributed jointly by the paternal and maternal germ cells, the sperm and ovum. But one set of chromosomes alone are sufficient so far as development is concerned, as we can see from cases of virgin birth or parthenogenesis. These genes are potential hereditary characters which can find an expression only in the later stages of development and in the adult. They do not seem to be responsible for initiating the early stages of development.

We must look rather to the cytoplasm for the factors which are known to convert the apparently static egg into the dynamic embryo. In the case of some animals like the frog, even the unfertilised egg shows a differentiation into

a pigmented animal pole, and a light coloured heavily yolked vegetative pole. The distribution of the yolk and pigmentation, the position of the nucleus etc., bring about such a differentiation. In the frog the animal pole indicates the future head end of the animal, and the vegetative pole the tail end. This differentiation into poles is called polarity and is the primary expression of the egg's organisation.

How does the egg get differentiated into the animal pole or potential head end, and the vegetative pole or potential tail end? In some animals, at any rate, this differentiation is due to a high rate of oxidational or metabolic activity at one end, and a very low rate at the other. Between the two ends there is a graded difference in the metabolic rate. This is spoken of as the axial gradient. Yolk which is readily oxidisable is confined to the region of the lowest metabolic rate, which becomes the vegetative pole, and the opposite end becomes the animal pole. The axial gradient in its turn is due to another factor, which however is not in the egg but outside. This is the proximity of the egg to the blood cells in the ovary of the mother. Thus an external factor determines in the egg which is to be the future head end and which the future tail end.

The next step of differentiation—we refer once again to the frog's egg—is the establishment of bilateral symmetry. This is possible only when the dorsal and ventral sides are determined, and this is done by the entry of the sperm into the egg in the act of fertilisation. When the sperm enters the egg on one side, the pigment on the opposite side is sucked up, and a grey crescent appears exactly opposite to the point where the sperm enters. This

grey crescent is the future dorsal surface. The dorso-ventral axis represents another axial gradient, the dorsal side being the region of the highest metabolic activity. There is yet another gradient formed in the egg, from the surface to the centre. Thus the fertilised egg is a complex system with a definite organisation indicated by the axial gradients.

The egg is now set for further development, for with fertilisation the dynamic nature of the egg becomes manifest. It is not as yet visibly differentiated into different structures. Only the different parts show a quantitative difference in the metabolic rate. The next step is the establishment of a qualitative difference between the different portions, so that each will develop into a particular structure. The visible change that comes over the egg next to fertilisation is cleavage, as we have seen already. The American school of embryologists led by Wilson have carried out painstaking investigations into the history of each cell or blastomere of the dividing egg, and revealed the meaning of the process of cleavage. The egg becomes a mosaic of blastomeres each of which seems to be set apart for the formation of some specific part of the embryo. The experiment of Roux was made to see whether one of the blastomeres in the two-celled stage would give rise to a full embryo or half embryo. In some animals, even as late as the thousand-cell stage, any one blastomere, if isolated, may give rise to a complete embryo. In other animals each of the cells in the two-celled stage can give rise only to a half-embryo. These observations lead us to infer that the material for the formation of the specific portions of the embryo is separated or set apart at a very early stage in the development of some eggs, but much later in others. The former are called mosaic eggs and the later regulation eggs.

What is it that brings about the differentiation during cleavage? Is it the nucleus? Can it not be that differences between the nuclei, due to unequal divisions bring about the differentiation during cleavage? Spemann performed a very interesting experiment which shows that the nucleus is not responsible for this differentiation. He tied a hair round the fertilised egg of a newt pinching it into a dumbell-shape in such a way that the nucleus came to lie at one end, while the other end was without the nucleus. In course of time the end with the nucleus segmented while the other end did not segment. After several divisions had taken place, he loosened the loop and allowed a nucleus lying nearest to the end without a nucleus to pass into it. Then the loop was tightened again. This second end now began to segment, and it developed not into any special part of the embryo, but into a whole embryo, though it contained, as compared with the other portion only a fraction of the nuclear material to start with. Thus the potentiality of one or many nuclei seems to be the same. Recently Dalcq has put forward an hypothesis to explain how the egg is roused to activity. He supposes that the nuclear sap mixes with the cytoplasm while the ovum is ripening, and partly diffuses into the outer part or cortex of the egg. The cortical portion has some inhibiting influence on the egg, which is changed at the time of fertilisation. At fertilisation the cortical substance is split up and provides the substances which bring about differentiation, segregation etc. Leaving alone the details, what we have to note is that the cytoplasm contains the factors for the differentiation during cleavage.

When the frog is in the blastula stage, no differentiation is visible in it except in the size of the blastomeres and the pigmentation of the cells of animals and vegetal poles.

The smaller dark coloured cells are destined to give rise to the ectoderm and the larger light coloured to the endoderm. But at this stage the egg is 'plastic' except in the region of the crescent, and the parts are interchangeable. A portion of the pigmented region the potential or presumptive ectoderm can be transplanted into the light coloured region or region of the presumptive endoderm. In the same way the presumptive endoderm can be transplanted into the dark coloured region, and it will grow into the ectoderm. In other words what is to become the outer skin may be made to grow into the inner skin, and vice versa. But this 'plasticity' is lost when the blastula becomes a gastrula, and the ectoderm cannot be exchanged for the endoderm, or the endoderm for the ectoderm. The embryo is at this stage invisibly marked out into a number of regions chemically different from one another. In other words there is a qualitative differentiation now, and the fate of each part of the embryo is now fixed. This is usually spoken of a chemodifferentiation. In the eggs of the regulation type this occurs late as in the frog, but in the eggs of the mosaic type this takes place very early.

Though the egg is analysable into a number of chemically different fields, there is as yet no visible differentiation into different structures. There now appears a new feature which brings about a visual organisation in the embryo. Gastrulation in the frog takes place by the appearance of a lip-like structure in the region of the grey crescent. This is called the dorsal lip of the blastopore. We are not concerned with the details of gastrulation, but we must remember this dorsal lip, for it is a remarkable structure. Normally, the nerve plate, the axial supporting rod of the embryo, the notochord which officiates as the 'backbone' in the embryo, all these axial structures

are formed in the meridian of the dorsal lip of the blastopore. But if the dorsal lip is transplanted into some abnormal place, the nerve plate and the notocord are developed there under the influence of the dorsal lip of the blastopore. There are two kinds of newts, one with dark coloured eggs, and another with light or white coloured eggs. Spemann took the dorsal lip from the light coloured egg and transplanted it into a dark coloured egg. Thus the dark coloured embryo had two dorsal lips, one its own, and the other the transplanted one. The embryo now developed two notochords, nerve plates (or brains), one set its own and the other 'imposed'! And it was from the tissues of the dark coloured embryo that the light coloured blastopore organised the organs. The dorsal lip of the blastopore is therefore called an organiser, for it organises the embryo wherever it is placed. It is the focus about which the embryo is organised. It has been found out that the organising power of the organiser is due to a chemical substance present in it. Another interesting feature is that the organiser from a toad will organise the axial structures in the newt. And foreign tissues or agar after being in contact with the organiser for some time become infected with organising capacity, and may be used for organising the axial structures in an embryo. But the organiser can act only on competent tissues. In the particular case under consideration, the tissues are competent at the time of gastrulation. Provided the tissues are 'competent' in this sense, it does not matter whether it is ectoderm or endoderm or mesoderm on which the organiser is acting; the organiser will induce the formation of the embryonic structures. But the power or effect of the organiser will vary according to the region on which it is acting. The front end of the nerve plate will be induced to develop into the brain,

the hinder part into the spinal cord, and so on. The chemical substance extracted from the organiser will 'evoke' the formation of the nerve plate, but will not effect this 'individuation' into brain, spinal cord etc. So it is assumed that there are two factors in respect of the action of the organising centre. One is the 'evocator', a chemical substance which will merely induce the formation of a nerve plate from competent tissue, and the other is supposed to be the 'individuation field' which determines what part of the nerve plate shall be induced. Through its evocator—a chemical substance—the organiser brings about induction, through its 'individuation field' it effects organisation of that which is induced.

A central military authority may issue from its headquarters a general command for the mobilisation of troops for defence, but the particular form of defence which has to be organised and into which the command has to be translated will depend on the regional relationship of the troops. The mobilisation which is due to the command from the central authority is like the 'induction' of the 'evocator' of the organising centre in the embryo. The organising of the form of defence with regional variations depending on the regional relationships is like the 'individuation' depending on the 'individuation field' of the organising centre.

Another feature which the above analogy will explain is the self-differentiation of the different regions of the embryo, when once they have been started on the road to differentiation by the organising centre. After receiving the general command each corps in the army will decide its own details of action while in the thick of the fight. This is like the self-differentiation of different parts of the embryo after 'induction' and 'individuation' have taken place. The

early rudiment of the leg bone of the chick, while it is still a shapeless mass of mesodermal tissue, may be cut out of the embryo and grown in an artificial culture after it has started its self-differentiation; and it will continue to self-differentiate developing every detail of structure.

After the primary organiser has done its work, secondary and even tertiary organisers may appear, and bring about further differentiation of the embryo. The eye-cup which grows out from the brain tube in the embryo acts an organiser, inducing the ectoderm to form a lens. It may be cut and removed from its natural position and transplanted in the side of the embryo or in some other abnormal position, and it will induce the formation of the lens in an abnormal position.

After the organisers have done their work, the outlines of the embryo and the various organs are visible. The embryo is by now well on the road to the realisation of the form of the young organism. Functioning of the organs brings about further differentiation. Other factors internal as well as external, guide it along the road, and the hereditary factors or genes will lead it to its goal, the attainment of the form characteristic of the species. Environmental deviations may lead to developmental aberrarations as in the case of the fish *Fundulus* which develops a cyclopaen eye, when magnesium cholride is added to the sea-water in which it lies.

Thus the young science of 'Causal Embryology' or 'Entwicklungsmechanik' has revealed to us new land marks of differentiation in the development of the organism. Regional differences of metabolic rate in the egg establishment of axial gradients, determination of the future head and tail regions, determination of the dorsal and ventral

surfaces and establishment of bilaterality, transformation of the embryo into a chemical mosaic by the differentiation of a number of chemically different fields, the appearance of the organiser on the scene, with its evocator and individuation field and which, like Mother Carey in Kingsley's 'Water-babies', who made things make themselves' organises the parts of the embryo about it to self-differentiate into tissues and organs,—these are events of development.

The survey of animal development presented above, brief and incomplete though it be, will suffice to indicate what a complex process development is. The new embryology does not claim to have explained away the process of development, but its brilliant results have given us a better insight into the complex of development. They have analysed the big riddle into smaller riddles. It is beside the point to raise the question whether this causal embryology will ever be able to solve the riddle of development, or whether the developmental processes can be explained ultimately in terms of physics and chemistry.

Several theories of development have been formulated. To mention but a few: there is the vitalistic theory of Driesch who imports into development an undemonstrable factor, the *entelechy;* there is the mechanistic theory whose exponents hold that the 'causal postulate is perfectly applicable to living organisms, and can be satisfactorily applied to the biological order of things, irrespective of the possibility of biological phenomena being reduced to physico-chemical processes.' Other exponents of the mechanistic outlook would assume the possibility of the physico-chemical explanation of all biological phenomena as a useful hypothesis, with the reservation that biology

may discover new and unsuspected properties of life and living matter. In justice to the upholders of the mechanistic hypothesis, it must be stated that they do not hold development to be explicable in terms of the old laws of classical physics and chemistry, or by analogy to man-made machines. We have also the organismic theory which with its Holistic orientation aims at steering clear of both the vitalistic and mechanistic theories, and whose apostles like Bertalanffy would declare an autonomy for biology to enable it to develop its own concepts independently of physics, under whose shadow, they complain, Biology has languished like a plant deprived of light." It is not proposed to present here a critique of the several thories of development. For theories and hypotheses let philosophers contend, while we watch and admire the beauty of co-ordination, both spatial and temporal, of the developmental processes, and the panoromic succession of forms which the embryo wears as time 'bites' into it.

"The one Spirit's plastic stress .
Sweeps through the dull, dense world, compelling there
All new successions to the forms they wear"—

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PATRONS AND PLACE-NAMES OF TAMILNAD

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"The days of royal patronage are gone," said Nammalvar the greatest of Vaishnava saints. The same sentiment is expressed and illustrated by Saint Sundarar in one of his sacred hymns.[1] These seers were obviously dissatisfied with the general degeneracy of poetic taste in high circles and the consequent lack of response to the call of the Muse. The former feels the pang so much that he entreats the gifted poets to live by the sweat of their brow instead of courting the princely gaze that used to follow them in palmier days.[2] He seems to recollect the golden age in which the crowned kings and nobles of the Tamil land deemed it a privilege to honour the votaries of the Muse.

The memory of some of these illustrious patrons is preserved in the classical poems and place-names of the

1. 'இம்மன்னுலகிற் செல்வர் இப்போதில்லை நோக்கினேம்'
—திருவாய்மொழி.
'நலமிலாதானை நல்லனே யென்றும், நரைத்த மாந்தரை
இலையனே,
குலமிலாதானைக் குலவனே யென்று கூறினும் கொடுப்பாரிலை'
—திருப்பகலூர்ப் பதிகம்.

2. 'என்னுவது, எத்தனை நாளைக்குப் போதும். புலவீர்காள்
மன்னு மனிசரைப் பாடிப் படைக்கும் பெரும்பொருள்'
'வம்மின் புலவீர்! நும்மெய் வருத்திக் கைசெய்து உய்ம்மினே'
—திருவாய்மொழி.

Tamil country. The early Pandya kings were delighted to associate themselves with the activities of the literary men who adorned the royal academy (*Sangam*) at Madura and honoured them with handsome gifts and presents. The great Chola king Karikala gave a magnificent gift to the poet who pictured in a lovely poem the grandeur of Pum-Pukar, 'the city beautiful.'[3] The exemplary patronage extended to the literati by some of the contemporary noblemen exalted them into an illustrious order (*eluvallal*) in the estimation of the country.[4] By common consent the place of honour among them seems to have been assigned to Pari, the ruler of the hill-fort of Parambu surrounded by three hundred villages. He is extolled as the model of munificence by Saint Sundarar.[5] Tradition has it that the three kings of the Tamil country beseiged his fort and assasinated him by treachery. The country of Pari is considered to be Parambanad, a division of the Pandinad, wherein the existence of a village called Pariccaram is disclosed by epigraphical evidence.[6] Kapilar, the towering poet of 'the Augustan age of Tamil literature' was a great friend of Pari. This poet was born at Tiruvadavur situated in the south Parambanad.[7] It is possible that temperamental affinities and territorial patriotism bound the poet and his patron in an indissoluble union.

3. 'தழுவு செந்தமிழ்ப் பரிசில் வாணர் பொன்
பத்தெடாறு நூறுயி ரம்பெறப்
பண்டு பட்டினப் பாலை கொண்டதும்'
—*கலிங்கத்துப்பரணி*, 198.

4. 'பாரி ஓரி நள்ளி எழினி
ஆயே பேகன் பெருந்தோள் மலையனென்று எழுவர் —சூ 125.

5. 'கொடுக்கிலாதானைப் பாரியே யென்று கூறினும்
கொடுப்பாரிலை' —திருப்புகலூர்ப் பதிகம்.

6. *South Indian Inscriptions*, Vol. VIII, p. 227.

7. *Ibid.*, p. 222.

Another nobleman of the 'Illustrious order of Seven' honoured in songs is Adikan or Adikaman. He ruled over a considerable extent of territory between the Pennar and Vellar. The fortified city of Takadur, the modern Dharmapuri, in the Salem district, was his capital. He appears to have been generous to a fault. His gift of an ambrosial fruit to the poetess Avvai in grateful appreciation of her poetic genius elicited universal admiration.[8] His territory was invaded by a powerful Chera king who succeeded in destroying the fortified city of Takadur. In honour of his signal victory the Chera styled himself "the conqueror of Takadur"[9] and his military exploit forms the theme of an ancient Tamil poem entitled *"Takadur Yattirai."*

The memory of Adikaman survives in the names of cities either founded by him or in his honour. Five miles south of Dharmapuri there is a place called Adaman Kottai which is obviously a corruption of Adikaman Kottai. 'The outline of the old fort wall still exists and the position of the temples within the ramparts indicates the former extent of the town.'[10] Possibly, Tiruvatikai, the modern Tiruvati, on the river Gadilam, which is associated with the devoted services of the saintly sister of Tirunavukkarasar, is a classical abbreviation of Adikanur, the city of Adikan.[11]

The inimitable generosity of Kumanan of Kongunad has endeared him to the high and the low alike. This great

8. 'அமிழ்து விளைதீங்கனி ஔவைக்களித்த அரவக் கடற்றானை அதிகன்' —சிறுபாண், 101.

9. 'தகடூர் எறிந்த பெருஞ் சேரல் இரும் பொறை' என்ற பெயர் சங்க இலக்கியத்திற் காணப்படும்.

10. *Gaz. Salem*, p. 196.

11. 'அதிகைக் கெடில வீரட்டானத் துறையம்மானே' —திருநாவுக்கரசர் தேவாரம்

man deprived of his estate by the greediness of his wicked brother and wandering in the jungle as an exile was found by a poet in dire need. The pathetic words in which the poet pictured his poverty melted his heart.[12] He handed his sword to the poet and meekly offered his head on which his brother had set a price, for the relief of his unmerited poverty The poet was stunned by the offer. Sword in hand he rushed to the cruel brother who banished such a noble soul, described the incident in moving terms and reconciled the brothers. The place known as Kolumam in the Coimbatore district is considered to be a corruption of Kumanam called after his noble patron.[13] The poet who has enshrined his fame in immortal verse is Peruntalai-cattan. The prefix in the name probably denotes the place of the poet. Peruntalai was the original name of the village now called Peruntalaiyur in Coimbatore.[14]

This golden age of royal patronage passed away and it was followed by a period of apathy and confusion, which was deplored by the great seers. During this period the principal religions of the Tamil country were preparing for a battle royal. The validity of the Jaina and Buddhistic doctrines was challenged by the Saiva and Vaishnava

12. புறம். 164, 165.

13. I. M. P. Vol. I, p. 563. Kolumam in Karaivalinadu is eleven miles south-east of Udumalpet. Sewell's Antiquities, p. 222.

14. It is probable that Peruntalai, denotes the place of the poet, just as Cittalai is associated with another Cattan and Kalattalai with another Sangam poet. The village Peruntalaiyur is 20 miles north east of Satyamangalam (Coimbatore). There is an old Siva temple with many inscriptions on the walls one of which is dated the 23rd year of Sundara Pandya Deva's reign. *Ibid*, p. 216.

saints which provoked 'the great war of religions.' The saints toured the country from one end to the other, singing sacred hymns at every shrine and infusing religious fervour in the masses. They lifted the mind of men from material pursuits to the gracious feet of the Lord, and exhorted those who had the gift of poesy to sing the praise of the Maker and not of the mortals.[15] Thus they ushered into existence what may be called the age of spiritualised poetry, which was naturally succeeded by the age of philosophy. Religious institutions were started for the conservation and propagation of spiritual knowledge. The kings and nobles deemed it an act of great religious merit to construct new temples or renovate the old fanes glorified in the sacred hymns. Thus came into existence the great temples of southern India, the architectural beauty of which command the admiration of the modern world.

The advent of European civilisation and especially the spread of English education shifted the emphasis from religion and philosophy to arts and science. Eradication of mass illiteracy and encouragement of higher learning and research are now deemed more beneficial to the community than the construction of temples and establishment of charitable institutions. This time spirit is reflected in the songs of the popular Tamil poet of the modern age. 'Better far' says Bharathi, 'to initiate a poor soul in the rudiments of knowledge than to endow a thousand choultries and erect

15. 'வள்ளல் புகழ்ந்து நும் வாய்மை யிழக்கும் புலவீர்காள் !
கொள்ளக் குறைவிலன் கேண்டிற் றெல்லாந் தரும் கோதிலென்
வள்ளல் மணிவண்ணன் றன்னைக் கவிசொல்ல வம்மினே'
—திருவாய்மொழி
'பொய்ம்மை யாளரைப் பாடாதே எந்தை புகலூர் பாடுமின்
புலவீர்காள்' —சுந்தரர் தேவாரம்; திருப்புகலூர்ப் பதிகம்.

ten thousand temples.'[16] The religious institutions of southern India are slowly adjusting themselves to the conditions and requirements of the modern times. The enlightened head of the Tirupanandal Mutt has initiated the admirable policy of awarding an annual prize to the best Tamil scholar of the University of Madras.[17] The foundation of a residential University near Chidambaram offering instruction in all that is best in the culture of the east and west, marks a new epoch in the cultural history of the Tamil country. In grateful appreciation of the generous gift of the Rajah of Chettinad which brought the University into existence, the temple of learning and the sacred place where it is situated are named after him. In close proximity to the sacred hall of Cirrambalam where the mystic dance of the Lord explains the principles of cosmic life, the Annamalai University will stand for all time as the source of light and inspiration to countless generations of students and lovers of learning.

16. 'அன்ன சத்திரம் ஆயிரம் வைத்தல்
ஆலயம் பதினாயிரம் நாட்டல்
அன்ன யாவினும் புண்ணியம் கோடி
ஆங்கோர் ஏழைக் கெழுத்தறிவித்தல்'

—பாரதி நூல், பக். 126.

17. His Holiness Srilasri Kasivasi, Swaminatha Thambiran Swamigal Avergal of Tirupanandal has made an endowment yielding an annual interest of Rs. 1,000 "which is paid in cash to the candidate who stands first in the first class in Tamil in the Oriental Title examination (Vidwan Final) with Tamil alone as the subject." The prize is styled as 'King George V Memorial Tamil Prize."

THE IDEA OF AN INDIAN UNIVERSITY.

By

T. N. Siqueira, S.J.,

The Sashtiabdhapurthi of Sir Annamalai Chettiar deserves more than the customary recounting of a kind man's benefactions. He has used his great wealth not in scattering largesses to deserving causes but—without altogether neglecting other appeals for his help—in one very definite kind of philanthropic work, in fact the one which deserves the name if any work does, for it aims at *making men*: higher education. He has founded and maintained a university in the twentieth century! And though the Government has donated an equal 20 lacs of rupees towards its foundation and an annual grant of a lac and a half, the initiative of this noble project came from this great son of India.

The Annamalai University was the result of a long-felt need of a centre of higher learning in the Tamil Nad. A state university was eagerly asked for by the advocates of Tamil culture but the attraction of the established order and the fear of a loss of prestige in a smaller and less extensive university prevailed. It was at this time that Sir Annamalai came forward and offered to found and keep up a unitary residential teaching university.

That was in 1929. Twelve years have passed, and the Annamalai University has grown in numbers and prestige till it has about a thousand students and its degrees are not considered inferior to those of other

universities. It might therefore be a not unworthy way of honouring its founder to examine how far it embodies the idea of an Indian University.

I

Newman has for all time embalmed in his measured prose the true Idea of a University. That ideal—of a school of *universal* knowledge acquired by the study of literature and art and of all the sciences in their due degrees rising up to theology their queen—is true of all times and places because it is based on the very nature of things. A university, in any part of the world which is fit for one, ought to be in some way universal, as far as circumstances allow (not less) reflecting the manyfacetedness of God's own knowledge and the manykindedness of mankind. It does not, therefore, seem that there can be such a thing as an Indian university as distinct or different from an American or African or German university, for there cannot be a limited university.

But if there is no limit to a university's scope in regard to persons as well as subjects, there is a difference of approach and of spirit a difference of emphasis, which corresponds to and is an effect of the difference of climate, surroundings, history, economic condition, language, culture (which includes art, philosophy, religion, customs and manners) of each university's area. In studying the same Economics, for example, a different emphasis will inevitably be placed in an agricultural area like Travancore or Mangalore from an industrial part of the same country like Ahmedabad or Calcutta; and, taking India as a whole, a different spirit will inevitably pervade the teaching of, say, English poetry here from what would in Japan or France.

This obvious but seldom understood fact could be expressed in terms of a country's personality. Just as each individual boy or girl, though possessing the same human nature, possesses it in a different way (i.e. in a different proportion between the various faculties of body and soul which make up human nature), so too though all nations are made of men each has a different history, a different sum-total of experiences down the ages—geography and climate, food, wealth or poverty, occupation, art, conquest and independence, trade and communications, philosophy, religion etc. Every element of environment, in fact, and every event favourable or unfavourable moulds and completes and thus changes the personality of a people no less than of an individual. The Indian of 1941 is certainly not the same as the Indian of 1931, and still less is he the same as the African or the New Zealander or the Dutchman of 1941 or of 1931.

It is unintelligent and beside the point to ask which nation or individual is superior. They are different—the longer and richer and better their experience, the better and more complex their 'personality'. But most of this does not depend on them, for it is the work of extrinsic causes. The consequence for education is that just as each child has to be educated in terms of his own personality, so too each people has to be educated in terms of its own personality—taking this word in the less strict but no less true sense I have explained.

This does not mean that *what* is taught and learnt by each nation (or individual) should be different, but that the *way* it is taught and learnt, the *emphasis* on the different elements which enter into the process, the *approach* to the faculties, the *spirit* of the entire undertaking should be different and adapted to each different 'personality'.

Applying this to university education, with which we are chiefly concerned here, it means that there should be in an Indian university a distinctly Indian spirit, an Indian method of approch to universal knowledge. There should, of course, be no restriction of knowledge to things Indian, for that would be the very negation of education, whose property is to broaden and deepen the wells of our common human nature. But the processes of knowledge should begin from things known—i.e. Indian—and not from unknown quantities; what is under our very eyes and before our very doors should be first observed at first hand and recorded and impartially examined and only then should our conclusions be compared with those of visitors friendly or unfriendly, partial or impartial.

II

My idea of an Indian university is that it is a seat, besides other subjects, of the study of Indian history in a first-hand and thorough way. Is it not a standing disgrace to the nearly-a-century-old universities of India that the only largescale Indian History so far attempted has been in Cambridge? And perhaps even a great disgrace is that Indian History is not even a compulsory subject in the History groups of Indian universities and, at any rate, is not as popular as English or Greek and Roman History? The Patna University has recently formed a plan for the bringing out of a serious History of India. But there will be many a pause in the work for want of continued support and appreciation of the importance of the undertaking. Indeed, the writing of a competent and first-hand History of India requires a thorough re-research and re-study of each period and should therefore be portioned out among the different universities, so that each Province may study at close quarters the events in which its own past was chiefly

forged and the whole of India. A body such as the Inter-University Board or an All India Editorial Board, may co-ordinate the work of the various Universities and bring out a History of India worthy of India.

In this work of research and collaboration the Annamalai University would have to play an important part. Being as it is the only residential university of the Tamil Nad and situated near some of the most interesting sites in all history, it is a duty it owes to India to ascertain and make known the facts of the past as they were and drew the right lessons from them. Messrs. C. S. Srinivasachari and R. Sathianathan have indeed done some work in this direction. But how little interest and encouragement has been shown to them and how few facilities have been given them for actual research as distinct from mere teaching! When highly paid scholars from foreign universities covet the riches of our history, is it not regrettable that our own able and willing workers are so few and so little encouraged? If an Indian university does not do this work, what university will?

The scientific teaching of the Indian languages, too, is an important part of an Indian university's duty. These languages contain treasures of literature and philosophy and even in their earliest works reveal a real genius for synthetic and rounded thought. And yet Sanskrit is still in many ways an undiscovered mine and its riches are hardly suspected by the vast majority of Indian graduates. It is left to Schooenhauer and Max Muller and Rhys Davids and F. W. Thomas to grow lyrical over India's heritage while Indian universities are content to praise Sanskrit and starve Sanskritists. If the Bhandarkar Institute were transplanted, to Harvard it would get

much more concrete encouragement than it does in Poona in spite of the ungrudging services of men like V. S. Sukthankar. If a critical edition of the *Mahabharata* were decided upon in any other country it would not languish for want of support as it does in the one country which can call itself Bharatavarsha.

And the Annamalai University, which is *the* university of the Tamil Nad has the sacred trust of studying and developing the Tamil language. This ancient and supple language is rich in possibilities; it has to be bent to modern needs of quick communication, science, public life. Where can a body of able scholars be found fit and willing for this great task—on which the progress of the Tamil Nad and through it of all India depends—if not in the nearest approach we have to a Tamil Nad University? If the staff is so burdened with the work of ordinary teaching that it has little energy left for research and creative writing, the very primary purpose of an Indian university would seem to be defeated.

It is not in this direction, therefore, that retrenchment is needed. If it were at all needed, it might more easily be made in those Departments which do not distinguish an Indian university from a European or an American, or which do not distinguish a university in South India from one in Bengal or Bombay. The note of universality of courses (*universitas rerum*) should of course be kept. But is it more costly to preserve in the twentieth century than it was in the Middle Ages when Paris, Bologna, Oxford and Cambridge, Nalanda and Takshasila first embodied the idea of a university?

Another subject which one expects to be taught and studied in an Indian university is Indian art. In the welter of foreign imitations in music, painting, dancing and

architecture which have followed in the wake of western education, India's special contribution to the world's art is in danger of being smothered by her own children. The debasement of Indian music, Carnatic as well as Hindustani or Bengali, by the depraved taste of the groundings in the cinema has been frequently pointed out in the Press —but in vain. The introduction of cheap foreign instruments (like the harmonium) which are out of keeping with the spirit of our music, has aslo been deplored by true musicians in vain. The style of dancing, building and painting has also been affected by unthinking imitation of uncongenial foreign models. Against all these evils it is the function of an Indian university, with its staff of experts and its atmosphere of detachment from sordid gain and the confidence it enjoys with the public at large, to fight— not by vapid denunciation which provokes a denser obstinacy, but by positive study and demonstration of the beauty and adaptability to modern conditions of Indian artistic motifs.

III

Of the spirit of an Indian university it is easier to feel than to speak. It consists in a general attitude of appreciation and respect for things Indian, a general initial disposition to examine them fairly and improve them if possible rather than condemn and disown them out of hand, an enlightened love which wants the true good of the country and is not stopped by petty partisanship or narrow provincialism in acknowledging and correcting wrong. Such a spirit seems to exist, to a certain extent, at Santinikatan where one breathes the atmosphere of India in the mango groves, the open-air classes, the frescoed library, the Kala Bhavan. There is something of this spirit in the Annamalai university, too, and especially in the recently opened

school of Indian Music where in sound-proof rooms strains of vocal and instrumental Carnatic music are produced from early morning till late at night.

More than all this, however, the Indian University should draw to itself and keep as in one family teachers and students from every race and province and language and religion, so that living and working together they may grow in self-knowledge and mutual knowledge and appreciation. In a well-known but never sufficiently known passage in *The Idea of a University* Newman says:

"If I had to choose between a so-called University which dispensed with residence and tutorial superintendence and gave its degree to any person who passed an examination in a wide range of subjects, and a University which had no professors or examinations at all but merely brought a number of young men together for three or four years and then sent them away....if I were asked which of these two methods was the better discipline of the intellect....if I must determine which of the two courses was the more successful in training, moulding and enlarging the mind, which sent out men the more fitted for their secular duties, which produced better public men, men of the world, men whose names would descend to posterity, I have no hesitation in giving the preference to that University which did nothing, over that which exacted of its members an acquaintance with every science under the sun."

This may seem strongly said. But it points a lesson which we in India need more than anywhere else, for our name is Disunion. Our universities should therefore above all insist on the *universities personarum*—the living together of *different* students and teachers, eating together, playing, discussing, studying and writing together, so that mutual knowledge may breed

mutual appreciation which casts out mistrust. In the removal of communal mistrust, which is the chief and perhaps only obstacle to India's progress, our universities must play the greatest part. For it is there that the future leaders of India are formed. And mutual confidence, without which no democratic government can stand, can neither be brought nor commanded but must be patiently deserved—by common *life*. The value of hostels and, above all, of hostel life (which means as much common life as is possible) cannot therefore be overstressed in any scheme of university education. School boys and girls may be too young to profit by a full measure of hostel life. But in the university the mixture of different students and professors on a familiar and equal plane is essential more than anywhere else in a country as vast and heterogeneous as India is.

The place of a residential university in India is therefore very high. The smoothing over of religious, communal, and caste differences which the Annamalai University has achieved in a few years in the heart of the Tamil Nad would alone more than justify its existence and even the gratitude of India to its founder, even if it did nothing for the advancement of research and higher learning. But it has done much more, and it has much more to do still for the fulfilment of the idea of an Indian—and particularly a South Indian—University. It has to cultivate in its alumni those habits which mark the truly educated man—the spirit of impartial inquiry and calm examination, the spirit of understanding and independent judgment, the spirit of openmindedness and appreciation of whatever is true and good and beautiful wherever it may be found, the spirit of universal love and service towards God and men. Sir Annamalai will have the consolation of having made all this possible.

UTILISATION OF SOME OF THE AGRICULTURAL WASTE PRODUCTS IN SOUTH ARCOT DISTRICT

By

M. L. Sitaraman, M.Sc.

AND

S. Aravamuthachari, M.Sc.

There are vast possibilities in this district for preparing agricultural and vegetable products for more profitable export. A lot of work is still to be done, in improving agricultural methods, for co-ordinating labour and capital, and for starting new mills and cottage industries, to cope adequately with the agricultural resources and to provide work for the mainly agricultural population for more months in the year.

Paddy, groundnut, sugar-cane and cashewnut constitute a few of the most important agricultural produce of South Arcot district. The methods at present in vogue for preparing the produce for the market are far from satisfactory. Also, paddy husk, cashewnut shell, groundnut shell and bagasse are still to-day wasted or burnt uneconomically as low grade fuel. In some places only an attempt is made to extract the corrosive liquid from the cashewnut shell by antiquated, crude and highly inefficient charring processes.

Casuarina and croton sparsiflorus are two other unexploited potential resources. The climate and backwater soil are ideal for casuraina (Casuarina equisetifolia). The

ubiquitous croton sparsiflorus is as much of a pest to the agriculturist as the water hyacinth (Eichorina crassipes) is in the Bengal province, Tanjore and South Arcot districts. The seeds of the plant provide a high grade drying oil of commercial value.

We are not concerned so much with the agricultural methods in this district which here as elsewhere in the province leave much scope for improvement. The bulk of the agricultural population consists of small land holders, poor, conservative and incapable of following the expert experimental advice of the Agricultural Department. To give only one example, the annual loss to the Madras Presidency due to poor quality of exported groundnuts has been estimated at 52 lakhs of rupees.[1]

About 40% of acreage in this district is under rice cultivation. Rice bran is rich in vitamin B complex and in mineral salts especially manganese. At present the bran is used only as cattle food. If industrial solvents are available at cheap rates it is possible to extract the oil out of the bran and use it in soap industry. Bran could be concentrated and standardised and vitaminised food products manufactured from it. Experiments have shown that charcoal from paddy husk would be as efficient as bone-charcoal in the clarification of sugar cane juice. The essential quality in an adsorptive charcoal is high porosity which is found in this charcoal. The ash from this husk contains about 90% of silica and 7% of calcium oxide and has never been tried for the manufacture of glasses, silica wares and silica gel. If experiments with this ash should prove suc-

1. Groundnut by Dr. B. V. Narayanaswami Naidu and Hariharan (Annamalai University Publication).

cessful, paddy husk would prove to be a cheap source of pure silica. Nature separates for us pure silica through the rice plant; it would be impossible to economically purify clay and yet we have been allowing paddy-husk-ash to go to waste.

Groundnut is the second important agricultural produce of this district and about 28% of the total area is under cultivation (425,725 acres in 1938-39). South Arcot of all districts in the Presidency stands unique as the largest producer of groundnut, the loose soil being best suited for its cultivation. The bulk of groundnut is exported after decortication. A moiety only of the kernels is worked by crude presses for the valuable oil. The hulls which constitute 29% of the pod contain 17-20% of furfural yielding material, that is, mainly Xylose, a reducing sugar, which can easily be obtained by extraction with 0·2 N sulphuric acid. The average composition is as follows:

Moisture	4·69%
Ash	3·16%
Ether extract	3·22%
Pentosans	16·03%
Reducing sugar	1·63%
Cellulose	50—60%

We would recommend the utilisation of the hulls for the preparation of activated charcoal, furfural, paper pulp and other cellulose products. We can but mention a few of the many uses and modern industrial applications of the groundnut oil which in our presidency has been used mainly as an adulterant of ghee and sesame oil. Apart from the manufacture of a poor quality of soft soap, hydrogenated products, margarine, rubber substitutes, lubricating oils, motor fuel and glycerine could be prepared from the oil by

suitable processes. Due to the present war India has been deprived of markets (Germany, Italy and Netherlands) consuming nearly 8 crores of rupees worth of groundnuts. We would therefore urge the importance of a hydrogenation plant at Mettur in conjunction with the alkali industry as the by product hydrogen is sufficient to hydrogenate 16 tons of groundnut oil per day to start with. The glycerine content of the oil is next only to that of cocoanut oil and dynamite glycerine can easily be manufactured from it. Also claims have been made for the application of India rubber substitutes prepared from groundnut oil in the manufacture of dynamite itself, in place of kieselgur. Besides the nitrated oil mixes easily with nitrocellulose. According to Chopra, groundnut oil is comparable with olive oil as a nutrient and food, and can be given in wasting diseases. In our opinion it is more palatable than olive oil; artificial ghee, closely simulating the natural product, can be prepared from the oil by incorporating the vitamins, diacetyl and ethyl butyrate in standard amounts and the food value thereby considerably enhanced.

The cake (groundnut meal with oil content of 5-8%) can be used as a substitute for wheat flour for the manufacture of bread, delicacies and biscuits. It is a valuable cattle food with the highest protein content 46·4%. The cakes from damaged and mouldy nuts alone, need be used as manure. The easily extractable protein of the cake can find application as a binding medium in the paint industry and for the preparation of distempers and other decorative paints.

Cashewnut shell contains about 50% of a corrosive liquid. The amount of the shell which is exported from South India is enormous as the following figures will show:

1923 Export to America from South India 1,00,000 lbs.
1937 Export to America from South India 27,000,000 lbs.
1938 Export to America from South India 58,000000 lbs.

Newer methods of extraction with hot oils are more efficient and 50% of the available shell liquid is extracted thereby from the highly honeycombed shells. Steadeler in 1847 extracted the liquid from the shells with ether and later workers have shown the principal constituent of the liquid named Cardanol to be a valuable phenol. Polymerisation products of this liquid find a variety of applications, including insulating varnishes, dyes and cold setting cements.

The oil from the cashewnut or the cashewnut kernel oil as it is popularly called, has been studied fully but is of little interest on account of the fact that the cashewnut is relished like almonds as a delicacy either in the raw state or with a little dressing.

The seacoasts of Southern India enjoy the heavy monsoon rains and an equitable climate (about 68° to 104° F) throughout the year. The soil in the west coast is suitable for the cultivation of the cocoanut; and the loamy soil in the east coast is best suited for the cultivation of casuarina. Dry distillation of casuarina wood does not seem to have been carried out in any large scale. The wood is either burnt as fuel or converted into charcoal by crude, wasteful process. Distillation of the wood as in Bhadravati would make it possible to recover methanol, acetic acid and wood-tar. Also the yield and quality of the charcoal would be improved. It would be of interest to know that the price of this charcoal has risen in recent years and it has been found to be ideal for charcoal driven motors and lorries. With rationing of petrol the demand

for casuarina charcoal is bound to rise very much. Besides, it has been reported that a brown dye could be extracted from its barks.

Croton sparsiflorus (Eliamanakku or Naimilakkae in Tamil) has been classified by botanists as belonging to the croton family. To the lay man it is apparently a misnomer being neither a beautiful croton nor sparse in flowers. Really it is an insidious pest and a terror to the agriculturist; it has constituted itself as a first class nuisance around roads, and railways supplanting the erstwhile cactus, in the municipal areas, in and around the villages. In short it is an outstanding eyesore threatening the beauty of the Indian landscape. However, the seeds of this hated dictator amongst weeds, which usually mature in the spring between February and April, were collected and investigated in the Annamalai University Chemical Laboratories. The seeds were found to contain 33% of a clear light yellow oil having the usual smell of drying oils. The Iodine value of the oil is 172 (Wijs). Also it is quick drying. It is equal, if not inferior to linseed oil and could be put to the same uses as the latter. Also rubber substitutes, water-proofing material and paint vehicles could be manufactured from the oil as is usual from drying oils. The ash of the seeds also contain Calcium 20%, Potassium 14%, Phosphorus 29·8% and Nitrogen 4·9%. The seed cake will therefore be an excellent manure. The Agricultural Department of the Government of Madras in one of their communications refer to the manurial properties of the compost of this plant.

Lack of space restricts us from going in detail into the vast chemical potentialities of sugar cane refuse popularly called bagasse. The romantic juice of the plant has

centered to itself the major attention of the sugar cane producer and the chemist. Also the cane growers have been content to burn bagasse in the wet or dried state as fuel to concentrate the sugar cane juice. It belongs to the bamboo (Graminaceae) family, a classical source of wood pulp. It is a pity that sugar cane plant especially the bagasse which is surely less refractory than the bamboo and easily more pliable after a necessary malleating and crushing process, has not been worked in South India as the raw material for first class wood pulp that it can be expected to furnish. Mention might also be made here of the use of the harder portions of bagasse in the production of light fire resisting material of the 'Heraklith' type. Moreover, the making of cattle feed with bagasse screenings and molasses as fodders has been experimented upon and found to replace the usual feeds like ragi straw.

It is no idle dream or Laputan phantasy to talk of isolating wood pulp from bagasse or groundnut hulls; of extracting silica from paddy-husk-ash or valuable motor spirit and aviation petrol by fermentation of molasses and by cracking groundnut and other fatty oils. We must point out that cheap hydroelectricity and the astounding improvements in chemical industrial technique have revolutionised the manufacture of basic chemicals and industrial products. Also the exigencies of the last Great War and the present world wide war have, if we might borrow an apt chemical word, catalysed industrial output. Thus the raw materials of a past century need no longer in all places be the raw materials of the present century. In the nineteenth century utilisation of waste products was necessary to sustain an industry and to make it economical and profitable; now the socalled waste products generally furnish new and important materials, so

that there is a chain of industries around the key industry. Often minor industries assume prominence and the main industries become less significant. In democratic America democratisation in politics has had its repercussions in democratisation of thought and of industry. For example, after common salt is removed from sea water, the mother liquor, formerly looked upon as stale, unprofitable and unworkable is now, in their hands, an important source of magnesium, a metal so vital in the elemental state or as alloys, for peace or for war. One of the biggest brains of India, Sir M. Visveswarayya, has recognised the necessity for industrialisation as the means of increasing the standard of living of the teeming millions of our country at the present day and the only salvation for India. 'Industrialise or perish' is his sage advice to the country at the present day, with its vast untapped mineral and vegetable resources. India like America is a subcontinent and there need be no fear of the markets becoming glutted with finished products. Our idea is that for a long time to come, India could well afford to consume the fruits of her own agriculture and industry. India should industrialise so that it may first be self-contained and self-sufficient. We fervently hope that eminent economists also would agree with our point of view.

THE WORD 'गोमण्डल' AND COMMENTATORS.

By

K. A. Sivaramakrishna Sastri.

In his standard and popular work on Indian Logic, the Muktavali, Visvanatha Pancanana classifies words into four kinds— यौगिक, रूढ, योगरूढ and यौगिकरूढ. As illustrations he cites four words —पाचक, गोमण्डल, पङ्कज and उद्भिद the first comes under यौगिक because it conveys an idea— a cook—only with the help of its derivative significance. The second गोमण्डल quite in contrast with the first conveys something without any reference to its etymological significance. The third पङ्कज, when it means lotus, has the double signification रूढि and योग simultaneously. The last word उद्भिद is capable of denoting two different ideas—a tree and a sacrifice—with the help of the two significations alternately operating.

Now what does the term गोमण्डल mean? Is it a द्वन्द्व compound to be split into गो and मण्डल or a single compound denoting a single idea? As it cannot be determined by the text itself we depend upon commentaries. Among those now available, the Dinakari, a very popular one, does not explain the word but only remarks that in many books the reading गोमण्डप instead of गोमण्डल is found, but it is an error.[1]

1. 'मण्डलादि' इत्यत्र बहुपुस्तकेषु 'मण्डपादि' इति पाठः। स प्रामादिकः। The Dinakari Balamanorama Edn. (1923), pp. 581-85.

Another Commentator, Sri Rayanarasimha, criticises Dinakara and tries to justify the reading set aside by him. He says that the word मण्डल taken as रूढ means a country; but if it is taken as यौगिक it may mean somebody taking cream. In the same way the discarded मण्डप also may be taken as रूढ when it means a tent or a canopy while it is equally capable of conveying the idea of a man tasting cream. Therefore neither of the two is to be preferred to the other. Further he suggests 'गवादिपदम्' as a satisfactory reading.[2] Ramarudra, a commentator on the Dinakariya does not agree with Dinakara in rejecting the reading मण्डप[3].

Now, forgetting the two commentaries for a while, let us examine the text itself which runs thus—

(1) यत्र अवयवार्थ एव बुध्यते तद्यौगिकम्। यथा पाचकादिपदम्।

(2) यत्र अवयवशक्तिनैरपेक्ष्येण समुदायशक्तिमात्रेण बुध्यते तद्रूढम् यथा गोमण्डलादिपदम्।

2. 'केचित्तु 'यथा गोपदमण्डलादिपदम्' इति मूलपाठभ्रमेण '"मण्डलादि" इत्यत्र बहुपुस्तकेषु "मण्डपादि" इति पाठः, सप्रामादिकः' इत्याहुः। तदसत्, मण्डपपदेन रूढ्या वितानबोधनेऽपि मण्डं पातीति (?) व्युत्पत्त्या मण्डपानकर्तुरपि बोधनात् मण्डपपदस्य रूढपदोदाहरणत्वं न संभवतीत्याशयेन 'मण्डलादि' इति पाठः समर्थितः। तथात्वे रूढ्या देशविशेषवाचकमण्डलादिपदस्य मण्डं लाति इति व्युत्पत्त्या मण्डादानकर्तृवाचकत्वेन यौगिकरूढतया मण्डलपदस्यापि रूढपदोदाहरणत्वासंभवात्। तस्मात् केषुचित् पुस्तकेषु 'मण्डपादि' इति पाठः। केषुचित्पुस्तकेषु 'मण्डलादि' इति, केषुचित् 'गवादि' इति पाठः। पाठत्रयमध्ये आद्यपाठद्वयस्यापि दुष्टत्वेन ग्रामादिकत्वं परिकल्प्य निर्दुष्टत्वात् अन्त्यपाठ एव स्वीकार्य इति।'

प्रभा, Balamanorama, Edn. pp. 583-4.

3. एवञ्च मण्डपपदस्य गृहरूपार्थे रूढत्वसंभवेन न रूढमध्ये परिगणनानुपपत्तिरिति मन्तव्यम्।

तरङ्गिणी, B. M. Edn. p. 581.

(3) यत्र तु अवयवशक्तिविषये समुदायशक्तिरप्यस्ति तद्योगरूढम्। यथा पङ्कजादिपदम्।

(4) यत्र योगार्थरूढ्यर्थयोः स्वातन्त्र्येण बोधः तद्यौगिकरूढम्। यथा उद्भिदादिपदम्।[4]

It must be noted that in each case, except in the second, the author gives only one illustration. In the second case two examples, according to the commentators, are cited. A glance at the text tells us that the author might not have found any necessity to cite two examples in this case alone and in all probability might have given only one example as in all other cases. It is also to be noted that Dinakara without giving any reason simply discards the other reading as spurious. Therefore we should find out the meaning of the term गोमण्डल which may help us in maintaining the propriety of the text and in justifying Dinakara's remark on गोमण्डप.

We come across very many terms in Sanskrit like गोपुर, गोमेद, गोष्ठ, गोयुग and षड्गव. The first means a tower, the second, a precious stone, the third a cattleshed, and the fourth and the fifth, two and six animals respectively. In all these cases the first part गो has entirely lost its significance. Hence we can freely use those terms along with any word and coin forms like अश्वगोष्ठ, गोगोष्ठ, उष्ट्रगोष्ठ, अश्वगोयुग and उष्ट्रषड्गव. These terms which were once used strictly to mean cowshed, couple of cows etc., have gradually lost the significance of their part गो and become current coin in their loose sense. The great grammarian Katyayana

4. B. M. Edn., pp. 581-8.

first treats गोष्ठ, गोयुग and षड्गव as terminations to be added to the *pratipadikas* (stems) like अश्व etc., and later considers them as compound words without any significance attached to their part गो[5]. Kaiyata, the commentator on Patanjali's *Mahabhashya*, going a step further, seems to have treated them as रूढशब्दs like तैल and प्रवीण.[6] The word तैल is derived by adding a *Taddhita* termination to the stem तिल to mean gingelly oil. If this significance is to be rigidly followed, terms like सर्षपतैल and इङ्गुदीतैल become contradictions. So we have to rely upon grammar to get the forms but not the meanings of रूढ. The second प्रवीण, generally used to mean skilful or well versed, is derived as प्रकृष्टः वीणायाम् (expert in Vina—a musical instrument). Therefore it goes without saying that the term प्रवीण in the expression व्याकरणे प्रवीण loses its derivative sense and stands for skilful. Hence we may use वीणायां प्रवीण without redundancy.

In the light of the considerations urged above it is clear that we need not attach any value to a part of a com-

5. उपमानाद्वा सिद्धम्—उपमानाद्वा सिद्धमेतत्। गवां स्थानं गोष्ठम्। यथा गवां तद्वदुष्ट्राणां ... गोयुगच् शब्दश्च प्रत्ययो न वक्तव्य इति। गोर्युगं गायुगम्। यथा गोस्तद्वदुष्ट्रस्य उष्ट्रगायुगम्। तैलशब्दश्च प्रत्ययो न वक्तव्य इति। प्रकृत्यन्तरं तैलशब्दो विकारे वर्तते। एवञ्च कृत्वा तिलतैलमित्यपि सिद्धं भवति।

Patanjali on V. 2-29, Vol. III, Kielhorn, p. 376-7.

6. व्युत्पत्त्युपाय एव तिलानां विकारस्तैलमिति। रूढिशब्दश्चायं स्नेहद्रव्यवृत्तिः तथा च साहश्याश्रयणमन्तरेण इङ्गुदीतैलादयः शब्दाः प्रयुज्यन्ते। यथा प्रकृष्टा वीणायां इति व्युत्पत्तिमात्रं क्रियते। कौशलं त्वस्य प्रवृत्तिनिमित्तम्। तेन वाणायां प्रवीणः इत्यपि भवति।

On Patanjali, (V. 2-29), Vol. III, Benares Edn., p. 72.

pound in order to fix its meaning. Why not then we say that the word गोमण्डल also stands simply for मण्डल, without any value attached to its part गो, seeing that that word has the following accepted meanings: (1) the globe; (2) a multitude of cows?[7] At the same time मण्डल also means 'a globe'.[8] In contrast to this भूमण्डल and भूवलय mean 'a terrestrial globe.'[9] It is further to be noted that in no Sanskrit lexicons do we find the word गोमण्डप, while गोमण्डल is found in some of them though its 2nd meaning 'a multitude of cows' and other derivative meanings alone are given.[10]

The above observations enable us to infer that Visvanatha Pancanana and his commentator Dinakara treat the whole term गोमण्डल as conveying a single idea—the globe. This establishes the propriety of the text and justifies the remark of Dinakara that गोमण्डप in the place of गोमण्डल is erroneous. Do we still expect him to assign any reason for his rejection of the reading गोमण्डप? No; therefore the two commentators Ramarudra and Ramanarasimha do not seem to have caught the significance of the text, and of the remark of Dinakara.

7. V. S. Apte, Sanskrit English Dictionary (1922), p. 193. L. R. Vaidya Sanskrit English Dictionary (1889), p. 251. Sir M. Monier-Williams, Dictionary (1899), p. 365.
8. Sir M. Monier-Williams, ibid, p. 775. V. S. Apte, ibid, p. 409.
9. V. S. Apte, ibid, p. 409.
10. Taranatha Tarkavacaspati, Brahdabhidhana, Vol. IV, p. 2713. St. Petersburg Dictionary, p. 808.

THE TREFOIL DECORATION IN INDO-MEDITERRANEAN ART

By

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Amongst the relics discovered at Mohenjo Daro and Harappa perhaps there is none that has been reproduced so much in modern books on ancient art and on Indian civilization than the fragment of a little image of a man whose head is surrounded by an ornamental ribbon, and whose body is covered with a cloth decorated with trefoil.[1] (Fig. 1). He has almost always been described as a *yogin,* perhaps on account of the slight opening of the eyelids and the position of the eyes, without paying attention to the diadem-like

1. Marshall, *Mohenjo Daro and the Indus Civilization,* III. pl. XCVII; Mackay, *Die Induskultur,* pl. 20, (Leipzig, (1938); Mackey, *The Indus Civilization,* pl. H. No. 2; Mookerji, *Hindu Civilization,* p. 19. (London, 1936); *Memoirs of the Archaeological Survey of India,* No. 41. pl. 1: (Calcutta, 1929); Masson-Oursel (and others), *Ancient India and Indian Civilization,* frontispiece (London, 1934); Rawlinson, *India,* pl. i, (London, 1937); Coomaraswamy, *History of Indian and Indonesian Art.* pl. 1; *Archaeological Survey of India, Annual Report,* 1925-26, pl. xlii (Calcutta, 1928); Reau, *Arts Musulmans, extreme Orient,* p. 119, fig. 17 (Paris, 1939). Childe, *New Light on Most ancient East* pl. xxi, (London 1934); Mackay, *la civilisation de l'Indus,* pl. VIII. No. 2, (Paris, 1936); etc.

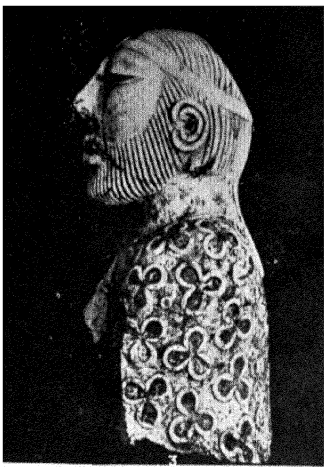


Fig. 1.
Bust of a proto-Indian King
—*Archaeological Survey of India*

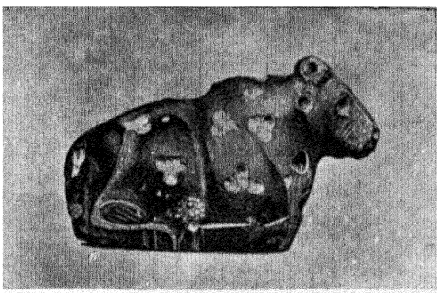


Fig. 2.
A Sumerian Bull decorated with Trefoil.

Fig. 3.
Man-headed bull from Sumer adorned with Trefoils.
Louvre Museum

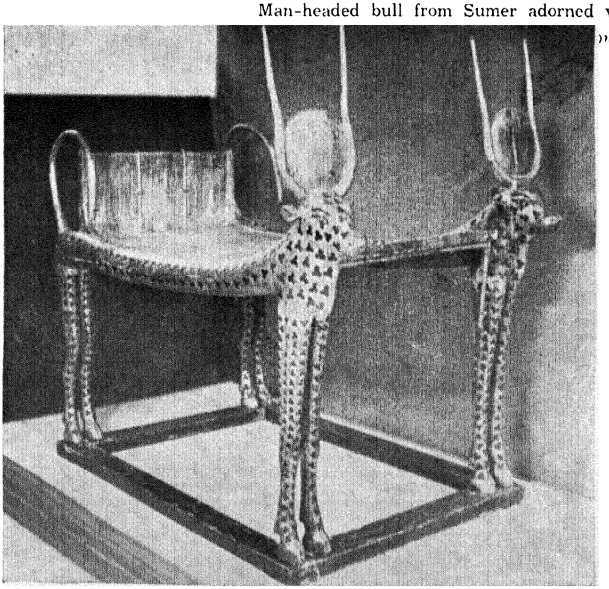


Fig. 4.

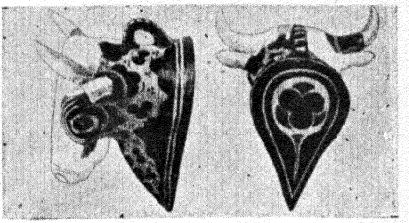


Fig. 5.
Minoan Bull Rhyton

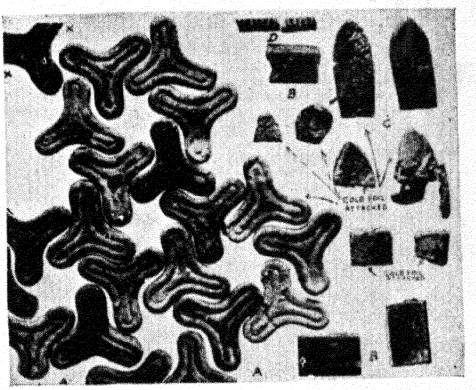


Fig. 6.
Trefoil faience inlays from Crete

Fig. 7.
Perseus killing the Medusa.
(Painting on an Attic jug)

ribbon that encircles his head nor to his richly decorated garb. A *yogin* in India has never used such beautiful apparel. The early person whose image we now contemplate, thanks to the labour of the Archaeological Department, was a king of the proto-Indian people, a Mina, "the shinning one," "a farmer of the Grab."[2] The fillet or ribbon round his head was the real royal diadem, that *bandha* which was tied round the head when the *pattabisheka* of later times was performed.[3] In the Assyrian poem of Gilgamesh, a Sumerian king of the city of Uruk, we read that his ancestor Utnaphishtim orders one of his servants to supply new apparel to Gilgamesh and among other things he also mentions this royal ribbon: "Be the band round his head made new."[4] This ribbon was the royal diadem preserved by Greek and Roman rulers in their state functions.

The rich mantle over his shoulders was perhaps a ceremonial robe, a sort of priestly-kingly cloak, for both functions, religious and royal were united in him.[5] Let us pay attention to the pattern that decorates this robe. It is the treble leaf, scientifically denominated *Trifolium*, and ordinarily called *trefoil*.[6] That this design was not uncommon in

2. Cf. Heras, *The Religion of the Mohenjo Daro People according to the inscriptions*, J. U. B., V. pp. 25-26.

3. Cf. for instance *S. I. I.*, XI, *Bombay-Karnatak Inscriptions*, I, p. 107, inscr. No. 110, l. 12, *E. I.*, VII, p. 130; vv. 2-3.

4. Leonard, *Gilgamesh, Epic of Old Babylonia*, p. 71. (New York, 1934).

5. Heras, *op. cit.*, p. 26.

6. My confrere and colleague Rev. Fr. J. F. Caius tells me that there are in India three species of *Trifolium* : *T. fragiferum*, Linn. confined to temperate Kashmir; *T. pratense*, Linn. (Red Clover) that extends from Kashmir to Garwal at 4,000-8,000 ft.; *T. repens*, Linn. (White Clover) in the temperate and alpine Himalayas and

that early period, the existence of beads decorated with it among the proto-Indian relics sufficiently evinces.[7] After all there was nothing extraordinary in the pattern. It could have been selected to decorate the royal cloak in the same way as any other beautiful design.

But if we now turn the pages of history a bit, we shall be greatly surprised to find the same pattern decorating three bulls hailing from Sumer.[8] They are images representing the "bull of heaven," "the leading bull of the year," *i.e.* the first constellation of the solar year.[9] (Fig. 2) One of these three bulls has besides the sun, the moon and a star—probably the morning star—on its back in the centre of the trefoils, that cover its body.[10] Another specimen, which is now in the Louvre Museum has a horned human head after the fashion of the late Assyrian bulls representing the guardian spirits of the royal palace.[11] (Fig. 3). Was there any link between the trefoils of India and the trefoils of Sumer?

in the Nilaghiris. With no other indication than a trefoil sign it is impossible to identify the *Trifolium* suggested by the above decorative motif.

7. Marshall, *Mohenjo Daro and the Indus Civilization,* III. pl. CXVI. Nos. 40, 49, 53; pl. CLII, No. 17; Mackay, *Further Excavations at Mohenjo Daro,* pl. CXXXVII, No. 57; 66; pl. CXXXVII, No. 97; pl. CXXXVIII. No. I.

8. Evans, *The Palace of Minos,* II, p. 261.

9. Sayce, *Lectures on the Origin and Growth of Religion as illustrated by the Religion of the Ancient Babylonians,* pp. 292-293. (London Oxford, 1897).

10. Wooley, *The Development of Sumerian Art,* pl. 55, a. (London).

11. Heuzey, *Catalogue des Antiquites Chaldeennes,* No. 136, (Paris, 1902).

Our inquiry will produce still more interest when we realize that this pattern has been used to decorate the images of the Egyptian goddess Hathor represented as a cow, on each side of the funeral couch of the famous Pharaoh Tutankhamen. (Fig. 4). Elliot Smith has explained at length how this celestrial cow, a totally "uncow-like creature," was placed on the sides on the Pharaoh's couch. Hathor was supposed to be the giver of life, the earliest of the great Egyptian Mothers, the divinity that had to give new immortal life to the deceased. "The object of the cowshaped couch was to ensure by magical means this translation of the deceased to heaven."[12] Now these two images of Hathor in Tutankhamen's couch are lavishly gilded and fully decorated with *lapis-lazuli* trefoils of beautiful uniformity. Was there any special magical charm in this decoration of Hather in the funeral chamber of Egypt's sovereign?

Our suspicion is confirmed by the fact that we find the trefoil once again decorating a sacred object in Crete. Amongst the objects discovered by Sir Arthur Evans at the Little Palace of Knossos, there is a clay bull's head rhyton painted black and white. (Fig. 5). The most common device in this painting is the trefoil, which also finds a special central place at the back of the bull.[13] The sacred use of these bull's shytons is well known. We have seen one of them equally decorated from Sumer. In India amongst the Saivas in relatively modern times receptacles with a bull's head outlet are not infrequent. Similar ones

12. Elliot Smith, *Tutankhamen and the Discovery of his tomb by the late Earl of Carnavon and Mr. Howard Carter,* pp. 103-112 (London, 1923).

13. Evans, *op. cit.,* I, fig. 370; II, p. 536.

have been found in Egypt.[14] The decoration at least of two such rhytons one in Sumer and another in Crete with the trefoil does not seem to be completely accidential.

Moreover, again at Knossos a number of trefoil faience inlays, some of them coated with gold foil were unearthed by Sir Arthur Evans.[15] (Fig. 6). The rich material used for these inlays, accidentally fallen from the piece they were decorating, shows the great importance of this pattern which we find once more used in the Greek classical period.

In an Attic jug of the middle of the 6th century B.C., now kept in the British Museum, there is a painting representing the slaying of the Medusa. Persus is actually thursting his *harpe* into the throat of the female monster (Fig. 7). He wears a fawn-skin over a chiton. That skin is decorated with a number of circles surrounded with dots, which are described as stars, and in their midst there is a clear specimen of a trefoil.[16]

Similarly on another Attic vase of the Louvre Museum goddess Athena is shown carrying a shield, the device of which is three treble leaves round a central circle.[17] (Fig. 8). Again the *chiffon* worn by a *corai* (a maiden consecrated to religious service) of the same Museum is decorated

14. Flinders Petrie, *Hyksos and Israelite Cities*, pl. XXXII (London, 1906).

15. Evans, *op. cit.*, I, p, 451.

16. Woodward, *Perseus. A Study in Greek Art and Legend*, pl. 13-a (Cambridge, 1937); Harrison, *Prolegomena to the Study of Greek Religion*, p. 225, fig. 45 (Cambridge, 1908).

17. *Corpus Vasorum Antiquorum*, France 8, Louvre, III, Hg, pl. I, No. I.

with small circles grouped in threes in a trefoil fashion.[18] Finally a silen painted on a vase of the Boston Museum has his forehead and bold head decorated with at least five visible trefoil signs.[19]

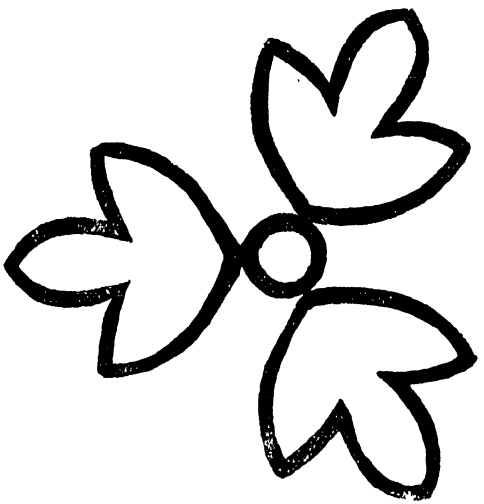


Fig. 8. Three trefoil device on Athena's Shield (Attic Vase of Louvre Museum)

Going further west we come across the same decoration in an Etruscan mirror. (Fig. 9). The main figures of this work of art are Apollo and Dionysos between whom one sees the head of the sun surrounded by a circle of rays. Above this group and walking to the left there is a huge panther that has a small animal in its mouth. The whole body of the feline is decorated with spots arranged in trefoil groups. Only once four points have been grouped in-

18. De Rider, *Les bronzes antiques du Louvre*, I, Les figuarines, No. 236, (Paris, 1913).

19. Boston, No. 10, 179: Beazley, *Attic Red-figured Vases in American Museums*, p. 82, fig. 50 bis (Cobridge U. S., 1918).

stead of three.[20] What the symbolism behind this brute is we are not able to say. It is the constant companion of Dionysos and the Maenads even down to the classical period. Dionysiacal panthers decorated with trefoils and at times with quatrifoils may be seen in an Etrusean tomb at Tarquinia,[21] on a painted vase of the Museum of Munich,[22] and on a *stamnos* of the British Museum.[23]

The same trefoil three dot arrangement is used to decorate the cloth that covers the lower part of the body of Apollo in a vase painting of the Hermitage Museum of Petrograde.[24]

The trefoil in Crete developed into a quatrifoil sometimes. A Mycenacan bull on a vase found at Cyprus (Fig. 10) has a number of trefoils on the upper and lower portions of its body. The quatrifoils form a central row. The front portion of the animal is covered with small crosses, which are the last development of the trefoil.[25]

The same evolution we discover in the painting of a bull rhyton carried by a servant on a wall in the tomb of Men-Kheperra-serib, High Priest of Amon at Thebes. This rhyton has mixed trefoils and quatrifoils.[26]

20. Gerhart, *Etruskische Spiegel,* pl. CCXCII; Harrison, *Themis,* p. 442, fig. 136 (Cambridge, 1912).

21. Weege, *Etruskische Malerei,* p. 68. fig. 62, (Hall, 1921)

22. Ducati, *Storia della Cermica Greca,* II, p. 330, fig. 247.

23. B. M. *stamnos* No. E443; Beazley, *op. cit.,* p. 55, fig. 35.

24. *Hermitage Museum Catalogue,* No. 1807.

25. *Corpus Vasorum Antiquorum,* Great Britain, I, British Museum, II, C. b, pl. 7, No. 10.

26. Meyer, *Fremdendarstellungen,* pp. 596-600; Max-Muller, *Egyptian Research,* II, pl. I-XXII.

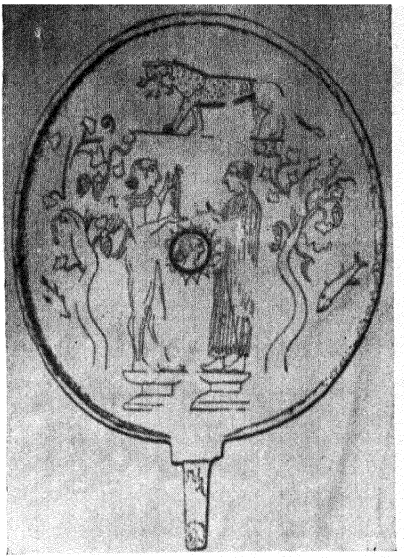


Fig. 9.
Etruscan mirror with the figures of Apollo, Dion, Ysos and the Sun.

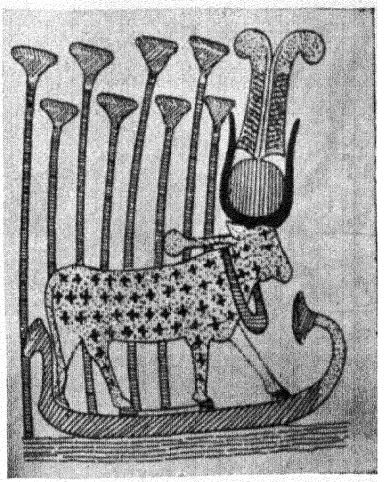


Fig. 11
Hathor decorated with quatrifoils or crosses.

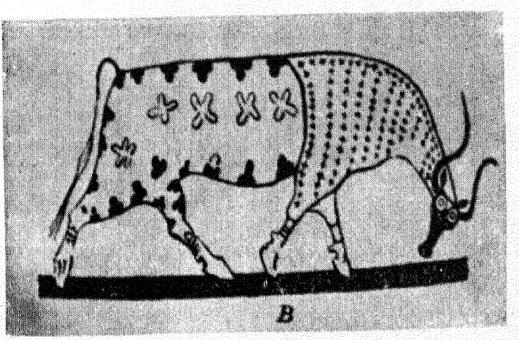


Fig. 10.
Bull decorated with trefoils, quatrifoils and crosses (Mycenaean Vase)

Consequently, the celestial cow Hathor also was decorated with quatrifoils or crosses in later specimens. (Fig. 11).

The trefoil decoration has also been found in Spain adorning the forehead of busts of the mother goddess unearthed in the vicinity of Alicante, on the eastern coast of Spain, and in Ibiza, one of the Balearic Islands.[27] The trefoil appears once more in a scrol-frieze, round a mosaic of the labours of Hercules, discovered near Valencia.[28]

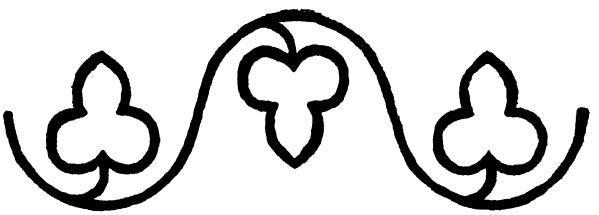


Fig. 12. Trefoil frieze round mosaic of Hercules' labours (Valencia, Spain)

Fig. 13. Trefoil frieze round church gate at Rubio, Spain.

(Fig. 12). This frieze is repeated round a romanesque gate of the Church of Rubio in Catalonia, built in the 13th century (Fig. 13).

27. Lafuente Vidal, *Excavaciones en la Albufereta de Alicante* (*Antiqua Lucentum*), fol. XI (Madrid, 1934).

28. Rodenwaldt, *Arte Clasico*, p. 779 (Barcelona, 1933).

It is said that the Druids, who according to some authors were the priests of the nation prior to the Celts in France in England and in Ireland,[29] a nation which to all evidence seems to be Mediterranean, held the trefoil in great veneration.[30] In fact traditions connected with the life of St. Patrick inform us that he used the trefoil in order to explain the mystery of the Holy Trinity to the Irish pagans, a fact which seems to suppose that the trefoil was known to them as a religious symbol or object. Even now in some European countries the quatrifoil seems to have some superstitious beliefs attached to it. It is supposed to be a sign of good luck.[31]

What was the symbolism behind this simple sign?

The real meaning of the trefoil is still a mystery. One thing seems certain, that it must have a very high perhaps religious significance; for in the cases studied above, it is always found in connection with something sacred.

In Mohenjo Daro the priest-king who was the representative of god amongst the people, in Egypt the image of a goddess, in Sumer the heavenly bull, in Crete an object used for sacred purposes, in Greece the dress of a god and the shield of a goddess. Amongst the Etruscans a symbolic animal, the constant companion of a god; in Spain the headgear of a goddess, a mythological represen-

29. Cf. Heras, "Quienes eran los Druidas?," *Ampurias* (Barcelona), II, pp. 17-32.

30. Kendrick, *The Druids. A Study in Keltic Religion*, pp. 124-125. (London, 1927).

31. De Gubernatis, *La Mithologie des plantes*, II, p. 360. (Paris, 1882).

tation and the gate of a Church. Further archaeological discoveries will perhaps enlighten us on this interesting subject. The trefoil looks like a trifle. Yet it may have a sublime symbolism behind it.

In point of fact the triple leaf of the bilva tree, *Aegle marmelos,* is still much venerated in India and is dedicated to Siva in his three-fold function of creator, preserver and destroyer. The leaves of the vilva tree are placed on the *linga* to cool the heated deity.[32] One of Siva's titles is *Bilvadanda,* i.e. "he who holds the staff made of Bilva."

The sacredness of this trefoil leaf may be guessed from the following story narrated in the *Skanda Purana*:

Once upon a time there was a hunter who was living in the region near the Himalayan mountains. One day while hunting he was overtaken by nightfall. In order to escape the wild beasts, he climbed a tree where he spent the night in great discomfort. Naturally he often shook the branches of the tree while changing his position, and at each motion of the branches many leaves were falling. Now, a *linga* happened to be under that tree and since the tree was a *bilva,* the trefoil leaves were falling over the *linga.* Siva is said to have been highly pleased. When a few days after the hunter died, Yama the god of death was put to flight after a violent quarrel and Siva carried the hunter to heaven. Later Yama complained to Nandi, Siva's vehicle and servant of the latter's treatment. Then Nandi replied: "This man has been a great sinner who had no scruple to shed blood; but before he died, he fasted,

32. Martin, *The Gods of India, A brief Description of their History, Character and Worship,* p. 240 (London Toronto, 1914).

watched, and offered *bilva* leaves to the *linga*. This action has cleansed him from his sins."[33]

Some statues of Saiva saints and devotees are represented with a *jata-makuta*, or hair head-gear, ending in a trefoil (Fig. 14). In modern times images or painting representing Siva or his *linga* are often associated with the three leaves of the bilva (Fig. 15). Even Vishnu and Krishna are sometimes shown with a trefoil, or three peacock feathers joined in the shape of a trefoil, upon their *makuta* (Figs. 16 and 17).

Sir Arthus Evans has tried to explain the appearance of the trefoil decoration in Minoan Art by showing its plastic evolution from the intersection of three C's.[34] Yet we may now state that the trefoil decoration did not originate in Crete, as it existed before in India, in Sumer and in Egypt. After considering the religious connections of this motif throughout the Indo-Mediterranean civilizations, we are of opinion that the trefoil is a symbol of the divine triad, God who is one and who is three,[35] a tenet which persistently exists in all those civilizations as if it were the religious heirloom of the race.[36]

33. *Ibid.*, pp. 174-175. Cf. *Skanda Purana*, III, 3, Adh. 2, vv. 31-32; Gupte, *Hindu Holidays and ceremonials with Dissertation on Origin, Folklore and Symbols*, pp. 208-215 (Calcutta, 1916).

34. Evans, *The Palace of Minos*, IV, pp. 314-315.

35. Heras, *"The Religion of the Mohenjo Daro People," J.U.B.*, V, pp. 16-18; Heras "Further Excavations at Mohenjo Daro," *The New Review*, IV, pp. 73-75.

36. I shall explain the existence of this belief in all the Indo-Mediterranean nations in my work on *The Religion of the Proto-Indians and its Evolution in the Mediterranean Nations.*

Fig. 14.
A Saiva Saint with the trefoil on his head
—*Museum of the Ind. His Research Institute, St. Xavier's College, Bombay*

Fig 15.
Modern painting of Siva's Linga with the three leaves of the bilva on the background.

Fig. 16.
Modern painting of Vishnu with a peacock feather trefoil on the *makuta*.

Fig. 17.
Venugopal with a peacock feather trefoil on the *makuta*.

RECENT DEVELOPMENTS IN INDIAN CURRENCY

By

Prof. V. G. Kale, M.A.,

Poona

I welcome this opportunity of contributing an article to the Commemoration Volume to be presented to the Rajah Saheb of Chettinad and thus of paying my tribute of appreciation of the large-heartedness and liberal mindedness of an old friend and colleague in the Council of State. Being away from headquarters for several days and having little free time at my disposal, I had to choose for this article a theme that appeared to be topical and was handy when I decided to sit down to write. Nevertheless, I feel that Indian currency is a fascinating subject and intrinsically of great national importance and no further apology is needed to justify the selection I have made of one small aspect of that large theme.

Even a superficial observer will have noticed that in Great Britain and in India, the authorities have been trying to take to heart the lessons taught by the experience of the last Great War in the matter of economic policies and, as far as practicable, to avoid what turned out to be mistakes twenty years ago. Problems relating to prices, exchanges, currencies, taxes, rates of interest and public debt are being handled with great caution but with promptness and decision in the light of past experience. This feature of the situation is particularly striking in the field of cur-

rency and exchange and appeals with special significance to a person like myself who had to comment upon Indian currency policy in the central legislature and outside, during and immediately after the last War. The rupee-sterling exchange was put up then with every unfavourable development in trade and with every rise in the price of silver. There were ordinances and bans on the breaking up and transport of rupees, but all the coins that were poured into circulation vanished into hoards or melting pots, creating an artificial scarcity of money. This time necessary adjustments are anticipated and are promptly carried into effect and the control of exchange is more tight and satisfactory. We have now the comparative advantage that the control of the country's currency and credit is no longer divided as it then was but is unified in the hands of the Reserve Bank of India. In the last war inordinate demands for metallic currency defeated all efforts to supply it, including the issue of one rupee and two and a half rupee currency notes. Let us see how a similar demand for metallic currency on an abnormal scale has been met during the present war, without serious inconvenience to the public and to the authorities. The latest report on currency and finance issued by the Reserve Bank of India gives interesting information on this subject.

During the "busy season" in India, *i.e.*, from September to March when commercial crops are being moved after harvests, notes and rupees are in demand for payment to cultivators and for financing of seasonal trade activities. During the other—*viz.*, the "slack season"—there is movement of currency in the opposite direction and money returns to commercial centres through the channels of revenue collections and payment for manufacturers and so on. All the currency that flows out into the countryside does

not, of course, return in this way. The normal expansion of business activity and some hoarding absorb a small part of the currency which means an addition to the money that remains with the public. "The volume of currency in circulation usually reflects the incidence of the busy and slack seasons, rising and falling with their alteration . . . . . Ordinarily the slack season is taken to start when currency begins to return about February or March and ends about September or October when return gives place to absorption of currency." (Report on Currency and Finance, 1940-41). This process of outflow and inflow of expansion and contraction and of absorption of paper and metallic currency is a normal feature of the business life of India. Abnormal conditions such as a serious disturbance in the country's balance of trade, a famine, a wide spread panic, changes in the supply or prices of the precious metals tend to cause violent fluctuations in the above seasonal process of currency distribution. In the last war some of these factors combined to produce huge absorption of rupees and led to grave embarrassment of Government who could not provide metallic currency in the face of abnormal rises in silver prices and the rapid disappearance of rupees from circulation.

How are absorption and return of currency calculated ? Since the Reserve Bank of India took up the management of the currency "the variations in the figures of notes in circulation as given in the weekly returns of the Issue Department of the Bank are taken to indicate absorption or return. Notes in circulation now include the amounts held in the Government Treasuries as well as by the public, but exclude the holdings of the Banking Department of the Reserve Bank. The absorption or return of rupee coin means the decline or rise respectively in the

amount of rupee coin held in the Issue Department of the Bank." Since 1935-36 rupee coin does not include half rupees, which are shown under small coin and since 24th July 1940, rupee coin includes Government of India rupee notes. It should be noted here that the circulation of one rupee notes the right to the conversion of which into rupee coin was withheld from the public was an important measure adopted to stem the tide of the absorption of rupee currency.

On the outbreak of the War, it was noticed that a heavy demand, which was bound to be partly speculative and partly the result of increased business activity, should arise and that a larger amount than usual of notes and rupees should go into circulation. But the absorption of currency during the two years 1939-40 and 1940-41 was extraordinarily heavy amounting to Rs. 118 crores. This compares curiously enough, with a return of currency during 20 years ended 1938-39 of Rs. 68 crores! The following figures show absorption and return during 19 months of war up to March, 1941 and the 19 months before the war ended August, 1939 :—

Absorption = (+)
Return = (−) (In lakhs of Rs.)

19 Months	Notes	Rupees	Small coin	Total including small coin
January, 1938 to August, 1939	— 4,39	— 22,54	— 6	— 26,99
September, '39 to March, 1941	+ 78,77	+ 52,76	+ 6,91	+ 138,44

The monthly absorption and return of currency are given in the following two tables :—

I

1939—40

(In lakhs of Rs.)

Currency Month	Notes	Rupee coin	Small coin	Total
April ..	— 38	+ 1	+ 14	— 23
May ..	— 92	— 18	+ 7	— 1,03
June ..	— 3,18	— 3,22	—18	— 6,68
July ..	— 6,20	— 3,50	— 27	— 9,97
August ..	+ 47	— 2,46	— 18	— 2,17
Sept. ..	+ 24,03	+ 33	+ 12	+ 24,48
Oct. ..	+ 7,38	+ 2,60	+ 33	+ 10,31
Nov. ..	+ 9,81	+ 3,04	+ 43	+ 13,28
Dec. ..	+ 15,81	+ 5,28	+ 53	+ 21,62
Jan. ..	+ 1,92	+ 3,37	+ 49	+ 5,78
Feb. ..	+ 1,71	+ 2,56	+ 41	+ 4,68
March ..	— 1,00	+ 2,35	+ 32	+ 1,67
Total ..	+ 49,45	+ 10,08	+ 2,21	+ 61,74

II

1940—41

(In lakhs of Rs.)

Currency Month	Notes	Rupee coin	Small coin	Total
April ..	+ 1,06	+ 2,56	+ 29	+ 3,91
May ..	+ 8,92	+ 6,81	+ 46	+ 16,10
June ..	— 1,59	+ 15,12	+ 46	+ 13,99
July ..	— 9,02	+ 5,18	+ 42	— 3,42
August ..	— 6,43	+ 3,62	+ 25	— 2,56
Sept. ..	— 2,31	+ 2,03	+ 20	— 8
Oct. ..	— 51	+ 1,00	+ 39	+ 88
Nov. ..	+ 48	+ 83	+ 22	+ 1,53
Dec. ..	+ 12,10	+ 1,13	+ 46	+ 13,69
Jan. ..	+ 3,80	— 1,36	+ 47	+ 2,91
Feb. ..	+ 4,43	— 1,41	+ 38	+ 3,37
March ..	+ 8,18	— 2,28	+ 31	+ 6,21
Total ..	+ 19,11	+ 33,28	+ 4,28	+ 56,62

From Table No. I above it will be seen that there was a huge absorption amounting to as much as Rs. 57 crores during the first four months of the war. In the succeeding months demand for currency in the shape of notes steadily declined but rupees continued to be in large demand obviously for hoarding. On the collapse of France in June, 1940, in particular, hoarding of rupees became a craze. In June the absorption of rupee coin amounted to Rs. 15 crores. The return of notes in the three months, June to August was extraordinarily heavy and totalled nearly to Rs. 22 crores between 15th June and the end of August. Coin was freely issued to the public without limit, with the result that the holding of rupee coin of the Issue Department of the Reserve Bank, which had stood at nearly Rs. 76 crores on 1st September, 1939, dwindled to Rs. 35 crores in the third week of June, 1941, having fallen below the statutory limit of Rs. 50 crores by the end of May, 1940.

This scarcity of currency artificially created by hoarding had to be promptly faced. Government took two steps to meet the situation. Coin was to be supplied in exchange for notes only to the extent of the normal and reasonable requirements of individuals and refusal to accept coin or notes in payment of a debt or otherwise was prohibited. These measures produced the desired effect and the situation was finally eased with the introduction of the Government of India one rupee notes and the increased supplies of newly minted rupees. As it would have taken time to provide adequate supplies of new one rupee notes, notes which had been printed in 1935 to meet a possible contingency but which had not been actually used, were immediately put into circulation. These notes took the place of rupee coin both for legal and practical purposes and the

Reserve Bank of India Act was suitably amended to rectify the position as regards its holding of rupees. New and larger sized issue of one rupee notes has now been put into circulation.

The short-lived demand for coin was not confined to rupees but extended also to small silver coins and to nickel and copper. Th absorption of small coin in 1939-40 was the largest since 1919-20. The absorption of small coin during the first seven months of the war amounted to Rs. 2·63 crores. During the year 1940-41, the absorption reached record heights being Rs. 4·26 crores and there was no return of small coin in the slack season of the year. In the 19 months of the war period the absorption of small coin amounted to Rs. 6·9 crores whereas in the 19 months of the period before the war there had been a return of 6 lakhs of rupees.

Foreign exchange has been systematically controlled from the very beginning in the present war, both in England and in India, and the rupee-sterling rate has been steadily maintained. The balance of trade and the large balances which the Reserve Bank of India was enabled to have in London have facilitated the maintenance of the exchange at a fixed level. The problem, again, has not been complicated by a steady and abnormal rise in the price of silver as it happened in the last war. The heavy absorption of rupees and of small coins indicated the direction of the difficulties that might arise in this connection and prompt steps were taken to prevent possible undesirable developments. Two ordinances were issued one in July and the other in December, 1940 announcing that the fineness of the half rupee and of the whole rupee would be reduced from eleven-twelfths of fine silver and one-twelfth of alloy to one half of fine silver and one half of alloy.

These measures were obviously intended to prevent unnecessary waste of silver in view of large demand for coin and to discourage hoarding. The rupee and the small silver coin have thus been now reduced to the true status of token currency.

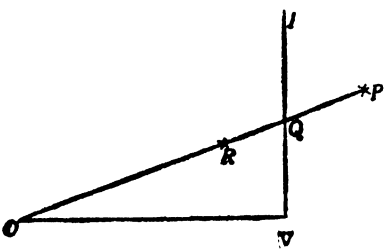
In a war like the present, reaching ever-widening dimensions, the importance of keeping the country's currency system on an even keel cannot be exaggerated and the brief account given above of the developments which have taken place in the domain of Indian currency and of the farsighted policy which the Government and the Reserve Bank have adopted with commendable promptness in connection therewith, is calculated to create a feeling of confidence in the public mind that the authorities concerned will meet every difficult situation as it arises, in the appropriate manner.

ON A PROJECTIVE TRANSFORMATION

By

P. Kesava Menon, M.Sc.

The focal properties of conics are usually studied by means of projections involving the circular points and circular lines. This paper is mainly an attempt to study those properties by a simpler projective transformation in a single plane. The transformation is then extended to spaces of higher dimensions.



Let O be a given point, and l a given line. Take any point P in the plane determined by the point O and the line l. Let OP intersect l in Q and let K be the harmonic conjugate of P with respect to O and Q.

If P moves along a curve C, R will move along a curve Γ which we shall call the 'transform' of C.

As an immediate consequence of the definition of the transformation we have

Theorem 1. All straight lines through O transform into themselves.

Let V be the foot of the perpendicular from O on l. Then, since P, R divide OQ harmonically, it follows that l bisects the angle PVR. Hence we have

Theorem 2. A straight line through V transforms into its reflection about the line l.

As a corollary to the above theorems we get

Theorem 3. The transformation preserves the angles at O in magnitude and sign and the angles at V in magnitude but changes the sign.

It is clear that the transform of any point on the perpendicular bisector of OV is at infinity; conversely, the transform of any point on the line at infinity lies on the perpendicular bisector of OV.

Therefore we get

Theorem 4. The perpendicular bisector of OV transforms into the line at infinity; and conversely, the line at infinity transforms into the perpendicular bisector of OV.

2. Next we shall discuss the equations of the transformation. Taking O as origin and OV as the initial line, we

have, if (r,θ), (r',θ) be the points P and R respectively, and OV=2c, then

$$\frac{1}{r} + \frac{1}{r'} = \frac{2}{OQ} = \frac{\cos\theta}{c} \tag{1}$$

If (x,y), (x′, y′) be the cartesian co-ordinates of P, R respectively, then dividing both sides of (1) by cos θ and sin θ separately, we get

$$\frac{1}{x} + \frac{1}{x'} = \frac{1}{c}, \text{ and } \frac{1}{y} + \frac{1}{y'} = \frac{x}{cy} = \frac{x'}{cy'};$$

so that

$$\left.\begin{aligned} x &= \frac{cx'}{x'-c}, \quad y = \frac{cy'}{x'-c}; \\ \text{and} \\ x' &= \frac{cx}{x-c}, \quad y' = \frac{cy}{x-c}. \end{aligned}\right\} \tag{2}$$

Hence we have the

Theorem 5. The transformation is projective, so that the transform of an algebraic curve of the nth degree is a curve of the same degree. In particular, straight lines transform into straight lines and conics into conics.

Also, from (1) we have

$$\frac{r'}{r} = \frac{x'-c}{c} = \frac{c}{x-c} \tag{3}$$

Let the transforms of the points P_i (x_i, y_i) be P_i' (x_i', y_i') (i=1, 2, 3) and let the radii vectors OP_i, OP_i' be denoted by r_i, r_i' respectively.

If, further, Δ, Δ' denote the areas of the triangles $P_1 P_2 P_3$, $P_1' P_2' P_3'$ respectively, then

$$\Delta' = \tfrac{1}{2}\begin{vmatrix} x_1' & y_1' & 1 \\ x_2' & y_2' & 1 \\ x_3' & y_3' & 1 \end{vmatrix} = \tfrac{1}{2}\begin{vmatrix} \frac{cx_1}{x_1-c}, & \frac{cy_1}{x_1-c}, & 1 \\ \frac{cx_2}{x_2-c}, & \frac{cy_2}{x_2-c}, & 1 \\ \frac{cx_3}{x_3-c}, & \frac{cy_3}{x_3-c}, & 1 \end{vmatrix}$$

$$= \frac{1}{2\prod_{i=1}^{3}(x_i-c)}\begin{vmatrix} cx_1, & cy_1, & x_1-c \\ cx_2, & cy_2, & x_2-c \\ cx_3, & cy_3, & x_3-c \end{vmatrix}$$

$$= \frac{-c^3}{\prod_{i=1}^{3}(x_i-c)}\Delta = -\frac{r_1' r_2' r_3'}{r_1 r_2 r_3}\Delta \qquad \text{(by (3)).}$$

Thus we get

Theorem 6. If P_1, P_2, P_3 be three points with transforms P_1', P_2', P_3' respectively and Δ, Δ' be the areas of the triangles $P_1P_2P_3$, $P_1'P_2'P_3'$, respectively, then

$$\frac{\Delta}{OP_1'\,OP_2'\,OP_3'} + \frac{\Delta}{OP_1 . OP_2 . OP_3} = 0.$$

Consider a circle with centre O and radius a. Putting $r=a$ in (1) we see that its transform is the conic.

$$\frac{a}{r'} = \frac{a}{c}\cos\theta - 1,$$

having O as a focus, the initial line as the transverse axis and whose semi latus rectum is a and the distance of the directrix from the focus is c. Hence we get the

Theorem 7. Circles with centre at O transform into conics with a focus at O and the corresponding directrix common, the semi latera recta being equal to the radii of the corresponding circles. Conversely, a system of conics having a focus and the corresponding directrix common, can be transformed into concentric circles by a proper choice of O and the line l.

3. A number of interesting deductions can immediately be made. We give a few as illustrations.

Since the chords of a circle subtending a constant angle at the centre envelop a concentric circle, the point of contact of a chord with the envelop being on the bisector of the angle subtended by the chord at the centre, we get on transformation (using Theorem 3) the

Theorem 8. Chords of a conic subtending a constant angle at a focus envelop a conic having that focus and the corresponding directrix common with the given conic. Further, the point of contact of a chord with the envelop lies on the bisector of the angle subtended by the chord at the focus.

If a polygon be inscribed in a circle and circumscribed to a concentric circle, then

the sides of the polygon subtend a constent angle at the common centre. Correspondingly we have the

Theorem 9. If a polygon be inscribed in a conic and circumscribed to another having one focus and the corresponding directrix common with the former, then the sides of the polygon subtend a constant angle at the common focus.

Moreover, the necessary and sufficient condition that a polygon of n sides be circumscribed to a circle of radius a and inscribed in a concentric circle of radius b is $a=b\cos\pi/n$.

Therefore we have

Theorem 10. The necessary and sufficient condition that a polygon of n sides may be circumscribed to a conic of semi-latus rectum a and inscribed in another conic having one focus and the corresponding directrix common with the former and whose semi-latus rectum is b is $a=b\cos\pi/n$.

If in Theorem 6 we take P_1, P_2, P_3 on a circle with centre O and radius a, the area of the triangle P_1, P_2, P_3, will remain constant if the sides subtend constant angles at the centre. Hence we immediately deduce

Theorem 11. If P_1, P_2, P_3 be three points on a conic such that the sides of the triangle $P_1P_2P_3$

subtend constant angles at a focus, O, and if Δ denotes the area of the triangle $P_1P_2P_3$, then

$$\frac{\Delta}{OP_1 \cdot OP_2 \cdot OP_3} \text{ is constant.}$$

Since the maximum triangle inscribed in the circle is equilateral, it follows that the maximum value of $\frac{\Delta}{OP_1 \cdot OP_2 \cdot OP_3}$ is attained when the sides of the triangle subtend the same angle at O, and is then equal to $\frac{3\sqrt{3}}{4a}$, where a is the semilatus rectum.

A circle with centre at the midpoint of OV has its equation in the form

$(x-c)^2 + y^2 = a^2$. This by (2) transforms into

$$\left(\frac{cx'}{x'-c} - c\right)^2 + \left(\frac{cy'}{x'-c}\right)^2 = a^2,$$

that is, into the hyperbola

$$\frac{(x'-c)^2}{c^4/a^2} - \frac{y'^2}{c^2} = 1, \qquad (4)$$

which has the midpoint of OV as its centre, the semi-latus rectum and the conjugate axis to a and c respectively, and the x-axis for the transverse axis. Thus we get

Theorem 12. Circles having a common centre can be transformed into concentric hyperbolas whose conjugate axes coincide and are equal in length, and whose latera recta are equal to the radii of the corresponding circles [We have only to chose O, V

such that the common centre is the mid-point of OV].

The converse is also true.

Since O, V are fixed points for all hyperbolas of the system (4) being the points where the circle, concentric with the hyperbolas and having its radius equal to the common semi conjugate axis meet the transverse axis, it is clear that we can obtain from theorem 12, theorems analogous to theorems 8, 9 and 10. The actual statement of the theorems is left to the reader.

It may be remarked here that circles having centre at V transform into conics having a focus at V and the corresponding directrix common, the semi-latera recta being equal to the radii of the corresponding circles.

4. The method of transformation given above can easily be extended to spaces of higher dimensions. For the transformation in n-diamensions we have simply to replace the line l by an $(n\text{-}1)$-flat. If 2c be the distance of the $(n\text{-}1)$-flat from the origin O it follows, exactly as in the case of two dimensions, that the relation connecting OP and OP′ is

$$\frac{1}{r} + \frac{1}{r'} = \frac{\cos\theta}{c} \qquad (5)$$

If we take OV as the x_1-axis we get the following transformation scheme in cartesian coordinates:

$$x_1 = \frac{cx_1'}{x_1' - c}, \qquad x'_1 = \frac{cx_1}{x_1 - c} \qquad (i = 1, 2, \ldots\ldots n) \qquad (6)$$

The content Δ of an (n+1)—simplex formed by the points

$$P_r\,(x_{r_1}, x_{r_2}, \ldots\ldots, x_{rn})\ (r = 1, 2, \ldots\ldots, n+1) \text{ being}$$

$$\frac{1}{n!} \times \begin{vmatrix} x_{11} & x_{12} & \ldots\ldots & x_{1n} & 1 \\ x_{21} & x_{22} & \ldots\ldots & x_{2n} & 1 \\ \cdot & & & & \\ \cdot & & & & \\ \cdot & & & & \\ x_{n+1,1} & x_{n+1,2} & & x_{n+1,n} & 1 \end{vmatrix},$$

we have, if Δ' denotes the content of the transformed simplex, analogous to theorem 6, the

Theorem 13.

$$\frac{\Delta}{OP_1 \cdot OP_2 \ldots OP_{n+1}} + \frac{\Delta'}{OP_1' \cdot OP_2' \ldots OP'_{n+1}} = 0.$$

We can also write down without difficulty the analogues of the other theorems.

VYAVAHARIKA—PRAMANYA—A CRITIQUE

By

B. N. Krishnamurti Sarma, M.A.

To be true to Monism in philosophy one must naturally deny the reality of human experience altogether. To do so bluntly, would however be shocking to the susceptibilities of man. The Buddhist and the Advaitin have therefore tried to disguise the bitterness of their pill by the sugarcoat of व्यावहारिकप्रामाण्य (provisional validity) which they assign to human experience. Madhva feels that व्यावहारिकप्रामाण्य is merely a euphemism for "invalid." It may be a mouthful phrase; but it cannot satisfy the philosopher's hunger for truth. It is at best a self-complacent lie with which one cannot hope to deceive all men for all time.

What is this " व्यावहारिकप्रामाण्य " of reality, in point of fact? Is it a 'working kind' of reality? That can only be when the said reality is assured of unstultifiability.[1] The " व्यावहारिक real " is admittedly *not so*. It is futile to argue that our ordinary experiences may be credited with just as much " provisional " validity as a dream experience! For one thing there is no proof that our dreams are so *utterly* unreal as the argument assumes.[2] They are indubitably the result of वासना s—the subconscious impressions

1. व्यावहारिकता चास्य स्यादबाध्यत्वमेव हि।
(*Anuvyākhyāna*) I.4,89.

2. * * * नच स्वप्नोऽपि नो मृषा

of the waking state. It is otherwise difficult to see the necessity for a "material cause"[3] (वासना s) and an "efficient cause' in their case. Non-entities like the Sky-flower are never in need of such causes.

Even the dreams and illusions are not *wholly* unreal. There is an element of reality in them: —

भ्रमेऽप्यभ्रमभागोऽस्ति तेन्मात्रमुपजीव्य हि ।
बाधकज्ञानवृत्तिः स्यात् * *

No one cares to deny even at a later date that he had gone thro' such and such an experience.[4] To that content then, the dream or the illusion must be said to be real. The element of unreality comes in only at the point of its identification for the nonce with waking experience.[5] This aspect of it alone is corrected and set aside by the बाधक ज्ञान — not the entire experience *as such*. Thus, it is not so much the actual presence of the snake there as the psychological effect of its misapprehension there,—which is a fact—that is the real cause of the fright[6] and the flight of the perceiver.

3. जागरितप्रभववासनानिर्मितत्वात्तस्य स्वप्नस्य—
Samkara, B. S. B. III,2,6

4. यद्यपि स्वप्नदर्शनावस्थस्य सर्पदंशनादिकार्यमनृतं तथापि तद्व-गतिः सत्यमेव फलं । प्रतिबुद्धस्याप्यबाध्यमानत्वात् ॥ नहि स्वप्नादुत्थितः स्वप्नदृष्टं मिथ्येति मन्यमानः तदवगतिमपि मिथ्येति मन्यते कश्चित् ।
(Samkara B.S.B. 2,1,14)

5. जाग्रत्त्वमिति हि भ्रमः । (AV. I,4,90).

6. सर्पभ्रमादावपि हि ज्ञानमस्त्येव तादृशम् ।
तदवार्थक्रियाकारि तत्सदेवार्थकारकम् ॥ (AV. I,4,91).

The example of dreams and illusions would moreover be powerless to prove the "provisional validity" of non-existent things. It is beyond the capacity of the unreal to serve as a practical means of response-satisfaction[7] such as is partially at least found to be the case in dreams and illusions. At any rate, there is difference of opinion anent such fitness[8]—whereas both parties to the controversy are agreed on the fitness of the real to operate as such a means of response-satisfaction.[9] Why not then admit the reality of the world in so far as it admittedly ' 'अर्थक्रियाकारि' especially when the 'real' has been admitted to be अर्थक्रियाकारि? The advantage of the argument is certainly on the side of Madhva in so far the अर्थक्रियाकारित्व of what is "मिथ्या" (unreal) is yet in doubt and to be established.

II.

It is difficult to condemn world perception as 'innately deceptive.' The statement that everything is deceptive and unreliable cannot be made without some reservation at least in favour of the very reasoning and grounds on which such a thesis is sought to be based.[10] If this reasoning itself and those grounds themselves are deceptive the contrary proposition would be true that everything is sure and certain.[11] The kind of "negative elench" of the Khandanakara would

7. बाध्यं नार्थक्रियाकारि।
8. साधकत्वमसत्यस्य साध्यं विप्रतिपत्तितः (AV. II, 2, 228).
9. साधकत्वं तु सत्यस्य साक्षिणो ह्यावयोर्द्वयोः।
सम्यक् सम्प्रतिपन्नं * * * AV. II,1,94.
10. मिथ्यात्वं यदिदुःखादेस्तद्वाक्यस्याग्रतो भवेत् । AV. I,1,17
11. भ्रान्तत्वं भ्रान्तताचेत्स्यात्कथं नाभ्रान्तिसत्यता? AV. III.2,98.

defeat its own purpose and would at once put such *irresponsible* debator out of court in any intellectual parley.[12] Such ultra scepticism would recoil upon the Advaitin himself and besmirch his own certitude of his Sakshi (self). Such a doubting Thomas can have no justification to open his mouth and make any statement whatever. He must bid good-bye to all attempts at arriving at the truth of the Vedanta through study and investigation : वेदान्त वाक्यानि हि सैत्रेरुदाहृत्य विचार्यन्ते । वाक्यार्थविचारणाध्यवसाननिर्वृत्ता हि ब्रह्मावगतिः Samkara on B.S.B. 1.1.2. He would forfeit his place among inquirers after truth (परीक्षकः) and would be treated as outside the pale of debate (कथाबाह्य).

III.

If the validity of perception is called into question that of the monistic Scriptures could no more be exempt as both of them operate equally mediately and ultimately rest upon the same Sakshi for their interpretation and understanding.[13] It is futile to put in that tho' ultimate validity is denied to experience, it is conceded some sort of ' practical ' or ' provisional validity.' What precisely is this "provisional validity? Is it 'being valid for sometime' and turning out 'to

12. यदि नाङ्गीकृतं किंचिदनङ्गीकृततापि हि ।
नाङ्गीकृतेति मूकः स्यादिति नास्मद्विवादिता ॥

13. प्रामाण्यमागमस्यापि प्रत्यक्षादन्यतः कुतः ?
साक्षिप्रत्यक्षतोत्वेवं मानानां मानतेयते ॥ AV. III,2,55.

be invalid' at another ?[14] In that case, the Advaitic texts would share the same fate as worldly experience and the "dualistic texts (भेदश्रुतिs), For, it must be admitted in fairness that the two groups of texts (as conceived by the Advaitin) are mutually exclusive and each is in a state of *suspended animation* and hence invalid in the life time of the other.

Madhva also refutes the hairsplitting distinction in validity (drawn by the monist) between the Advaitic texts and the consolidated experience of duality and calls the Sakshi to witness. There can be no 'degrees of validity.' The very idea is the result of a confusion of thought. Factual validity can admit of no temporal limits. The true is true for all times and the untrue must remain so *now* and within a given spatio-temporal setting for ever. The so-called व्यावहारिक validity of experience is thus a misnomer. The world of experience that (according to the Advaitin) is *sure* to be nullified (invalidated) with reference to all the three periods of time. नासदस्ति भविष्यतीति त्रैकालिक निषेधप्रतियोगि cannot be said to be *valid* even now :—

कालान्तरेऽप्यमानं चेदिदानीं मानता कुतः ?

The Advaitin then must not be afraid to strike if willing to wound universal experience. He must therefore make bold to throw off his mask and coolly declare that world experience is *really invalid* as it is falsified by the true perception of the oneness of self. He should not play a double game of running with the hare and hunting with the hounds. He would have to state also if the Advaitic proof that establishes the oneness of the Atman by negating all

14. कंचित्कालं प्रमाणीभूय पश्चादप्रमाणी भावः..... ॥
(*Sannyayaratnavali*, III,2, p. 6b)

duality in release, *continues to be valid* and true for ever afterwards or not. In the former case, there would no longer be a pure monism. If the said proof (प्रमाणं) of oneness is likely to be stultified in its turn, there would be a recrudescence of world experience[15] then. Nay, from one point of view, an absolute validity for the Advaitic texts would be as much detrimental to the interests of a pure Monism as that of duality-texts. The Monist would thus find himself between the horns of a dilemma. He can neither reject the validity of his own monistic texts nor yet hold it to his heart.

Madhva argues that whatever else *may* or *may not* be admitted in release, Time as a fundamental category must be recognised to persist and endure. Any attempt to negative Time in release would still presuppose "Time." The persistence of time in release is also borne out by temporal adjuncts like तदा (then) अथ (thereafter) in passages like :—

> तीर्णोहि तदा सर्वान् शोकान् हृदयस्य भवति ।
> अथ मर्त्योऽमृतो भवति ।

descriptive of the state of release.

We are thus forced to ascribe the utmost validity to whatever is attested by our own intimate personal experience of outside reality. Such penetrating experiences (of an intimate or immediate character) are never seen to be falsified by reason or revelation :—

> क च प्रत्यक्षतः प्राप्त[16]मनुमागमबाधितम् ? AV. III, 2, 64.

15. मिथ्यात्वमानं मोक्षेपि मान किं नेति भण्यताम् ।
मानत्वेऽद्वैतहानिः स्यादमानत्वेऽप्यमोक्षता ॥ AV. III,2,61.

16. हृदहृष्टं तु यद्दृष्टं AV. II,2,231.

IV.

In this connection, Madhva criticises the plea of the Advaitin that the illusory identification of body and self experienced by us, is set aside by reason and revelation. He argues that far from our being under the grip of any such universal and ineradicable delusion, we are all of us generally conscious of the essential distinction between the two as is attested by the familiar judgment—"This is my body." Nor is such discrimination confined to human beings alone. It extends to the subhuman species as well—to the beasts, birds and even aquatic creatures whose lives are from the moment of their birth regulated by suitable responses to the instinctive emotions of love, aversion, fear and want. This shows that these creatures have a vivid recollection of their past lives and experience and instinctively model their present behaviour upon their past[17]. So then, judgments like 'I am fair' 'I am dark' are to be treated not as erroneous perceptual identifications but as figurative usages on a par with others like—'the cots are screaming." (मञ्चाः क्रोशन्ति).[18] The millionaire that has become bankrupt is said to be "lost". True, if there is such a widespread realisation of the distinction of body and soul as between a house and the tenant therein, one should expect to find people say : "My body is white; not I." Madhva explains that the reason why we do not usually find them saying so is not because they do not realise the body and

17. जातामात्रा मृगा गावो हस्तिनः पक्षिणो झषाः ।
भयाभयस्वभोगादौ कारणानि विजानते ॥
अस्मृतौ पूर्वदेहस्य विज्ञानं तत्कयं भवेत् ।
यदा देहान्तरज्ञानं देहैक्यावसितिः कुतः ॥ AV. III,2,68-9.

18. उपचारश्च कृष्णोहमिति कर्दमलेपने ॥

soul to be different; but because their realisation is not *vivid eno'* for the nonce, to rise above the counter-acting force of the all-pervasiveness of the self within the body. The body is shot thro' and thro' with the self that pervades it inside and out even as fire permeates a flaming ball of iron or a heap of coals. So much so that in our sheer inability to keep the two apart we are led to use such figurative descriptions as "coal burns" "the iron-ball is ablaze."[19] There is nothing strange in this. Even so should it be in the case of the body and the self when we say—'I am fair' 'I am dark', 'I am lost'; 'I have won' etc. There is no risk of their being misunderstood as such usages have come to stay (रूढ.) Moreover, awareness of mutual distinction may at times go together with an inability to find suitable linguistic expression to mark off one thing from another. We may be aware of the differentia without being able to explain it to the satisfaction of another.[20] Instances are not wanting of mothers of twins who though capable of distinguishing them, would yet be unable to explain the how of it to another's satisfaction. Hence the anxiety of Scripture to drive home the destinction and bring it to the forefront.

Thus, the pet theory of the Advaitin that perceptual judgments are inherently liable to be sublated by reason or revelation stands discredited partly because (1) as between the body and soul there is no case at all for such identity; (2) or because where the confusion is fostered in

19. व्याप्तत्वादात्मनो देहे व्यवहारेष्वपाटवात् ।
भेदज्ञानेऽपि चाङ्गारवह्निवत्स्वाविविक्तवत् ॥
भवन्ति व्यवहाराश्च ॥ AV. III2,70-71.

20. * * * नहि प्रत्यक्षगानपि ।
अर्थान्यथानुभवतः प्रतिपादयितुं क्षमाः ॥ (*Ibid*).

hedonistic circles it is *not* in the nature of a sense-perception at all (but of blind belief in a false doctrine); (3) or because tho' perceptual the judgment turns out to be valid as in कृष्णोऽहम्; or (4) because where it is invalid as in शुक्तिरजत (illusion of silver in nacre), it is rectified *not by reasoning* but by a valid and subsequent perception (बलवत्प्रत्यक्ष) itself! There is thus no case of a perceptual knowledge being set aside solely by inference or Scripture without reference to an irrefragable subsequent perception[21] or the test of conviction of साक्षी. The attempt at discrediting experience on extraneous grounds is thus doomed to failure. That being so, the self-validity of experience stands unshaken and the dodge of व्यावहारिकप्रामाण्य is completely exposed.

21. दृष्टस्य वस्तुनः बलवद्दृष्टिं विना
नान्यत् बाधकम् ॥—(*Tattvodyota*)

A FEW CHAPTERS IN ALKALOID CHEMISTRY

By

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The chemistry of the alkaloids is one of the most fascinating problems offered to students of organic chemistry. It is very difficult to make a choice of material for an article of this type and considerations of space impose restriction of method of treatment. However, a few topics have been selected for presentation in an easily readable form.

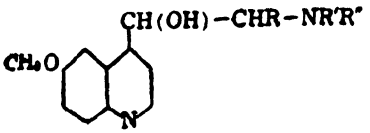
Cinchona Alkaloids.

The chief interest in this group of alkaloids is due to its application in malaria. Cinchona bark contains eight principal alkaloids of which quinine, dihydroquinine, quinidine, cinchonidine and cinchonine are most commonly used in medicine. Amongst these five, quinine occupies the foremost place of importance. It is very difficult even now, to correctly evaluate clinical results and in the case of cinchona alkaloids excepting quinine, it is extremely difficult to get others in sufficient quantity of absolute purity.

In spite of the fact that more than a century has passed since the discovery of cinchona as an antimalarial and despite numerous attempts to solve the problem of chemical constitution and antimalarial action, it cannot be said that the problem is solved. The difficulties associated with the problem are numerous, not the least difficult of

which is in instituting strictly comparative clinical tests, in view of the non-transmittibility of human malaria to experimental animals.

In 1912 Kaufmann[1] advanced the view that the use of quinine as an antimalarial agent is due to its substituted hydroxy quinoline ethylamine structure.



(R,R′ and R″ are hydrogen or alkyl groups)

The development of this thesis was held up until the discovery by Giemsa, Weise and Tropp[2] that "Pasmodium prœcox", parasite of bird malaria, can be used as an experimental infection. The effect of various drugs on this parasite is parallel to their action on that human malaria. A quantitative comparison between various drugs can be made by comparing the time required for the appearance of the parasites in experimentally infected canaries. This method, like the use of trypnose in some branches of chemotherapy, proved very useful.

Experiments with cinchona alkaloids have shown that for the same type of bird malaria, the lævorotatory alkaloid is more effective than its optical isomer. The alkaloids have furnished illustrations of striking changes in action with slight structural variations and conversely of profound structural alteration not affecting action to any

1. Ber., 1912, *45*, 3090; 1913, *46*, 63.
2. Arch. Schiffs. U. Tropenhygiene, 1926, *30*, 334.

marked degree. It is observed that antimalarial activity of cinchona alkaloids do not disappear unless (1) changes, such as the preparation of various ethers, are carried out to such an extent as to bring about an abnormal increase in molecular weight; (2) alteration in the basic character of the substance, e.g., by oxidation of the vinyl side-chain to carboxyl; (3) change in the structural type, e.g., conversion to quinicines by opening out the quinuclidine portion of the molecule.

There was considerable doubt about the exact nature of the products obtained by demethylating quinine. Henry and Solomon[3] find that demethylation with aluminium gives apoquinine, $C_{19}H_{22}O_2N_2$, mixed with chlorodihydroapoquinine, $C_{19}H_{22}O_2N_2Cl$. The products of demethylating quinine with sulphuric acid[4] include apoquinine, isoapoquinine, and hydroxydihydroapoquinine. Demethylation of quinidine was studied by Suszko and collaborators[5] who have isolated apoquinidine in addition to isoapoquinidine. Quinine-apoquinine change involves the shifting of the double bond besides demethylation.

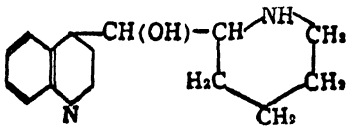
$$\text{(I)} \quad CH_3O-C_9H_5N-CH(OH)-C_7H_{11}N-CH:CH_2 \longrightarrow$$

$$\longrightarrow HO-C_9H_5N-CH(OH)-C_7H_{10}N:CH-CH_3 \quad \text{(II)}$$

Goodson[6] has studied the addition of hydrogen halides to the vinyl group and the value of the products formed in

3. J. Chem. Soc., 1934, 1923.
4. *Ibid*, 1935, 966. See also Butler and Cretcher J. Amer. Chem. Soc., 1935, 57, 1083.
5. Rec. Trav. Chim., 1933, *52*, 839; Rocz. Chem., 1935, *15*, 209.
6. J. Chem. Soc., 1935, 1094.

the treatment of malaria. Ainley and King[7] have accomplished the very difficult synthesis of the substance (III) which manifested some antimalarial power.

(III) 

This synthesis constitutes the first example of an active substance modelled on the cinchona type which is not known to occur in nature.

A large number of observations have recently been made available by the publication[8] of the results of a large number of experiments carried out under the schemes organised by the Health Organisation of the League of Nations. A short summary of this report would not be out of place in this connection.

Antimalarial drugs are probably of two kinds, schizonticidal and gametocidal. Schizonticidal drugs include the naturally occurring cinchona alkaloids and atebrin; probably the only representative of gametocidal drug worth mentioning is plasmoquin. The main defects of the synthetic drugs, particularly plasmoquin, is their toxicity while the principal advantage of atebrin over quinine is its more powerful action. The best clinical results seem to be obtained by the combined use of schizonticidal and gametocidal drugs, quinine-plasmoquin being considered to be the best.

7. Proc. Royal Soc, 1938, *B 125*, 60.

8. League of Nations 4th General Report of the Malaria Commission.

Ergot Alkaloids.

The oxytocic properties of ergot has placed it in a very important position and has long been used in obstetrics. Many attempts have been made to identify the principle responsible for the physiological action of ergot—to hasten labour or prevent haemorrhage in querperium. These attempts resulted in the isolation of a number of alkaloids. The alkaloids form five pairs, the members of each pair being interconvertible. Each pair consists of a lævorotatory physiologically potent member constituting the ergotoxine series and its opposite number, a strongly dextro-rotatory, physiologically weak compound.

Our knowledge of these alkaloids has progressed in rapid strides within the last few years. Barger and Carr,[9] Barger and Dale,[10] and Kraft[11] showed ergotoxine, $C_{35}H_{39}O_5N_5$; is convertible into ergotinine by treatment with acetic anhydride or by boiling with methyl alcohol. The reverse change is brought about by hot, dilute, alcoholic phosphoric acid solution. Ergotamine and ergotaminine, $C_{33}H_{35}O_5N_5$, were isolated by Stoll,[12] the conditions under which this pair undergoes isomeric interconversion being governed by conditions similar to those governing the ergotoxine—ergotinine conversions. The ergosine—ergosinine

9. J. Chem. Soc., 1907, *91*, 337.

10. Biochem. J., 1907, *2*, 240.

11. Arch. Pharm., 1906, *244*, 336.

12. Schweiz, Apoth, Ztg., 1922, *60*, 341. See also Smith and Timis, J. Chem., Soc., 1930, 1390; Soltys, Ber., 1932; *65*; 553; Barger, Analyst, 1937, *62*, 340.

pair, $C_{30}H_{37}O_5N_5$, was isolated by Smith and Timmis.[13] Ergocristine and ergocristinine, $C_{35}H_{39}O_5N_5$, were obtained from Spanish and Portuguese ergot by Stoll and Burckhardt.[14]

The therapeutic values of ergot were ascribed to the above four pairs of alkaloids. Moir[15] developed a new technique for comparing the action of aqueous extracts of ergot with those of the four pairs of alkaloids. He found that both qualitatively and quantitatively the results obtained on human querperal uterus were different. It was found that the response to the extracts followed much more rapidly on their oral administration than did that of the alkaloids, the effect of which were, in fact, somewhat erratic when administered in this way. The author concluded that this must be due to some unknown principle and this inference was confirmed by the isolation of the active principle involved by Dudley and Moir.[16] This new alkaloid, called ergometrine, possesses all the qualities of the liquid extracts of ergot. Dudley[17] has devised a simple method of isolation which makes ergometrine probably the most easily obtainable of the ergot alkaloids.

Pure ergometrine, $C_{19}H_{23}O_2N_3$, is a monoacid base.[18] The manufacture of ergometrine has resulted[19] in the isolation of another alkaloid ergometrinine, isomeric with ergo-

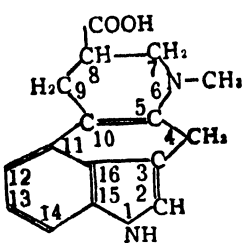
13. J. Chem. Soc., 1937, 396. See also Kofler, Arch. Pharm., 1938, *276*, 41.
14. Zeit. Physicl. Chem., 1937, *250*, 1; 1938, *251*; 287.
15. Brit. Med. J., 1932, *i*, 1022, 1119.
16. *Ibid.*, 1935, *i*, 520.
17. Pharm. J., 1935, *134*, 709.
18. Proc. Roy. Soc., 1935, *118B*, 478.
19. Nature, 1935, *136*, 259.

metrine, into which it is convertible. Stoll and Burckhardt[14] have found a new ergot pair, isomeric with ergotoxine and ergotinine, the lævo form, ergocristine, is highly active, the dextro form, ergocristinine, is less active.

The chemistry of the ergot alkaloids is progressing so very energetically and that in the not distant future their constitutions would all be indisputably established. Sufficient data is now available to visualise the chemical relationship which exists between the members of this group: ergotoxine, ergotinine; ergotamine, ergotaminine; ergometrine, ergometrinine; all yield lysergic acid on alkaline hydrolysis. This acid thus appears to be the common basis for ergot alkaloids.

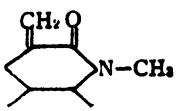
Lysergic acid, first obtained by Jacobs and Craig,[20] was reducible to α-and γ-dihydrolysergic acid,[21] and on boiling in aqueous solution is converted into isolysergic acid.[22] d-Lysergic acid is converted into dl-lysergic acid by heating in dilute barium hydroxide solution at 150° in an atmosphere of nitrogen. Jacobs and Craig[23–25] suggest formula (IV) for lysergic acid.

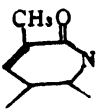
(IV)



20. J. Biol. Chem., 1934, *104*, 547.
21. *Ibid.*, 1934, *106*, 393.
22. Smith and Timis, J. Chem.. Soc., 1936, 1440.
23. J. Biol. Chem., 1936, *115*, 227.
24. *Ibid.*, 1932, *97*, 739.
25. J. Amer. Chem. Soc., 1938, *60*, 1701.

When ergotinine[24] or lysergic acid[21] is submitted to nitric acid oxidation, a tribasic acid, $C_{14}H_9O_8N$, is obtained and this yields quinoline on distillation with soda lime. 1-Amino-5-methyl-naphthalene is formed by potash fusion of dihydrolysergic acid. Jacobs and Craig[25] observe that dihydrolysergic acid loses water on pyrolysis to yield a neutral unsaturated product to which two alternative formulae can be assigned (Va and Vb)

(Va) 

(Vb) 

In the earlier formulation[23] of lysergic acid, it was assigned an α-amino acid constitution, but in view of the production of the neutral product and the dissociation constant of the acid, the β-amino structure[25] is preferred. A compound called ergoline containing the skeleton of dihydrolysergic acid has been synthesised by Jacobs and Gould,[26] and is represented as the carboxyl and methyl replaced by hydrogen. The position of the carboxyl group on the 8th carbon atom is also supported by the basic dissociation constants of dihydrolysergic acid and 6-methyl ergoline. The work of Stoll and Hofmann[27] on the recmization and isomerisation of lysergic acid shows clearly that the acid contains only one asymmetric carbon atom as postulated in (IV).

A very interesting and important achievement in ergot chemistry is Stoll and Hofmann's[28] partial synthesis

26. J. Biol. Chem., 1937, *120*, 141; 1938, *125*, 289.
27. Z. Physiol. Chem., 1937, *250*, 7.
28. *Ibid.*, 1938, *251*, 155.

of ergometrine and ergometrinine by condensing d-2-amino-propanol-1 with racemic isolysergic acid azide, obtained by the action of hydrazine hydrate on lysergic acid. This synthesis confirms the deductions[29] derived from the analytical side.

MONOCROTALINE.

'Crotalaria spectabilis', like many species of crotalaria, is toxic and its toxicity has been shown to be due to an alkaloid monocrotaline,[30] $C_{16}H_{23}O_6N$. Hydrolysis of monocrotaline yielded[31] a basic product, retronecine, and an acid, $C_7H_{12}O_3$, monocrotic acid.

$$C_{16}H_{23}O_6N + H_2O \longrightarrow C_8H_{13}O_2N + C_7H_{12}O_3 + CO_2$$

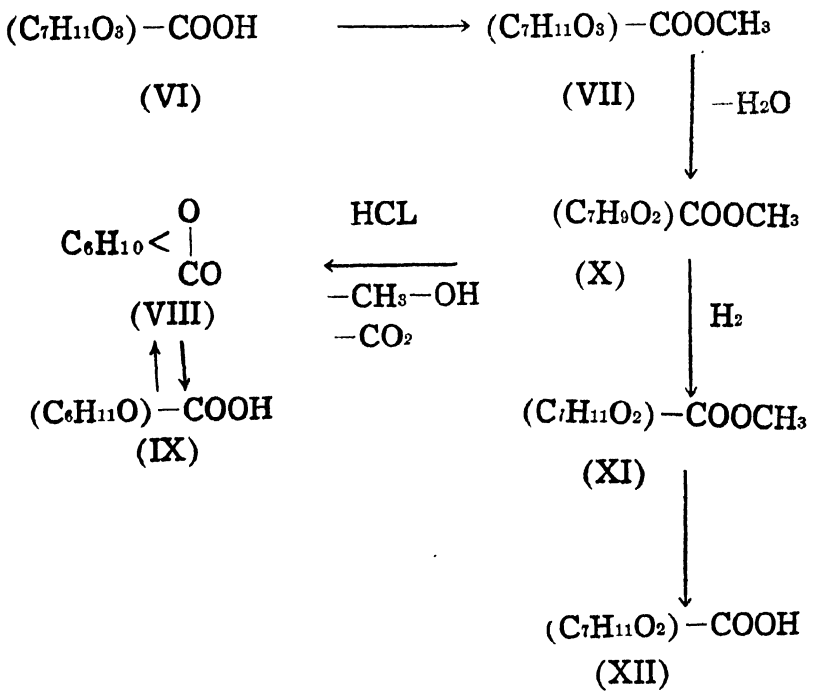
The molecular formula of monocrotaline and its hydrolysis to an acid and an alkanolamine places it in the same group ss Senico, Heliotropium, and Trichodesma alkaloids. Another mode of cleavage successful[32] in this group is hydrogenolysis. Monocrotaline is readily reduced to retronecol, $C_8H_{15}ON$, and monocrotalic acid, $C_8H_{12}O_5$.

Monocrotalic acid is monobasic, optically active, and on heating with alkali is decomposed yielding the monobasic monocrotic acid. Adams and Rogers[31] and Adams, Rogers and Sprules[33] have shown that monocrotic acid forms a monomethyl ester which forms a dinitrophenyhydrazone. The action of iodine and alkali on the acid

29. Science, 1935, *82*, 16; J. Chem. Soc., 1937, 396.
30. Ber., 1890, *23*, 3557; J. Amer. Chem. Soc., 1935; *57*; 2560.
31. J. Amer. Chem. Soc., 1939; *61*, 2815.
32. Ber., 1935, *68*, 1051; J. Chem. Soc., 1935; 11.
33. J. Amer. Chem. Soc., 1939, *61*, 2819.

gave iodoform, thus indicating a keto-methyl group. Oxidation with sodium hypobromite gave a mixture of meso-and racemic-α: α′-dimethyl succinic acid.

The presence of a lactone group in monocrotalic acid (VI) is indicated by back-titration of the acid with excess of alkali. The acid decomposes on heating[34] yielding α: β: γ-trimethylangelicalactone (VIII) which is also obtained by the dehydration of monocrotic acid (IX).

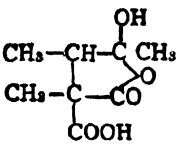


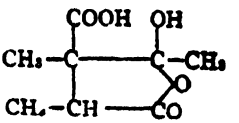
The same lactone can be obtained by a two step procedure which clarifies the reaction. Methyl monocrotalate (VII) on heating in vacuo loses water to give an unsaturated ester (X) together with a small amount of the lactone

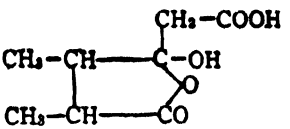
34. *Ibid.*, 2822.

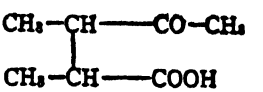
(VIII). This ester can be hydrogenated under high pressure to a dihydro ester (XI) which in turn may be hydrolysed to a crystalline lactonic acid (XII). The unsaturated ester (X), on hydrolysis with concentrated hydrochloric acid, yields the lactone (VIII).

Three structures for monocrotalic acid have been considered [34] (XIII), (XIIIa) and (XIIIb).

(XIII) 

(XIIIa) 

(XIIIb) 

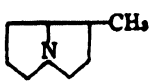
(XIV) 

Monocrotalic acid in presence of alkali is decarboxylated to monocrotic acid (XIV—dimethyl levulinic acid. Adams and Lang[35] have established structure (XIV) by synthesis. Although the synthesis of monocrotic acid has confined the structure of monocrotalic acid to the three alternatives, it is only a synthesis that will finally decide the question.

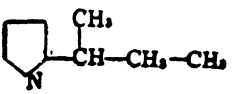
Retronecine, $C_8H_{13}O_2N$ contains two hydroxyl groups and one double bond; retronecanol, $C_8H_{15}ON$, is saturated and has one hydroxyl group. These two bases are identical with those obtained by Manske[36] from retrorsine. The

35. *Ibid.*, 1940, *62*, 2289.
36. Can. J. Research, 1930, 5, 651. See also Refs:—32.

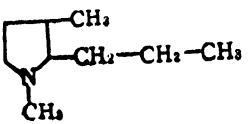
bases are isomeric with analogous bases from the alkaloid heliotrine described by Menshikov.[37] Adams and Rogers[38] have critically reviewed the work of Menshikov from which he deduced that heliotridane was 1-methyl pyrrolizidine (XV).



(XV)



(XVI)



(XVII)

By degradation (XV) can yield 1-methyl-2-s-butyl pyrrolidine (XVI) or 1:3-dimethyl-2-n-propylpyrrolidine (XVII). Menshikov's results and deductions have been clarified by the synthesis[38] of 1:3-dimethyl-2-n-propyl-pyrrolidine and its identity with dl-dihydro-des-N-Methyl-heliotridane, a compound obtained by exhaustive methylation of heliotridane followed by reduction.

Retronecanol was converted into chlororetronecane by treatment with thionyl chloride. The chlorine was replaced smoothly by hydrogen, using Raney nickel and hydrogen at room temperature, yielding heliotridane. It has already been stated that retronecanol is formed in the hydrogenation of monocrotaline, two molecules of hydrogen being absorbed. The alkaloids heliotrine[37] and retrosine[32] hydrogenate in a similar manner, hydrogenolysis occurring at the ester grouping. Diacetyl retronecine reduces to acetylretronecanol[32-39] and acetic acid. It thus appears

37. Ber., 1932, *65*, 974; 1933, *66*, 875; 1935; *68*; 1051; 1555; 1936, *69*, 1110, 1799 and 1802.

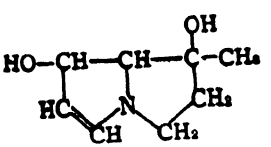
38. J. Amer. Chem. Scc., 1941, *63*, 228.

that retronecine and heliotridine contain a remarkably labile hydroxyl group which is lost by hydrogenation. Adams and Rogers[39] designate the stable hydroxyl group α-and the labile β. The same authors have studied the catalytic hydrogenation of monocrotaline and retronecine under various conditions and their results can be summarised as follows:—

(a) The partial reduction of monocrotaline gives monocrotalic acid and a base desoxyretronecine, $C_8H_{13}ON$.

(b) If retronecine is reduced under certain conditions using Raney nickel, only one molecule of hydrogen is absorbed with saturation of the double bond and formation of platynecine, the base obtained by saponification of the alkaloid platyphylline.[40] Platynecine forms a mono-and a di-benzoate depending on the conditions, one hydroxyl esterifying more readily than the other.

Accepting the basic nucleus of retronecine as 1-methyl pyrrolizidine, Adams and Rogers[39] have proposed the following formula (XVIII) for retronecine

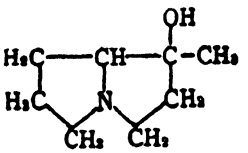


(XVIII)

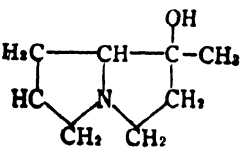
39. *Ibid.*, 537.

40. See Orekhov and Tiedebel, Ber., 1935, *68*, 650; Orekhov et al, *ibid.*, 1886; 1936, *69*, 1908.

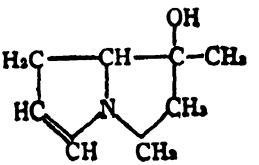
the corresponding saturated compound for platynecine, retronecol by formula (XIX), desoxyretronecine by (XX) and monocrotaline by (XXI).



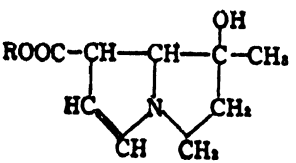
(XIX)



(XXa)



(XXI)



(XXb)

ROOC—is monocrotalic acid residue.

TAMIL WORDS AND THEIR MEANINGS

By

Rao Saheb M. R. Rajagopala Iyengar, M.A.

The growth of the vocabulary of a language is, in many respects, like the growth of the population of a country. Old words give birth to new ones which slightly differ from their parents and thus the stock goes through a process of multiplication. The new words formed from the old are used in senses which, though closely allied to the meaning of their originals denote different shades of thought and emotion. In course of time some words drop out of use like நெய்யம் in Tamil for ghee and their places are taken up by younger ones either grown out of the original words or borrowed from cognate or other languages. Just as new surroundings or circumstances force the individuals in a nation to give up their old callings and adopt new ones in the struggle for existence, in languages also, as the centuries pass, certain words acquire new meanings more or less different from their old senses. Division of function is another point of resemblance between language and population. When several words in a language have the same sense, they develop, in the process of time, differences of meaning justifying their existence. This principle of division of function may be seen prominently at work when the language spoken by a people comes into contact with that of foreigners by the conditions brought about by trade, politics, religion or other social activities. Native words expressing certain ideas mingle with those of the foreign language denoting the same ideas. Some-

times the foreign word aggressively drives out the native from current use occupying its place in triumph, or, what is more common, the two sets of words enter into a tacit compact dividing the extent of meaning between them. This state of conflict and compact was at work when Tamil scholars imported a large number of Sanskrit words as a result of their admiration of the works of Sanskrit authors. Even when Tamil possessed words to express the same ideas, the importation became common and was thought, perhaps, to enrich the resources of Tamil expression.

The principles that underlie the development of new meanings in words and the changes often undergone by words in their meaning are found to be the same for all languages, to whatever family, Dravidian, Indo-Germanic, or Semitic, they might belong. These changes in meaning are due to mental associations, working through long periods of time. These mental associations follow the same laws of psychology among all races of men, because there is a sub-stratum of kinship, mental and spiritual, common to all mankind. The principles of semantics, or the science of meanings which linguistic scholars have deduced from their study of the vocabulary of Indo-Germanic languages are therefore found applicable also to Tamil though the latter belongs to a different family.

The changes of meaning undergone by Tamil words may not strike us as having occurred at all, if we compare their use in ancient Tamil literature with that in modern Tamil verse or even prose. Literary Tamil, especially in verse, often employs words in their earlier senses as seen in classical writers of old ignoring their present day meanings. A modern English poet may use 'fond' in its old sense of 'foolish'; from this it would be idle to assert

that the word has suffered no change of meaning. So also the Tamil word நாற்றம் which applied to good as well as bad smell in olden times, has now come to be used in current talk for only bad smell. A verse writer of to-day might still use it for fragrance in his poem. This should not blind us to the fact of its having changed in meaning. Current use in ordinary conversation affords a surer test of such changes than literary usage. This test is, of course, available only in living languages like Tamil. Sanskrit and other languages which are no longer the mother-tongue of any people contain words stratified in the writings of different epochs and the study of the semantics of such languages becomes exceedingly difficult. Even in them, the classification of literary specimens according to their age of composition and the comparison of the use of words in the earlier works with that in later writings may reveal the occurrence of changes in the function of words. Bearing in mind these prefatory remarks, we may now proceed to study the operation of semantic principles in Tamil words.

In the earliest stage of the development of all languages the few words that have already come into existence are extended by metaphorical usage to denote varied objects, thoughts and feelings which are in some way associated with their original meaning. Take, for instance, the word தலை, one of the earliest words in the Tamil vocabulary. Its primary significance is, of course, the head. Then by metaphor, it is used to mean the chief person in a group or community since his position of importance is like that of the head to the members of the human body. The head being the first member of the body to strike the beholder, தலை is extended also to mean the first as in தலைத்திவசம். An easy transition from this is its use for 'source' or 'origin'

as in தலைக்காவேரி. The latest development in its use is to denote a postage stamp which bears the figure of the head of the sovereign. From தலை is formed the derivative தலைவன் one who is like the head in relation to his group. clan, or sect. தலைவன் extends its area of denotation in course of time to include all great men, the guru or the spritual teacher, and God. Since the chief character of a story, poem or play has the prominence of the head in the human body, தலைவன் is employed also in that sense. The same process of metaphorical extension is illustrated in the earliest Tamil word, கை. Its original meaning is, of course, the hand or arm. Metaphorically the rays of the moon or the sun may be called their hands and thus கை comes to mean 'a ray.' Since the two sides in a quarrel or fight may be called the two hands on either side of the body, கை denotes also side, faction, or party. A natural extension of கை is to mean the elephant's trunk which serves the purpose of the human arm. கை extends its range to mean also workmen as in பத்துக்கை வேலை செய்தது cf. ('ten hands were at work in that channel' in English). Here the extension is not by metaphor but by synecdoche. One more illustration may suffice for this process of figurative extension of the use of a word. கால் is a native Tamil word of primitive origin. Its earliest sense is 'leg' or 'foot' of person or animal. Then metaphorically the word is applied to mean the lower part, base or bottom of a thing. As the wheels of a cart or carriage may figuratively be termed its legs, கால் comes to mean 'wheel.' கால் is similarly employed to denote post or pillar which is the leg on which a house or shed stands. கால் also means one-fourth presumably from the relation of a single leg to the four legs of an animal. Similarly the word மூலம் borrow-

ed from Sanskrit and originally meaning 'root' has the following meanings arrived at by metaphorical usage:—foot, base, origin, source, cause, means or agency, and text of a book. Hosts of other illustrations may be given in support of the remark that, Tamil like other languages consists largely of forgotten metaphors.

The same process of metaphorical extension may be seen at work in other foreign words borrowed into Tamil. For example, the Sanskrit word पक्ष (paksa) பட்சம் meaning, the wing of a bird, was imported into Tamil. The two wings of a bird may figuratively be extended to mean the two sides of a question, the two parties in a quarrel or battle, and the two alternatives in a dispute or discussion. So பட்சம் came to mean side, party, and alternative. Since a man attached to a party showed affection to its members பட்சம் came to mean love or affection. Finally in ஈ பேராகும் பட்சத்தில், பட்சம் means only *in case* or *if* implying one of two alternative possibilities. The metaphor was, in course of time, forgotten after the enrichment to the vocabulary had taken place.

Extension

Apart from the process of metaphorical extension at work in the earliest stages of the development of a language, we may observe also other forms of extension in the meaning and application of a word. இரணியம், originally a Sanskrit word, meant at first gold; later it was applied to all forms of money gold or silver. பாட்டி means primarily 'grandmother' but is extended to mean 'any old woman.' பஞ்ச பாத்திரம் originally Sanskrit, meant the five vessels or cups used in the worship of the gods to contain *Arghya, Padya, Acamaniya, Snana* (bath), and *Suddhadaka* (pure

water). The word has now come to mean among Brahmins any drinking cup or tumbler. எண்ணெய் and தண்ணீர் are interesting examples of extension. In his article entitled "The Semantic Principle of Expansion," published in *The Journal of the Annamalai University,* Vol. VI No. 2, Mr. A. C. Chettiar points out that எண்ணெய் originally meant எள்+நெய் 'gingelly oil' but, in course of time was extended to mean 'any kind of oil' and that தண்ணீர், originally தண்+நீர் 'cold water' has been extended to water in general, cold or hot, as in சுடு தணணீர். The two words afford instances of extension in usage due to ignorance of etymology. The Tamil word நெய் was formerly wide in its denotation and was applied to any sticky or oily substance: 'blood,' 'fat,' 'grease,' civet, (புழுகு நெய்) oil and butter (வெள்+நெய) வெண்ணெய், were all நெய்; the ancient word for clarified butter or ghee, the modern நெய் was துபபம் as in Canarese. As time passed on, நெய் suffered a restriction in its use and meaning and came to mean only 'ghee' துப்பம் having gone out of use. The need for another word meaning 'oil' in general led to the adoption of எணணெய் whose derivation எள்+நெய் had by that time been forgotten. Thus எண்ணெய் has become extended in its scope and means oil in general. For gingelly oil a new word was invented நல்லெண்ணெய்(நல் or நல்ல+எண்ணெய்)ஃதங்காய்எண்ணெய்,கடலெண்ணெய்,ஆமணக்கெண்ணெய் and the like are thus etymological absurdities due to ignorance.* A similar ignorance has led to the extension of the

*There are, however, some philologists who hold that எண்ணெய் is not எள்+நெய் as given *in the Tamil Lexicon.* They are of opinion that எண்ணெய் is a derivative of the Prakrit word *inēa* (Sans.) meaning oil. If so, எண்ணெய் would not be a case of extension at all.

meaning of தண்+நீர் or தண்ணீர். The original Tamil word for water was நீர் as in Canarese. For cold water the compound word தண்ணீர் was formed as in Canarese *tanniru* and for hot water the compound formation was வெந்நீர் or சுடுநீர் corresponding to Canarese *bisi-niru*. Owing to ignorance of the meaning of the adjective தண் (cold), தண்ணீர் was afterwards understood to mean water in general with the result that we have such absurdities as பச்சைத்தண்ணீர் and சுடுதண்ணீர். That the extension was the result of later ignorance of etymology will be evident when it is pointed out that some sects of Brahmins use தண் itself for water as in தண் கொண்டுவா.

The employment of a word which was originally the name of a person noted for some quality or trait in history or legend to all persons exhibiting that characteristic is another form of extension. The proper noun has in course of time, become a common noun and is used as such even by people who have no knowledge of the original. அலை மஞ்சன் who is referred to in *the Ramayana* as a prince who took a delight in throwing children into the river has now come to mean any mischievous or ill-behaved person. மூதேவி literally the elder goddess, the elder sister of Lakshmi, the goddess of good fortune and prosperity is now used to mean any person who brings ill-luck. கும்பகர்ணன், the great sleeper in *the Ramayana* is now used of any person who sleeps too much. நாரதர் the name of the great sage, has now become a common noun meaning a mischief-maker. சகுனி or சகுனி மாமா, Duryodhana's uncle, is now a by-word meaning 'evil genius.' அரிச்சந்திரன், மன்மதன், சுக்கிராசாரி, யமன், பிருகஸ்பதி and அனுமார் are other examples as also ரதி and கைகேயி.

Like the names of persons, the names of some animals are often used of persons believed to possess similar qualities. புலி and சிங்கம் for a valiant man குயில், for a singer with a good voice, கிளி for a beautiful woman, மந்தி and கழுதை for fools and பெருச்சாளி for a cunning old fellow may be cited as examples of this form of extension. பரப்பாம்பு is not amenable to control by spells and charms like நல்லபாம்பு or cobra and is hence used to mean one who will not be bound by any principle of right conduct. சாகுருவி the screech-owl, whose screech at night is believed to portend death is employed to mean one whose presence is ominous. The huge size of the elephant has led to யானை being used in many compound formations to mean big. As examples may be stated யானைக் குந்துமணி, யானை நெரிஞ்சி and யானைக்கால (elephantiasis of the leg). The word மண்டு is often employed in the sense of dunce. It is evidently a contraction of the Sanskrit word manduka which means frog, a creature believed to be silly. A few place-names, too have gone through this process of extension. கயாவாளி or கயவாளி means, in Tamil, a cheat or scoundrel and is from *Gaya-wallah,* a native Brahman of Gaya who cheats pilgrims under false pretences for the sake of money. திருப்பந்துருத்தி உபசாரம் has come to denote hypocritical or insincere invitation or offer of hospitality. The word is from திருப்பந் திருத்தி, a village near Trivadi in the Tanjore District, where the idol from the temple of Trivadi is invited in a half-hearted and insincere manner to hospitality at night. கும்பகோணம் is in slang, an expression meaning deceitful conduct. மைசூர் ரஸம், and மைசூர்ப்பாகு are other examples of extension in place-names. Very few

think of Mysore when they use these words for the respective articles of food. About the examples cited above of the names of persons, animals and places being extended to mean those who exhibit similar qualities, it has to be said that some persons who use them in the new sense may be aware of the metaphorical or figurative origin of the extension. But even they sometimes forget the figurative extension when they use the words, although, if asked, they might be able to explain the allusion to literature, legend or tradition contained in them. As a matter of fact, extension of meaning may be said to pass through three stages. In the first stage the extension is metaphorical and deliberate. In the second stage the word is used to mean something similar to the object indicated originally by the word, though the person employing it forgets, for the time being, that he is employing a figure of speech. This is the stage when the metaphor may be said to begin fading. In the third stage, the figurative character of the extension is generally completely forgotten, and the word may be said to have an existence independent of its origin. It is in this way that metaphors have faded in the meanings of many words.

Restriction or specialisation of meaning.

Far more common in Tamil than the principle of extension is the opposite process of restricting the use of a word to only a part of its original denotation. அடுக்குள் originally signified any room within another room. At present it refers only to a kitchen. சிற்றாடை (சிறு + ஆடை), originally meaning a small garment, means now the small garment of a girl. It is no longer applied to a boy's garment. இலை means leaf, of course, but, sometimes, it is restricted to வெற்றிலை (betel). கொள்ளிவைத்தல் means, literally setting (a thing) on fire and must have been used in that

wider sense in the past. Now it is employed to mean lighting a funeral pyre. சுருணை is any piece of cloth or straw rolled up. Now it means only a mop. துரை was formerly any lord, master, or chief, but now it is generally restricted to mean Europeans. கல்லறை was formerly any room built of stone but is now only a sepulchre. பிள்ளையார் is, etymologically, the respected son of revered parents but is commonly applied only to Ganesa, the son of Siva. பொடி means, of course, any powder even now, but has also the restricted sense of tobacco powder or snuff. வாயிதாப்பணம் should apply to any money paid in instalments but in some Tamil Districts is restricted to mean *kist* paid in instalments to Government. நெய் has already been referred to as an instance of restriction in modern Tamil where it means ghee. In ancient Tamil, it was any oily substance, butter, ghee, oil, honey or grease. பழையது has a general sense of anything old and the restricted sense of rice cooked and preserved in cold water. சுண்ணம் from Sanskrit *curna* has the restricted sense of chunam as well as the general sense of powder. பரதேசி is a Sanskrit derivative, meaning 'a foreigner' but, as many of these people from other than Tamil country went about begging their food, it is now generally employed in the sense of a mendicant. கொழுனன் was formerly the husband or the husband's brother. Now it means only the husband's brother. ஜவான், a word borrowed from urdu meant any strong man. Now it has come to be restricted to a constable or a peon in an office.

Deterioration or degradation of the meanings of words

The history of words often reveals the degradation of meaning that some of them suffer in course of time. Origi-

nally without any bad meaning, they come later to be used in a bad sense as a result of what might be called the principle of association.

The Tamil word அயலான் means neighbour, but as neighbours are often in bad terms with each other, அயலான் has come to mean also enemy. நாற்றம்in old Tamil meant simply smell, good or bad, in modern Tamil it is generally used only of bad smell மணம் being used of good smell. To speak of இனியநாற்றம் to-day would be pedantry. ஆபாஸம் or ஆபாசம் is a Sanskrit word borrowed into Tamil and meant only false appearance. It is now used in Tamil in the sense of dirt or filth. Degradation in meaning cannot go further. அண்ணைத்தை is only elder brother, but as elder brothers are prone to idleness and dullness when compared with their younger brothers, it has come to be employed in some Tamil districts in the sense of an idler. காமாட்டி is a loan word from Mahrathi and meant at first labourer or digger of earth. As labourers are associated in the mind with idleness and a proneness to scamp their work, it is now used in Tamil for fool, idiot, or dunce. காலாடி was originally an energetic person, then a vagrant, and is now a rogue. குதிரைக்காரன் first meant a mounted warrior and was later employed for a plundering trooper. குப்பை is from the Sanskrit *gumpha* (a collection). In old Tamil it is often used in a good sense as in சாத்திரக்குப்பை but in modern Tamil குப்பை is invariably used for rubbish. சால்ஜாப்பு, a loan word, meant at first answer and is now used for a lame excuse. சிறுக்கி was originally a girl or maid-servant and is now a term of contempt like the English

word *wench* which has undergone a similar degradation. கூத்தி was originally a dancing woman as dancers are generally loose in their morals, the word கூத்தி has now come to mean concubine or prostitute. With this may be compared தேவடியாள். Originally a word denoting a woman devoted to the service of a deity in a temple, it has now the bad sense of a prostitute or courtesan by the principle of association. Like the English word *knave* which orginally meant servant but now means rogue, the Tamil பையல் was in old Tamil a boy and is now a mean fellow. விகாரம் is a loan word from Sanskrit and meant formerly 'change.' Now it has degraded in meaning and means an ugly change or distortion. தகப்பன்சாமி is primarily the name of the god Subramanian who, according to legend, was the preceptor of his own father, the god Siva. It was a title of esteem but now it is degraded to mean any headstrong fellow. வழிச்சோறு simply meant food taken by a traveller to eat during his journey. It is more often used now for the food that is given to a poor man so that it might serve as viaticum for a departed spirit. The change of meaning in the Tamil word follows closely that of the Sanskrit word patheya. அக்கா or அக்காள் means, of course, elder sister but it has also a degraded sense and is used of a woman bringing ill-luck to the family (from Lakshmi's elder sister). வீங்கு is employed in ancient Tamil literature only in the sense of growth or increase. It has now deteriorated to mean a swelling or inflammation in any part of the body. முத்தண்ணு, like the slang அண்ணுத்தை referred to before is often a term of contempt for a lazy fellow, a ne'er-do-well. மலையாளபகவதி means literally the goddess Durga worshipped in Malabar. As she is believed

to be the patron deity of magicians and sorcerers, the word is now used of any one who deceives under false pretences. புலம்புதல் is a word used in older Tamil literature for proclaiming, whether what is proclaimed is good or bad; now it means only lamenting. பரிகாரி or, to use the proper Tamil form, பரியாரி is a Sanskrit word taken into Tamil. It meant a physician who applies remedies; as many பரிகாரியார் were of the barber caste and actively followed that profession too, it has come to mean a barber. மடையன் originally was a cook serving in the மடை or மடைப்பள்ளி or kitchen. Only men too dull to follow the higher professions would take to the kitchen; hence மடையன் now means not a cook but dunce. ஜாடுமாலி or சாடுமாரி is from the Urdu *jharmali* meaning woman sweeper and has suffered degradation denoting at present a despicable person.

Elevation or Exaltation of Meaning

The opposite process of a word acquiring, in course of time, a more dignified or exalted sense than it originally had is also met with in Tamil though elevation of meaning is not so common as degradation. அம்மா or அம்பாள் means primarily mother, but has also the exalted sense of Parvati, the universal mother. So also அம்மான், which signifies father or uncle is sometimes employed in religious literature for God. கண்ணோட்டம், which literally means a glance of the eye is used generally for a gracious look. காலட்சேபம் borrowed from Sanskrit, means literally spending one's time but is restricted to spending one's time in listening to a story of Vishnu or other gods in what are called Harikathas. The exaltation is seen also when it is used by Brahmins for a study of Vedanta. கூறை, which for-

merly meant cloth in general, is now used only of the auspicious saree in which a bride is dressed just at the time when the tali is tied round her neck. சீலை Sanskrit (Sila= a stone) means stone and has also the more dignified sense of the image of a god carved in stone. பிள்ளையார் has already been given as an example of restriction of meaning. It is also an instance of elevation of meaning. In fact many of these words which have undergone degradation or elevation may be said to have undergone restriction of meaning; but simplicity of classification should not make us lose sight of the mental process underlying the restriction. முகூர்த்தம், taken from Sanskrit, means primarily a period of time equal to an hour and a half, but is most commonly employed for an auspicious part of the day suitable for weddings or other religious rites of a festive nature. விக்கிரகம் (Sanskrit, vigraha) means, primarily, the body of a person, but is a common appellation for the images of gods. மடி literally means cloth folded, but has become exalted in sense to denote only cloth that is ceremonially pure and fit to wear during religious observances. நாச்சியார் was formerly applied to any highborn lady, princess or queen as may be seen in its cognate form in Malayalam *netyaramma* the title given to the Maharaja's consort in Cochin. நீறு has the primary meaning of ashes and also the more dignified sense of sacred ashes for smearing the forehead or other parts of the body with. பத்தினி derived from Sanskrit *patni* not only means wife in Tamil, but wife conspicuous for chastity.

Transference

There is yet another principle or process observable in the way words change their meaning. It has been called

transference. Take the word பொங்கல், for instance; it means boiling but, by transference, பொங்கல் has come to mean rice boiled with green gram. The transference is from the process of boiling to the product of boiling. பிழி means primarily squeezing but has a secondary meaning honey by transference from the act of squeezing the comb to the resultant product.In the sentence அந்தப்பாச்சா இங்கே பலியாது, பாச்சா means show of power and is by forgotten metonymy transferred from badshaw the title of the Moghul rulers of old. துணி and துண்டு, meaning cloth and towel (or piece of cloth), are transferred from the verb துணி (cut) as the weaver, having woven a long cloth, cuts it afterwards into several pieces or garments. The modern word தந்தி is a derivative of the Sanskrit word *tantri* meaning wire. தந்தி as in தந்தியடிக்கவேணும் means telegram or message sent by wire (cf. kambi the Malayalam equivalent which also means telegram). The transference is from the wire to the message conveyed with the help of the wire. செம்பு means copper and by transference also a vessel, since many of such vessels were formerly made of copper. The underlying principle is metonymy consciously or unconsciously working in the minds of men. நாமம், the castemark of the Vaishnavaites, is also an illustration of transference. These marks should be put on by a Vaishnavaite with the utterance of some of the nama's or names of Vishnu. ஸம்ஸாரம், originally as in Sanskrit, the cycle of births and deaths resulting from karma has come to mean wife in Tamil, because the most prominent feature in the life of the Samsarin is the wife. சுருட்டு shows transference from the process of rolling up to the product of the roll, namely, the cigar and is also an

example of specialisation. திங்கள் has had a curious history. In early and literary Tamil it means primarily the moon. Then by transference திங்கள் came to mean also the month as in மார்கழித்திங்கள், since the moon's revolution round the earth marks the lunar month. Then when the seven days of the week came to be adopted from the semitic races, the seven days came to be called by the names of the seven planets (the sun being considered as a planet). In Canarese and other cognate languages *Somavara* is the moon's day or Monday, the Sanskrit word *Soma* being taken for the moon. Tamil did not adopt the Sanskrit word *Soma* for the day of the week and called திங்கட்கிழமை using the native திங்கள் for the moon. திங்கள் standing both for month and for the day of the week was felt to be ambiguous and the Sanskrit word masa was therefore modified to மாதம் and used for month திங்கள் being generally reserved for the week day. Of late, however, the tendency among purists to avoid using foreign words in Tamil has led many to give up மாதம் for month and revert to திங்கள் as of old. இந்த வைகாசித்திங்கள் இருபதாந்தேதி திங்கட்கிழமை may be found in invitation letters or announcements. The ambiguity has to be resolved from the context. தாரை வார்த்தல் means, in Madras Town and the adjacent districts, to lose. The forgotten metaphor underneath this word is the giving away of a girl in marriage by her parents pouring a stream of water on the hand of the bridegroom. Whenever anything is given away as a gift, this pouring of water is enjoined for the ritual. So the act of pouring water in a stream தாரை has come to mean to give away or rather to lose. அம்மணம் now means naked or nakedness and is a forgotten metaphor from the Sramanas or Jain

saints who renounced even clothes. போடுவான் means soft well ground flour of black gram mixed with water but literally signifies that which is put into or mixed with rice flour mixed with water for making தோசை or இட்டலி. It is a case of transference from the act to the thing that the action is concerned with திவசம் is a loan word from Sanskrit and meant originally 'day' but, by transference, it is now invariably used for the ceremony performed on the anniversary of a person's death. So also திதி. அம்மை, (literally mother) which means small-pox illustrates the transference to the disease from the goddess அம்மன் (mother) or மாரியம்மன் who is believed to be the cause of the disease. ஆஸ்கா, meaning crystalline sugar is from the name of one of the places where it is manufactured. அஷ்டஸஹஸ்ரம் is a Sanskrit word meaning eight thousand. From the number the word is now transferred to the community of South Indian Brahmans whose families originally numbered 8000. The word now means only a member of that Brahman sect. ஓலை is interesting for its changes of meaning. Primarily it is a palmyra leaf. Since it was formerly used for writing on, ஓலை came to mean also letter. A small piece of the coloured leaf was formerly made into a tiny roll and worn by women in their ears which had sufficiently large holes made in them for the purpose. As civilisation advanced, this roll of leaf gave place to a roll of gold; and now diamond ear-rings have taken the place of the old ஓலை and are often called வைரஓலை if they are bigger in size than the தகடு. ஜட்கா is a loan word in Tamil from urdu jhatka where it means quickly (cf. Skt. Jhatiti-quickly. Now it has come to mean a cart drawn by a horse or pony as horses were in pre-steam engine days considered to be the fastest of means of trans-

port. The English word *number* (நம்பர்) has been borrowed into Tamil and has come to mean a case for trial in a court as these cases are given numbers in serial order when they are filed in courts. பேரன் is really பெயரன் (namesake) one who has the same name; but it has come to mean grandson as grandsons in Hindu families are generally given the names of their grandfathers. சோம்பற் சாவடி (a lazy fellow) is a case of transference from the place where idlers sit to the persons who sit there.

Among instances of transference of meaning due to resemblance or metaphor may be mentioned புச்சம் which is used to mean the remainder, the original meaning of the word in Sanskrit being tail. புள்ளடி (புள் bird அடி foot) literally means bird's foot and now denotes the mark ∧ placed below a line of writing to show the place of omission; the resemblance between it and the impression of the bird's foot has been forgotten. வால் is often used in conversation of mischievous boys, the resemblance being presumably to the tail of a lizard or other reptile moving about actively even after it has been cut off from the body of the animal. பழைத is often used for snake since it is thought inauspicious to use the word பாம்பு at night. பறை மேளம் means literally the drum used for proclamations in streets; metaphorically it has come to mean one who cannot keep a secret, though the metaphor is now forgotten. The English word 'club' has had a curious history in Tamil. Its meaning in English of 'an association of persons united by some common interest and having premises for resort, meals, temporary residence" was ignored when it was borrowed into Tamil. From the band of men, the meaning of the word was transferred to one of their activities and that the least important *viz.* eating and the

Tamil word came to mean an eating house. A further development has occurred in the compound word மிலிடோரி இளப் which means an eating house for non-vegetarians obviously from the fact that military men insist on having meat for their food. மிலிடோரி இளப் does not mean in the least an eating house for military men.

Euphemism

Changes of the meanings of words are sometimes due to an aversion to call a spade a spade in the matter of death ill-luck and the like. Men shrink from the blunt expression 'so and so died'. They resort to a euphemistic expression like "He breathed his last" or "He is no more." In Tamil காலஞ்சென்றான் literally 'pass the times' is a euphemism for 'died' தலை சாய் தல் literally 'hang the head' is another euphemism for the act of dying. Vaishnavites euphemistically say அவர் ஆசாரியன் திருவடியை யடைந்தார் (literally: he has reached the feet of his guru) or திருநாட்டை யலங்கரித்தார் (literally: he has become an ornament of the celestial world) instead of saying 'he died' which appears perhaps brutal in its bluntness. Likewise saivites say சிவலோகஞ் சென்றார் (literally: he has gone to the world of Siva). Euphemism underlies also the word தாலிழந்தவள் for a widow (literally a woman who has lost the thread). கால வித்தியாசம் (literally the difference of time) means in present day Tamil 'bad times'. Prudishness in speech considers certain words connected with sexual life indecent and resorts to euphemistic usage. தூரம் (literally distance) is used of a woman when she is in her periods because she remains at a distance from others to avoid polluting them. அவள் பெரிய மனுஷியானாள் (literally she became a big woman) is euphe-

mistic for 'she came of age' which is itself an euphemism in English.

Irony has had something to do with the use of words. நல்ல பாம்பு (the good snake) is the name given to the cobra which is the deadliest of snakes. It is difficult to say whether fear or irony has been the cause of this usage. மங்களவாரம், the auspicious day, is the name given to the day which is really far from being auspicious. பூசை கொடு த்தல், which literally means to make an offering, is the term colloquially used for striking a person.

Folk Etymology

The etymology of a word is sometimes forgotten and a false etymology takes its place in the popular mind and causes changes in the form or meaning of words. அறைக் கீரை, should be அறு கீரை, கீரை that is cut. The ignorance of etymology in the use of தணீர் and எண்மணய் has already been pointed out. பிரமாதம் and பிரமாதமாய் mean in Tamil something very serious, whereas the Sanskrit original pramada means 'error' or 'mistake' கண்ணமுது is a favourite word with Vaishnavite Brahmins for பாயசம். The word is properly speaking, கன்னல் (sugar) + அமுது (food) The fancied meaning of a dish liked by கண்ணன் or Sri Krishna has probably been, at the bottom of the error. ஈட்டுப பெண் and டாட்டுப பெண் used for daughter-in-law seem to have no etymological propriety. They are perhaps corruptions of மணட்டுப் பெண் which means 'the wedded girl.'

The examples given above of the principles underlying changes of meaning in Tamil words are by no means

exhaustive. Enough, however, has been said to indicate the different mental processes which lie at the root of such changes.

Books and pamphlets referred to :—

1. Tamil Lexicon : University of Madras, 6 vols.
2. Greenough and Kittredge : Words and Their Ways in English speech.
3. Ernest Weekly : The Romance of Words.
4. A. C. Chettiar : The Semantic Principle of Expansion. The Journal of the Annamalai University, Vol. VI, No. 2

MAGNETIC SUSCEPTIBILITY OF METAL CRYSTALS.

By

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Abstract.

The present paper gives an account of our present knowledge relating to the magnetic susceptibility of metal crystals. Brief references to the main developments in recent years are given. It will be seen that the contributions from the Physics laboratory of the Annamalai University have greatly helped the growth of the subject.

1. *Introduction.*

Study of the magnetic susceptibility of single crystals of metals has assumed considerable importance in recent years because of the theoretical interest attached to such measurements. Pauli (1926) applied the Fermi-Dirac statistics to the calculation of the paramagnetism of a free electron gas and showed that at ordinary temperatures, the gram atomic susceptibility $(\chi_A)_e$ due to the free electrons is given by the expression $(\chi_A)_e \times 10^6 = 48{\cdot}17(q/V_0)$ where q is the number of free electrons per atom and V_0 the width (in volts) of the occupied energy range in the completely degenerate state. Taking into account the Landau (1930) diamangnetism of the strictly free electrons, the above expression reduces to the following.

$$(\chi_A)_e \times 10^6 = 32{\cdot}11(q/V_0)$$

The diamagnetism of the free electrons was shown by Landau (1930) to be given by $\chi_L = 0{\cdot}623 n_0^{1/3} \varrho^{-2/3} A^{-1/3} \times 10^{-6}$

where n_o is the number of free electrons per atom in the metal, ϱ the density of the metal and A its atomic weight. The total paramagnetic susceptibility of the degenerate electron gas is $2\chi_L$ since the paramagnetic effect due to electron spin is three times as great as the Landau diamagnetism. Peierls (1933) studied the effect of the lattice field on the diamagnetism of metals.

2. *Experiment.*

Metallic single crystals have in general been prepared by the method of Bridgman (1925). The tube containing the metal is passed through an electrically heated furnace, the temperature inside being regulated to be about 30°C above the melting point of the metal. Goetz and Focke (1934) prepared bismuth crystals having any desired orientations by initially attaching seed crystals to the rods. Schoenberg and Uddin (1936 a and b) prepared small beads of bismuth metal and converted them into single crystals by cooling them very slowly through the melting point.

The Gouy method has been adopted by various investigators. Consider a single crystal having the shape of a cylindrical rod arranged with one of its ends between the two parallel pole faces of an electromagnet and its cylindrical axis normal to the direction of the field. All the metal crystals so far studied have two principal susceptibilities one ($\chi_{\parallel}$) parallel to the axis of symmetry and the other ($\chi_{\perp}$) normal to this axis.

Let the angle between the principal axis of the crystal and the cylindrical axis of the rod be φ. The plane through

these two axes intersects any horizontal section of the crystal along a straight line. Let θ be the angle which this straight line makes with the direction of the magnetic field. It may be shown that the magnetic susceptibility χ_θ in this position is given by

$$\chi_\theta = \chi_\perp (\cos^2\varphi\cos^2\theta + \sin^2\theta) + \chi_{||}\sin^2\varphi\cos^2\theta$$

When the crystal is rotated about the vertical axis and the Gouy forces are determined at intervals of say 15°, it is found that χ_θ varies between a maximum and a minimum. If χ_o and χ_{90} be these values,

$$\chi_\perp = \chi_{90} \text{ and } \chi_{||} = \frac{\chi_o - \chi_{90}\cos^2\varphi}{\sin^2\varphi}$$

The angle φ may be determined by X-ray methods, by breaking the crystal or by etching. Bismuth, zinc and cadmium crystals may be broken easily. Deformation of these crystals may be avoided by cooling the crystals to liquid air temperature and then breaking them. $\chi_\perp$ and $\chi_{||}$ may be determined even if φ could not be directly found from the equation,

$\chi_{mean} = \frac{1}{3}(\chi_{||} + 2\chi_\perp)$. If $\chi_\perp$ and χ_{mean} are determined, $\chi_{||}$ and φ may be easily calculated.

Schoenberg and Uddin (1936a) used the Sucksmith balance (Bates 1939, p. 105) to find the principal susceptibilities of bismuth crystal.

3. *Results.*

The results obtained by different investigators are given below.

Metal.	Authors.	Temperature °C.	Crystal structure	$\chi_\perp$	$\chi_\parallel$	Anisotropy $\chi_\perp/\chi_\parallel$
Zinc	M.R.C.	17	Hexagonal close-packed.	—0·145	—0·190	0·763
	S.R.R.	30		—0·149	—0·202	0·738
Cadmium	M.R.C.	17	do.	—0·160	—0·261	0·613
	S.R.R. & S.S.	30		—0·163	—0·223	0·731
Mercury	V	—183		—0·121	—0·112	1·080
Thallium	S.R.R. & K.C.S.	30	Hexagonal close-packed.	—0·165	—0·412	0·400
(α)	S.R.R. & A.S.N.			—0·164	—0·420	0·390
Tin	H	17	Tetragonal	+0·0270	+0·0241	1·120
	S.R.R.	30		+0·0400	+0·0387	1·034
Tellurium	S.R.R. & S.R.G.	30	Rhombohedral.	—0·296	—0·329	0·900
Bismuth	G.F.	21	do.	—1·482	—1·053	1·408
	S.R.R.	30		—1·582	—1·160	1·364
	K.	17		—1·49	—1·08	1·380
	S.U.	27		—1·44	—1·025	1·405
Antimony	M.C.	17	do.	—0·63	—1·13	0·558
	S.U. (c)			—·55	—1·42	0·387

M.R.C. : McLennan, Ruedy and Cohen (1928)
S.R.R. : Rao (1936)
V. : Vogt (1934)
S.R.R. & K.C.S. : Rao and Subramaniam (1936)
S.R.R. & A.S.N. : Rao and Narayanaswamy (1938)
H. : Hoge (1935)
S.R.R. & S.R.G. : Rao and Govindarajan (1939)
G.F. : Goetz & Focke (1934)
K. : Kapitza (1931)
S.U. : Schoenberg and Uddin (1936a)
M.C. : McLennan and Cohen (1929)
S.U. (c) : Schoenberg and Uddin (1936c)

For zinc and cadmium, $\chi_{\parallel}$ is greater than $\chi_{\perp}$ but in the case of mercury, $\chi_{\parallel}$ is less than $\chi_{\perp}$ Thallium (α) shows a remarkably small value of $\chi_{\perp}/\chi_{\parallel}$ and only antimony exhibits a still lower value. Bismuth shows a high diamagnetism and contrary to antimony, $\chi_{\perp}$ is greater than $\chi_{\parallel}$ Paramagnetic white tin shows a feeble anisotropy. Tellurium which is diamagnetic has its principal susceptibility values close to each other.

The results have been explained on various considerations. Bismuth crystals are perhaps the most interesting. Ehrenfest (1929) and Raman (1929) suggested that the high diamagnetism of bismuth and graphite was probably due to the presence of large electron orbits. Jones (1934) has discussed the high diamagnetism of bismuth by considerations of Brillouin zones in the metal lattice. An explanation is given not only for the large value of its diamagnetic susceptibility but also for the effects arising out of temperature variation and introduction of traces of foreign metals.

Rao and Subramaniam (1936) have shown that in the case of thallium at room temperature, two of the three valence electrons have their orbits in the hexagonal plane and that the other electron possesses a metallic bond. Stoner (1934) has drawn attention to the fact that in the case of zinc and cadmium the anisotropy lies in the diamagnetic part of the susceptibility.

4. *Temperature variation.*

The variation of the principal susceptibilities of bismuth crystal with temperature has been studied by Kapitza (1931), Goetz and Focke (1934) and Schoenberg and Uddin (1936a).

Kapitza found $d\chi_{\parallel} \mid dT = 0 \cdot 76 \times 10^{-3}$ and

$$d\chi_{\perp} \mid dT = 1 \cdot 191 \times 10^{-3}$$

in the range 85°K to 290°K, assuming χ to vary directly as the absolute temperature T. Goetz and Focke (1934) studied the dependence of the anisotropy on temperatures between 90°K and 543°K (melting point of bismuth). An almost linear relation between the principal susceptibilities and temperature was obtained. Schoenberg and Uddin (1936a) investigated the variation in the range 14°K to 400°K. Both $\chi_{\perp}$ and $\chi_{\parallel}$ were found to vary linearly over a considerable temperature range. Below 50°K both the principal susceptibilities become nearly independent of temperature. Schoenberg and Uddin (1936b) studied the dependence of susceptibility on the field strength at low temperatures.

De Haas and van Alphen (1930 and 1932) first showed that the susceptibility of bismuth at low temperatures is dependent on field strength. Schoenberg and Uddin (1936b) studied the de Haas and van Alphen effect of bismuth at temperature down to about 4°K. The magnitude of this effect is found to depend on alloying. These results are of special interest from theoretical considerations of bismuth crystal structure.

Rao and Subramaniam (1936) investigated the variation of the principal susceptibilities of thallium. On heating α-thallium (which is hexagonal), the structure changes to the cubic at about 230°C. This change is indicated by the magnetic properties of thallium single crystals. As soon as the temperature became larger than 230°C. the observed susceptibility was constant when the crystal was rotated. The diamagnetic susceptibility of the cubic or β-thallium was found to be 0·158. On melting at 300°C. this value became 0·131.

Schoenberg and Uddin (1936c) found that in the case antimony $\chi_{\perp}$ was constant in the range 14° to 300°K. But $\chi_{\parallel}$ was found to increase steadily as the temperature was lowered from 300°K.

The crystal diamagnetism of tellurium at temperatures ranging from 30° to 500°C. was investigated by Rao and Govindarajan (1939). The value of $K_{\parallel}/K_{\perp}$ which was found to be 1·11 at 30°C. decreased gradually to 1·00 at 220°C. and remained constant thereafter till the melting point was reached. What is of special interest is that $K_{\parallel}$ decreased while $K_{\perp}$ remained constant in the range of temperatures 30° to 220°C.

5. *Effect of alloying.*

Goetz and Focke (1934) carried out an extensive series of experiments on the effect of impurities of foreign elements added to bismuth. They showed that the magnetic anisotropy increased when the impurity is electropositive and decreased when electronegative.

$\chi_{\perp}|\chi_{\parallel}$ is increased by the addition of tin (which is electropositive with respect to bismuth) and is decreased by the addition of tellurium. Schoenberg and Uddin (1936a) arrived at similar results and showed that $\chi_{\parallel}|\chi_{\perp}$ is not a linear function of temperature. Mott and Jones (1936) have explained these variations from the point of view of Brillouin Zones in bismuth.

Rao and Narayanaswamy (1938) found that $\chi_{\parallel}|\chi_{\perp}$ of α—thallium was decreased by lead or tin, while cadmium increased this value. Tin was nearly two and a half times as effective as the same atomic percentage of lead. The principal susceptibility $\chi_{\perp}$ of cadmium was found by Rao and Sriraman (1938) to decrease by the addition of small quantities of lead. Small amounts of zinc did not influence the anisotropy of cadmium. The principal diamagnetic susceptibilities of tellurium showed a decrease in value due to small admixtures of tin, cadmium, bismuth and lead. The decrease was found by Rao and Govindarajan (1939) to be dependent on the atomic radius of the element introduced.

6. *Influence of cold-working.*

The influence of cold-working on the principal susceptibilities of bismuth, zinc and tin crystals were studies by Rao (1936). Bismuth crystals showed a decrease in susceptibility, this decrease being of the same order of magnitude as in the case of polycrystalline bismuth. Zinc crystals showed a small decrease in the principal diamagnetic susceptibilities on cold-working. Tin crystals had their paramagnetic susceptibility lowered slightly by tensional stress.

The influence on magnetic properties of boundaries of the small crystals in polycrystals was also discussed.

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THE THERMAL ENERGY OF CRYSTALLINE SOLIDS

By

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1. *Introduction.*

The first great step towards the development of a satisfactory theory of the specific heat of solids was taken by Einstein (1907) when he showed that the acceptance of the hypothesis of radiation quanta involves as a necessary consequence that the mechanical energy of the vibrations of the atoms in a solid must also be regarded as consisting of discrete units or quanta proportional to the frequency of vibration. A quantitative relationship between the heat content of a solid and the "frequency spectrum" of its internal vibrations is thus indicated. The evaluation of the thermal energy depends on a determination of this spectrum, namely, a knowledge of the frequencies of the atomic vibrations and the manner in which the available degrees of freedom are distributed amongst them. This is a problem of some difficulty, to the solution of which there are two distinct methods of approach. The first is the phenomenological one, namely, that of obtaining the desired information in some independent fashion e.g., by spectroscopic research. The other is the *a priori* method of finding the possible modes of vibration from a knowledge of the crystal structure and the forces acting between the atoms, by a dynamical investigation. To the genius of Einstein we owe the first indication of both of these methods of approach to the specific heat problem. The reconciliation

of the results obtained by the two methods with each other and with the specific heat determinations over a wide range of temperature is obviously of the highest importance to a proper appreciation of the physics of the solid state of matter.

2. *Discrete versus Continuous Spectra.*

In his first paper, Einstein adopted the phenomenological approach provided by the fact that infra-red radiations of specific wave-lengths are strongly reflected by many crystals, indicating that they possess characteristic frequencies of internal vibration. It is natural to assume that this is a very general feature of the crystalline state, and hence that we are justified in assuming the infra-red spectrum to consist of monochromatic radiations whose frequencies correspond to certain specific modes of internal vibration. Einstein had no difficulty in showing that the facts then known concerning the specific heat of many solids were broadly in accord with his ideas. He even ventured to calculate the characteristic frequency of diamond from the specific heat data and to suggest (1907) that this calculated frequency might possibly be "inactive" in infra-red absorption. There are however, many solids e.g., metals, for which infra-red spectroscopic data are not forthcoming. To meet such cases, Einstein (1911) showed that the atomic frequency ν could be approximately connected with the bulk modulus K of the solid, its density ϱ and the atomic weight M by the formula,

$$\nu = 2{\cdot}8 \times 10^{7} \cdot M^{-\frac{1}{3}} \cdot \varrho^{-\frac{1}{6}} \cdot K^{\frac{1}{2}} \qquad .. \quad (1)$$

The Einstein formula for the specific heat even with a suitably assumed atomic frequency deviates from the facts at very low temperatures. To explain this deviation,

Nernst and Lindemann made their well-known suggestion that even in the case of elementary solids, two characteristic frequencies have to be considered, of which one is half the other, equal weight being assigned to both. A notable improvement in the agreement with the experimental facts was thereby obtained. Lindemann also suggested a semi-empirical formula connecting the frequency ν with the atomic weight M, the atomic volume v and the melting temperature T_m of the solid, namely,

$$\nu = 2{\cdot}12 \times 10^{12} \sqrt{T_m / M v^{2/3}} \qquad .. \quad (2)$$

giving values of ν in fair agreement with (1).

Starting from the idea that the thermal energy in the solid could be identified with the energy of ordinary elastic solid vibrations, Debye (1912) put forward a theory of specific heats which gained general acceptance. Elastic waves can be propagated in any specified direction within a crystal with three different velocities; one of these waves is approximately longitudinal and the other two are approximately transverse. The possible frequencies of stationary vibration are determined by these velocities and by the dimensions of the crystal. It is a feature of Debye's theory that the frequencies of all the three possible types of wave-motion are assumed to have an identical upper limit determined by the equation,

$$3N = S \int_{\delta}^{\nu^{max}} 4\pi \left(\frac{2}{c_1 3} + \frac{1}{c_2 3} \right) V \nu^2 d\nu = \frac{4\pi V}{3} \left(\frac{2}{c_1 3} + \frac{1}{c_2 3} \right) \nu_{max} \qquad (3)$$

where N is the total number of atoms, V is the volume of the crystal, c_1 and c_2 are respectively the velocities of transverse and longitudinal waves. *The "frequency spectrum" is thus a continuous one*; the number of degrees of

freedom assigned to a given frequency interval increases with the square of the frequency and the spectrum terminates sharply at the assumed upper limit.

3. *Some Remarks on the Debye Theory.*

A justification may be sought for assuming an upper limit of frequency for the possible stationary vibrations of an elastic solid in the view that the lattice spacings in the crystal necessarily set a lower limit to the possible wavelengths of such vibration. It is readily seen that such limitation of wave-length is equivalent to the limitation of the number of degrees assumed by Debye. On this basis, however, there should be separate limits of frequency for longitudinal and transverse waves, since the velocity of the latter is much smaller than that of the former. In Debye's theory however, no such distinction is made. Hence, we should regard his formula (3) as a semi-empirical relation between the highest possible atomic vibration frequency and the elastic properties of the solid. Indeed, taking the value of Poisson's ratio as $\frac{1}{3}$, formula (3) may be written in the form

$$\nu_{max}=3\cdot6\times10^{7}\cdot M^{-\frac{1}{3}}\cdot\rho^{-\frac{1}{6}}\cdot K^{\frac{1}{2}} \qquad .. \quad (4)$$

which is identical with formula (1) due to Einstein except for a somewhat larger value of the numerical constant. It is thus clear that the Debye theory is based on a hypothesis regarding the vibration spectrum which, however plausible it may appear, is essentially arbitrary. That the Nernst—Lindemann formula which considers only two discrete frequencies gives the specific heat correctly over a fairly wide range of temperature indicates that widely divergent assumptions regarding the nature of the vibration spectrum

may be consistent with the specific heat data. The basic question whether the spectrum is discrete or continuous can therefore be answered only by independent spectroscopic research. *Prima facie,* however, it is highly probable that the vibration spectrum includes a low-frequency part of the same physical nature as the ordinary acoustic or ultrasonic vibrations in the solid. This can be regarded as a "continuous" spectrum when the half-wave length is sufficiently large in comparison with the lattice spacings of the crystal. Its contribution to the specific heat would be relatively small at ordinary temperatures but would become important at low temperatures, which is precisely the region where the Debye formula has had its principal successes. On the other hand, the specific heat data do not compel us to accept the idea that the atomic displacements of higher frequencies have the same physical nature as the ordinary elastic solid vibrations. They appear to be quite consistent with the supposition that even in the simplest crystals, and at ordinary temperatures, the thermal energy, instead of residing wholly in a continuous spectrum of vibrations as postulated by Debye, is only to a small extent associated with a spectrum of this nature appearing in the region of low frequencies; much the larger part of the energy might well be carried by vibrations with discrete frequencies appearing as lines in the near or remote infrared spectrum.

4. *Evidence from Light Scattering.*

A powerful method for the spectroscopic study of vibration spectra was furnished by the present writer's discovery made early in 1928 that the spectrum of the light scattered in transparent crystals includes radiations of altered frequencies. Many substances have since been in-

vestigated by this method and a wealth of data has come to hand which is of the highest significance to crystal dynamics and specific heat theory. Two broad results have emerged from such spectroscopic observations. The first is a striking confirmation of Einstein's idea of 1907 that the vibrations of the atoms in elementary solids as well as in more complicated compounds are *monochromatic.* The lines of displaced frequency observed are, in general, extremely sharp. It is perhaps not surprising that this should be the case for the frequencies which roughly correspond to those observed as fairly sharp lines in the melts or solutions of the same solid. Significantly enough, however, it is also true for the lines representing frequencies which are characteristic of the crystalline state and are either not represented in the fluid state or else appear as diffuse continua in the latter condition. Numerous such lines (usually with small frequency shifts) may be observed even with crystals of fairly simple composition.

The second broad feature revealed by the study of light scattering is that the number of discrete lines observed in the spectra generally much exceeds the number of the so-called internal vibrations usually represented by Einstein functions in the expressions for the specific heat of a crystal. Since all such lines represent modes of vibration with specific frequencies, additional Einstein terms must necessarily be added to represent their contributions to the specific heat. Since their frequencies are generally very low, these terms carry a considerable fraction of the thermal energy even at low temperatures. Accordingly, both the number of degrees of freedom and the actual proportion of the thermal energy which can be assigned to the elastic solid vibrations of the crystal is greatly reduced. Indeed,

the spectroscopic facts compel us to recognize that the proportion of the thermal energy which is identifiable as vibrations of the elastic solid type in crystals is usually far smaller than has hitherto been supposed. We may go so far as to say that the thermal energy, instead of being wholly or largely representable by Debye functions at ordinary temperatures, includes in most cases a part so representable to a very minor extent.

5. *Some Illustrative Examples.*

The relative unimportance at ordinary temperatures of the contribution to the specific heat made by the elastic solid vibrations in a crystal may be illustrated by selected examples. Amongst elementary solids, we may take the cases of the three elements which are transparent to light; namely, diamond, sulphur and phosphorous. The spectroscopic data for these substances completely contradict the idea that a continuous vibration spectrum is the principal carrier of thermal energy.

In the case of diamond, we have several distinct sources of information regarding the nature of the lattice vibrations namely the scattering of light, infra-red absorption, ultra-violet absorption, and luminescence. All the evidence indicates that there are numerous types of lattice vibration in diamond represented by definite frequencies. These fall into two groups, the leading members of which are respectively, a vibration of frequency 1332 cm^{-1} and another at 790 cm^{-1} in spectroscopic units. A detailed discussion of the specific heat data for diamond by Mr. V. B. Anand is being published shortly which indicates that nearly the whole of the thermal energy of diamond is carried by these two sets of monochromatic vibrations.

The case of sulphur has been studied and discussed in relation to the specific heat data by R. Norris (1941). Assuming that sulphur is present in the crystal in the form of S_8 groups, 18 out of the 24 degrees of freedom of the atoms in each group have been assigned from the spectroscopic evidence to the internal vibrations of the group and 3 to its rotational oscillations. The three latter appear in the spectra as lines with frequency shift of 50 cm^{-1}, 50 cm^{-1} and 85 cm^{-1} respectively. Thus only one-eighth of the total number of degrees of freedom remains with unidentified frequencies which could possibly be associated with vibrations of the elastic solid type in the crystal.

The case of phosphorus is of special interest. There is evidence that the substance both in the liquid and solid states consists of P_4 groups, the face-centered cubic lattice of the crystal containing four such groups per unit cell. The internal vibrations of the P_4 group are completely represented in light scattering and are responsible for 6 out of the 12 degrees of freedom. The spectrum shows no lines which could be ascribed to the rotational oscillations of the P_4 group. It may be presumed, however, that they exist and have specific frequencies associated with three more degrees of freedom which fail to appear in light scattering owing to the tetrahedral symmetry of the group. The spectrum of the crystal exhibits a sharp line with a frequency shift 32 cm^{-1} (C. S. Venkateswaran, 1936) which however disappears in the melt. This coincides approximately with the calculated Lindemann frequency and may therefore be ascribed to the translational oscillations of P_4 groups in the crystal lattice. Thus, no more than 3 out of the 48 degrees of freedom associated with the 16 atoms in the lattice cell can be assigned to

elastic solid vibrations of the kind contemplated in the Debye theory.

6. *The Case of Quartz.*

A very complete experimental study and theoretical discussion of the case of quartz has been given recently by Mr. B. D. Saxena (1941) and is very illuminating. He considers the unit cell of the crystal to contain three SiO_2 groups, the total number of degrees of freedom per unit cell being therefore twenty-seven. Out of this number, only three degrees of freedom, namely the three translations of the unit cell are associated with vibrations of the elastic solid type. The remaining twenty-four degrees of freedom must therefore be assigned to specific lattice vibrations of the monochromatic type. The application of group theory enables these twenty-four modes of vibration to be classified according to their symmetry characters. The possibility of their appearance as discrete lines in light scattering and in infra-red absorption in specified circumstances can also be predicted. A correlation with the spectroscopic data shows a very complete agreement with the theory, enabling the observed frequencies to be referred to one or the other of the possible symmetry types of vibration. Finally, a calculation is made of the specific heat of the crystal. This shows a remarkably close fit with experimental data over the whole range of temperature from 20°T to 800°T. The calculation shows that the Debye contribution to the specific heat is a major part of the whole only up to about 75°T; at 300°T it is only one-fifth and at 800°T only one-eighth of the actual specific heat.

THE POETS AND THE PATRONS OF THE TAMIL LAND

By

E. S. Varadaraja Aiyar, B.A.

It is an established fact that Literature and Art flourish where there is proper State encouragement. The period in the history of Tamil Literature viz., the first century of the Christian Era has been called the Augustan age of Tamil Literature. This period, it is well-known, coincides with the benign rule of the Cera prince Senguttuvan. This prince as well as his illustrious predecessors and contemporaries, the kings of the Cola and the Pandya Kingdoms have been eulogised by the learned scholars of the time. These three great crowned kings of the ancient Tamil land had been solely responsible for the growth of excellent Tamil Literature especially poetic literature.

It is also generally known that in any age or clime poetic literature often precedes prose literature. The former by its concise nature, is often easily memorised and in the days when printing was not even dreamt of, no other literary form could so easily have preserved the noble thoughts and the valuable traditions of our ancestors. The poets themselves were scattered in different parts of the Tamil land, but all of them met at Madura, the famous seat of Tamil learning, that being the place where as tradition will have it, the three great Tamil Academies once existed.

It is not the purpose of the present article to give or trace the history of these noble academies which have done so much for the enhancement of Tamil Literature. The

materials for its history are few and what little we know of these great assemblies is limited to our knowledge of the third academy or the Kadaiccangam. The real Tamil treasures which are the outcome of the extraordinary intellect of our ancestors belong to the above third Academy and even to this day the Tamilian looks back with respect and gratitude to the famous authors who composed the works of the period and who are known by the respectful appellation of சான்றோர்.[1]

In one of the old stanzas we have this assembly of poets likened to a beautiful garland or necklace interspersed with the various precious gems. As these gems, though born in different places unite in the necklaces so also the poets who were born in different places gathered together at Madura, the seat of Academy. They belonged to different castes and creeds and each one's calling was different from the other. They were well-versed in the different arts and we can trace in their poems their beautiful knowledge of the world. Even the kings of the time were great Tamil scholars and we have excellent specimens of their poems in the Sangam anthologies. Ilangovadigal, the author of the immortal classic Silappadikaram was a Cera prince.

It was a remarkable feature of this period that there was actually no religious or communal quarrels. All the learned poets assembled in common ground and their only aim was to foster good, enduring Tamil literature. Not confined to the four walls of an educational institution their knowledge of the world and nature was something marvellous and one has simply to turn over a few pages of the old anthologies if he wants to realise the peculiar and pleasure-

1. Puram (218),

able effects of their magic touch. The best ideas had been put in the best possible form and similes and metaphors had been culled from the broad nature and its environs. Not obsessed by narrow feelings of caste or creed, they were able to give their best talents to the poetic composition with the result that we have now hundreds of stanzas full of poetic beauty and charm. This absence of communal feeling, however, tended to create amity and perfect unity among these noble savants. Real education and literary attainments of a high order were all what they wanted and literary celebrities were much respected. Poets like Kapilar and Paranar have elicited admiration even from their compeers in the Academy. In stanza 183 of *Purananuru,* we have the lofty ideas of one Ariyappadaitanta Nedumceliyan. In the poem he says that it is always better to learn ungrudgingly at the feet of a master rendering him proper obeisance and substantial help monetary or otherwise, that even among the sons born in the same family the mother has a tendency to prefer the educated son to others, that the king is always after the wisest man in a family and not the oldest, and that it is a common feature observable everywhere that even a person born high in social status would stoop down to learn under a teacher, though the latter might be born in a status lower than his, as real knowledge knows no caste.

These high principles characterised the poets of yore, who have handed down to us real poetry full of feelings and natural grandeur. Observations of nature and similes drawn from them abound in their poetry. A few of them may be quoted. A sensitive balance is compared to balanced judgement. The swordsmen in battle array have been compared to big white fish drawn together; the elephant weltering in the battle-field with its trunk cut is likened to

a plough share. The irredeemable nature of a place conquered by a king is compared to water strewn on red-hot iron. The instability of the world has been well brought out by likening it to the part played by the actors in a drama or kuttu. The king's concealed anger is compared to that of the elephant, which, remembering the stone thrown on it was watching to deal with the offender. The continued march of poets and bards in search of literal patrons who could appreciate their art and offer them presents is likened to the various streams which take their rise in hills and flow in the plains towards the sea. The double nature of the king viz., his easy accessibility to his admirers and his sterness to his enemies has been compared to that of an elephant which while bathing allows even young children to handle its tusks and which however while in rut threatens to destroy everything that crosses its path. The munificent patron is often compared to a solitary fruit-bearing tree in a long dreary forest entirely void of tree-shade.

Among the poets we find a decent number of women also. It will thus be seen that women in these days had some real freedom and that good educated ladies did find their honourable seats side by side with the men-poets. Even wives of kings had been good poetesses as will be seen from the Sangam collections that have come down to us. Kakkaipadiniyar, Koppendu, Adimandiyar, Auvaiyar and the highly accomplished daughters of the liberal chieftain Pari were some of the women poets.

Leaving these aside let me now see the role actually played by these poets. Some of them had actually served in the capacity of ministers. The lyrics and the elegies composed by them on their patrons are innumerable and they are full of feeling or pathos. As advisers, as intermediaries even in the private quarrels or misunderstandings

between the king and his consort, as promoters of peace between rival kings, as people who created strifes or put an end to them, they had been of incalculable service in those remote days. The confidence and the absolute reliance based upon these poets by the then kings and chieftains are things which every Tamilian must cherish and value. When we find a king like Nedumceliyan actually swearing that if he failed to capture and subjugate the enemies who spoke of him with disrespect, he shall go unsung by the learned poets who assembled in his court under the headship of Mangudi Maruthanar, our soul gets elevated and we feel proud of the exalted position our poets once occupied and the high esteem in which they were held by the monarchs. Students of Tamil literature know only too well the attempts made by no less than four poets, viz., Kapilar, Paranar, Arisil-kizhar and Perumkunrur-kizhar, to pacify Pehan an illustrious liberal chieftain of their time and to bring about rapproachment between him and his wife and the signal success that attended their noble attempts. The divine friendship of Kopperuncolan and Pisirandiyar had almost become a classic and the disgust with the affairs of the world felt by the great poet Kapilar immediately on the death of Pari his noble benefactor and his final resolve to fast unto death and not outlive him are acts highly exalted in themselves. One cannot but feel here the gratitude felt by the poet for all the services rendered by his Lord and the noble services undertook by the poet to get the daughters of his master married. Many civil quarrels and internecine disputes had been avoided by the poets' intervention at the proper moment. Here is an illustration for this act of theirs.

Nalamkilli and Nedumkilli were the scions of the Cola family. The former laid seige to Nedumkilli's capital. Now

Kovur Kizhar a poet of high eminence who was a good friend of both of them addressed them as follows :

"Neither you nor your opponent wear the palmyra or the margossa flower. Both of you wear the Athi flower which is the distinguishing flower of your line. Even if any one of you gets defeated it is the cola family that is discomfited. Victory in battle for both of you is not possible. Hence it does not behove you, born of a noble line to quarrel among yourselves. This strife will only serve to get you the ridicule of your adversary. So please refrain from fighting with each other".[2]

On another occasion Kopperuncolan decided to wage war on his sons being offended at their misbehaviour. On seeing this one Pullarrur Eyirriyanar addressed the king thus :—

"O benign prince, your present opponents are not the Cera and Pandya who are your traditional enemies. Nor are you their inveterate adversary. When you depart this world leaving behind you your undying fame they alone are the sole claimants of your kingdom. Supposing your sons fight with you and get defeated, to whom else are you going to hand over your kingdom ? If you get defeated you will be despised by all. Hence I beseech you to shake off your anger and refrain from this ignoble act.[3]

Further instances where the poets gave their best advice to their patrons in moments of crisis can be multiplied. They had been their keen advisers in matters of state or royal administration. They had from time to time advised them to do all possible acts to promote the welfare

2. Puram (45).
3. Puram (213).

of the people. Paranar in one of the stanzas in *Purananuru* (5) advised a Cola prince Ilancetcenni to look after the welfare of his subjects with the tenderness, care and affection with which a mother rears her young child. The great poet Kambar stresses on this sacred duty of a righteous monarch when he tells us that King Dasaratha ruled the world and looked after the welfare of his subjects as carefully as a very poor farmer will look after his small patch of cultivable land. Karikizhar, another Sangam poet praises Muthukudumi Peruvazhuthi in the following manner: —

"Oh Beautiful prince! let your parasol lower down when you circumambulate the temple of the three eyed Siva. May your munificence be discriminate. May your crowned head bow down before learned sages. May the laurels you wear fade by the smoke that shoots up from the fire which devastates your enemy's realm. May your irrepressible anger disappear before the bright faces of your beloved wives and may you live as long as the sun and the Moon."[4]

Here we have a fair idea of the general way in which the poets of old were used to eulogise their patrons. Again in stanza 9 of Puram we are told of the righteous way in which warfare was undertaken in those days. The cows must be protected as well as the sages and learned men. The women and the sick must be saved. Due consideration must be given to those who have not borne children who alone could perform the last rites to the deceased and the usual offerings to the manes, as it was considered that people without issues could not enter heaven. Very useful advice regarding the manner in which the king should rule

4. *Ibid* (6).

his realm is found in almost every alternate stanza of Puram. One Pisirandaiyar addressed Arivudai Nambi in the following manner. "Oh Prince, if paddy is converted into balls of rice and given to the elephants, the produce of even a small patch of land like the Ma [illegible] can feed the elephant for many days. But if the elephant is left to eat the grains in the paddy field itself even hundred acres will not suffice and the paddy grains that are spoiled by being trodden by the animal will be greater than those that actually fill its stomach. Similarly, if a king exacts taxes with a certain principle, his wealth will accumulate. But if he resorts to extortion, he will soon lose his wealth and his kingdom will fall."[5]

Besides these we are able to learn through these poems several acts committed by the victors in the places subjugated by them. It was the custom in those days to plough the tilled fields with white-mouthed asses and to spoil the drinking water tanks by driving elephants in them. Portions of conquered territory were often set on fire and women made prisoners. The gems in the crowns of the defeated kings were utilised for being set or fixed in the anklets of the winner. Castor-oil nuts were sown in the cultivated fields and the hair of women taken as captives was twisted like ropes and was used to drag the king's chariot. The spoils of victory were freely distributed to the bards, poets, augurs and others.

Let us now see the patrons who by their liberal gifts had helped the growth of literature and literary men. It was already observed that the three ancient kings the Chera, Chola and Pandiya, liberally patronised literature.

5. Puram (184).

The staunch friendship of Kopperuncolan and Pisirandaiyar as well as of Kapilar and Pari, had already been noticed. The eulogies bestowed upon Adhigaman by the poetess Auvvaiyar are very pleasant reading. When we hear that the Cera prince willingly parted with a Nelli fruit which had the virtue of bestowing immortality in favour of Auvvaiyar we are reminded of their divine friendship, and the high regard the prince had for the poetess. She, in her turn ever proud of her profound learning, condescended to praise him and even to act as embassy when asked to do so. The innumerable gifts made by the Cera kings to those poets who praised them have been faithfully recorded in the ancient work *Padirruppattu*. This work at present contains only eight sections, the first and the tenth having been lost. Each is in praise of a Cera King and from Imayavaramban Nedunceralathan up to Ilanceral Irumporai we have got a regular record of their achievements, benefactions, valour, etc. When we hear of a Cera king actually fanning a poet, who tired of walking lay on the dais intended for the royal drum or Murasu, we realise the depth to which the kings were willing to go down in order to respect real erudition. It was Karaikal Valavan that gave 16 lakhs of Pon as present to Kadiyalur Uruthirankananar for his beautful poem *Pattinappalai*. Selvakkadunko, a Cera king presented one lakh of Kanam (an old coin) to Kapilar for his seventh ten sung in his praise and also all the lands that could be seen by him from the top of a hill known as the Nandra hill. Last but not least we have a curious instance of a cera king actually renouncing his kingdom in favour of a poet known as Arisilkizhar for having praised him in the eighth ten of *Padiruppattu*. The learned poet, however, refused the offer and exhorted him to rule the realm peacefully.

Even apart from crowned kings we have a regular list of petty chieftains whose bounty has been praised in the best possible way by the bards and poets. Pari, Pehan, Nalli, Ori, Ezhini and a host of other names are familiar to the Tamil scholar. The elegies sung on the demise of kings and chieftains sung by the bards are heart-rending and every piece tells us of the benignant way in which the poets were treated by them while alive. Kapilar tells us that Pari was master of 300 villages and that all of them had been given away as presents to the bards. Pari's munificence was proverbial and his having parted with his chariot so that it may serve as a prop for the mullai creeper shows his consideration even to plants which have only one sense, *viz.*, the sense of touch.

Regarding the elegies, one or two may be quoted here. One Aduthurai Masattanar (Puram, 227) in one of his stanzas praised his deceased patron Kulamurrattu Tunjiya Killivalavan thus:—

Oh Death ! You are unwise. Inexperienced as you are you have eaten the seed that would have well sustained you. You have taken the life of one who by winning many a battle had been of immense help to you in feeding your voracious appetite. Hallo ! you are to be pitied. Who else is going to satisfy your hunger ?

Arisilkizhar another poet sings pathetically of his patron thus (Puram. 232) :—

" Oh let me be gone along with my benefactor. What avails my lonely presence here under the Sun, separated as I am from my patron. I wonder how he, my patron is going to accept the little quantity of toddy that is to be given to him as part of the offerings which are usual for

the dead, he, who rejected outright and refused to accept territory after territory offered to him as tribute by his adversaries"!

The poetess Auvvaiyar on her bereavement caused by the death of Athiyaman Anji has sung thus:— (Puram 235)

"Oh my patron! What little was available he used to give me and feed me first. He used to sit and dine with a good number of people. All that is past. Full of valour he will not scruple to visit battlefields. That is now past. The pointed lance which was thrown by the enemy and which pierced his heart pierced also the begging bowl, the hand that bore it and the tongue of the learned bard who knows to praise in the best possible way employing well-chosen words and epithets. Hereafter no one is there to sing and nobody to be sung."

While, however, reading these elegies and other poems even a casual reader is likely to be struck by the miserable poverty of the bards, the minstrels, and the Padinis. Extremely indigent they wandered from place to place mostly in *palai* or dry tracts in search of benefactors who could give them food and clothing. They were expert singers and at times dancers too. Here are some pen-portraits of their extreme penury: One Odaikizhar of Turaiyur has sung of Vel Ay in the following manner. (Puram, 136):—

"Oh! of the enemies that hover round me whom am I to specify as the worst: shall I speak of the lice with their little ones sticking fast to the sides of my tattered clothes which are full of stitches like the upper side of the sound box of a guitar or yazh; or shall I refer to the

pinching hunger which torments me and my kith and kin ; or shall I recount the worry caused by the high-way robbers who regardless of my despicable position rob me of what little I have. Somehow with the fervent hope that it is Ay who would realise all these, our troubles and enemies, I approached him and said " They alone who help us and relieve our distress will be reckoned as really charitable people. But those who help others placed in better status than we are, are the very men who do so expecting to be helped in turn. Hence I request you to send us away with suitable presents as befits our learning. May you live long."

Another poet Perunthalaiccathanar by name praises Kumanan thus :— (Puram, 164)

" The wife in the household is in great distress. The oven not being used for a number of days is full of fungus growth. The young ones at the breast not finding any milk there gaze piteously on the mother's face. The mother is full of tears. On seeing this I have approached you Kumana for you are the right man to be approached for relieving my poverty."

Another Unpotipacumkudaiyar has sung of Ilancet-cenni. In this poem we find a humorous depiction of the poverty of the bard and the subsequent pleasure enjoyed by his children and relatives on being the recipient of innumerable presents from a munificent patron. He says, (Puram, 378) :—

" My patron actually showered many ornaments on me. On seeing them my people rushed in to wear them. But as they were not used to them they wore on the ears the jewels that were to be worn on the fingers and those of the fingers in their ears. The jewels intended for the waist

were worn by them on their necks and the neck ornaments were assigned to their waist." This act of theirs has been likened by the poet to that of the monkeys of Kishkinda, when they beheld the jewels which Sita threw in a bundle while she was being forcibly carried away by Ravana.

While I am here I think it will not be inappropriate if I refer to the magnanimity, boldness and self-respect that characterised these bards in spite of their impecuniosity. Here are one or two instances that may bear out the above statement. The poet Perumcittiranar approached one Veliman when he was at the point of death. His brother was however instructed to reward the poet liberally. The brother rewarded him scantily. This the poet could not brook. He discarded the small present and addressed the giver thus (Puram, 162) :—

" You are not the protector of poor people. Nor are liberal patrons wanting. You will see that the world consists of very good patrons for bards like me."

Auvvaiyar when she first approached Athiyaman found him rather indifferent and somewhat slow in receiving her. Unable to put up with this she addressed the door-keeper thus :—(Puram, 206)

" Oh gateman who guards the gateway which never shuts against bards. Perhaps this Anji does not realise who I am. The world is not completely void of wise men and patrons who could help them. Hence, I am now bundling up my musical instruments and I am ready to start. For the sons of an expert carpenter the forest full of trees is highly useful and valuable. In the same way, for me who live by my learning food is sure to come wherever I go."

Having now dealt with in a way the poets and the patrons in the early centuries of the Christian Era, let me now proceed to give a short sketch of the support and patronage the Tamil literature received in the epochs subsequent to the Sangam age. About the 4th Century A.D. we hear of the earlier Colas and also of the advent of the Kalabhras. Then from the 5th Century we have a regular list of the Pallava Kings who were very liberal patrons of Arts and Literature. Both Sanskrit and Tamil were encouraged and even Buddhists and Jains received rich endowments at their hands. This period was highly prolific in religious literature and it is here that we hear of the Saiva Nayanmars and the Vaishnava Alwars who have contributed a good deal to the growth of Tamil poetic literature especially literature of devotion. Huge temples were built by them and they were very richly endowed. These temples were great repositories of learning and several inscriptions that belonged to their reigns tell us of their munificence. Perumthevanar was patronised by Nandi varman, the Pallava King who was the victor of Tellaru and *Nandikkalambagam* was composed by him in praise of the king. Koccengat colan, it is said, had constructed seventy-two temples (Mada temples) for Siva and Tirumangai Alwar refers to this as well as his other benefactions for Vishnu shrines.

When, however, the Cola supremacy revived under Vijayalaya in the 9th Century, we find again great impetus given to literature and art. Rajaraja, Rajendra and other Cola Kings were very liberal patrons of art and Ottakkuthar who was poet laureate of three Cola monarchs in succession was held in high esteem by the kings. His muvar ula and Thakkayagapparani give us much information regarding the men and things of his time. Again Kambar

who flourished in the reign of Kulottunga III has gained immortal fame by his Ramayana and we have ample evidences to prove that his patron benefactor was one Sadayappa Vallal. Kamban has praised this patron in ten places in his immortal epic. Upakara Smrithi or remembrance of one's benefactions is a very common thing observable in our poets. Pugalendi has praised his patron Chandransvargi and Villiputhurar the author of Bharatam in Tamil, his patron Varapathiatkondan.

Coming down to later times we have the bounties of the Rajas of Ramnad. The Sethu Samasthanam can boast of many illustrious poets and philosophers and the recipients of valuable gifts from the Rajas of Ramnad are legion. Besides these then were many ministers, rich landlords and madathipathies who had lent solid support to Tamil literature. Of the Saiva mutts that helped the cause of Tamil special mention must be made of Tiruvaduthurai, Dharmapuram, Tiruppanandal and the Suryanar Koil mutts. Of the zamindaries that promoted Tamil literature we can mention Uttumalai, Ariyalur, Ettayapuram and Marungapuri. It was the liberal munificence and the dainty food given by these patrons that were mostly responsible for the varied literature we have had in recent times. But one is likely to halt here and remark with a sense of dissatisfaction that the above literature had not been up to the mark and that in point of magnanimity of style, faithful description and effective presentation our later poets have maintained only a very low standard, with the result that one perceives very great difference between the productions of these later poets and those of the Sangam period. Perhaps too much dependence of these poets on their patrons had led them to compose their prabhandams with the patrons themselves as the heroes and thus most

of them though they are very fine reading yet lack the beauty of genuine poetry based on pure nature.

Till very recently fear was entertained by all lovers of Tamil literature that it was entirely lacking in popular support and that a continuance of this state of affairs would tell unfavourably on that literature. Fortunately for the Tamil land we see the Renaissance period. This period has happily coincided with the very liberal donation of several lakhs of rupees made by Dr. Raja Sir Annamalai Chettiar of Chettinad to establish a Tamil University in the heart of the Tamil land. Among the many benefactions of the Raja Saheb this one for Vidya Danam stands supreme. Real learning Tiruvalluvar has said, does not stop with the material body but is calculated to stick to the undying Atman or soul and hence the education that one receives in one's birth will always be useful to him even in subsequent births. The many attempts made by the Raja for the amelioration of Tamil and enhancement of Tamil literature music and art have been praised all over the country. Recently his favourite idea of popularizing Tamil songs and of encouraging the composition of pure Tamil songs has been well appreciated and men of learning and musicians of high standing have already set about to respect that idea and to work for its fulfilment. One may therefore hope that this seat of learning viz., the Annamalai University will go a great way in promoting the cause of Tamil literature and that this period will stand as an epoch-making one in the history and growth of Tamil Literature, Science and Art.

A METRICAL INVARIANT ASSOCIATED WITH FOUR COPLANAR POINTS[1]

By

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The θ normal[2] at a point P of a conic is the line obtained by rotating the tangent at P, in the positive sense about P, through an angle θ. If any three points be taken on a conic it could be shown that there is a unique value of θ (mod π) such that the θ-normals at these points are concurrent. Now, given four points in a plane, it is well known that the locus of centres of the conics through the four points is a conic Γ circumscribed to the diagonal triangle A B C of the four points. In this note we seek to determine the value of θ for which the θ-normals at A, B, C, to Γ are concurrent as a metrical invariant of the four points.

Since a set of four points in a plane may be specified as the common points of the two parabolas through them, the angle in question may be obtained in terms of the invariants of the two parabolas.

1. The problem in a slightly different form was suggested to me by R. Vaidyanathaswamy.

2. For a study of the θ—normals of a conic reference may be made to (i) Cases *Analytical Geometry,* pp. 538-9. (ii) On the θ—normals of a conic by R. Vaidyanathaswamy *Maths. Student,* Vol. I, no. 4, pp. 121-130. (iii) On a metrical invariant etc., by A. Narasinga Rao and B. Ramamurti, Annamalai University Journal Vol. I, No. 2. (iv) On the quasi-normals of a conic by R. Vaidyanathaswamy, *Jour. Ind. Math. Soc., Vol.* 18 No. 12, pt. II, pp. 281-8.

Now, among the conics through four points there are two special members, namely, a rectangular hyperbola R and a conic of minimum eccentricity M whose axes are parallel to the asymptotes of R; the parameters of R and M seperate harmonically those of the parabolas.[3] Thus, if the equations of M, R be:

$$M: \quad ax^2 + by^2 - k = 0 \tag{1}$$

$$R: \quad 2hxy + 2gx + 2fy + c = 0 \tag{2}$$

the equations of the two parabolas in the system may be written in the form:

$$P := \quad M + \lambda R = 0 \text{ where } \lambda = \pm \sqrt{ab}/h \tag{3}$$

The Φ-conic of the two parabolas P_1, P_2 is concentric with Γ[4] and has A B C for a self polar triangle. Hence by a known result,[5] if the θ-axes of Γ are conjugate diameters of Φ, then the deviation of A B C is θ,

Now, a pair of θ-axes of a conic separate harmonically the equiconjugate diameters. Thus, as the equiconjugate diameters of Γ are parallel to the asymptotes of M, the θ-axes in question are parallel to the double lines of the involution pencil determined by the two pairs, namely, the asymptotes of M and the lines through the origin parallel to the asymptotes of Φ. From (1) and (3) it may be easily shown that the required double lines are:

$$ax^2 - by^2 + \frac{a^2 b^2}{h^2}(af^2 - bg^2)xy = 0 \tag{4}$$

3. On the quasi-normals, etc., *ibid.*, p. 286.
4. *Ibid*, p. 286.
5. On the θ-— normals etc., *Ibid.*, p. 127.

Also, the pair of lines through the origin parallel to the θ-axes of Γ is:

$$ax^2 - by^2 + (a + b) \tan \theta \cdot xy = 0 \qquad (5)$$

comparing (4) and (5) we have

$$\tan \theta = \frac{1}{a + b} \frac{af^2 - bg^2}{3fg - 2ch} \qquad (6)$$

To express, then, the value of $\tan \theta$ given in (6) in terms of the invariants of P_1, P_2 we notice that:

$$\Delta_1 = -\frac{ab}{h^2}(f\sqrt{a} - g\sqrt{b})^2, \quad \Delta_2 = -\frac{ab}{h^2}(f\sqrt{a} + \sqrt{b})^2 \qquad (7)$$

$$\theta_1 = \frac{ab}{h^2}(af^2 + bg^2 - 4abk) - 2\frac{\sqrt{ab}}{h^2} ab(3fg - 2ch) \qquad (8)$$

$$\theta_2 = \frac{ab}{h^2}(af^2 + bg^2 - 4abk) + 2\frac{\sqrt{ab}}{h^2} ab(3fg - 2ch) \qquad (9)$$

$$\text{also, } J_1 = (a_1 + b_1) = a + b = (a_2 + b_2) = J_2, \; C_{12} = (a_1 b_2 + a_2 b_1 - 2h_1 h_2) = 4b \qquad (10)$$

From equations (6) to (10) we get

$$\tan^2 \theta = \frac{4C_{12}}{J_1 \cdot J_2} \frac{\Delta_1 \Delta_2}{(\theta_1 - \theta_2)^2} \qquad (11)$$

We may remark that when $J_1=0$ (so that J_2 is also zero) equation (11) gives $\theta=\pi/2$. This is so because in this case the four points form an orthocentre set so that Γ is a circle.

ON NUMBERS ANALOGOUS TO HIGHLY COMPOSITE NUMBERS OF RAMANUJAN

By

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Introduction.

In his memoir on Highly composite Numbers,* Ramanujan calls a number highly composite, if the number of divisors of the number is greater than that for any lower number. The origin of this paper lies in the attempt to consider other common arithmetic functions in the light of the above definition. Considering the functions connected with the number of ways of resolving a number into t factors, the sum of the reciprocals of the rth powers of the divisors of a number, and the number of numbers prime to and not exceeding a number, I define three different classes of numbers. Hence this paper consists of three parts.

Considering the technical nature of the subject, here I give only a statement of the main results without any proof. The full paper will be published elsewhere in a mathematical journal.

I. *Highly Composite Numbers of t^{th} Order.*

If the number of ways of resolving a number into t factors is greater than that for any lower number, then that number may be called a 'highly composite number of t^{th}

order.' That is, N is a highly composite number of t^{th} order, if

$$d_t(N) > d_t(N') \text{ for all } N' < N,$$

where $d_t(n)$ denotes the number of ways of decomposing n into t factors. According to this definition, highly composite numbers of Ramanujan are highly composite numbers of second order.

In the investigation of the properties of these numbers, I closely follow Ramanujan, and it is interesting to note that every result about Ramanujan's highly composite numbers is proved to be true with respect to these numbers, provided that we substitute t instead of 2 in proper places. This requires only a close study of Ramanujan's paper with an eye for generalisation; yet the results are remarkably interesting.

Writing N in the form

$$N = 2^{a_2} \cdot 3^{a_2} \ldots . p^{a_p},$$

Where N is a highly composite number of tth order and p is the greatest prime factor of N, I prove the following results:—

1. $a_2 \geqslant a_3 \geqslant a_5 \geqslant \ldots . \geqslant a_p \geqslant 1$.

2. $a_p = 1$ for all N except for a finite number of values of N. To be more precise,

$a_p = 1$ whenever either $p > 2^{2t}$ or $a_2 \geqslant t+1$;
and $a_p \leqslant [\sqrt{t}]+1$ when $p \neq 2$,
and $a_p \leqslant \sqrt{t}+\frac{1}{4}+\frac{3}{2}$ when $p=2$.

3. If $\log \lambda = 0 \ (\log p)$,

$$a_2 \log 2 \sim a_3 \log 3 \sim a_5 \log 5 \sim \ldots .$$

$$\sim a \ \log \lambda \sim \frac{(t-1)\log p}{\log t}$$

4. If $\log\lambda = 0 \ (\log\log p)$,

$$a_\lambda \log\lambda = \frac{(t-1)\log p}{\log t} + 0(\sqrt{l_3 p}).$$

5. When N is large, the indices comparatively near the beginning form a strictly decreasing sequence.

6. When N is large, groups of equal indices occur comparatively near the end.

7. Two consecutive highly composite numbers of t order are asymptotically equal.

It appears that no one has considered the maximum order of $d_t(n)$ when $t \geqslant 3$. Following the proof given by Wigert for the maximum order of $d(n)$, we can prove a corresponding result for $d_t(n)$. But Ramanujan's method enables us to sharpen this considerably. The maximum order of $\log d_t(\mathrm{N})$ proved to be

$$\mathrm{Li}\,(\log \mathrm{N}) + 0\left\{\log \mathrm{N} \cdot e^{-a\sqrt{(l_2 \mathrm{N})}}\right\}$$

without any hypothesis, and it is

$$\mathrm{Li}\,(\log \mathrm{N}) + \frac{\log^{\frac{1}{2}}(t+1)}{\log t}\,\mathrm{Li}\left\{(\log \mathrm{N})^{\log^{\frac{1}{2}}(t+1)/\log t}\right\}$$

on Riemann hypothesis.

II. Highly Abundant Numbers.

Let $\sigma_{-r}(n)$ denotes the sum of the reciprocals of the rth powers of the divisors of n; i.e.,

$$\sigma_{-r}(n) = \sum_{d/n} d^{-r}$$

Then N may be called a 'highly abundant number of rth order' if $\sigma_{-r}(N) > \sigma_{-r}(N')$ for all $N' < N$. According to this definition, Ramanujan's highly composite numbers are highly abundant numbers of order zero.

In this paper, I confine my attention to the cases when $r \geqslant 1$, and use the name 'highly abundant number' only when $r \geqslant 1$. N denotes a highly abundant number and I write it in the form

$$N = 2^{a_2} \cdot 3^{a_3} \ldots . p^{a_p}$$

I prove that $a_2 \geqslant a_3 \geqslant \ldots . \geqslant a_p \geqslant$, and $a_p = 1$ for all N except for 4 and 36 when $r=1$, and for 4 when $r \geqslant 2$. In similarity with highly composite numbers, it is proved that, when N is large, indices near the beginning form a strictly decreasing sequence, and that groups of equal indices occur near the end. When λ is fairly small in comparison with p,

$$a_\lambda \log \lambda \sim \log p.$$

Further, it is proved that, when a_2 is given, other indices can vary through only three values, and the indices, except a finite number of those near the beginning can be determined with an error of at most unity. But I am not able to show that two successive highly abundant numbers are asymptotically equal.

By comparing the tables for Ramanujan's highly composite numbers and highly abundant numbers of the first order, we see many highly composite numbers which are not highly abundant. Further as far as the tables go, all highly abundant numbers are highly composite. So, for a long time, I was under the impression that every highly abundant number of rth order was necessarily one of lower order.

But now we know that in a highly abundant number, $a_2 \log 2 \sim \log p$, while in a highly composite number of Ramanujam $a_2 \log 2 \sim \log p/\log 2$. Hence, it follows that, after a certain limit, no number will be simultaneously highly composite and highly abundant. This was a real surprise to me. So the above conjecture is not true in general. Yet, the question whether a highly abundant number of the second order is necessarily one of the first order together with all similar questions remains unanswered.

It is interesting to observe that 7560 is the first highly composite number which is not highly abundant, while I wonder whether the first highly abundant number of the first order, which is not highly composite according to Ramanujan, is within the reach of modern computation. Yet it is an intensely interesting problem to determine the number of numbers which are simultaneously highly abundant and highly composite.

Wigert* has proved that the maximum order of $\sigma_{-1}(n)$ is

$$e^{\gamma} \log \log n + 0 \ (\log \log n),$$

*Acta *Mathematica* Vol. 37 (1914) 114 at sequel.

where γ is Euler's constant. Properties of highly abundant numbers enable us to sharpen the above result considerably. In this paper, it is proved that

1. max. $\sigma_{-1}(n)=e^{\gamma}\log\log n+0(1)$, by elementary methods;

2. max. $\sigma_{-1}(n)=e^{\gamma}\log\log n+0\{1/(l_2 n)^t\}$, for every fixed t by assuming known results about the distribution of prime numbers; and

3. max. $\sigma_{-1}(n)=e^{\gamma}\log\log n+0\{(\log\log n)^4/\sqrt{(\log n)}\}$

on assuming the truth of Riemann hypothesis.

III. Totient Numbers.

As usual, let $\varphi(n)$ denote the number of numbers prime to and not exceeding n. When we attempt to define numbers with respect to $\varphi(n)$ in analogy with highly composite numbers, we get two different classes of numbers.

At first, let us define a class of numbers N such that $\varphi(n)>\varphi(N')$ for all $N'<N$. Then obviously all primes come under this category. But the problem whether any other number is comprised in this class is really unapproachable; as a matter of fact, it is equivalent to the following conjecture in the theory of primes: namely, there is at least one prime in each of the following intervals (n^2-n, n^2) and (n^2, n^2+n), where n is an integer. Hence this class of numbers is not interesting and we pass on to the consideration of the other class.

If $\varphi(N)<\varphi(N')$ for all $N'>N$, then we may call N a totient number. These numbers are really interesting; for they are neither too easy nor too difficult to be investigated.

Let q be the first missing prime if any and P the last prime occurring in N, where N is a totient number. Then I prove that index of P cannot exceed 3, and there are infinitely many totient numbers in which this index is 2. It is highly probable that this index does not exceed two in any case, but I am not able to prove it.

Further, I show that all the primes upto $\sqrt{P}$ should occur; but there are totient numbers in which the gap between the last prime and the last but one contains as many primes as we please. A totient number is not divisible by two primes greater than $(1+\sqrt{2})q$. If a totient number is divisible by any prime greater than 2q, then $P<3q$. There are infinitely many totient numbers in which the index of P is 2, but there are as many primes as we please between q and P. While $2\cdot3\cdot5\ldots.P$ is a totient number, there are infinitely many totient numbers in which the indices near the beginning can be chosen as irregularly as we please. Further it is proved that $\log q \sim \log\log N$.

If $F(x)$ denotes the number of totient numbers not exceeding x, then

$$c(\log x)^2/\log\log x<F(x)=0(x^{\varepsilon}) \text{ for every } \varepsilon>0.$$

Two consecutive totient numbers are asymptotically equal. After a certain limit, a totient number can be neither highly composite nor highly abundant. Further it is proved that 2, 6, 12, 60, 120, 240, 840, 1260, 1680, and 720720 are the only numbers which are simultaneously highly composient and totient.

In his Primzahlen, Landau has proved that

$$\min.\ \varphi(n) \sim e^{-\gamma} n/\log\log n.$$

At the end of this paper, this result is sharpened. By elementary methods, it is shown that

$$\min.\ \varphi(n) = e^{-\gamma} n/\log\log n + 0\{n/(\log\log n)^2\}.$$

By making use of known results about primes, the minimum of $\varphi(n)$ is proved to be

$$e^{-\lambda} n/l_2 n + 0\{n/(l_2 n)^r\}, \text{ for every fixed } r,$$

Finally, on assuming the truth of Riemann hypothesis, the minimum order of $\varphi(n)$ is sharpened

$$e^{-\gamma} n/l_2 n + 0\{n(l_2 n)^2/\sqrt{\log n}\}.$$

CHARITY AND RELIGION

By

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Charity is one of the main planks of all religions. There is no duty to which more frequent reference is made in the Quran than that of alms-giving. In almost every chapter this duty is urged upon the believers ; and in some chapters, indeed, the Prophet returns again and again to this subject. Further, we notice that the duty of alms-giving is usually coupled with that of prayer, upon which also, the Prophet of Islam lays great stress.

IN ISLAM.

Alms are of two kinds in Islam, namely voluntary and legal or obligatory.

Voluntary alms is what one gives from one's property to obtain the favour of God.

' Spend out of (the bounties) we have provided for you ' is the injunction of the Quran, which asks the believers to give away wealth in charity or employ it in good works. Good works embrace everything that advances the good of one who is in need or promotes the welfare of the community or the nation. Three questions are raised in this connection : what shall one give ? to whom shall he give ? and how shall he give ? The Quran provides an answer in the following verse:

" Whatever you spend that is good, is for parents and kindred, and orphans, and those in want and for wayfarers. And whatever you do that is good—Allah knows it well. " (Ch. II—215).

So ' whatever you do that is good ' is charity. It may be money, a helping hand, advice or even a kind word. To fight in the cause of truth is also one of the highest forms of charity.

" The parable of those who spend their wealth in the way of Allah is that of a grain of corn : it grows seven ears and each ear has a hundred grains. Allah multiplies to whom He pleases. " (Ch. II 261).

" Those who spend their wealth in the cause of Allah and do not follow up their gifts with reminders of their generosity, or with injury—for them their reward is with their Lord. " (Ch. II—262).

" Kind words and forgiveness are better than charity followed by injury..... " (Ch. II—263).

The verses of the Quran given above set a very high standard for charity. It must be in the way of Allah, that is, in all charitable deeds love of God should be the motive, so that the feeling of brotherliness may be fostered. The giver of charity must expect no reward in this world (nishkamakarma of Sanskritists) and his charity should not be followed by references and reminders to his act. The kindness and the spirit to overlook other people's faults or short-comings are said to be better than charity if it is spoiled by annoyance or injury to the recipient.

The holy Quran draws distinction between True charity and False charity.

" And the likeness of those who spend their substance seeking to please Allah, and strengthen their

souls, is as a garden high and fertile; heavy rain falls on it but makes it yield a double increase of harvest, and if it receives not heavy rain light moisture suffices it." (Ch. II—265).

True charity is likened to a garden on an elevated ground. When there is plenty of rain, the water penetrates the soil, yet, its elevated situation keeps it well-drained and the healthy atmosphere increases its yield enormously. But at times, if there be not sufficient rainfall, it catches dew and makes most of any little moisture it can get and that is sufficient for it. Thus a man of true charity gives freely in affluent circumstances without hoarding; in lean times also he does good works without any complaint. He is spiritually healthy; he always looks to God's pleasure, and the strengthening of his soul.

"Cancel not your charity by reminders of your generosity or by injury—like those who spend their substance to be seen of men, but believe neither in Allah nor in the Last Day. They are in Parable like a hard, barren rock, on which is a little soil; on it falls heavy rain, which leaves it just a bare stone. They will be able to do nothing with aught they have earned." (Ch. II—264).

False charity is compared to a hard barren rock, on which a little soil has fallen by chance. Rain water, which made fertile soil flourish, washes away the little soil deposited on the rock and exposes its nakedness. Thus charity 'to be seen of men' is really no charity. It is a false charity, and indicates a disbelief in the Creator.

The Quran enjoins that only good things and well-earned wealth must be given in charity.

" Give of the good things which you have (honourably) earned, and of the fruits which we have produced for you, and do not even aim at getting anything which is bad, in order that out of it you may give away something, when yourselves would not receive it except with closed eyes. " (Ch. II—267).

The preceding verse shows that charity has value only if something good and valuable is given, which has been earned honourably and which is produced in nature and can be cited as a bounty of God. So the idea contained in the English proverb "Charity covers a multitude of sins " is not approved in Islam.

" If you disclose acts of charity, even so it is well; but if you conceal them and make them reach those really in need, that is best for you. " (Ch. II—271).

Charitable deeds may be done openly or secretly. It is better not to seek publicity, but if it is for public purposes, it must necessarily be known provided the chief motives in charity—God's pleasure and our own spiritual good—are kept in view.

Indiscriminate acts of charity are condemned in the following verse of the Quran:

" Charity is for those in need, who, in Allah's cause are restricted from travel and cannot move about in the land, seeking for trade or work. The ignorant man thinks, because of their modesty, that they are free from want. Thou shalt know them by their unfailing mark. They beg not importunately from all and sundry. " (Ch. II—273).

The real beneficiaries of charity indicated in the above verse are those in want, and the want must be due to honourable cause. ' God's cause ' may be defined as sincere and real service to humanity, and devotion to one's religion. Such men may not go about from door to door. It is the duty of the rich to find them out, and help them liberally.

LEGAL OR OBLIGATORY CHARITY.

The Quran lays great emphasis on the service to humanity and amelioration of the condition of the poor. It teaches that every wealthy man who belongs to the commonwealth of Islam should contribute annually one-fortieth of his wealth to a common fund which is managed by the state, or where there is no state, by the Muslim community, for the betterment of the poor. This contribution by the Muslims is called *Zakat*. The institution of *Zakat* in Islam acts not only as a levelling influence, but it promotes sentiments of love and sympathy for fellow-beings.

By means of this institution wealth is made to circulate in the body politic of Islam. A portion of the wealth collected regularly from richer members is pooled at the centre and then distributed among the poor and deserving people for their uplift. This practice used to solve the distribution of wealth, which is the main concern of the present day economists. Wealth has the tendency to accumulate and bring about inequalities of capitalism. The *Zakat* aims at partail redistribution of wealth so that the whole community may derive benefit out of such distribution. The Quran and Traditions lay down the items of expenditure of this *Zakat* money.

Islam has a broader conception of charity apart from its sense of giving away one's wealth. The Quran attaches great importance to such deeds of charity as the emancipation of slaves, the feeding of the poor, taking care of orphans, and doing good to humanity.

The Traditions of the Prophet give various examples of charitable deeds such as the removal from a road anything which may cause injury, helping a man to ride his animal, or load his animal, to show the way, to say a good word, and refrain from doing evil to any one and so on.

IN HINDUISM.

One of the objects of charity in Hinduism appears to be the warding off of ills and difficulties that may happen to an individual or a state. It is believed that charity prevents difficulties and is regarded to be very auspicious and sacred. According to the Matsya Purana[1] there are 16 *mahadanas* which were performed by great kings like Krishna, Ambarisa, Prahlada, Prthus and Bharata.

The sixteen *mahadanas* are :—

1. Tula purusa dana—or a gift equal to the weight of a man in gold. This is said to be the first and best of all gifts.
2. Hiranyagarbha dana—a gift of a golden vessel called hemagarbha.
3. Brahmanda dana or a mundane egg to be made and worshipped on an auspicious day and given away as gift.

1 See V. R. R. Dikshitar, *The Matsya Purana—A Study.* University of Madras (1935) pp. 95–100.

4. Kalpapadapa dana—a gift of a tree of paradise. This is said to be equal in merit to the Asvamedha sacrifice.
5. Gosahasraka dana—a gift of thousand cows.
6. Hiranya Kamadhenu dana a gift of a celestial cow of gold.
7. Hiranyasvadana—or a gift of a horse of gold. This is said to confer numberless benefits on the devotee.
8. Hiranyasvaratha dana—a gift of a horse chariot of gold. The giver is said to attain beatitude after being freed from all sins.
9. Hemahastiratha dana—a gift of an elephant car of gold.
10. Panca langalabhu dana—a gift of a plot of land measuring five ploughs.
11. Dhara dana—a gift of an earth of gold in imitation of Jambudvipa.
12. Visvacakra dana—a gift of a wheel of the universe weighing from 1000 palas of gold to 20 palas according to the ability of the devotee.
13. Maha Kalpalata dana—a gift of a creeper of paradise. Here the worship of devis and of Lokapalas is inculcated.
14. Saptasagaraka dana—or a gift of the seven oceans. The ceremonies are performed in seven sacrificial pits filled with honey, butter-milk, etc., representing the oceans respectively.

15. Ratnadhenu dana—a gift of a jewelled cow.

16. Mahabhutaghata dana—a gift of a pot containing the five elements.

These Danas were performed by Hindu kings till a very late period of Indian History. We have the valuable testimony of Epigraphy to show that the kings of Vijayanagar performed these *mahadanas* at different centres of pilgrimage and thus endeared themselves to peoples and gods. Even to-day some of these Danas are given in Hindu states like Travancore.

The Hindu Law Books insist that gifts should be given to *sishtas* or men of learning and exemplary character who hand on the torch of learning. Annadana or feeding the poor and the deserving is considered to be the best kind of charity and therefore a number of *choultries* and *chatrams* are established by philanthrophists in all ages. Besides almsgiving there are other kinds of gifts like the erecting of new shrines and renovating of old temples and endowing large estates with permanent income for promotion of learning.

If we turn to Tamil literature, the *Tirukkural,* a Tamil classic, lays stress upon almsgiving in many couplets :

" What you spend in alms to the indigent is worthy.

Otherwise it cannot be without taint of some purpose. "

" The giver will not feel delighted, till he sees the face of the suppliant lit up with satisfaction. "

"Men of noble birth give alms to those who seek it without waiting for their poverty-stricken language."

IN OLD AND NEW TESTAMENTS.

Frequent references are made to the matter of alms-giving both in the Old and New Testaments as well as in Talmudic writings.

Lev. 19, 9 f :—"And when ye reap the harvest of your land, thou shalt not wholly reap the corners of thy field, neither shalt thou gather the gleanings of the harvest. (10) And thou shalt not glean thy vineyard, neither shalt thou gather the fallen fruit of the vineyard; thou shalt leave them for the poor, and the stranger; I am the Lord your God."

Deut. 14, 28f:—"At the end of every three years thou shalt bring forth all the tithe of thine increase in the same year, and shalt lay it up within thy gates : (29) and the Levite, because he hath no portion nor inheritance with thee, which are within thy gates, shall come, and shall eat and be satisfied; that the Lord thy God may bless thee in all the work of thine hand which thou doest."

In the Talmud the greatest stress is laid upon this duty. Here, as in the Quran, it is again and again referred to. The following passages may be taken as examples :

P. Aboth 5 : "There are four kinds of alms-givers, namely, those who are willing to give, but are not willing that others should give; whose eyes are envious of the goods of others. He who wishes that others give, but that he himself should not give; whose

eyes are envious of his own goods. He who gives himself and also allows others to give; he is pious. He who will neither give himself, nor yet allow others to give; he is wicked.

Snh 49 b. "Alms is more meritorious than all sacrifices."

B. Bathra 10 b: "So great is alms-giving that it reaches even to redemption."

"As the sin-offering of Isreal made expiation, so doth alms make expiation for the people."

Ber. 6 b. "Three things destroy evil fate, namely, prayer, alms and repentance."

"What are meritorious with fasting are the alms which a man gives in the evening to the poor, that they may procure provisions."

Noteworthy also are the following sayings in the Talmud :

"Alms is the salt of wealth. When wealth is salted with this, it keepeth, just as meat is kept from destruction with salt."

Compare Christ's teaching in Luke 11, 41 :

"But rather give alms of such things as you have; and behold, all things are clean unto you." Here Christ enjoins alms as the true means of purifying material objects for our use.

The giving of alms in secret is greater according to the teaching of Moses. It is said of Rabbi Janay, that seeing a man bestowing alms in a public place he said,

" Thou hadst better not have given at all, than to have bestowed alms so openly, and put the poor man to shame. "

Rabbi Jochanan taught that he who is active in kindnesses towards his fellows is forgiven his sin.

Christ also like the Prophet of Islam believed in the value of giving alms in secret. Christ says in Matt. 6, I:—

" Take heed that you do not give your alms before men, to be seen of them; otherwise, you have no reward of your Father which is in heaven."

Thus the greatest value is attached to the practice of almsgiving not only by Islam but by all other religions. The prominence given to this matter shows us in what light almsgiving was regarded among all the great founders of various religions.

MODERN VIEWS ON THE STRUCTURE OF METALS[1]

By

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There are several striking properties that distinguish a metal from a non-metal. A metal is a good conductor of both heat and electricity; indeed in popular descriptions of electrical phenomena the term *metal* is used almost as a synonym for a good conductor. We speak of metallic reflection or metallic lustre, and also of a metallic sound or the ring of a metal, and figuratively of a metallic voice. We speak also of the malleability of a metal. What is it that endows metals with these characteristic properties? The first step towards an answer to this question was the recognition, made about the end of the last century, that these various properties characteristic of a metal are intimately connected with one another, and further that they can all be traced ultimately to the presence in the metal, of a large number of free electrons, *i.e.*, electrons that can migrate freely over the whole body of the metal.

The mobility of these electrons accounts directly for the observed electrical conductivity of the metal, and also for its thermal conductivity. The optical behaviour of such a medium containing free electrons will be similar to the behaviour of the ionosphere with regard to wireless waves. As we know, the ionosphere, containing a

1 Some parts of this paper are based on a speech broadcast from the All India Radio Station, Dacca.

fair number of charged particles, almost totally reflects all wireless waves whose wave-lengths are greater than a certain critical value. The facility with which wireless waves are propagated over the earth—indeed several times round it under favourable conditions—is due to the reflecting properties of the ionosphere. In the same manner a metal, with its large density of free electrons, has its critical wave-length in the ultra-violet region of the spectrum, and electromagnetic waves of longer wave-lengths, as for example light-waves, will therefore be totally reflected from the polished surface of the metal. This accounts for the peculiar sheen or lustre that is associated with a metal. The solid metal, which is crystalline, may be regarded as an assemblage of positive ions arranged in a regular manner, and embedded in a matrix of negatively charged free electrons, and this structure will account for the malleability of the metal, and also for its peculiar elastic properties.

The number of such free electrons is easily estimated, at least in some of the simple metals like the alkali metals. Thin films of these metals have been found to become transparent, as should be expected, beyond a certain critical wave-length in the ultra-violet, which is different for the different alkali metals. From these wave-lengths one can calculate the number of free electrons in these metals in the same manner in which one can calculate, from the critical wave-length of penetration of wireless waves into the ionosphere, the density of charged particles in it. The number of free electrons in the alkali metals, thus estimated, comes out to be nearly one per atom, which, in view of the monovalency of these atoms, seems to be very reasonable.

With this estimate of the number of free electrons, one would naturally like to go further, and deduce quantitatively from a few simple postulates regarding the movements of these electrons, the various metallic properties. An obvious, and particularly simple, set of postulates would be to suppose that these electrons are moving about in a random, disorderly manner, much like the molecules in any ordinary gas. Then, the larger the temperature the greater will be the velocities and therefore the kinetic energies of these electrons. This picture, however, presents some fundamental difficulties. In the first place, measurements on the heat capacities of metals show that even with a large increase in temperature there is hardly any change in the kinetic energies associated with the electrons—a result which flatly contradicts the theoretical prediction.

Secondly, each of these electrons, by virtue of its spin, should behave like a small magnet, of a definite known strength. When a piece of any metal, like copper or silver—I shall exclude for the present the ferrous metals, which have a complicated magnetic behaviour—is placed between the poles of a magnet, the elementary electronic magnets in the metal will naturally tend to aline themselves along the direction of the magnetic field. This tendency to regular alinement will, however, be much hampered by the disorderly thermal movements of these magnets. When equilibrium is established, there will be, statistically, a preponderance of orientations along the field, as compared with orientations in other directions; with the result that the piece of metal will behave like an induced magnet. Now the lower the temperature, the less violent will be the thermal movements, and consequently the feebler the disturbances to

the regular alinement of the elementary magnets, and therefore the greater the magnetization of the piece of metal.

But actually the magnetization produced at all ordinary temperatures is found to be only one hundredth of the expected value, and further even this feeble magnetization, instead of being stronger at lower temperatures, remains practically independent of temperature.

From the low values for the specific heat and the magnetization of the free electrons in the metal, one may be tempted to infer that the number of these free electrons may not be really so large as that deduced from the optical data, but may be much smaller, only a hundredth of it. This alternative also presents a serious difficulty. The observed conduction properties of the metal will then require that the free electron must be capable of travelling enormous distances in the metal without suffering any collision—distances about a hundred times the distance between neighbouring atoms in the metal. How an electron can travel in a straight line such large distances, and still dodge all the intervening atoms, which are fairly closely packed, and avoid colliding with them, is on this view incomprehensible.

The above considerations relating to the specific heat, magnetization, and distances of travel of the electrons in a metal, will illustrate the kinds of difficulties that one meets with in trying to develop a simple kinetic theory.

On a closer examination of the problem, however, the failure of the simple theory is not surprising. With the large concentration of free electrons that ordinarily

obtains in a metal—nearly as large as the concentration of the atoms—and their low mass, the wave-aspect of the electrons will become very conspicuous, and we have to replace the ordinary kinetic postulates appropriate to an aggregate of particles, by suitable postulates that will take into account the wave-nature of these electrons.

The fundamental law governing wave-motions in an enclosure is very simple. Let me illustrate by some examples. It is well-known that if a stretched string is allowed to vibrate, those vibrations only will be maintained whose half-wave-lengths are equal to the length of the string, or half, or a third, or a fourth, etc., of the length. In other words, only those vibrations that form nodes at the two fixed ends of the string, will be maintained.

In the same manner, if we consider the vibrations of the air in a closed room, there are certain discrete notes which only can be maintained in the enclosure, as any one who sings in a small room will realize. By sounding various notes it is easy to locate some of these natural frequencies of vibration of the air in the room. According to Lord Rayleigh it is somewhat in this manner that blind people are able to guess about the sizes of rooms.[1]

Now the result that in any given enclosure certain discrete wave-lengths only can be maintained, is very general, and applicable not only to the sound-waves

1 He quotes a remarkable instance recorded by Darwin. 'The late blind justice Mr. Fielding' writes Darwin 'walked for the first time into my room when he once visited me, and after speaking a few words said "This room is about 22 feet long, 18 wide and 12 high"; all of which he guessed by the ear with great accuracy'.

maintained in the air inside a closed chamber, but also to light-waves, or electron-waves, maintained in suitable enclosures.

An obvious question suggests itself at this stage. We found just now that only waves of certain discrete wave-lengths, depending on the size of the enclosure, can be maintained in it. Will all these waves be maintained in equal intensity, or will some of the waves be more intense than others? In other words, how is the energy distributed among the different permitted vibrations?

In the example of the sound-waves in an enclosure the answer is simple; the gravest notes will be the predominant notes. The corresponding problem in the case of light-waves is rather complicated, and has indeed proved to be a major problem in physics. With electron-waves the problem becomes again simple. Each of the permitted wave-lengths for the electron-waves in the medium, as for other waves, will correspond to a definite kinetic energy, so that the law regarding the maintenance of waves of definite wave-lengths, will mean that the kinetic energies of the electrons in the metal can have certain discrete values only. There is a subtle principle of exclusion[1] governing these electrons according to which, in the whole assemblage, containing billions of billions of electrons, just two electrons, and no others, can have any particular permitted kinetic energy. These two may be regarded as a pair moving along opposite directions with the same kinetic energy, and with their spins opposed to each other.

1 The above statement of the Principle of Exclusion may be shown to be ultimately equivalent to the statement that no two electrons in the metal, having their spins parallel, can occupy the same position at the same time.

Now assigning one such pair of electrons to the gravest mode of vibration, *i.e.*, to the lowest permitted level of kinetic energy, another pair to the next higher permitted energy level, and so on, one finds that the last pair of electrons in the metal has to be assigned on this scheme to an energy level that is enormously high. To give an idea of the magnitude of the highest energy possesed by the electrons, I may mention that in a metal like silver, the energy will be the same as the average energy of the molecule in any ordinary gas kept at a temperature of about 40,000°C. The corresponding velocity of the electron will be nearly 1|250 of the velocity of light, *i.e.*, nearly 750 miles per second, which is a very high velocity indeed.

Thus all the permitted energy levels up to a certain large value will be occupied by electrons in pairs. A few stray electrons may occupy some of the immediately higher energy levels, and singly; their number being the smaller the lower the temperature. At room temperature their number will be about one per cent.

The enormous energies possessed by the free electrons in the metal will therefore persist practically unimpaired right down to the lowest temperatures.

The above model of the electronic structure obtaining in metals offers a satisfactory solution of the difficulties encountered before. In one first place, since the average kinetic energy already possessed by the electrons is at least a hundred times greater than the thermal energies possessed by molecules at ordinary temperatures, naturally until we reach temperatures of the order of a few thousand degrees, we cannot appreciably add to their energy content.

Secondly, the majority of the electrons are paired in such a way that the spin magnetic moments of the components of a pair oppose each other. In the presence of a magnetic field it is only the few stray electrons (about one per cent at room temperature) that are unpaired, that can turn round in the magnetic field and contribute to the magnetization. It is therefore not surprising that the observed magnetization is so feeble.

Now the number of such single or celibate electrons will be the smaller the lower the temperature. On the other hand, the lower the temperature the less the disturbance from thermal agitations to the regular alinement of these magnets and hence the greater the magnetization. As a result of these two opposing factors, the first tending to decrease the number of effective magnets at low temperatures, and the second tending to improve their alinement at low temperatures, the observed feeble magnetization will be practically independent of temperature.

On this view, the number of free electrons that can take part in electrical conduction will in effect be small. We then have to meet the third difficulty that I mentioned, namely that observational data require that the electron should be capable of travelling large distances, without colliding with any of the numerous atoms in its path. The difficulty resolves itself in view of the wave nature of the electron which predominates under the conditions of close packing in the metal. When the wave-length is large in comparison with the inter-atomic distance, electron-waves, just like light-waves, will suffer very little loss of energy by passage through a homogeneous medium in which the constituent atoms, which will tend to scatter the waves, are regularly spaced as in

the crystalline metal. If the atoms are *perfectly* regularly arranged, the scattering of the electron-waves by them will be so small that the metal will have hardly any electrical resistance. Thus on this view the difficulty is not so much to explain how the electrons travel large distances in the medium, but to explain why they stop at all, *i.e.,* why the metal has any electrical resistance at all. To explain this we have to invoke the deviations from the regular arrangement of the atoms, brought about by their thermal agitations; the higher the temperature, the larger will be the deviations, and hence the greater the scattering, and therefore the greater the electrical resistance of the medium. This is one of the characteristics of pure metals. The presence of any impurity, will naturally disturb the homogeneity of the scattering medium, and will thus tend to increase its resistance. This result also is experimentally verified.

Thus all the three difficulties mentioned in an earlier part of this paper as typical of those that one encounters in the classical electron theory of metals, vanish when the wave nature of the mobile electrons is taken into account. If further one can, on this basis, explain what can not be explained on the classical theory, namely, why certain elements only are metallic and not the others, the new theory may be regarded as quite satisfactory.

The question raised above may be restated in the following form: why is the free electron density so large in certain elements and not in others? If we might generalize from the results obtained for the alkali metals, we should expect the number of free electrons to be the same as the number of valency electrons. Why then are not all the elements metallic?

We have already seen that electron-waves with certain definite wave-lengths only can be maintained in a given enclosure and that among these permitted wave-lengths, all those that range from the longest to a certain minimum, which is determined by the density of free electrons in the enclosure, will be represented in the motions of these electrons at ordinary temperature. Assuming that all the valency electrons in a crystal are free, let us calculate this minimum wave-length. If this wave-length—to be more precise, half of it—comes out to be much greater than the distance between neighbouring atoms in the crystal, then evidently the influence of the crystal lattice on the electronic motions will be small, and the electronic behaviour will conform to that of an electron gas. The substance will then exhibit pronounced metallic properties. This is the case with the alkali metals, and the noble metals.

If, on the other hand, the minimum wave-length calculated from the electron density is not so large, the possibility of regular reflections from the crystal planes, of some of the short waves, has to be considered; in other words, the influence of the lattice becomes prominent. In the neighbourhood of those wave-lengths that can be reflected strongly, are set up barriers that require much energy to cross over from the long wave-length side.

If, as frequently happens, the permitted wave-lengths on the long wave-length side of the barriers are *just* sufficient in number to be assigned one to each pair of electrons in the substance, then these electrons are as good as bound. They cannot change their wave-lengths, or their momenta, except by crossing the barriers, *i.e.*, except when supplied with the requisite

large energy from outside. Such substances will not conduct electricity, except in very high electric fields. In other words, they will behave as insulators. Diamond is a typical example of such a substance. The number of electrons to which can be assigned proper wave-lengths, without crossing the barriers, comes out in this crystal to be just four per carbon atom, *i.e.*, just all the valency electrons; and the barriers are sufficiently high to prevent a normal crossing over of the electrons.

Thus the new theory provides us further with a criterion by which to decide whether the valency electrons in a given substance can be regarded as free, or as effectively bound, *i.e.*, whether the substance will behave as a metal or as an insulator.

KUBERA

By

G. V. K. Aiyangar, M.A.

Kubera or Kuvera is one of the gods of Hindu mythology. His counterpart is found in the mythologies of most of the countries of Asia and even goes by the same name in some of them. He ranks below the principal gods and is a sort of guardian of the world and defender of the faith.

In Vedic mythology Kubera figures as the regent of the spirits of the lower regions and of darkness, as the Indian Pluton.

There are various references to Kubera in the Ramayana. Accounts of the origin of Kubera, as found in the epics and the puranas, differ. The story as given in the Uttarakanda of the Ramayana is; " Brahma had a mental son named Pulastya. Pulastya had a son named Visravas by the daughter of Trinavindu. Visravas, becoming a sage, married a daughter of Bharadwaja, Idavida, whose son Brahma named Vaisravana, Kubera. He performed austerities for thousands of years and received as a boon from Brahma that he should be the god of riches and one of the guardians of the world. At the suggestion of his father Visravas he took possession of Lanka for his abode, which was formerly built by Viswakarma for the Rakshasas who through fear of Vishnu had forsaken it."

The Mahabharata makes Kubera the son of Pulastya and not his grandson. According to it, " Brahma had a mental son named Pulastya, who again had a mental son named Gaviputra Vaisravana or Kubera. The latter

deserted his father, and went to Brahma who, as a reward, made him immortal and appointed him to be the god of riches with Lanka for his capital, the car Pushpaka for his vehicle which moved at its owner's will at a marvellous speed. Pulastya being incensed at this desertion of his son Kubera reproduced the half of himself in the form of Vaisravas who looked upon Vaisravana with indignation. The latter strove to pacify his father and with this view gave him three elegant Rakshasis to attend on him. They bore him Ravana, Kumbhakarna, Vibishana, Kara and Surpanakha. These sons were all valiant, skilled in the Vedas and observers of religious rites but perceiving the prosperity of Vaisravana were filled with jealousy. The brothers began to practice penance to propitiate Brahma who gave them the well-known boons. One of the acts of Ravana's tyranny was to turn Kubera out of Lanka and take Pushpaka by force from Kubera. Kubera retired to Gandamadhana. The Pushpaka was returned to him by Rama after Ravana's death.

Another account of the origin of Kubera is to be found in the Varahapurana. When Brahma entertained the desire to create a universe a shower of lime-stones began to pour forth from his face attended with high winds. After some time when the fury of the storm broke down and everything became calm by the wish of Brahma, he asked the mass of stones to assume the form of a divine person of peaceful countenance and appointed him as the lord of wealth and commanded him also to be the guardian of the riches of the Gods. Kubera is also said to be one of the emanations of Siva with his abode at Alakapuri on the Mount Kailasa.

Besides being the lord of riches and the guardian of the north, he is considered to be the king of the Yakshas, Guhyakas and Kinnaras and is represented as being carried in his car or on the heads of men. Throughout the Ramayana there are brief references to Kubera as the giver of riches and also to the beauty of his palace and gardens. The Bhagavata Purana describes his garden as a place " where the inhabitants enjoy a natural perfection, attended with complete happiness obtained without exertion. There is there no change resulting from the four Yugas; no distinction of virtue and vice; there is neither hunger, weariness, anxiety, grief, fear nor death. The people live in perfect health free from every suffering for ten or twelve thousand years.

His consort is Kauveri or Yakshi or Charvi, daughter of Dhanava Mura. His sons were Manigriva or Varnakavi and Nalakubara or Mayuraja and his daughter Minakshi. The sons were cursed by Narada to become trees in which condition they remained until Krishna an infant uprooted them.

The corporeal form of a king is composed, says Manu, of particles from the eight guardians of the world, of whom Kubera is one. The king therefore surpasses all mortals in glory and is the genius of wealth.

The agamas also recognise Kubera as the master of the Yakshas. According to one authority his colour should be golden yellow and crimson according to another. The colour of his dhoti is to be red and the uttariya white. His person should be adorned with all ornaments including a Kirita, Kundala and necklaces composed of a series of golden coins. He should be good

looking or even terrific looking and possessing either two or four arms. If the arms are only two the hands may be kept in the varada and abhaya poses or the left hand may keep in it a gada; if he has four arms, two of them should be one each round his consorts Vibhava and Vriddhi seated on his left and right laps, the remaining hands should carry the gada and sakti. His left eye should be of yellowish brown colour and he should be dressed in the fashion of westerners. He should have a Kavacha, a pair of moustaches and side-tusks. He should have a rather podgy form, in the "I sold for cash" style. He may be seated on a padmapita or be driven in a chariot drawn by men or even directly seated on the shoulders of a man.

To the right and left of Kubera there should be the Sankanidhi and Padmanidhi who should resemble the Bhutas. He should be surrounded by the eight kinds of wealth and by a number of Yakshas. One of the agamas states that the ram is the vehicle of Kubera but the Rupamandana prescribes the elephant as his vahana. It states that his four hands should carry the gada, a purse containing money, a pomegranate fruit and a Kamandalu. It also states that the figure of Kubera should be to the west of the image of Ganesa in any temple dedicated to Ganesa.

Kubera in the form of an idol has no temple and no Agamic worship; but he is worshipped in the home as part of Vedic ritual on certain occasions. The Taitareya Aranyaka (I, 31) prescribes the procedure in detail for the Vaisravana Yagna. In the elaborate ritual during a Shashtiabdhapurthi, Kubera is one of the chief gods to be propitiated. He is invoked in a poornakumbha

placed to the north of the main Kalasa in the following words:—Naravahana, Lord of the Yakshas and of all holy men, O God, being invoked by me, make this my puja fruitful.

Kubera belongs as much to Buddhism as to Hinduism. In the Buddhist literature and mythology also he is the god of riches and the guardian deity of the northern region of the universe. He is also the chief of the Yakshas, good or evil genii. He is the husband of Hariti, a Yakshini, and herself a giver of wealth. His other forms are Vaisravana and Jambhala. In the Buddhist mythology Kubera is sculptured exactly as in the Hindu representation; but he is immediately recognised by a mongoose which is generally also shown either as sitting upon his left lap or placed on his left side. In the bas-reliefs of Chandi-Mendut there is a representation of Kubera surrounded by Yaksha children and alongside a scene the central personage of which is the child-devouring Hariti, who being converted became the beneficent goddess of health and abundance.

In the mythology of Lamaism Kubera is one of the eight terrible divinities. Kubera or Vaisravana (in Thibetan Ruam-thos-ras) belongs to the group of genii who are the guardians of the points of the compass. He is the god of riches; his emblem is a banner and his attribute a mongoose vomiting pearls. He is the guardian of the North.

The Indo-Chinese have eight Lokapalas (lukabalas) who watch over the earth and its inhabitants. The kingdom of the North is under the ward of Kovero or Peysrap (Kuvera or Vaisravana). His subjects are the Yeaks clad in gold.

Kuvera is also popular with the Javanese. He is one of the minor gods of their pantheon and is the god of riches. He is represented as an obese figure and his most frequent attributes are the mongoose and the lemon.

In Japan Kuvera goes by the name of Kompira or Kubiri. He is a fairly popular deity. One story is that he was originally a demon, converted to Buddhism and he became a god of happiness. Another makes him one of the twelve generals who were protectors of Buddhism. Others make him one of the twenty-eight nakshatra deities. Kompira is regarded as a patron god of sailors and a god of prosperity. The images represent him as a big-bellied man sitting cross-legged. He is ugly, his skin is black and he holds a purse.

In Tamil literature also Kubera is the god of wealth, lord of the Yakshas, regent of the north and one of the Ashtadikpalas. But it is only in Tamil literature that the word also connotes a very rich person.

SEATS OF LEARNING AND THEIR PATRONS IN ANCIENT INDIA

By

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On this auspicious occassion of the celebration of the sixtieth birthday of Raja Sir Annamalai Chettiyar of Chettinad, the greatest patron of learning in Modern Times in South India, my thought naturally wanders into Sanskrit Literature in search of similar benefactors who have helped learning in ancient times, and finds solace to feel that the tradition of ancient India is being kept up unbroken even in modern times. To an ordinary modern Indian, the name of Raja Sir Annamalai Chettiyar appears in association with the names of various persons who have endowed Universities in the West and their minds move spacially. But since I am a Sanskritist, my mind takes to the time-axis and associates the name with similar patrons who have helped in the development and preservation of culture in our own India in ancient times.

Even in the most ancient specimen of Sanskrit Literature, namely the Rigveda, we come across references to the patronage of learning with munificent gifts. The Rigveda contains a little over a thousand hymns with an average of ten verses, mostly in the form of praises addressed to the various gods. But right from the beginning to the end, we come across verses in praise of the patrons of learning also, interspersed with praise addressed to the gods. In most of the cases, such praises addressed to the patrons of learning come at the

beginning or end of hymns addressed to the gods. Sometimes, these praises addressed to the patrons of learning form separate hymns.

The kings of yore, who were symbols of the State, considered it one of their most sacred duties to see that such persons who engaged themselves in the advancement of learning and its propogations received adequate aid from the State. No learned man left the portals of a royal residence in disappointment if his mission in the visit was to receive such State-aid for higher education. The Rishis of Ancient India devoted themselves to probing into the mysteries of the world, in finding out the Truth in the world and in communicating such Truth to their disciples. They were interested in the day to day affairs of the world as well, and they were in frequent communication with the State as symbolised by the King. It is not right to say that their endeavour was only to find out the abstract metaphysical Truth of the Universe divested of all practical importance. Although they attached great importance to the problem of metaphysical Truth, they knew that there was a life-aspect in the Universe, and whenever there were calamities in the world like draught, flood, famine, pestilence and war, they were on the side of the Kings to advise them about the remedy. There are constant references in Sanskrit Literature to show that the Rishis associated themselves with the practical affairs of the State, that they tendered their mature advice on all matters of State and that the Kings sought such advice and listened to them. I need not dilate on the matter much further.

The Kings knew that although in matters of day to day administration, the regular civil and military

officers of the State may be depended on to carry on the work, in special circumstances the State needs the advice of thinkers who are not involved in the complications and details of administration and who can take a detached and impersonal view of things. It is this close association of the State with the higher thoughts of the few in ancient India that gave the stability to the State. And these Rishis were nothing more than what in modern terminology can be called University men.

The Rishis spent their times in the Asramas, persuing their intellectual vocations, advancing and propogating learning. The Rishis cannot maintain the Asramas, the ancient counterpart of modern Universities, without money and such money they got from Kings and also from wealthy men. It is in acknowledgment of such contributions from Kings and wealthy men that the Rishis sang in praise of such gifts. Such praises as appear in the Rigveda are called the Danastutis (praises of gifts). Perhaps all such Danastutis collected together will have the appearance of a modern Commemoration Volume. Such commemoratory volumes are not modern inventions. We have many such commemoratory volumes in Samskrit Literature, right from the Rigveda to very recent centuries. Kavindrachandrodaya, contributed by the scholars of the seventeenth century as a token of their gratitude to Kavindracharya, a great Samnyasin at the time of Shah Jahan, for having interceded with the Emperor and saved them from the pilgrim Tax at Allahabad is one of the latest specimens of such Commemoratory Volumes in Sanskrit Literature. Nrisimhasarvasva, dedicated to a great Samnyasin named Nrisimha of Benares is another.

The Danastutis in the Rigveda have not been collected and presented as a separate work. They remain scattered in the vast literature called the Rigveda. The praises offered by the various Rishis to the various Kings and patrons remain in their positions within the contributions of the separate Rishis in the Rigveda Collection. We know who the Rishis were who have addressed such praises to the Kings and to the other patrons and we know also who the Kings and other patrons were who helped the Rishis in maintaining the Asramas. Thus the entire hymn 126 in Mandala I is addressed by Kakshivan to Bhavayavya. Perhaps it may not be out of place here to give some specimens of such praises.

With Wisdom I present these lively praises to Bhavya the dweller on the banks of the Sindhu,

For he, unconquered king, desiring glory, hath furnished me a thousand sacrifices.

A hundred necklets from the King, beseaching, a hundred gift-steeds, I at once accepted,

Of the lord's cows a thousand, I Kakshivan. His deathless glory hath he spread to heaven.

The Rishi Vamadeva has addressed similar praise to King Somaka, son of Sahadeva. Babhru of the Atri family praises the King Rinamchaya. Similarly Syavasva of the same Atri Family praises Sasiyasi, Purumidha, Taranta and Rathaviti. The first of these four is a woman and as such is of special interest. I quote a few lines from the praises addressed to this woman patron of learning.

Yea, many a woman is more firm and better than the man who turns

Away from gods and offers not.

She who discerns the weak and the worn-out the man who thirts and is in want:

She sets her mind upon the gods.

Similarly various Rishis like Bharadvaja and Vasistha have addressed praises to their respective patrons. The largest number of such praises comes from the Rishis of the Kanva family, whose hymns are collected in the eigth Book of the Rigveda.

When we come to the Upanishads there are various stories narrated there about Kings offering gold to the Rishis. The entire Dharma Sastra Literature is full of praises about offering gifts of gold and other forms of wealth to Brahmins in expiation of sins. No religious rite is complete unless there is the offering of money to the Brahmin who officiated at the rite.

When a student finished his education at such Asramas, they usually gave some Dakshina to the Teacher. This shows that no fee was collected at these institutions and it was at the option of the student to contribute something to the Institution at the end of his education. This may at best correspond to the Convocation fee or the fee for the registration as graduate in the modern Universities.

The story that Kalidasa narrates in the fifth canto of his Raghuvamsa is typical of this system. A boy of the Kutsa family finished his education at the Asrama of Varatantu and at the end the student insisted on the teacher accepting a fee, though the teacher at first

declined. Then when the student persisted, the teacher demanded 14 crores as the fee and the student approached the King Raghu for help in such a plight. The great king said that he had his treasury completely depleted on account of a sacrifice which he had performed, in which all his worldly possessions he had to offer as Dakshina to the Brahmins but assured the student :

> " A young man who had crossed to the other shore of wisdom seeking the necessary money to pay his fee to the teacher did not have his desires fulfilled by Raghu and had to go over to another patron for the money—such a new disgrace shall not alight on me."

There is another interesting story which throws some light on the mentality of the ancient Rishis. King Parikshit was under a curse that he would be bitten by the serpent Takshaka. The great Rishi Kasyapa was going to the Palace of the King to save him. Then on the way he met Takshaka himself. They recognised each other and they wanted to know who was stronger. Takshaka bit a banyan tree and the tree was turned into ashes. Kasyapa threw some water with Mantras and the tree was restored to its original state. Takshaka knew that if he killed the king, the Rishi would save him and bring him back to life. So Takshaka asked the Rishi why he wanted to stand in the way of the operation of fate. The Rishi replied that if he saved the King's life, he would receive wealth for his Asrama. Takshaka offered wealth to the Rishi and the latter quietly retired, leaving the king to his fate of being killed by Takshaka's bite.

The Rishis had to keep up a great establishment in the form Universities and for this they wanted money. The money had to come from the State and also from private benefactions. They received immense patronage both from the Kings, who symbolised the State and also from rich people. Out of such benefactions, the great Asramas were maintained, where the students received free education, free in its widest application.

The Asramas were not mere narrow theological or metaphysical institutions, where the Rishis thought about only the absolute values of things, about the Infinite, the Eternal in the Universe, regardless of the practical values of things. Nor were the Asramas very far removed from the cities and completely detached from the common life in towns and villages. The Rishis themselves knew all about the practical aspects of things in life and advised the kings on such matters. In the Mahabharata, just prior to the Rajasuya, Narada went to the Palace of King Yushisthira and made inquiries about the welfare of the citizens in the empire. He did not go there to engage the King in a metaphysical or theological disputation, nor to impress the king with his abstract erudition devoid of practical values. When there was a possibility of a civil war consequent on Duryodhana snatching away the kingdom of Yushisthira by treachery, all the sages went to both the parties to avert such a calamity, by trying console one in his loss and by trying to persuade the other to return the illegitimate acquisition. When there was misery in the country, the Rishis went to Sri Rama to represent matters to him and to find a remedy.

Even ordinary Samskrit Literature, apart from such semi-religious literature like the puranas, contain refer-

ences to the interest which the Rishis took in the affairs of the State. In the forest, Yudisthira was councelling patience; but Draupadi and Bhima were urging for immediate military action. Meanwhile Vyasa came and brought about a compromise, advising patience till they had concerved their strength and at the same time suggesting that Arjuna should go and win the invincible weapon from Lord Siva. This is the subject matter of a work called the Kiratarjuniya by Bharavi. When India was being trampled by foreigners, there was the need for the reunion of Indian life with godliness so that a real national hero might be born. It is the Rishis that brought about this reunion of Indian national life with Godliness. This is the subject matter of Kalidasa's Kumarasambhava. The spirit of the entire Sakuntala is that the so-called dwellers of the forest colonies were far more practical than the men in the cities and the great Rishi Kanva says that although he was a resident of the forest, he was not ignorant of the needs and ways of city life. When King Dilipa was being tormented by the fears of a great calamity to the kingdom, he went to the forest to Vasistha for advice. When Vasistha met him, he asked about the affairs of the State. All these things prove that in those days, the Asramas were the centres of higher knowledge, both its advancement and its propagation. Such higher knowledge was also intimately associated with the affairs of the State and the life of the common people. The Rishis, who were in charge of the Asramas, were deeply interested in the affairs of the common people and advised the State whenever the State was in need of detached councel.

The Asramas were not isolated institutions completely shut off from the life of the people in the cities and in the villages. Vasistha's Asrama to which Dilipa went for advice was only an afternoon's journey from capital of the King. The Capital of Dusyanta was only two days journey from the Asrama of Kanva. The kings could drive up to the gates of the Asramas in their chariots drawn by horses, which showed that the Asramas were not situated in dense forests to which approaches could be had only by the use of hatchets every time for cutting down trees and shrubs. They were on the main thoroughfares between cities.

Just as when Raja Sir Annamalai Chettiyar of Chettinad conceived the idea of starting an institution for advanced studies, he selected a place on the highway between the important cities of the province, but sufficiently detached from the noise and bustle of cities, and in the suburbs of an important town, similarly in ancient India also, when the Rishis desired to set up an Asrama, they never selected the centre of a city as the site. Even now when on account of the development of cities, localities which were fairly quiet become busy centres, educational institutions which were originally established in such places are being moved over to the less crowded parts. The same was the principle which governed the selection of sites for Asramas in ancient India also.

Every such Asrama was a University or at least a college in those days. Rich men and the State patronised such institutions. Rich endowments and occasional subsidies made the development and maintenance of such Asramas possible. In Raja Sir Annamalai Chettiyar we see the worthy inheritor of such a

great tradition. The only difference between the ancient Asramas and the modern Universities is that while in ancient India, public life and the administration were guided by the wisdom developed in such Asramas, we do not find the State and public leaders seeking and receiving the same guidance from modern Universities. I close this Paper with an appeal to the Raja Saheb to see that the State take better advantage of the intellectual atmosphere of the Universities where there is a clear understanding of the needs of the world but where the complications and previous commitments of administrative details would not vitiate the search for a proper solution and thereby to see that modern Universities are elevated to the same high position of the Asramas in the national life of the country.

CHEMISTRY AND MODERN WARFARE

By

A. P. Madhavan Nair, M.A.

I

No school of modern thinkers will subscribe to the view that Science is an end in itself and that its purpose is the pursuit of pure knowledge for its own sake with no practical social function to perform. Science is and has been, exercising a profoundly vital and revolutionary influence on society. There is no phase of modern civilization, no aspect of the civilized man's material existence, which science has not embellished, made richer, fuller and healthier. But no critics are needed to point out that this is only one side of the picture. On the other side, we are confronted with the gruesome spectacle of scientific inventions and discoveries being used, or abused, to an ever-increasing extent for wholesale destruction and devastation. So much so, the unmixed admiration of a past generation for science and its achievements has given place to grave scepticism and a growing sense of alarm. This sinister aspect of the application of science has been brought home, with vividness and emphasis, to the present generation which has lived to participate in or at least to witness two Great Wars. In the interim between the two wars, when the premier nations were muddling through abortive attempts at World reconstruction, the entire blame for all the ills of modern society and for the total inefficacy of the proposed methods of cure, used to be laid at the door of science. Drastic steps, such as a total suppression of science and its discoveries, were often

advocated. The Bishop of Ripon, addressing the British Association in 1927, said, " .....Dare I even suggest .....that the sum of human happiness outside scientific circles would not necessarily be reduced, if, for ten years, every physical and chemical laboratory were closed and the patient and resourceful energy in them transferred to recovering the lost art of getting on together and finding the formula of making both ends meet in the scale of human life.....". This, if taken literally, is a counsel of despair, which leads us nowhere.

How far does science merit the indictment that it is the root cause of all the complex and apparently insoluble problems that modern society is groaning under—problems such as the periodic recurrence of war with all its attendant horrors, the widespread prevalence of acute poverty in the midst of plethoric plenty, and the general financial chaos? Modern social evolution took a tragic turn when Man achieved mastery over Nature before he could master his own baser self. He lacked the ethical and moral equipment necessary for a healthy assimilation of his newly acquired knowledge. Jealousy, greed, the urge for competition and the craving for combat continue to be his main impulses even after ages of evolution. No wonder then that he should prostitute scientific knowledge for purposes of self-aggrandizement.

If, by a miracle, all the accumulated scientific knowledge we possess today were to be wiped out, thereby enabling us to start afresh on a clean slate, could we then confidently look forward to an era of uninterrupted peace and harmony? No, all indications are to the contrary. Man will still continue to fight, resorting

to the primeval, crude methods of fighting. It might be said that ruin on the same widespread scale as now will then become impossible. But in place of a war which the excellence of modern armaments would make short and decisive, you will have an indecisive, long-drawn-out struggle extending over centuries in which destruction and devastation will be no less extensive than now.

Science has never started a war. But it is true that when war starts, out of causes beyond the control of science, all the scientific resources of nations are mobilised for the successful prosecution of war. The entire output of the nation's scientific research is in effect commandeered in war-time, and becomes state-controlled. No doubt, science loses its international character and outlook, for the time being. But this is inevitable, and science can hardly be blamed for it. To take a parallel, in times of war all able-bodied men are called up for military service. Would anyone therefore seriously suggest that the establishment of permanent peace will be feasible, only if young men were prevented from developing a good physique? No less absurd is the suggestion that in the interests of peace, science and scientific research must be given a burial.

When reviling science as an agent of mass annihilation, let not the critics forget the magnificent contributions of science to the defensive and humanitarian aspects of modern warfare. It is not always that this laudable role of science in the conduct of war receives all the recognition it deserves. In performing such vitally important functions as the development and perfection of effective systems of defence against the enemy's latest weapons of offence, the supply of foodstuffs of

adequate nutritive value by supplementing or supplanting natural food with synthetic and substitute materials, the prevention and control of epidemics and other diseases—in all these, the Nation, in its hour of need, puts its entire trust on the indefatigable labours of its small army of scientists.

II

In the conduct of modern war, the laboratory is being recognised in an ever-increasing measure as an indispensable military adjunct. It is the responsibility of the chemists, working in the laboratory or in the factory, to furnish war materials of basic military importance without which the prosecution of war for a single day would be impossible. These include explosives, poison gases, synthetic products of various descriptions, besides metals and alloys for numerous constructional purposes. Among these, explosives occupy a position of paramount importance in warfare. Except on such rare occasions as when the intrepid Greek army routed the Duce's invading hordes by the simple process of disembowelling them with bayonets, we seldom hear of operations with weapons not involving the use of explosives.

The first explosive to be used for military purposes was gunpowder, the introduction of which in fourteenth century Europe, is epoch-making in more respects than one. It opened up an altogether original form of warfare in which chivalry had no place, and mere brawn ceased to be the deciding factor. The necessity for devising guns and cannon proved a great impetus to metallurgical and other industries. It is remarkable that gunpowder with its numerous defects as an explosive, held the field as

the only known military explosive for over four centuries. The nineteenth century witnessed the phenomenal growth of Chemistry as a science, and one of the directions in which chemistry developed was in the synthesis of new and powerful explosives which rendered gunpowder obsolete.

Modern explosives are best classified as propellants, high explosives and detonants, according to the use to which they are respectively put. Propellants by their explosion within the gun eject the projectile with a tremendous speed to carry it to the desired target. Modern propellants contain one or both of the well known explosives, gun-cotton or nitro-cellulose, and nitro-glycerine. The latter, which is too dangerous an explosive to be used in the pure state, is usually mixed with some diluent such as " kieselguhr " (or diatomaceous earth), or wood flour, and the resulting product is known as dynamite. Cordite is a mixture of nitro-glycerine and gun-cotton with a stabiliser such as vaseline. It may be mentioned in passing that the brilliant researches in this field were accomplished by the great inventor, Alfred Nobel, who is also known as a great benefactor and the founder of the world-famous Nobel prizes. Let us not overlook the significant fact that one of these prizes has been earmarked for the promotion of peace!

The projectiles used in war, shells, bombs, torpedoes or grenades, are charged with explosives of great " speed ", generally known as high explosives. Before the last war, the only high explosive used in shells was picric acid, or lyddite. This was completely superseded during the great war by other high explosives, like T. N. T. or trinitro-toluene which, alone, or mixed with ammonium nitrate, another high explosive, is in use.

Other more powerful explosives like liquid oxygen, or a mixture of ammonium nitrate, carbon and aluminium powder, have been proposed from time to time, and some of them may be presumed to be in use in the present war.

Detonants are extremely sensitive explosives employed only in very small quantities, just for the purpose of initiating the explosion of a high explosive in a shell or a bomb. The best known instances are mercury fulminate and lead azide. On impact with the target, the percussion of a needle causes detonation of the fulminate which, in turn, causes the explosion of the high explosive.

III

Chemical warfare, or the use of poisonous gases or liquid sprays or finely divided solids which produce casualties by their physiological action on the human system, was initiated by the Germans in the early years of the last war. The immediate tactical value of this new weapon was immense, inasmuch as it was used against the ill-defended allies. The element of surprise added to its horror. Casualties mounted up to a record figure. The allied lines were broken, and the morale touched a dangerously low level. It would appear that if the Germans had fully exploited this initial advantage, the tide of the whole war would have been turned in their favour. But the scientists in the allied countries quickly rose equal to the situation, and immediately put into use defensive apparatus, hastily devised and imperfect no doubt, but sufficiently effective in combating the new menace. Further, the terrific allied counter-attacks with the same weapon of offence baulked Germany of a possible victory.

There is as yet no evidence of chemical warfare being adopted in the present war. Hitler's hesitation in using this form of warfare can hardly be attributed to any humane considerations he may happen to possess. Possibly he must be having serious doubts about its tactical value when employed against the thoroughly prepared and well-equipped allied armies. Further, he cannot be under any illusions about the ability of the allies in giving back harder and surer hits in this line as well. But one would not like to prophesy in these matters, and one cannot rule out the possibility of chemical warfare playing a decisive part in the later stages of the war.

A War "gas" is a poisonous chemical substance which, for its successful use must possess some important properties, such as marked toxic effect even when diluted with air, stability against chemicals which may be employed for its absorption and removal, and a higher density than air which would prevent its easy diffusion into air. Besides, there is the all important economic factor—the ability of the nation for large-scale manufacture of the substance from the available raw materials at a reasonable cost. Of the 3000 substances examined during the last war, barely 30 came up to the prescribed standards, and only 10 or 15 of these could be actually used.

Based on the experience of the last war, these substances can be classed into different groups according to their physiological action. Thus there are lung irritants, vesicants or blistering agents, lachrymators or eye irritants, nose irritants or sneezing agents, paralysants or nerve poisons, and blood poisons. Chlorine, the

first war gas to be used, is a lung irritant. While it combines in itself several of the desirable properties of a war gas, it possesses a serious defect viz. its high chemical reactivity and the consequent ease with which it can be absorbed. Within six months of its introduction, chlorine gave place to another lung irritant, phosgene which proves fatal on exposure at higher concentrations. Numerous chemicals have been used as lachrymators not only in warfare, but also in times of peace, for dispersing hostile and unruly mobs. Many of these substances have marked action even at as low a concentration as one in a million. A compound known as chloropicrin forms a class by itself in as much as it causes nausea and provokes vomitting, thereby making it difficult to wear gas masks. Shells of lethal gases alternated with shells of chloropicrin will therefore constitute a very effective attack.

During the summer of 1917, the Germans introduced two new and powerful war gases: sneezing gas or diphenyl chloroarsine, and mustard gas or dichlorodiethyl sulphide. The so-called mustard gas, which is actually a liquid with a boiling point much higher than that of water, is the nearest approach to the ideal war gas, and was extensively used in the years 1917 and 1918. During the ten days of the Fall of 1917, it is estimated that the Germans used nearly 2500 tons of mustard gas producing an alarmingly large number of casualties. Within a few months, however, the allies were able to attack the enemy with his own weapon on an unprecedented scale, thanks to the discovery of a new method of manufacture of the substance by the British Chemists, Pope and Gibson. Besides its action on the eyes causing temporary or permanent blindness, its vesicant or blister-

ing action on the skin producing painful wounds is its important physiological action. Another attribute which makes mustard gas unrivalled as a war gas, is its persistence. Owing to its high density and high boiling point, it sinks into low places, lurking in trenches and penetrating crevices, for days and weeks. This persistence in time and space confers on gas warfare a tactical value all its own.

Chemical warfare is often condemned as an inhuman and fiendish invention of science which must be banned for ever from the approved forms of warfare. There are many scientists who maintain that chemical warfare is in fact a more humane method of incapacitating the enemy than the so-called approved methods of warfare. One might say that if war can at all be justified, all tactical steps undertaken for its successful prosecution must also be justifiable. One wonders whether, after all, there is so much to choose between two equally destructive forms of warfare. In Professor Low's words, " Whether it is better to be poisoned by mustard gas, torn to pieces by a hand-grenade or disembowelled by a bayonet, is a matter of personal taste."

IV

The role of science, especially of chemistry, in saving human beings from the jaws of death, is, paradoxically enough, never so significant as in war time. The launching of a new type of offensive like gas warfare or magnetic mine is a spur to scientists to devise an effective defence as expeditiously as possible. It has been remarked that the ingenuity displayed by scientists in devising new weapons of attack is equalled only by the rapidity with which scientists themselves invent defensive

measures to combat the new terrors. The development of the gas mask in the last war, and the recent degaussing or demagnetising arrangement for ships which completely eliminates the danger of magnetic mines, amply illustrate the above statement.

Another aspect of the humanitarian services of science is the development in chemotherapy involving the synthesis of highly efficacious drugs such as the sulphanilamide and sulphapyridine groups of compounds which verily take out many a sting from the wounds of war.

The chemist renders valuable service in solving the food problem of the nation, in at least two ways. In the first place he sees to it that a balanced diet with sufficient energy-producing material and with an adequate amount of vitamins is supplied, and thereby reduces to a minimum the dangers of under-feeding and of the incidence of deficiency diseases. The collapse of Germany in 1918 is often ascribed to the poor and defective nature of the food then available. It would appear that the nation had no stomach for continuing the fight. The expert advice of the chemist is needed also in solving the food problem in another important manner, by stimulating intensive cultivation of the arable land with the help of artificial fertilizers.

It must be evident from the above review how a full mobilisation of the resources of science is indispensable for success on the War Front as on the Home Front. Failure to grasp this fact in time has been the undoing of many a nation in the last two years. Even Britain, in some of her most desperate days last year, realised all too bitterly that the Nazis were using science with much

better effect to their advantage. With the almost unlimited resources of the Empire and of America at her disposal, there is, however, no reason why Britain should not excel the enemy " in the effective utilization of scientific thought, scientific advice and scientific personnel ", and thus pave the way for an early and complete victory.

AN IDEAL PATRON OF WOMEN'S EDUCATION

By

K. G. Mangalam, B.A., L.T.

Not less important than any of the manifold philanthropic activities of Rajah Sir Annamalai Chettiar is the unique and unbounded patronage readily extended by him to the cause of women's education in this University. Ever since the early days of the Sree Minakshi College which was the nucleus of the present University, it was one of the happy features of that institution to have afforded splendid facilities for the co-education of boys and girls in every branch of the institution. It is indeed a source of great gratification to see women graduates of this University occupying positions of responsibility in various spheres in different parts of this Province. While some of them are holding responsible posts as lecturers or teachers in the Educational Department, there are others who have gone up for higher studies elsewhere.

The most important of all the facilities afforded in this University for women's education is the maintenance of a separate Hostel for women students located in a fine artistic building in a convenient locality in the University grounds. The accommodation provided in the Hostel, and the various arrangements made for their comfortable residence have been highly spoken of by several distinguished visitors who have honoured the Hostel with their visits, on different occasions. The strength of the Hostel which was only nineteen in the beginning has gradually come up to forty-eight in five years. To meet further needs that might immediately arise there is

accommodation for a total strength of 60 students in the Hostel. More than one-third of the women students have taken up music for their training in the Music College, while the rest are distributed over the various branches of the Arts and Science departments.

The Rajah's ardent love and keen interest in music have taken shape in the maintenance of a separate Music College with its fine building and its staff of expert musicians. It can claim to be the only institution of its kind in this Province. The excellent arrangements made for running this institution are naturally attracting a large number of girls from distant parts of this Province including the Native States, nay, even from Ceylon in quest of the knowledge of this fine art.

Not content with these efforts for developing the knowledge of Indian Music, the benevolent Rajah Saheb made a handsome donation of Rs. 10,000 last year for the advancement of Tamil Music in particular and for the encouragement of the composition of original Tamil songs.

In addition to the several scholarships which the University grants, the Founder helps several deserving women students with adequate sums of money to enable them to prosecute their studies in the University.

As a happy coincidence in furtherence of the noble cause to which our Rajah Saheb has been keenly devoted, the University has been specially lucky in having as its Vice-Chancellors such highly cultured gentlemen of International fame as the Rt. Hon'ble V. S. Srinivasa Sastriar and Dr. Sir Kurma Venkata Reddi Nayudu Garu. In performing the pleasant function of unveiling the portrait of the former Vice-Chancellor, His

Excellency Lord Erskine, Governor of Madras, has rightly observed " There are no hands to which I would more gladly entrust the task of guiding the education of the youth of this country and no example of which I would more earnestly ask you to follow." And it has been rightly said of the present Vice-Chancellor that he is dedicating to the service of this University the treasures of wisdom and experience which he has garnered during decades of unremitting public service. It is hardly necessary to emphasise the very keen interest taken by these two officers in promoting the cause of women's education in the University.

The Rajah Saheb's devotion to the cause of women and their welfare has taken shape in the construction and equipment of the Ladies' Club, Annamalainagar, along with similar institutions founded or encouraged by him elsewhere in the country such as the Willingdon, Madras, the Lady Pentland Women and Children's Hospital in Chettinad, the Lady Ampthil Nurses Association, the Lady Irwin College, Delhi, the Nilgiris Ladies' Club, the Mylapore Ladies' Club as well as the Girl Guides' Movement and the Madras Seva Sadanam.

Such in brief are the varied acts of benevolence and philanthropy of the Rajah as a worthy descendant of the illustrious family of Kanadukathan in consonance with the innumerable acts of liberal charity and piety done by this family from nearly a century ago. Can the women of this Province ever dream of repaying the deep debt of gratitude which they owe to his unbounded generosity? The answer is not far to seek. The extent and nature of the Rajah's noble generosity can only be compared to itself just as Valmiki, the Father of Sanskrit poetry has rightly observed in his

famous Epic Ramayana that the beauties of the mighty ocean and of the sky can only be compared to themselves. " Gaganam gaganakaram, sagaraha sagaropamaha." So when the unbounded generosity of the Rajah cannot possibly be compared to anything else, it goes without saying that it is next to impossible to even dream of the possibility of repaying the debt which we all owe to him.

Verily as the Sun and the Moon, the brightest jewels in the Lord's creation are never tired of shedding their celestial lights for the growth and prosperity of the World our beloved Rajah Saheb whose selfless devotion to noble causes is in accordance with Lord Sree Krishna's teaching in Bagavad Gita will surely continue his unremitting love for the promotion of women's education.

Let us send forth our devout and unceasing prayers to Lord Nataraja on this auspicious occasion of the sixty-first birthday of our generous and noble Founder for his long life of continued prosperity and unalloyed happiness.

BRITAIN AND U. S. A. AFTER THE WAR

By

M. K. Muniswami, M.A., B.L.

Prefatory Note.

Those who try to envisage new trends in future world economy can at best only look into the immediate future and even then the shape of the post-war world cannot be seen in all its essentials. On assumption that the economic consequences of this war may not be altogether different from those of the last war, I have confined my discussion in this paper to such problems of a peace economy as dislocation, debt, and distrust which may arise soon after the war is over.

Britain to-day is in a much better position to mitigate the shock of post-war demobilisation of men and capital, as she had had the experience of the period after 1919 and of the post-depression adjustments to solve the still unsolved problem of the dislocation caused by the last Great War. Most economists in Britain, to prevent slump conditions after this war would like to organise British economy on the Nazi pattern, though they take care to stress the difference between such British economy and the present Nazi economy in that the former would be the result of democratic decisions and subject to democratic control. *The Economist* (17th May 1941) has begun to speak of the impending post-war boom in England. The havoc caused by the Luftwaffe would necessitate reconstruction of the devastated areas; after the experience through which the British public have passed under the present rationing regime,

there might be an increased demand for all manner of consumers' goods. There might, in fact, be an excessive demand over supply and it might become necessary to continue rationing for some time after the war. The payment of the Dole to the unemployed and extension of instalment credit facilities—two features absent in 1919 are likely to exert their beneficent influence.

Optimistic forecasts as to the course of world trade are based on the known demand for liquidating damage done in the war as also the improved distribution of wealth. They do not take into account such factors as the more or less permanent reduction in British merchant tonnage or the repatriation of overseas investments which have paid for Britain's imports during this war period. Nor do they take into account the handicaps under which Britain's export trade will suffer, when German competition in coal, steel and chemicals recurs and take into account the need for British assistance to the many European governments, with their headquarters in London and now inalliance with Britain. The scope for British exports in future would depend largely on the nature of the European peace settlement. The present war-time industries especially in Canada and Australia would reduce the markets that British manufacturers enjoyed before. Reapproachment of U.S.A. and Canada on the one hand, and the South American Republics on the other would make British export trade prospects gloomier. It is not likely however that British export trade would altogether disappear, for Britain with her experience of the trade drive in recent years, and with her increased efficiency in manufacturing skill, born of the application of scientific research to war-time

industries, is likely to renew her invasion of Central European markets. As in 1920, in the period after this war, Britain may not find difficulty in elbowing out Japan from the Indian and Colonial markets. Professor Nevins of Oxford has referred to the impending conflict between the U.S.A. and Britain in the South American and Asiatic markets, in a recent issue of the *Spectator*. The possibility of friction between U.S.A. and Britain is not confined to industries alone; America like some other countries of the British Empire and South America may wish to sell meat, grain and cotton, while Britishers importing these commodities from the Empire, and from South America may not be keen on importing them from the U.S.A. Instead of looking to the South American and Dominion markets, a writer has suggested in the *Political Quarterly* that Britain would do well, bearing in mind the feeble results of the Ottawa pacts of 1932, to look the prosperity of her export trade in Central and Eastern Europe. He stresses that something like the present German plan for inter-European trade must be preserved. In the event of Anglo-American co-operation he also suggests that the U.S.A. may well play its part in building up electrical power stations and mechanising the agriculture of Eastern and Central Europe. The Secretary to the U. S. Treasury has stated that the huge reserve of gold would be available to repair the ravages of the present war in Europe. The continuance of 'Hitler's new economic order' would be a powerful threat to both the export trade of the U.S.A. and the future value of her gold stocks. Any reduction in the world value of gold in the future, besides upsetting existing exchange rates and causing further dislocations in foreign trade would affect all those Governments and

Central Banks that have written up the value of their gold holdings. As the U.S.A. after the war is likely to have large surpluses of both agricultural produce and manufactured goods it would be to its own interest to maintain without alteration the existing exchange rates. The trend of economic life in Europe after the war cannot but have a permanent effect on Britain. The increase of war debts, taxation and the destruction of productive equipment are going to have a definite effect on Britain's foreign trade. No immediate revival in commercial intercourse with lost markets can be hoped for.

Depreciation of sterling however would seem to be inevitable in the case of Britain. During this war it has of course been the preoccupation of Britain to maintain the cross-rate, as any lower rate of exchange would increase the burden of sterling payments for purchases made from the U.S.A.; but after the war depreciation of sterling would enable Britain to improve her balance of payments. An additional virtue of such a step would be the reduction in the burden of the huge-short-term debt that she has contracted. *The Economist* has calculated that no less than 1,400 million pounds have been borrowed in the form of Treasury bills and that loans from banks, during the last eight months aggregate to 490 millions. There is not likely to be any desire " to look the dollar in the face " after this war. The havoc caused to British export trade by the Gold Standard Act of 1925 must be still green in the memory of Mr. Winston Churchill. Given the rate at which national debts are piling up the world over, the need for alleviation of the real weight of debt, will be stronger after the end of this war, than at any time in world's history. The existing

100 per cent E.P. duty has taken profits out of the present war and as the net profits of most British companies have not increased, in recent months, the capital value of their plant in any post-war valuation is not likely to go up, in order to enable the Treasury to introduce any capital levy.

Currency depreciation may give rise to some measure of protection to all home industries including agriculture. Such protection accruing to British agriculture would be all the more valuable when the British market is exposed to the fire of cheap Central European agricultural production. If the external depreciation of this sterling is insufficient to restore equilibrium to Britain's balance of payments, a policy of internal economic expansion may have to be adopted. Already Reconstructors are at work preparing tentative plans for starting new post-war industries, especially for civilian requirements in Britain. If British banks and the general body of British investors finance new industries, such as radios, television apparatuses and refrigerators, the shock of the present war's dislocation may be reduced. To help such new industries, and to relieve unemployment in the 'Special Areas' Britain would have at least to continue, if not intensify, existing protection. In the rehabilitation of British economy on a peace time basis, both sympathy and co-operation from the U.S.A. would seem to be called for. It ought to be the pre-occupation of the statesmen of the two countries to avoid points of friction and conflict that are likely to be numerous after the war. We have only to hope that the U.S.A. with the painful experience of repercussions on her economy by her pursuit of a policy of autarky, coupled with exchange depreciation before 1934 would now turn over a new leaf

and charitably tolerate Britain's attempts to stabilise her own economic system by pursuing the twin remedies of exchange depreciation and public works. Otherwise she might be confronted with a default of the debts that Britain has just begun to raise after her discovery that her scheme of Empire Dollar Pool to finance her war purchases, is inadequate. Let us all hope and pray that recent world economic history will not repeat itself, culminating in a greater depression.

A FREE UNIVERSITY FOR INDIA

By

Dr. A. Narasinga Rao, M.A., L.T., D.Sc., F.A.Sc.

Scientists tell us that the first appearance of Man on the Earth occurred in comparatively recent times—barely a million years ago. In fact, if the whole life history of our planet could be compressed into 24 hours from midnight to midnight, we find no traces of life for the first 12 hours; 7 p.m. finds the seas inhabited by fishes and amphibia while at 8 p.m. the giant reptiles are lords of the earth. Mammals, of whom Man is a member, appear only at 10 p.m. and the Piltdown Ape-man peeps out fugitively at 23 hours 59 minutes! The whole of our known history of about 10,000 years from the time of the Sumerian civilization to the present day would correspond on this scale to just half a second!

And yet, if within this very short interval Man has built up a social structure which has made him well nigh lord of the earth, sea and air—though it contains dangerous elements of instability as recent events show—this success is to be attributed to his capacity for abstract thinking and to two inventions which his more fertile brain made at the very infancy of the race, namely *speech*[1] and *writing*. The former enables an individual

1 Animals have various invariable sounds expressive of pleasure, caution, warning, calls to congregate etc., monkeys being the most voluble, but no animal has yet passed from single words to sentences. The brain of the chimpanzee corresponds in all physical details closely to man and has even Broca's convolution which is the seat of articulate speech and yet they have not learnt to talk.

to profit by the experience of another, while the latter ensures that anything of value, once discovered, is not lost to the race but will form the foundation for later generations to build upon. Knowledge becomes thus an ever-growing store of human experience. Now, any one-way process, however slow and weak will after long ages produce effects of far greater significance than another which, though powerful, does not act always the same way. It is this growing heritage of racial experience which has made the human species what it is today.

Man recognised early the value of this inheritance and made efforts both to hand it on to the next generation, and latterly, to add to its total content. These two functions which correspond to teaching and research, and what is even more important, a training in abstract thinking which differentiates man from all other animals, have been entrusted by society to various types of educational institutions with the universities at the apex of the scheme inspiring and guiding these activities. Thus higher studies and research are not the luxuries of age of leisure but the very life-lines of human evolution through which the race has drawn its vitality and its power. Even from the narrower standpoint of national well being, universities provide that background of pure knowledge which is necessary in an age of rapid progress and keen competition to enable each changing situation to be met effectively as it arises. There are few benefactions of greater service to the nation and the race than the foundation of an educational institution.

That there has been a lot of jerry building in the structure of human civilization is undeniable. There is maladjustment of means to ends almost everywhere,

while the introduction of a money economy with all its flexibility and stimulus to economic activity has made possible a dangerous concentration of power in wrong hands. Above all, the failure of man's moral education to keep pace with the training of his intellect and his progressive control over matter threatens the very extinction of the species in suicidal conflicts. Man has left many a Tobruk in his triumphant forward march and is paying heavily in human suffering for their reconquest. In this contribution I propose to deal with one of these maladjustments in our social structure.

If the supreme importance of higher education and research both for the race and for the nation be even partially conceded, it is necessary to ensure that every one whose natural endowments fit him specially for such a course should be picked out and given this training. Our present day organisation does nothing of the kind. It has made university education a costly commodity to be purchased by those who can afford it, thus introducing economic considerations into a field where they are irrelevent. In fact even secondary education is almost beyond the means of most middle-class families in India. If we had planned rationally, there would have been provision for the poorest boy or girl in the land to study up to the highest standards provided he or she had abilities of a sufficiently higher order. One of the steps in securing this objective would be the establishment of a University in India where no fees are levied and where those who are poor will receive also free boarding. Let us take a closer look at this unique institution.

Its alumni will be drawn from all over India and will be a group of exceptionally gifted individuals of

both sexes, many of them coming from very poor families. The total number will have to be restricted say to a thousand in the first instance so that it may be run on efficient lines and the demand for this limited accommodation from all over the country will enable the institution to maintain the high standards of admission. Obviously the education of these gifted individuals will have to be carefully planned and should not be confined to lecture hours only. It will have therefore to be a university, for otherwise it will not have the freedom to plan its course of studies, and it will have to be fully residential both as regards its staff and its students. The course of instruction might well include besides the usual subjects of study, an acquaintance with the outstanding events in world history, the main landmarks in the march of modern science, and some knowledge of the mechanism of the human body. Even more important will be the attempt to educate the sense of order, rhythm and harmony which is part of our racial inheritance. A knowledge of sketching and a capacity both to sing and to appreciate good music and works of art would be the normal equipment of every student. But in the development of the personality of the alumni the greatest stress will be on the moral side. The idea of service and cooperation will be kept always before them and many opportunities created for their exercise. There will be no religious instruction in the orthodox sense but the students will have had a sympathetic acquaintance with the manner in which the great religions of the world have approached the problems of the spirit, and of those ethical principles common to all religions. I know that the education of the moral side of man is one which bristles with difficulties. But we have the experience of

the Boy Scout and similar movements which have partly tackled the problem, while psychology is everyday providing us with fresh information regarding the analysis of personality. The issue is of such paramount importance that it has got to be faced and attacked from various angles and even a partial success would be well worth the attempt. In any case we do not solve the problem by ignoring it.

Granted the desirability of such a free University in which the poorest Indian could read upto the highest classes, it may be asked is it a practicable scheme. In particular is there any existing University which is so well endowed and run on such economical lines that the wiping out of its entire fee income will still enable it to carry on its activities, and which is besides residential, unitary and compact? I think the Annamalai University just fits into this picture. Its permanent endowment fund of 40 lakhs, the joint gift of its generous Founder and of the Government has by a careful husbanding of resources, increased to 60 lakhs. The interest on this fund together with the annual grant of 1·5 lakhs from the Government makes up nearly 4 lakhs or roughly 80 per cent of its total income. The net fee income (including tuition, examination and special fees less the amount paid back by way of scholarships) amounts to about 13 per cent of the total income while the other 7 per cent is made up of miscellaneous receipts which will not be affected by the abolition of fees.

One may speculate on the consequences of this bold step of a total abolition of fees. It will create an institution unique not only in this country but perhaps in the whole world, and entitled on that account to the generous

support of both the Princes and People of India in the performance of its noble task of training a band of young men and women of character and ability who would otherwise have been lost to the country. Its alumni are bound to rise to positions of leadership, and some of them at least would welcome an opportunity of helping financially the institution to which they owe so much. These benefactions would all be invested and their interest utilized for gradually expanding free boarding to those in need of such help until it is in a position to lodge, board, and educate all those whom it has taken under its wings.

The idea is by no means new and accords well with the Hindu ideology which has too high a regard for knowledge to treat it as an economic commodity. In the old Gurukulas and even today in the patasalas we have a system of free education up to the highest standards open to the poorest in the land. Is it unreasonable to suggest that the same principle be applied to the more dynamic and modern type of education which is needed in the world of today? India with her age long experience of things of the spirit has surely something of the value to contribute to the stabilising of the unsteady structure of modern civilization and has herself much to learn in evolving that synthesis of the old and the new which is the hope of the human race. In this supreme task and in the more practical but formidable problems of reconstruction which face her today, she will need the services of every one of her gifted sons and daughters trained to the utmost of their capacities. Will Tamil Nad which has often been a leader in matters intellectual be a pioneer in this field? Let the Gods decide.

A foolish dream, a castle in the air? Perhaps it is. But Man is a dreaming animal whom the memory of his dream haunts even after he is awake. Foolish men dreamt in the distant past that they could cross the measureless ocean and other fools have dreamt that they could fly in the air like birds. Man has always been an architect of aerial castles and has ever sought to rebuild them on earth " with faith and courage ", two of the toughest materials in the universe. The world can ill afford to lose its dreamers, for is not the world itself a dream of Iswara? May those stirring words of the greatest dreamer of this age echoing from his still warm funeral pyre receive a literal fulfilment:

" Where the mind is without fear, and the head is held high,
Where knowledge is free,

....

Into that Heaven of freedom, my Father, let my country awake."

RAJA SIR ANNAMALAI CHETTIAR SAVANT AND PATRON OF TAMIL LITERATURE

By

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Rajah Sir Annamalai Chettiar is one of those rare beings, whose arrival upon this planet of ours is at once their moment and our opportunity. Large-hearted and discriminating generosity is the lodestar of their existence; and it is the duty as well as the interest of lesser folk to draw upon such reserves of charity and help to canalise them in those fruitful directions indicated by the donor. Rich is wisdom, noble in feeling, transparent in sincerity, no South Indian in recent times has displayed such multiplicity of interests in life or given equally generously for their promotion. But the quality of a man's life or character must be judged not merely by the arithmetical reckoning of the number of things he does, but by the nature of the particular things he elects to do and by the way in which he does them. Every one of us knows how numerous are the Raja's charities. But that by which he will be longest known and most entitled to the imperishable gratitude of the present and of succeeding generations is the founding and inauguration of the Annamalai University.

Himself a savant, Rajah Sir Annamalai Chettiar has never been happier than when he declares himself, in deed as well as word, a votary of the Goddess. Vani. He worships at many shrines, but he is oftener found in the Temple of Learning, enriching it with his pious offerings.

The stream of his generosity sent its fertilising waters across the sacred soil of holy Chidambaram, so dear to the heart of every Hindu. And then there sprouted forth the little flower, the Sri Minakshi College, the nucleus of the Annamalai University. The stream now swelled into a flood, the little college refused to satisfy the deep hunger of his soul full of an inextinguishable passion for Tamil literature and culture; and the little, tenderly cherished flower of yesterday, broke into the crowded splendour of the present University. The Annamalai University fulfils many objects which a University is expected to do, but its uniqueness and individuality lie in its declared aim to promote and encourage the study of Tamil language and literature. In this sense we can regard it as being, at once, the proud symbol of one man's spirit of giving and the happy fulfilment of the dreams of many. Eager, expectant Tamil Nad welcomed this fine gesture of the noble Raja with a warmth of affection that will take long to die, and paid and continues to pay its grateful tribute of reverence and love to the man who has thus helped to translate its soul-hunger into this living edifice. Could there be anything more worthy of the noble generosity of the donor or more entiled to the admiring gratitude of the donees?

Not only has Raja Sir Annamalai Chettiar spent lakhs upon this child of his dreams, but he continues to feed it with recurring donations and endowments, ever cherishing it with the watchfulness of a loving parent. This is a pleasing reminder to us that the Annamalai University is not the sudden gift of impulsive generosity but the result of a carefully planned, deeply pondered answer to a public need. Recently in South

India we are witnessing a remarkable public interest in the promotion and popularisation of the Tamil language. The shabby and step-motherly treatment once accorded to Tamil is now but a painful memory, though humiliating enough when we recall it. Soon a reversal of values took place with our increasing sense of nationalism and a better knowledge of the inestimable glories of our Tamil literature. And so to-day the heart of every Tamilian beats to a new tune and responds to other melodies than those till now familiar to our ears. How much the Annamalai University is the cause of this new resurgent sentiment, how much it is the echo and the gratification of it, it is difficult to assess. Nor is it necessary. But there cannot be any hesitation in declaring that Raja Sir Annamalai Chettiar has succeeded in expressing the new emotions and dreams of the Tamils in a form that age cannot wither nor custom stale. Tamil has regained its pristine place in the Temple of Learning and the Raja has honoured himself by honouring her.

The Tamil Pandits and Scholars of South India owe a deep debt of gratitude to Sir Annamalai Chettiar for a worthy recognition of their place and status in the University. The Raja of Chettinad has never been guilty of leaving things half-done or even three-fourths done. That is not his way. So long as a subordinate role or an inferior rank is assigned to teachers in Tamil, the promotion of Tamil culture cannot be achieved. Their work is as important as, and in the Annamalai University, perhaps, more important than that of others. Naturally the Founder felt the need for establishing a professorship in Tamil—the first time, I think, that we hear of a professorship in connection with Tamil. Some of the

greatest scholars in Tamil literature and culture have naturally been invited and provided with all the facilities necessary for carrying on research in that direction. An Honours Degree in Tamil has been instituted. Though the University of Madras admits candidates to offer themselves privately for a M.A. Degree in Tamil and South Indian History, the Annamalai University alone prepare candidates for a Honours Degree in that subject. The University of Travancore has followed Annamalai and is preparing candidates for a similar degree in Malayalam. The Raja has spared no efforts to complete the scheme he has in mind, which is nothing less than making South India Tamil—conscious, to make us think and dream of our dear mother-tongue every moment of our lives. Classes for the Vidwan Course, classes for the training of Tamil Pandits, a large number of scholarships and fee concessions, facilities and generous endowments for the publication of scientific works in Tamil, a College of Music and quite recently a liberal donation of Rs. 10,000 for encouraging and persuading our musicians to revive and popularise Tamil composers and compositions—all these are but some of the endeavours on the part of this Prince of Givers to give Tamil her due place in the cultural life of South India. It is a happy feature in the many-sided personality of the Raja of Chettinad that, in his grand schemes for the rehabilitation of Tamil, he never ignores that a work of restoration must not only involve a patriotic harking to the past but also a forward view of things. In conformity with the conditions of modern life he has felt the need for giving our Tamil Pandits, employing traditional methods of instruction, insight into the more modern psychological approaches of to-day.

The training classes have, therefore, a fine opportunity for adapting reformed methods to Tamil teaching. Similarly, the ideas and conclusions of modern Science must be made available to the public, as part of the regular democratic process. Tamil, though a highly flexible language, has not yet had the occasion to employ a suitable scientific terminology, shaped in conformity with its genius and yet flexible and resilient enough to express the ideas of modern science. Raja Sir Annamalai Chettiar has never shown a higher vision than when he organised a department for the publication of scientific works in Tamil. He has announced prizes of Rs. 1,000 each for the best books in Tamil on subjects of modern thought; and such books on Logic and Physics have already been published. This department is certainly a valuable adjunct to the Research Department in Tamil, which is doing eminent work. About the college of Music, it would be superfluous to say much. It is an unique institution and has inspired other people and other places to fresh activities in the field of Carnatic Music. I am inclined to think that Tamil Nad, music-mad as it has always been, has responded to this fine gesture on the part of the Founder in a manner that fills every heart with joy. To-day there is better, more critical and understanding enjoyment of music and by larger numbers of people, because of the impetus given by the Raja. In music we shall find our soul; and certainly Raja Sir Annamalai Chettiar has not only helped to inform but refine the soul of South India. The recent gift of Rs. 10,000 for popularising Tamil songs has become the subject of conference and discussion as regards the best way of using it; and the public will certainly not be disappointed in its expectations.

Great as are his gifts and donations to the Annamalai University, Raja Sir Annamalai Chettiar's generosity is not confined to this one mighty institution. Wherever a good cause languishes for lack of funds, wherever noble work is done, it is only a question of " Ask and it shall be given " and his purse-strings are unloosened.

Great men have always been honoured in our country; their noble services have always been praised and sung to many a tune. But I am confident that we, in our times, shall not be able to honour a greater person, one more worthy of our poets' songs of praise, more entitled to our gratitude, one to whom these poor, pitiful words of mine would be less adequate to express our reverence and love for great deeds nobly done. This Memorial Volume, our floral tribute to the Raja of Chettinad on the auspicious occasion of his Shastiabda-purthi, is our heart's token to this great man. It is an occasion, which gladdens every heart; and may our tribute be worthy enough! and usher in many more such occasions!

SETTI IN LITERATURE AND EPIGRAPHY

By

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I deem it an honour and a privilege to be associated with the commemoration of Rajah Sir M. Annamalai Chettiar, the founder of a great Institution—the Annamalai University. The Rajah of Chettinad belongs to the great ancient community of traders and bankers who have shaped the commercial and industrial life of India through the ages. Coming nearer home the Rajah Saheb belongs to the noble community of the epic heroes of the Tamil nad, Kovalan and Kannaki, of Kavirippumpattinam, one of the great centres of international trade, two thousand years ago. The origin and history of this community of traders and bankers is one of the fascinating subjects of Indian history, ancient, mediaeval and modern.

We meet with the term Setti in the *Jatakas* and Sreshthi in the Brahmana literature and the Atharva Samhita. The term Sreshthin or Sresthya in the sense of the Headman of a guild occurs in the Atharva Samhita (I.9.3) and in the Satapatha Brahmana (13.7.1.1), Aitareya Brahmana (III. 30. 3). (*See* also Kausitaki Br. 28. 6). The Sreshthi of the *Brahmanas* invariably means a banker.

The *Jatakas* which are said to be compositions of the 6th and 5th centuries B.C. speak of as many as eighteen guilds with their respective heads. The head of the guild is sometimes called a Setti and sometimes a Maha-

setti. The Settis were by caste members of the Vaisya caste, always the richest class in the land. Trade was their hereditary calling as also banking. The Indian industrial development in the pre-Kautaliyan period and also post-Kautaliyan period was largely due to the activities of the Vaisyas. Each profession had its own organisation, democratic in character. We call this a guild. These guilds exerted enormous influence upon the economic life of the country in the several centuries preceding and following the Christian era. For in the time of the Guptas there is the testimony of the inscriptions as to the activities of these guild organisations. According to the *Arthasastra* of Kautalya (II.35) the Vaisyas were the great landowners and merchants. They were capitalists and money-lending was their profession in addition to trade and commerce. With the growth of trade and industry, capital got accumulated in the hands of a few, who were perhaps designated Mahasettis. The president of the guild was Pamukha or Jetthaka or Setti according to the *Jatakas* (I.120; II.335; III.49, etc.). In the march of time the professions became hereditary and fixed and a number of sub-sections of the great Vaisya caste came into being. Hence we find to-day a bewildering number of subsects in every caste of India. The one healthy influence of this hereditary occupation was to get more and more skilled in the arts of profession being handed down from father to son. Every Vaisya was so to say a born merchant. He brought to bear upon his trade his accumulated knowledge of centuries. With the rich background of tradition behind him the ancient Setti excelled in his arts and crafts and made a successful career. His products were in great demand by the peoples of the then known world—Rome, Carthage,

Ceylon and Islands of the Archipelago. Foreign gold flowed into India in abundance, and ancient India became famous for its wealth and splendour. This was true of both North and South India. The Sangam literature and foreign travellers bear eloquent testimony to the roaring trade of Tamil India with the foreign countries.

A critical study of the *Jatakas* gives us a glimpse of the social life of the Setti community in ancient India. In the Pali literature we meet with some interesting terms—Setti, Mahasetti, Anusetti and Uttarasettis. These terms are of much value to the antiquarian. They demonstrate clearly the social position held by the mercantile community and also the importance of that community in public life. The use of the term Setti in several places in the *Jatakas* shows that it was by itself a title, and was invariably given to the head of a guild. Therefore any guild president was a Setti.

The Mahasetti held a status much higher than the ordinary Setti. He was a wealthy capitalist. His aid and friendship were often invoked by the reigning chief. The state appointed Mahasettis as members of the royal council, as advisers to the king, as ministers and mahamatras. The Mahasetti represented in the royal council the banking and industrial interests, and advised the state on their industrial and economic policy. He helped the state in time of distress by advancing loans. He was again the leader among the Settis. Whenever disputes arose between any two guilds, it was the Mahasetti who settled such differences by arbitration. His decision was invariably accepted as binding. Thus the Mahasettis played a glorious part in the administration of the land. No wonder they were held in very high esteem by the

state and the public. The *Jatakas* reveal closer ties of friendship among the princes, Brahmans and the Settis. The sons of the members of all these communities had their education under the common teacher, and even some passages suggest that caste restrictions regarding inter-dining and inter-marriage were not so rigid as they became in later times. In a *Jataka* (III.49) a deer-trapper and consequently of low caste became rich by trade and was a great friend of the local Setti or guild-man (*See* also *Jatakas,* II, 319-20; IV, 38; VI, 348).

A Mahasetti is called a Rajavallabha in the *Suci Jataka.* He was a millionaire and was much actuated by generous impulses. He was charitable and made large endowments to religious shrines and gave liberal gifts for pious purposes. It is said that Anandapindika, a millionaire of Kosala presented to the Buddha a public park Jetavana in Sravasti, and the ceremony in connection with this function was attended by as many as five hundred settis (*Jataka* I.93). Anandapindika is not a single name of the capitalistic Mahasetti. Mrgadhara and Yasa were other Mahasettis who were worth many crores and were influential citizens of ancient India. We similarly hear of a Jain Ananda giving away as gift the Karle cave, the finest monument of all India. The Mahasetti was also a title of distinction conferred by the state on worthy citizens. If we are to believe the *Jatakas* (I.122), it was a title possibly held during life. For this *Jataka* entitled Chulla Setti Jataka bears testimony to the fact that this Chulla Setti of Benares held this title during his life and after his death the title passed on to his son-in-law. Among other honours which were conferred on these Mahasettis one was to hold the umbrella

of state (*setti chette*) (C.I.II., I, p. 208). What exactly this distinction meant we cannot say at this stretch of time. It may be that on important public occasions the Setti was allowed the use of royal umbrella, being an ensign of the sovereignty or he was appointed to hold the umbrella in connection with the state functions.

The Vinaya texts and other literary evidences speak of an Anusetti, literally an assistant to the Setti (I. 19; *Jataka* V. 384). Apparently the duties of the Setti or Mahasetti were so onerous that he wanted an assistant to look to all of them carefully and efficiently. The Anusetti may correspond to an Assistant Secretary of a modern department, while the Uttarasetti may be a Joint Secretary. The nature of the functions relating to the Uttarasetti is not clearly defined.

Passing on from the age of the *Jatakas* to the Kushan period, we find that the Vanika was different from the artisan classes and even caravan traders. The Vanika was an industrial partner and a banker of repute. He was in charge of trade and commerce, national and international. He contributed to the charitable establishments and erected huge edifices like caves for residence by pious men of all religions. At this time, the trade guild went by the name Sreni as also in the early period. And the head of the guild was Sresthin, a banker *par excellence*. (Ep. Ind. I, pp. 38 and 43; Ep. Ind. XXI, p. 55). The Vanik was officially recognised, and he was also known as Srenimukhya. If we proceed to examine the Gupta and the post-Gupta epochs we note that trade continued to be active and manifold and well regulated. Some of the members of the mercantile community enjoyed places of privilege as also patronage of kings.

Some of them were officials in charge of royal merchandise while others plied their private trade. The corporate activity of traders is more and more in evidence.

While this was the state of affairs in North India, it would be interesting to turn to South India and pass in review the role the merchants community of Tamilakam played. For this the Sangam works are primarily the sources of information. A *Jataka* (480) refers to the flourishing Tamil country and the international mart in that country Kavirippumpattinam, otherwise known as Puhar at the mouth of the river Kaveri. The merchants were the most influential community in this city. Commerce by land and commerce by sea were their profession. The wealth of the merchant classes surpassed the wealth of the ruling chieftains. A lot of foreign merchants were always seen in the city transacting business. There was no article of merchandise which could not find a place in the Puhar market. It is perhaps the Khaberis Emporium mentioned by Ptolemy. Manaikan, the father of Kannaki, and Masattuvan, the father of Kovalan, were the typical representatives of the Tamil merchant classes. They had heaps of wealth and were very liberal in gifts. They enjoyed the foremost aristocratic rank in the social scale. It is said later in the *Silappadikaram* that if the merchants of Madura, the Pandyan capital, only came to hear of the name of Kovalan's father, they would accord him a fitting welcome as befitted his rank and status. Such was the high position held and enjoyed by the merchant princes of Puhar and of all Tamil nad. Equally famous were Madura, Musiris, Tondi and Karur

as centres of a prosperous international trade. Trade, industry and commerce were in the hands of these merchant classes, whose alliance was sought by the ruling chieftain. The latter befriended by conferring titles on them. Etti was one such title (*Silappadikaram* XV. 1. 163). We hear of an Etti Sangaman, a flourishing merchant at Madura *Ibid.* 1. 196), and an Etti Sayalan. (*See* also *Manimekalai,* IV, 1. 58; *Perumkadai* Bk. I, Ch. 40, 1. 116).

Though the economic heart of South India was sound under the Pallava rule, we have not much material to show the concerted action of traders and merchants. But in the days of the great Cholas we have mercantile groups such as Valanjiyar of Tiruppurambiyam (71 of 1897 ARE) and Manigramam of Adittapura (*Ibid.* 33 of 1895). While *ur* and *sabha* were assemblies of the village, *Nagaram* was the local assembly of mercantile towns (ARE 82 of 1906). It sometimes stands for an occupational group like Salivanagarattom (*Ibid.* 268 of 1921). The *Nagaram* of the Cholas was a guild of merchants, primarily devoted to mercantile interests, These guilds endowed charitable trusts as for instance in Salem (47 of 1888 ARE). Some inscriptions refer to Dharmavaniyar who paid contributions for founding and maintaining mutts and for festivals connected with temples (ARE 547 of 1902; 28 of 1927). In this connection an inscription from Anbil (1235 A.D.) mentions among others the presence of Chettis of different nadus and Davanachettis (*Ibid.* 601 of 1902). Overseas trade was equally flourishing in the period especially with China, Sumatra and other Islands.

The Settis (Tamil Chettis, Chettiyar) figured very prominently in the history of the Karnataka, Telugu and Tamil areas, in the post-Chola period also. There were many sub-communities among them of whom mention may be made of the Gavaregas, Gatrigas, Chettis, Chettiguttas, Ankakaras, Biras, Biravanigas, Gandigas, Gavundas and Gavundasvamis, Behris, Komatis, Gavaras, etc. The proportion of the merchant communities to the total population in the country was very great according to Paes the Portuguese chronicler who visited the Vijayanagar empire during the days of the emperor Krishnadevaraya.

Many of them engaged themselves in foreign trade. The *Harivilasam* of Srinatha, the Telugu poet of the 15th century, dedicated to the merchant prince Avaci Tippaya Chetti of Simhavikrama pattana (Nellore) throws welcome light on the foreign trade carried on by him. According to this work Tippaya Chetti and his brothers Tirumala Chetti and Cami Chetti imported both by sea and land such valuable articles as camphor plants from the Panjab, gold (plate or dust) from Jalanogi (?), elephants from Ceylon, good horses from Hummanji (Ormuz), musk from Goa, pearls from Apaga (sea), Kasturikatakam from Ootangi and fine silks from China, and supplied them to the courts of Harihara of Vijayanagar, Firoz Shah Bahmani and the Gajapati ruler of Orissa. Further they enjoyed the monopoly of supplying all the necessary articles for the grand spring festival (vasantotsava) celebrated by Kumaragiri, the Reddi king of Kondavidu. (S. K. Aiyangar, *Sources of Vijayanagar History,* p. 57).

The Chettis about whom we hear in the Karnataka, Tamil and Telugu areas of South India did business also in the west coast of South India. Barbosa a traveller who visited South India in the sixteenth century has left a remarkable account of this community. He says: " The more part of them (Chettis) are great merchants, and they deal in precious stones, seed pearls and corals and other valuable goods, such as gold and silver, either coined or to be coined. This is their principal trade and they follow it because they can raise or lower the prices of such things many times; they are rich and respected; they lead a clean life, and have spacious houses in their own appointed streets . . . . They go naked from the waist up, and below gather round long garments many yards in length, little turbans on their heads and long hair gathered under the turban. Their beards are shaven and they wear finger marks of ashes mixed with sandal wood and saffron on their breasts, foreheads and shoulders. They have wide holes in their ears into which an egg would fit, which are filled with gold with many precious stones; they wear many rings on their fingers, they are girt about with girdles of gold and jewellery and ever carry in their breasts great pouches in which they keep scales and weights of their gold and silver coins and precious stones..... Their sons also begin to carry them as soon as they are ten years of age, they go about changing small coins. They are great clerks, and reckon all their sums on their fingers. They are given to usury, so much so that one brother will not lend to another a *ceitil* (a very small Portuguese coin of copper which took the place of the *dinheiro* in the reign of Joao) without making a profit thereby. They are sober and

orderly in eating and spending. They speak a tongue which differs from that of Malabar as it is with the Castalians and Portuguese." (Barbosa, Dames, II, pp. 71-73).

Again referring to them the same traveller observes: "The more part of all the heathen merchants or chatis who live throughout India are natives of this country and are very cunning in every kind of traffic in goods" (*Ibid.* II, pp. 125-26). Mahuan the Chinese traveller who visited South India towards the close of the fifteenth century also observes that the Chettis were the principal trading community in the country and says that they bought pepper from the farmers when it was ripe and sold it to foreign ships when they passed by, and that they also bought and collected precious stones and other costly wares (JRAS, 1896, p. 344). That they settled in the eastern countries like the Archipelago for commercial purposes is evident from Barbosa who notes that there were in Malacca Chetige merchants from the Coromandel coast" (Barbosa, Dames, II, p. 177).

Of equal importance as the Chettis in the commercial life of the country, particularly in the Kanarese and Telugu districts, were the Komatis. A prominent division among them were the Gavaras to whom reference is frequently made in the Kanarese epigraphs. (*See* also Methwold, Relations of Golconda in the Early Seventeenth Century, pp. 15-17).

The Banias were another trading community of South India. They were perhaps the Abraiaman of

Marco Polo. He says: " These Abraiaman[1] are the best merchants in the world, and the most truthful, for they would not tell a lie for anything on earth. (If a foreign merchant applies to them and entrusts his goods to them they will take charge of these, and sell them in the most loyal manner, seeking zealously the profit of the foreigner and asking no commission except what he pleases to bestow). They eat no flesh, and drink no wine, and live a life of great chastity, having intercourse with no women except with their wives; nor would they on any account take what belongs to another; so their law commands. And they are all distinguished by wearing a thread of cotton over one shoulder and tied under the other arm so that it crosses the breast and the back . . . .

" These Abraiaman are Idolators; and they pay greater heed to signs and omens than any people that exists."

A very noticeable feature of the commercial life of South India was the organisation of the merchants into guilds, particularly those trading in the urban areas. The guilds had in a majority of cases their origin in a community of interest which the dealers in a particular commodity or a group of commodities had. It may be noted here that there were two kinds of guilds, the craft guilds and the merchant guilds; while the former was a professional guild based largely on the caste system, the latter was mainly a body of merchants doing business in a particular commodity or group of commodities irrespective of their caste. Sir George Birdwood truly

1 Professor K. A. Nilakanta Sastri takes the view that these were Brahmans. (*Foreign Notices of South India* p. 176).

remarks: " Sometimes the same trade is pursued by men of different castes and its guild generally includes every member of the trade it represents without strict reference to caste." (Industrial Arts of India, p. 138).

There appear to have been many merchant guilds in the country which were known by such names as Banajigas, the Valanjiyar of the eighteen countries, the nadu, the nagara, the Vaisyavaniyanagarattar, the nagarattar, etc. A remarkable tendency of these guilds was to trace their descent from great personages of legendary fame such as Kubera and to claim that they were Vaisyas in caste. The Chetti merchants particularly professed to belong to different gotras such as Puccakola gotra, Yerasetti gotra, Bodarukuta gotra, Venukula gotra, Yanukula gotra, Vivarisitla gotra and Appanangakula gotra. (ARE 447-453 of 1915; *Ibid.* 1916, para 82).

The Vira Banajigas constituted a powerful mercantile corporation in the Karnataka districts. It appears they were not different from the modern Banyas. Dr. Barnett referring to them says: " There was a vast organisation of associated traders which about the twelfth and thirteenth centuries had spread a network over the greater part of southern India and Ceylon and perhaps even further, and which beginning with simple commerce and then developing an elaborate social and semi-military system strikingly recalls our East India Company. These were the Vira Banajus as they were called in Kanarese and Vira Valanjiyar as they were styled in Tamil. The name signifies ' valiant merchants,' and is therefore similar to our ' Gentlemen Adventures ' . . . ." They claimed to have come originally from Ahicchatra,

but their central body was at Ayyavole, the modern Aihole which was the seat of their Board of Directors consisting of a council of 500 members. (*See* B. A. Saletore, *Social* and *Political Life* in the *Vijayanagar empire,* Vol. II, p. 98 n.). But Dr. Fleet thinks that " Balanja is another form of Bananju or Bananja, the modern Bananjiga or Banijiga which must be the original of or a corruption of the Sanskrit Vanija, Vanijika, merchant or trader." They took such highsounding titles as *nakhariparivara* and *mummuridanda.* The Vira Banajigas appear to have been Lingayats.

As has been already said the guilds were also known as *Nagarattar*[2] or *Chettis,* though the latter term denoted simply a merchant in the Telugu districts. These guilds had each a leader who controlled the working of the organisation, and was known in the Telugu and Kanarese districts as the Pattanasvami or more simply Chetti. There is no manner of knowing how they were made the leaders of their respective guilds, either by election or recognition (and in some cases they were appointed by the Government), but there is no reason to doubt that they exercised much influence in the administration of the country, and in a majority of cases were in charge of the municipal administration in their respective

2 Both in South India and North India, a distinction was made of Settis in towns as compared with Settis in the rural parts. The Nigrodha Jataka (445) refers to the Settis of the Janapada or the country parts. Apparently the Janapada Settis held a lower status and were in charge of rural trade and commerce which were generally of the nature of barter and simple economy. The Settis of the town were apparently the Nagarattar who represented the city's trade and commerce. These were great financiers and bankers who advanced loans to the state and helped the state in the smooth working and economic advancement.

localities. The Pattanasvami or Prthivi Chetti commanded great respect event outside their jurisdiction; and according to an epigraph a particular Pattanasvami was presented with betel leaf and given dress and allowance of food by the government wherever he went as also the customs dues 'on the roads both ways' (E.C. xii, CK. 76).

There was another dignitary connected with the guild and was known as vaddavyavahari or vaddavyapari or at times as mahamukhyavadda vyavahari usually translated as senior merchant or merchant prince. But in our present state of knowledge it is not possible to say what exactly his duties were or in what relationship his office stood to that of the Pattanasvami if it was different from the latter. Usually these officers were connected with the institutions and organisation of fairs for which they were granted lands. An equally important dignitary in the local areas was the Prabhu or the Mahaprabhu usually associated with the guild. Perhaps a person could hold the offices of both the Mahavadda Vyavahari and the Mahaprabhu.

These guilds exercised powerful influence over the government; and it was not unusual for the government to seek their approval for their policy, particularly with regard to taxation (681 of 1922, Rep. 1923, para 83; *See* T. V. Mahalingam, *Administration and Social Life under Vijayanagar,* pp. 223-24). An officer under Achyuta Raya made a grant of some duties on crops and of the fee on marriages with the consent of the *nanadesi*-merchants also *Ibid.* The guilds could levy local taxes within the area under their jurisdiction, perhaps without any reference to sanction from the government.

The guilds enjoyed the privilege of conferring honours on persons of position and dignity, even on government officials. Towards the close of the fourteenth century we hear that the members of the nakara parivara and mummuridanda ' together with their three hundred Billa dependents and with the collection of the Holeyas of Vijayanagar having placed the diamond Vaisanige in the presence of the holy lotus feed of God Virupaksha and sitting down, having agreed among themselves conferred the mayoralty of the earth (prthvisettitana) on Muddayya Dannayaka who was the officer for the superintendence of the customs of our fifty-six countries." (E.C. V, Bl. 75). They also enjoyed the right to make regulations of a social character for their own members. A number of Chettis at Bagur made for instance some regulations in 1449 A.D. (?) regarding the women who lapsed from marriage.

In the closing years of the Vijayanagar history again the Chettis played a notable part in the commercial life of the country. They were also a factor to reckon with during the period of the establishment of trade settlements by the European powers in South India. The Dutch carried on their commercial transactions with those occupied in the textiles of the country through one Mallai or Mallaya Chetti alias Cinnaia or Cenanan Chetti. This merchant prince had many dependents under him of whom was one Seshadri Chetti of Porto Novo who in course of time rose to the position of the chief Indian merchant of Madras. (*See* C. S. Srinivasachari, *A History of Madras,* pp. 30-37). Several members of the community were Dubashes to the East India Company and later under the Crown up to the present day they are

taking active interest in the promotion of trade and commerce. Their services in the fields of trade, industry, commerce and banking have won the due recognition of the Government and the public as well, while the modern Chambers of Commerce have taken the place of ancient and mediaeval guilds.

BADARAYANA AND THE PANCARATRA

By

Pandit K. Srinivasacharya

All commentators, with the exception of Anandatirtha and Nimbarka,[1] agree in thinking that in the last four sutras of the second pada of the second adhyaya of the *Vedanta-sutra,* Badarayana discusses the question of the orthodoxy of the Pancaratra system, otherwise known as the Bhagavata or the Satvata school. But Samkara and Ramanuja hold diametrically opposite views regarding the Sutrakara's attitude to that system. The former claims that Badarayana condemns it like the systems previously examined; but the latter thinks that he approves of it. According to Samkara the four sutras set forth four objections against the Pancaratra; but, according to Ramanuja, the first two sutras state the *prima facie* case against the system, while the next two meet the objections and prove its authoritativeness. Their interpretations of the first two sutras present substantial agreement, the divergence arising only in their comments on the next two aphorisms.

Conscious of the fact that, in the interests of his system, he is forced to take up here an indefensible position, Samkara finds it necessary to preface his comments on these sutras with the following remarks:—Unlike the several heterodox *darsanas* whose views have just been criticised in the second pada, the Bhagavata system considers Brahman or Vasudeva as being at once the material and the efficient cause of the world, a theory

1 Anandatirtha and Nimbarka believe that this adhikarana is devoted to a refutation of the *Sakta Tantra.*

acceptable to the Vedantins. Again, the Bhagavata doctrine that the Highest self, Vasudeva takes on the fourfold forms of Vasudeva, Samkarshana, Pradyumna and Aniruddha is in perfect accord with the scripture. And so is the Bhagavata teaching prescribing an austere life devoted to the worship of the Lord in five different ways, known as *abhigamana, upadana, ijya, svadhyaya* and *yoga*. The Pancaratra is on firm ground with regard to these fundamental tenets. None of these is to be controverted. We must, however, take exception to the doctrine that from Vasudeva, the highest Brahman and the universal cause, the individual soul called Samkarshana originates; that from Samkarshana the internal organ termed Pradyumna takes birth; and that from Pradyumna proceeds the principle of egoity or individuality termed Aniruddha. For this theory implies that finite souls originate, a doctrine contrary to the Vedantic teaching.

Briefly stated, Samkara's comments on the four sutras are as follows:—The Pancaratra is lacking in validity, (1) because it speaks of the creation of the soul, whereas it is eternal and uncreated;[2] (2) because it teaches that the instrument, *viz., manas* proceeds from an agent, *viz.,* the soul, a theory which fails to find support in everyday observation or in scripture. (3) Or, if Vasudeva, Samkarshana, Pradyumna and Aniruddha are taken as Brahman, the ultimate cause, the objection already raised, namely, the impossibility of origination would remain unanswered. For either the four *Vyuhas*

2. न जायते म्रियते वा विपश्चित्—कठोपनिषत् II. 18
नात्मा श्रुतेर्नित्यत्वाच्च ताभ्यः.—ब्र सू. II iii 81

denote four distinct individuals equally omniscient, omnipotent and so forth or they signify four similar bodies assumed by an identical person; and in any case their origination would be unintelligible. The first alternative needlessly multiplies the deites; and it is particularly repugnant to the Bhagavatas who strictly adhere to the belief in a single supreme Lord. The second alternative does not fare better; for the four bodies are, by hypothesis, all alike and what is considered the effect exhibits no novel features and hence, the chain of causation is purposeless. Further, there is no reason why the number of forms that Vasudeva takes should arbitrarily be limited to four. In fact, the whole world from Brahma down to a blade of grass is His manifestation. (4) Moreover, the Pancaratra presents mutual contradictions. For example, sometimes *jnana* (knowledge), *aisvarya* (lordship) and the like are referred to as attributes (*guna*), and sometimes they are spoken of as substances (*guni*). Not only that; the Pancaratra Agamas even speak disparagingly of the Veda. It is said that Sandilya, not finding the highest bliss in the Vedas, turned to the study of the Pancaratra. Hence, it is to be rejected.

This interpretation is elaborately criticised by Yamunacarya in the *Agamapramanya,* a work devoted to the vindication of the orthodoxy of the Pancaratra system. The Visistadvaitic position is further presented in the *Sri-Bhasya* in a succinct form. On this view, the third and the fourth sutras would mean (3) If Samkarshana, Pradyumna and Aniruddha are no other than the highest Brahman, there could be no objection to the Pancaratra. (4) The Pancaratra explicitly denies the fact of souls having an origin. And with the removal of the only objection that could be raised against the

system, the Pancaratra can hardly be discredited as subscribing to erroneous doctrines. Samkara himself virtually admits this in the third sutra.

To explain the matter a little more in detail—In reply to the difficulty raised in the first two sutras, it is urged that Samkarshana, Pradyumna and Aniruddha denote only the highest Brahman and not the individual souls, manas and individuality. It is only the person who is imperfectly acquainted with the Bhagavata system who will assert that it speaks of souls as having an origin. All that it says is that Vasudeva, out of his infinite mercy, takes on four forms to render Himself accessible to His devotees. The purpose of these manifestations is the same as that of the Avatars generally. The scripture declares: "though unborn He assumes manifold forms."[3]

The question now to be decided is: Which of these two interpretations is the right one? The sutra in whose interpretation there is the greatest measure of divergence is the third. Vijnanadi bhave va tadapratishedhah. Literally translated, it runs as follows:—"Or, on account of their being knowledge and ultimate cause, there is non-contradiction of that." As expanded by Samkara it reads:—"Or, if they (*i.e.*, Samkarshana and the rest) are to be taken as Brahman and not as the soul, manas and egoity, still there is non-contradiction of that (*i.e.*, there is non-contradiction of the objection already raised against the Bhagavata system, *viz.*, the impossibility of origination)."

3. अजायमानो बहुधा विजायते

According to Ramanuja the sutra means: " Or, on account of (their) being Brahman, there is non-contradiction of that (*i.e.*, Pancaratra is uncontradicted)." The word ' tat means for Samkara ' the difficulty pointed out at the outset.' Ramanuja takes it to mean Pancaratra. On Ramanuja's interpretation, the first part of this sutra states an antecedent; and the second part, its consequent. But on Samkara's view, it means that the difficulty with regard to the origin of the jiva may be got over; but that the difficulty of the origin of the *vyuhas* would have taken its place and that, in any case, the objection of the impossibility of origination would remain unanswered. Clearly, this is far-fetched. It is not quite satisfactory to say that one part of the sutra refutes the objection already raised, while the other part states a fresh difficulty. Such an interpretation would be justified only if the sutra were really two.

The particle ' va (वा) occurring in the third sutra of this adhikarana is a clear indication of a change of side in the argument. Numerous examples may be cited both from the Purva-Mimamsa and the Vedanta sutras to show that the particle ' va ' with or without the negative particle ' na ' (न), is used to denote such a change.[4] As Thibaut says " .... it however appears to me that the explanations of ' va ' and of the ' tat ' implied in Ramanuja's comment, are more natural than those resulting from Samkara's interpretation."

4. एकं वा संयोगरूपचोदनाख्याविशेषात् (II iv 9); नाना वा देवतापृथक्त्वात् विधिर्वा संयोगान्तरात् (III iv 19) न वा विशेषात् (ब्र सू III iii 2); न वा तत्सहभावाश्रुतेः (ब्र सू III iii 63); पूर्ववद्वा (ब्र सू III ii 28);

Further, having accepted at the outset in unequivocal terms the theory of the Vyuhas, Samkara's condemnation of the selfsame theory exhibits a clean volteface.

Samkara interprets the last sutra to mean that since the Pancaratra talks lightly of the Veda, it is unvedic. But this is based on a misunderstanding. The text declaring that Sandilya found no lasting bliss in the veda and turned to the study of the Pancaratra does not intend to decry the Veda. It aims at extolling the Pancaratra. Take an analogous case. In the *Bhuma-vidya,*[5] Narada says that with all his study of the Vedas, Itihasas and Puranas, he knew only the mantras but did not know the self. Obviously the statement that the knowledge of the self is not attainable by any means except the knowledge of the Bhuman aims at glorifying this latter knowledge.

Vacaspati-misra in his *Bhamati* identifies the teaching of Oudulomi with the Pancaratra[6] and explicitly asserts that according to the Pancaratra system the jiva is without an origin.[7] In the face of this, how can it be argued that the Pancaratra is devoid of authority, as it speaks of the origination of souls?

5 Sacred Books of the East, Vol. xxxiv, p. lii.

6 It is not known on what authority this identification is made. Compare Ranga Ramanuja's Bhavaprakasika a commentary on Srutaprakasika, II, iv, 21.

इति पाञ्चरात्रमतमस्मिन् सूत्रे उपन्यस्यत इति यद्वाचस्पतिनोक्तं न तत्र मूलं पश्यामः ॥

7. यथाहुः पाञ्चरात्रिकाः—

आमुक्तेर्भेद एव स्याज्जीवस्य च परस्य च।
मुक्तस्य तु न भेदोऽस्ति भेदहेतोरभावतः॥ (भामती).
सर्वदेत्यनादिकाले-कल्पतरुः ।

Amalananda, the author of *Kalpataru,* says that the cardinal doctrines of the Pancaratra are sound and are even entitled to respect, but that it appears to differ from the Vedantic teaching only in one respect, namely its reference to the origin of souls. And even here the Pancaratra does not really intend to teach that souls originate. Like the upanishadic texts speaking of souls as originating, the Pancaratra text must be taken in a secondary sense.[8] Samkara himself has admitted in his comment on II, III, 17 that the scriptural passages referring to the birth of souls must be understood figuratively as standing for association with new bodies. Commenting on the third sutra, the *Vrttikara,* who was, according to one tradition, a direct disciple of Samkara, says, "If the terms Samkarshana and the rest denote Brahman, then we do not refute the Pancaratra, in fact, it would be the same as our system."[9]

If the Pancaratra system were unquestionably orthodox, why, it may be asked, should it be discussed in the company of philosophies whose heretical nature is exposed? As Ramanuja pertinently remarks, having confuted the Pasupata Agama, the Sutrakara has necessarily to dispel the doubt the Pancaratra also may, in so far as it belongs to the class of agamas, be lacking in force. To establish that the Pancaratra stands on an

8. बुध्दिपूर्वकृतिः पच्चरात्रं निश्वसितं श्रुतिः।
तेन जीवजनिस्तत्र सिद्धा गौणी नियम्यते ॥

9. जीवानां विज्ञानानन्दरूपत्व....
मङ्गीक्रियत इति चेत्तर्हि तदप्रतिषेधः, तस्य मतस्य प्रतिषेधः निरासः अस्माभिर्न क्रियते

Sutra-Vrtti Ed. by Mahamahopadhyaya Harihara Sastri. Sri Vidya Press, Kumbakonam, p. 41.

altogether different footing, the Sutrakara has per force to discuss the nature of the Pancaratra. A discussion on the Pancaratra will not cut into the general scheme of this section, because the opponent (*pratyarthi*) here is not the follower of the system, but he who believes in its heretical character. Or, as Vedanta Desika puts it, the second pada of the second adhyaya, whose object is to show that certain darsanas are not rivals to Vedantic thought, first points out that systems such as the Sankhya, the Bauddha and the Jaina are not worthy rivals since they are backed by unsound logic and then establishes that the Pancaratra cannot be reckoned a rival, for the simple reason that it is in fundamental agreement with Vedantic teaching.[10] "... it would not be unnatural", says Thibaut, "to close the polemical pada with a defence of that doctrine which in spite of objections has to be viewed as a true one".[11]

It is difficult to reconcile oneself to the thought that Badarayana condemned the Pancaratra doctrine in the *Vedanta-sutra* but extolled its greatness in the *Moksa-dharma* and elsewhere in his *Mahabharata*. Even if the identity of Badarayana with Vyasa were to be disputed, there is no gainsaying the fact that Badarayana subscribes to the views expressed in the *Mahabharata*. For he frequently cites passages from that work in support of his views.

10. प्रामाण्यं कर्मकाण्डस्मृतिनयवशत स्सात्वतस्यापि सिद्धं
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प्रत्यर्थित्वं विरोधभ्रममपनयता पाञ्चरात्रस्य वार्यं
दुस्तर्काद्युत्थितोक्त्या- तदितरसमयेष्वित्यनुस्यूतसिद्धिः ॥
अधिकरणसारावली. II ii 35

11 Sacred Books of the East, Vol. xxxiv, p. lii.

LIGHTNING

By

N. S. Subba Rao, M.A.

The age in which we are living has been called an age of electricity. Large amounts of electrical energy are generated at various parts of the world and put to all imaginable uses. In fact, we might say without much exaggeration, that there is no type of mechanical work to-day which cannot be carried out cheaply and more efficiently with the aid of electricity.

Although the large-scale harnessing of electric power is of recent origin, our planet has almost from its birth been endowed with immense sources of electric energy. This energy often displays itself during thunderstorm, in those luminous discharges in the atmosphere, known as lightning. The awe-inspiring character of these displays made people look upon the thunderclouds ' as the arsenal in which God keeps His artillery of thunder and lightning, at times to strike the children of men with reverential awe, or to inflict on them some great punishment.'

It is therefore not surprising that no systematic study of lightning was made till very recently. In 1752, Benjamin Franklin carried out his famous experiment with a kite at Philadelphia and demonstrated that electric charges and sparks could be drawn from thunderclouds and that these charges exhibited the same properties as similar charges obtained by artificial means in the laboratory. We now know that lightning is the visible manifestation of the passage of electricity either between two thunderclouds or between a thundercloud

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and earth. The electricity in the thundercloud is static or immobile until such time when it is set in motion during the lightning flash, unlike the current (or dynamic) electricity with which we are very familiar.

A thorough investigation of lightning in its various aspects has been carried out by Schonland, Malan, Collens and others, under the direction of the Lightning Research Committee of the South African Institute of Electrical Engineers. During these researches several hundreds of lightning flashes were photographed with the aid of a special camera known as the Boys Camera. The camera consisted of a fixed plate and two lenses revolving in a circle in front of it at the ends of a diameter. The lenses had a focal length of 15 cm. and were mounted with their centres at a distance of 10·1 cm. apart. The lens system was rotated by hand at a speed of 1500 revolutions per minute. With the aid of these photographs it was possible to detect the occurrence of a number of individual discharges in the same discharge channel separated from each other by exceedingly short intervals of time and to measure their velocities. These photographs were supplemented by those taken on an ordinary camera. These photographs showed the flash in its relation to the neighbouring objects and helped to locate the region in which the flash occurred. A slow moving camera, with only a single rotating lens instead of the two lenses in the Boys Camera, was also employed. It made one revolution for every 59 revolutions of the Boys double lens camera. As the cameras have to be kept open for some time before a discharge occurs they must be worked in the country away from the glare of cities. The fixed camera helps to fix the position of the flash, the slow camera gives the order of occurrence of the

individual flashes and the fast Boys camera separates the components of a flash and reveals what may be described as its fine structure.

Lightning flashes are of two kinds, consisting of discharges between one cloud and another or between a cloud and the earth. In general it was noticed that there were 2 or 3 intercloud discharges before one to the ground. A few cases where the discharge occurred without previous intercloud discharges have also been observed. In such cases the discharges to ground have been found to be very frequent and violent.

Every lightning flash is composite in character, the number of component strokes being variable ranging from 1 to 6. The component strokes are separated from each other by intervals of about ·001 to 0·03 second, the most frequent interval being 0·03 second. Schonland showed that single strokes are most frequent and that those with more than six components are rare. The origin of the separate strokes appears to be due to the existence of separate generating centres at different parts of the cloud. Quite a large number of discharge channels have been found to be Y shaped. These arise from separate generating centres in a cloud and have a common stem formed by one stroke and utilised by the other.

Each of these component strokes is itself double, consisting firstly of a leader stroke from cloud to ground quickly followed by an intense and fast moving main stroke. The leader stroke is of two kinds, stepped or dartlike, the stepped leader being more common. The leader stroke advances forward for a distance of about

50 metres, appears to pause for a while (50-90 micro-seconds) and advances another 50 metres and so on until it reaches the ground. The leader stroke thus establishes in a series of steps a conducting channel between cloud and earth, and enables the return or the main stroke to travel at a very fast rate from the earth to the cloud. The dart leader appears to take a direct path to earth in one step and it is believed that it may be using a channel previously prepared by a stepped leader too feeble to be photographed.

The leader stroke is heavily branched, the direction of branching indicating its direction of travel. The main stroke follows in every detail the path traced out by the leader stroke. After every one of the branching points the intensity of the discharge appears to be reduced.

The nature of the stepped leader is explained on the assumption of a slow moving negative pilot streamer which advances into virgin air with velocities of $1{\cdot}0 \times 10^7$ to $2{\cdot}0 \times 10^8$ cm. second and provides an ionised channel along which the stepped leader travels. The stepped leader travels much faster, with velocities varying from $1{\cdot}3 \times 10^8$ to $3{\cdot}2 \times 10^9$ cm. second and catches up the tip of the pilot steamer. Then there is a pause till a further ionised path is prepared by the pilot for the advance of the stepped leader. This explanation is supported by the fact that the ratio of the length of the path travelled by a stepped leader, to the time of pause, is a constant and is equal to the velocity of the pilot steamer.

Estimates of the various quantities involved in the discharge process were made from a study of the photographs taken with the cameras already described. The

photographic study was later supplemented by electrical studies of the discharge process. It is interesting to observe that the study of the development of the spark discharge in the laboratory, carried out by Allibone and Meek, showed characteristics similar to those of the lightning flash.

The calculation of the total amount of electrical energy expended over the surface of the globe in the form of these lightning flashes gives astounding figures. The average quantity of electricity carried by a lightning discharge is 20 coulombs. This means that the average current must be of the order of 20,000 amperes. Each flash as a rule discharges a cloud completely and it is known that an active cloud produces one flash every 20 seconds. The thundercloud may thus be looked upon as a huge electrical machine which expends 2 or 3 million kilowatts continuously during its hour or two of activity.

From data collected by Brookes from various parts of the globe, it is known that the earth experiences 16,000,000 thunderstorms per annum or 44,000 per day. This means that at any instant there are on the average 1800 thunderstorms in progress at different parts of this world or that 100 lightning flashes occur every second. Over the earth therefore thunderstorms are continuously expending energy at the rate of 4×10^9 kilowatts. This huge figure is likely to tempt scientists to device a method of tapping even a small bit of this energy and to utilise it for the good of humanity. However tempting the prospect may seem, no such effort has proved successful.

This stupendous amount of energy is used up in several ways. Most of it is dissipated in the form of heat and the luminous effects observed are the result of the heating to incandescence of the lightning channel.

A small portion of the energy is used up in the generation of Hertzian waves known as atmospherics. A study of lightning and its relationship to atmospherics has been made in great detail by several observers. Chief among them may be mentioned Watt, Appleton and Herd. The results of researches on atmospherics supplement the data on lightning referred to above, and in some cases provide information of great value which cannot be obtained by either visual observation or photographic registration.

It was very early (1926) established by Appleton, Watt and Herd that lightning discharges are capable of producing radiation fields similar in wave form and magnitude to those of atmospherics of distant origin. The above authors studied atmospherics with the aid of cathode ray oscillographs and concluded that the duration of atmospherics were of the order of a few milliseconds. Others employing a tuned wireless receiver and an Eithovan string galvanometer have given durations ranging between 0·2 and 0·5 second. Munro and Webster working with an aperiodic receiver and a cathode ray oscillograph, with a time base of the order of 0·1 second, pointed out that atmospherics really consist of a number of discrete pulses separated by clear intervals.

It was noticed by the author (1935) during experiments on atmospherics, carried out with the aid of a tuned receiver and a galvanometer of period of about 1 second, that certain thickenings or dots occurred in the trace of the galvanometer motion. The number of thickenings or dots indicate the number of separate impulses received by the galvanometer during a short interval. It was pointed out that the total duration of

atmospherics is about half a second and that these consist of a number of components, the fine structures of which can be revealed only with the aid of a cathode ray oscillograph.

All these observations on the structure of atmospherics may be correlated with the details of the structure of the lightning discharge and there is ample evidence to show that we must look to thunderstorms and their accompanying lightning discharges as important sources of atmospherics. Several attempts made to correlate the occurrence of atmospherics with the special type of meteorological conditions necessary for the building up of thunderstorms have yielded very valuable information. R. Bureau (1926) and others have concluded that atmospherics are the phenomena that give evidence best for the passing of a meteorological disturbance in tropical regions. The other meteorological variables give indication of the meteorological disturbance, when it has reached the observing station, while atmospherics announce it a few hours in advance.

Experiments were carried out by the author of this article (1940) with the aid of two receiving sets tuned to 400 metres and 40 metres respectively and two galvanometers of periods of about 2 seconds. Atmospherics were recorded for short intervals every hour throughout the day, over a period of nearly a year. It was found that sunset had a decided effect on atmospherics, an effect which may be aptly described as trigger action. The radiation from the sun exerts a restraining influence on thunderstorm activity, the occurrence of lightning and the generation of atmospherics. With the setting of the sun, the restraining influence is removed,

the trigger as it were is pulled, lightning flashes occur and the regular thunderstorm commences.

The investigations of Macky (1933) on the deformation and breaking up of water drops in strong electric fields point to the conclusion that inside a thundercloud, the splitting of the drops and the building up of high potentials are accompanied by small local sparks. These sparks are too feeble to be observed visually or with the aid of a camera. The author has pointed out that the occurrence of these sparks may be detected from a study of atmospherics on the short waves and that these give advance information regarding the existence of meteorological conditions in the atmosphere favourable for the building up of large thunder clouds. The work of the author has further shown that prolonged atmospheric activity on the short waves appears to be connected with the formation of meteorological depressions. The study of atmospherics therefore not only provides additional data on lightning but at the same time provides a new method of forecasting weather and the occurrence of meteorological depressions long before such formations are detected by the ordinary methods.

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OUR FOUNDER

By

Prof. P. A. Subramanya Aiyar, M.A.

The Rajah of Chettinad, the founder of the Annamalai University is a Nagarattar. The Nagarattars are a Tamil-speaking community living mainly in the Ramnad District and here and there in the Pudukottah State in the Presidency of Madras.

They are of the Vaisya caste, that caste to which the ancient Hindu law-giver assigned industry and commerce in his great scheme of division of labour. Engaged in commerce from time out of mind, they are keen business-men. The arithmetic of their book-keeping has astonished and puzzled the entire banking world. The rapidity and accuracy with which, without the help of pencil and paper, a ten year old brat among them can do an intricate sum in the calculation of interest can send expert Florentine " counter-casters " blushing.

But they are as soft-hearted philanthropists as practical business-men. In business itself can their philanthropy be discerned. A debtor among them, if any, never takes advantage of the law of limitation and never baulks the creditor of his money simply because the creditor forgot to sue him before the document became time-barred. But theirs is not merely this negative philanthropy. Brought up in an atmosphere of the true ancient Hindu *dharma,* they are trained experts in the art of giving away. The feeding of the poor and the building of temples have gone on for ages here with their money. And to-day they have added to

their already crowded programme-sheet of items of expenditure, the by-no-means-cheap item of founding and maintaining schools and colleges.

Rajah Sir Annamalai Chettiar of Chettinad founded the Annamalai University in June 1929. It was then, and has been so far, the only University in India that owes its existence to one man's charity. How long it will enjoy that proud distinction depends on how long the other Kuberas of the country take to be inspired by his example.

THE NUCLEUS OF THE UNIVERSITY.

The Annamalai University was not a sudden creation; it was a gradual growth. It developed out of a college affiliated to the Madras University.

The Sri Minakshi College, Chidambaram, was founded in 1920. Small as it was when started, only nine years old as it was when it gave place to the Annamalai University, it had a history of its own, not uninteresting and not without inspiration to true lovers and promoters of knowledge.

The country has known very well and will remember for ever the late Dewan Bahadur S. Rm. M. Rm. Ramaswami Chettiar, the junior of the two elder brothers of our Rajah Saheb. It was the name of this great and distinguished member of the Nagarattar community that was written in indelible characters in the Minutes Book of the Chidambaram Municipality in the year 1912 when at his own sole cost, he helped Chidambaram for ever to drinking water from the Coleroon. The Dewan Bahadur started in 1913 a High School at Chidambaram that men agreed in gratitude to call the Ramaswami

Chettiar Town High School. To him work in verity was Worship; and he wanted the High School to adopt that for its motto. Inscribed in bold capitals, on a piece of wood, the motto has hung any day these twenty-seven years at the threshold of the new school.

In less than half a dozen years after the foundation of the school, however, the philanthropist was, to the great ill fortune of eager scholars and indigent parents, gathered prematurely to his forbears. But Saraswati is an Immortal. And history shows that She is preparing to live the most vigorous life precisely when She seems most to languish. The Renaissance was preceded by what in European History is by common agreement called the Dark Ages. All the time the Dewan Bahadur was running his High School, the country was getting gradually acquainted with another member of the family at Chettinad who was in a few short years to make himself the contemporary Micaenas of our land.

Rajah Sir Annamalai Chettiar, then simple Mr. Annamalai Chettiar, was the youngest of the three brothers of whom the Dewan Bahadur was the second. Young at the time as he was, obscure certainly he was not. Already as early as the summer of 1915, his eager eye had discovered a golden chance for the exercise of his charity. They say that money burns in little boys' pockets, and spend it they must; wealth in the chests of these Nagarattars appears very much like money in little boys' pockets; at any rate, the particular Nagarattar gentleman of whom we are speaking, found it impossible to withhold charity in the presence of an object calling for charity. In 1915, after contributing handsomely to the hostels of the American College, at Madura, he came

forward with an offer to endow several lakhs of rupees on, and meet the entire cost of the management of, the Madura College, Madura, provided the entire management was transferred to the hands of a responsible committee of seven. And as an earnest of this offer he purchased land for thirty thousand rupees and put it at the disposal of the young men of the college for a play-ground. But as the proviso by which his offer was conditioned was, even after the lapse of five years, neither fulfilled nor seemed likely ever to be, Mr. Chettiar had to content himself with what he had done and to cast about once more for a fit recipient of his charity.

It was at this hour that it pleased fate to deprive Chidambaram of the great philanthropist, the Dewan Bahadur. But there is always a soul of goodness in things evil, and God fulfils himself in many ways. This event unhappy in the extreme to the public of Chidambaram, carried just some little consolation with itself in that it placed Mr. (then Rao Bahadur) Annamalai Chettiar immediately in charge of the tasks the Dewan Bahadur had undertaken. He became the manager of the infant High School at Chidambaram, and as the sequel showed, became its manager to some purpose.

It was in November 1918 that the management of the High School passed into the hands of the Rao Bahadur. On June 24, 1920, the Sri Minakshi College, Chidambaram, was an accomplished fact. That day Chidambaram (South Arcot, one should say) gained what Madura had lost.

The founder of the new college believes as firmly in modest beginnings as in earnest endeavours. The College

was, to begin with, to be an Intermediate College—a second grade college in the language of South Indian academicians. And even as an Intermediate College, it was to offer instruction only in non-science subjects among the optional groups; for Physics, Chemistry, Botany and Zoology require apparatuses and laboratories which it takes time to get ready.

The College was affiliated to the Madras University. It was housed temporarily in the High School building; that, by the way, means that the High School had been erected on a scale calculated to afford room to such guests as the new college.

South India stood astonished at what was doing at Chidambaram; Mr. Littlehailes, then Director of Public Instruction, Madras (and afterwards Chief Commissioner for Education with the Government of India and later, Vice-Chancellor of the Madras University) officiated at the opening ceremony of the new institution. Thus came into being a small college, which, Heaven and good men's hearts all blessing it, was going very quickly to expand and prove the nucleus of the present University.

THE FIRST GRADE IDEA.

For two years from 1920, the Sri Minakshi College was an Intermediate College. But the head of the noble founder had gone pregnant with great ideas for its development. It had already conceived a plan for erecting a big building on the site of the grove opposite the Chidambaram Railway Station and just on the other side of the Railway fence to the east. Negotiations were soon afoot for the purchase of it for about a lakh of rupees. Now the nearness of it to the Railway line

necessitated the approval of the transaction by the South Indian Railway. To get that approval was therefore to be the first step in process. One Friday evening in October 1920, the founder whose visits to Chidambaram in those days were more frequent than now, sent for a certain lecturer in the college who happened to be acquainted with Trichinopoly, and asked him to go to that place the next day and see the Agent of the South Indian Railway on the business. The man agreed. But it so happened that he was just then back from an after-noon jaunt to the beautiful village of Tiruvetkalam, half a mile on the other side of the Railway line. As the man's head was full of it, he could not help observing to his master that a college founded on that site would be an ideal one at once far from the maddening crowd and under the greenwood tree—as if Hardy had named his novels for the very purpose of describing this college to be! The eyes of the founder dilated, as his heart expanded, at the suggestion. Directly the idea was suggested, the proposal to interview the Agent of the South Indian Railway was dropped. It was on the contrary decided that early the next morning the founder should visit Tiruvetkalam with a party of people connected with the college.

The next morning the party drove to the place in two stately vehicles drawn each by a pair of stately bullocks. The one in which the founder (with two others) drove, reached the spot earlier than the other. The founder alighted first and the two others in the bandy got down after him. That moment a proud and merry pair of kites flew just overhead and sounded their characteristic note so heartening to the Hindu. They flew so near the ground that the penumbras they cast

were visible to an observant eye. The founder instantly reacted to the occurrence. His happiness was visible, and in a voice tremulous with emotion, he said to the two that stood by and to those in the other bandy who had by then come up with them, " God granting me life for a year more, I build a college on this very spot which it has pleased Him to indicate by means of this unmistakable sign." Well, some men find joy in the sight of hoarded wealth. Some reluctantly spend, when compelled, the money they have hoarded. Where, in the division of men under categories do you think Mr. Annamalai Chettiar that day belonged?

The words the Rao Bahadur uttered on that occasion were solemn ones. They struck awe in his hearers. But the awe was greater when the speaker directly proceeded to translate his speech into action. There are countless dreamers of day-dreams among us who not seldom bestow on the ears of their friends the benefit of a clear (and often clever) enunciation of their plans and purposes; but not many among these ever proceed to the step that lies next after the enunciation. Not so in this case—of course not. Plans were immediately invited. Many were drawn, discussed and dismissed before one could be decided upon.

But at this juncture occurred an event as if exactly designed to show that in the affairs of business-men, if man proposes business invariably disposes. The founder's over-seas business now urgently called his attention and he was, as it were, dragged to the other side of the Bay. Long was his stay there—longer than we expected or he himself wished. When at last he returned home, the year 1921 was already old. His

disappointment was keen at the thought that his institution was still an Intermediate College, still housed in the High School and still not in a position to offer instruction in Science subjects even in the Intermediate. As the urge for its development was imperative on him, he decided that if, for the moment, it could not adopt Mathematics, Physics and Chemistry on the optional side and expand horizontally, it could yet grow vertically by the B.A. course being started with History and Economics among the optionals.

THE NEW BUILDING.

The College indeed was now first grade. But it had no house of its own, and had clean outgrown the room that the High School could afford it.

O! knowledge ill-inhabited worse than Jove in a thatched house!

Not many days however went by before the construction was started of the contemplated college at Tiruvetkalam. On June 29, 1922 was the B.A. inaugurated; that very month were trenches dug, on the chosen site for the structure to be. One Mr. Duraiswami Ayyar of Sengudi (our workmen's Sengudi Ayya) was both architect and building superintendent.

His supervising ability left nothing to be desired. It was as vast as the resources of his master. On July 2nd, 1923, that is in less than twelve months' after the beginning, the building was ready for our occupation. Three hundred and sixty feet from north to south and sixty from east to west, and one storey high, it was an extraordinary feat of brick-masonry to be performed during a single process of the sun. But what is not

possible to men possessed of wealth, and a willingness to spend it, and served by people, true to their salt?

The building is now what they call the Arts Block in the University—Arts Block though, as a fact, it accommodates Botany, Zoology and part of Chemistry. We moved to it at the reopening after the summer vacation in 1923. That day we added the First Group in the Intermediate and Mathematics in the B.A., to our courses of studies. That day the numerical strength of the College more than doubled itself: in 1922 our students had numbered 97; in 1923 we had 148 on the rolls.

THE HONOURS IDEA.

All this time, honours were being showered thick on the founder. A Rao Bahadur till as late as 1920, he became a Dewan Bahadur in 1921. In the year following he was Knighted by a sovereign—it was his late Majesty King George V—who evidently knew a good man when he saw one. But a man of action like our philanthropist attaches more value to the achieving of honour than to the gaining of honours, to doing good deeds than to winning recognition therefor. While the King Emperor was greeting him with ever newer titles as the years went by, he was going on expanding the new foundation at Tiruvetkalam. In 1924 the college had its first regular Students' Home. Students that had for a year occupied barrack-like apartments improvised at short notice at Tiruvetkalam, now quitted them for what in comparison with them, was verily a mansion. And for living in it, every undergraduate had to pay a rent of one rupee a month. "A ridiculously low sum!" one would exclaim. Yes, quite. But high-minded charity is

not seldom guilty of such ridiculous acts, and not seldom ignorant of their ridiculousness.

When the Students' Home was building, Philosophy was being instituted in the B.A. And as early as June 1925, this first grade college had the Honours courses added to it in as many as three subjects: *English Language and Literature, History* and *Economics.* In the June following, it got affiliated to the University in Physics and in Chemistry in the B.A. The building in which the laboratories and lecture-halls relating to these branches were contained had been constructed some time in 1925 and were now declared open by Viscount Goschen, then Governor of Madras and Chancellor of the Madras University.

People in the Annamalai University now call it the Science Block. It lies north of the Arts Block and is linked to it by an over-bridge. Great was the gala our students and teachers had that day. The Governor performed the opening ceremony in the morning amidst great *eclat.* Then followed a breakfast of the kind that only the Rajah of Chettinad is known to give in the South Country. In the afternoon there was a lecture by Mr. A. Ramaswami Mudaliar (now Sir A. Ramaswami Mudaliar, Commerce Member in the Viceroy's Executive Council) presided over by Dr. C. R. Reddi. Sir Annamalai Chettiar was himself present. The two speeches were worthy of each other, and the hall and the audience worthy of them both. Attention held the hearers mute except at those (frequent) moments when, at an uncommon sally of wit or an unexpected turn of expression, admiration ran high and applause rose loud. It was as if an argument in law had been started

by Coke and finished by Bacon, good Queen Bess sitting the performance through.

1927 AND 1928.

The chronicler pauses here, as pause he well may. For the years 1927 and 1928 were years purely of establishing, years during which, as the sequel showed, the founder was holding his breath and girding his loins for the next leap. That leap was to be the greatest of all that he had yet taken. It was but proper then that we should remain for a time where we had been.

We might certainly have started Honours studies in Physics and in Chemistry. But we did not; we contented ourselves with getting our men ready for it. The founder sent our lecturer in Physics to England in the autumn of 1928 to pursue higher studies in the University of London. And it looked as if until acts of preparation like this should be over, no further stage in the growth of the institution was to be attempted. Here therefore we pause just to take stock of what had been achieved.

In 1928, the Sri Minakshi College was a first grade college affiliated to the Madras University. It taught, besides the compulsory subjects (English and the Second Language) Physics, Chemistry and Mathematics (or the First Group of Optionals) and Ancient History. Modern History and Logic (or the Third Group of Optionals) in the Intermediate. In the B.A. (again besides English and the Second Language) it offered instruction in Branch I (Mathematics), Branch II-A, (Physics), Branch II-B (Chemistry) Branch IV (Philosophy) Branch V-A (Hisotry) and Branch V-B (Economics).

To accommodate these branches of study we had two buildings—the Arts Block raised in 1923 and the Science Block constructed in 1926. Our students numbering 426 at that date were housed in two big blocks of hostel building. They boarded in four messes, (or sections as they are popularly called in this part of the country) built quite adjacent to the Students' Home. Four of the teachers of the college had quarters on the premises: the Principal who was the head of the institution and three others who held office as wardens of the hostel. Looking back on what was doing here in those days we of the Annamalai University feel to-day a legitimate pride in what had been accomplished in so short a time and in him who had accomplished it all.

Our building programme had been started in 1922. It had gone on till 1928. At the rate of about a lac a year on the average, we had spent seven lacs of rupees so far on buildings.

Well, a solid material possession, that. And what was its spiritual value? Values differ with different people. But a point of some significance is well worth pondering in connection with the structures built from 1922 to 1928 by Sir Annamalai Chettiar. When we moved to our new college building in 1923, at Tiruvetkalam, the place was little better than a wilderness. There indeed was a small temple and, surrounding it, a few hamlets. Human faces could indeed be seen here and there in that nook. But more than eighty per cent of the area going by the name of Tiruvetkalam was out of doubt, a wilderness. Prickly pear that used to meet the eye everywhere in South India (until a few years ago when an insect imported from Australia swept it all off

the country), had grown dense all over the place. Poisonous reptiles and insects had found cosy habitats amidst this thick growth. Even by day jackals could be seen playing in and out of the thickets as merrily as kittens in a house. And when we lodged our students in their hundreds in temporary sheds amidst these surroundings, we of the college (and its manager and proprietor, Sir Annamalai Chettiar) undertook a grave responsibility. Menacing was the danger from reptiles. Our boys and ourselves however seemed to possess a charmed life. It was really astonishing. But to minds that can reflect there need be nothing astonishing in this. Had not a whole labouring population over a vast tract of country been afforded work and comfortable wages for full six years? Had not thousands been placed for six years above anxiety in the matter of keeping the wolf from the door? How many bricklayers, carpenters, masons, workers with the spade, hewers of wood and drawers of water, how many of them all had not had a comfortable time of it, had not been—some of them—even helped to a competence? And how many hearts therefore were not blessing the donor? These blessings are not nothing. The human heart speaking in the fulness of gratitude and uttering a prayer on behalf of the good-doer is not nothing. And it was not without due thought that the sage promised heaven to builders of houses and payers of wages. How could Sir Annamalai Chettiar that great house-builder that liberal wage-payer come by anything but good in the course of a charitable enterprise he had undertaken?

Buildings worth seven lacs are of course things of value. But this spiritual wealth? What do you estimate its value at?

THE ANNAMALAI UNIVERSITY.

All of a sudden, in the spring of 1928, newspaper readers were taken agreeably by surprise one morning when they read an announcement that Sir Annamalai had endowed twenty lacs of rupees on a University to spring into existence on the site of the Sri Minakshi College and that the site, the buildings, the libraries, laboratories and furniture belonging to the college should be made over to the University to be. The public congratulated us, the staff of the college, but in the same breath blamed, as is its wont, us and our founder for not having given it any inkling as to what had been going on within the college. The public would have been more to the point if it had blamed us, the staff, for not having *read* the founder's thoughts. The fact was that we were as innocent of the new development as the public itself. If the founder resembled the kings of the Ikshwaku line in that both they and he earned money only to give it away,[1] he resembled a great king of that line in another respect: in that he and the great king mentioned never published their intentions and proposals until their intentions and proposals materialised and could be inferred by men by a process of arguing back from the results to the causes.[2]

While the public was indulging in angry mutterings at not having been taken earlier into the founder's confidence, the founder was proceeding at a round pace with the work of the University. A bill was introduced in the provincial legislative house (then the Legislative

1. त्यागाय संभृतार्थाः ॥
2. फलानुमेयाः प्रारंभाः ॥

Council) for the creation of a University at Tiruvetkalam. It was to be a teaching residential and unitary University.

The day of the discussion of the bill in the legislative house was perhaps the proudest day in the life of the donor. It was a holy act that he was performing: he was dispelling darkness and bringing light. He was doing it with money earned overseas, earned, as people now know, even at the peril of one's life on strands and shores far off. It *was* a holy act. And the character of the act showed itself in this: that while the bill was being discussed in the house of legislature, all parties were united, and no dissentient voice was anywhere heard. The poet cries that in the penance grove of Parvati lions and elephants, wolves and sheep were seen clubbing together. So holy was the occasion. Let us recall to the minds of our readers that on the day of the bill, the Treasury Bench and the Opposition, the Chief Minister and Mr. Satyamurti were at perfect accord.

The Bill becoming an act in September, the University began to function in the succeeding June. The staff of the old Sri Minakshi College were absorbed in the new University. The number was considerably increased by men being taken from outside. The appointments were to be made, according to the constitution, by a body called the Board of Selection. But as this body was mainly elective, and as those very bodies which were to be its constituencies had not been themselves constituted, a temporary Appointments Committee was created and that Committee did all the appointing for the year.

THE INFANT UNIVERSITY.

The Governor of the Province was the Chancellor of the University. Viscount Goschen was then Governor

of Madras and became our first Chancellor in June 1929. But when the University authorities, the Senate, the Academic Council and the Syndicate were constituted, it was already December and Viscount Goschen's period of Governorship had run out. The opening function of our Senate in March 1930 was performed by his successor, Sir George Frederic Stanley. Since that date the Province has had two more Governors and the Young University two more Chancellors. Sir Frederic Stanley was succeeded by Lord Erskine and he by Sir Arthur Hope, our present Chancellor. Brought up in the best traditions of English liberal education every one of these Chancellors has been an ardent champion of higher education. The Chancellor of three Universities at once, the Madras University, the Andhra University and our own, each of these noblemen has shown himself noble in his disposition towards seats of education.

Our Pro-Chancellor is by the Act, our Founder, the Rajah of Chettinad—yes, the Rajah of Chettinad. Our Founder had by now become a Rajah. The bill for his University had not been beaten into an Act on the legislative anvil two months, when there came a New Year day. On that day it pleased his sovereign to call him a Rajah—him and all the first sons after him among his descendants. How well it was in the fitness of things! It is customary in this ancient land for Rajahs to score wealth and spend it in encouraging learning. The founder of a University does become by that very royal act a Rajah in reality; and his Majesty King George V simply recognised an accomplished fact when he hailed this patron of higher learning a Rajah.

Great was the jubilation in the country; particularly at Kottaiyur where thousands of Nagarattars gathered

and greeted their honoured compatriot on cloth of gold, and at Annamalainagar where teachers and students felt, each of them, as if a kingdom had fallen to his lot.

At Annamalainagar? What and where is Annamalainagar? As King George V was calling Sir Annamalai Chettiar Rajah Sir Annamalai Chettiar, the Madras Government rechristened old Tiruvetkalam, the seat of the University by the name Annamalainagar. Truly there seem to be tides in the fortunes of places as in those of men. How else are we to account for the translation of a habitat of jackals into a temple of learning?

THE UNIVERSITY.

Besides the Sri Minakshi College three other (smaller) institutions went to the making of the new University: the Sri Minakshi Samskrt College, the Sri Minakshi Tamil College and the Sri Minakshi Pundit Training College. They were already three years old and were turning out Siromanis and Vidvans of the Madras University and certified pundits. The staff of each of these institutions now joined us, and the institutions formed the Oriental Faculty of the University. On the 1st of July 1929 therefore the Annamalai University was a unitary teaching and residental University consisting of three Faculties of Studies: Arts, Science and Oriental Learning. Among our students were Tamils, Telugus and Malayalees. On our staff were men from all parts of the country, distant Punjab itself not excluded. It came up to Newman's ideal of a *studium generale,* an emporium of knowledge, one to which students and teachers flock from all parts of the world for the purpose of carrying on commerce in knowledge.

As we had only the Arts Block and the Science Block to accommodate this vast assemblage, we erected temporary sheds for the housing of our new guests, the Orientalists. But as patch-work business is never in our founder's way, in but two years after the arrival of these new guests, our Oriental Block was ready and the temporary sheds were abandoned. This new block is what you now see at the southern extremity of the old Arts Block answering to the Science Block at the northern, and linked like it to the Arts Block by means of an over-bridge.

But progress did not stop here. As early as 1929, that untiring patron of arts and letters, our founder had started a Music Academy. Musicians from all quarters of the country had come and set the Academy on its legs. But at that time this institution did not form part of the University. Soon however it did. In December 1931 the Academic Council decided, and the Senate endorsed the decision, that this Music School should form part of our Oriental Faculty and that the Rajah of Chettinad, the founder, should be approached, for his consent. The Rajah saw that the measure if taken would but redound to the glory of the University. And as whatever did so commended itself to him, the consent sought was without difficulty obtained. We are now in a position to claim the teachers of Music at Annamalainagar for our colleagues in the University.

In 1929, Science had indeed received its due share of attention in that Honours Studies in Physics and in Chemistry were started soon after the University had begun to function. But we have been living in days of an irresistible Science wave this quarter of a century

and Honours courses in Physics and Chemistry would scarcely serve the turn of our student population. The vast majority of them are ardent votaries to Science. So in 1932, we started instruction in Natural Science—Botany and Zoology—in the Intermediate; and, when in two years from then, our young naturalists passed the Intermediate Examination, we accommodated them in the B.Sc. class in the branch which was after their hearts.

But what did all this mean? Why, only this: the musicians and the naturalists knocked at our door for living room. The naturalists who were, for the time being, housed in the Arts Block pitilessly pushed our office staff and our already vast and yearly growing Library out of that block. We had nothing for it but to turn once more to brick-masons and carpenters for help in this stress. The Library and Administrative Buildings which greet you to-day as you enter the premises were the result. They have cost us a pretty penny. They and the Convocation Hall which lies between them together cost us four lacs of rupees.

This pile is what they call the Srinivasa Sastri Hall. Writing to us the other day a visitor of artistic taste and educational enthusiasm said: " The Srinivasa Sastri Hall is really the pride of your University; why, for that matter, it is the pride of South India, I believe. How I wish to pay another visit to those grand buildings! "

Grand buildings indeed; and one may also allow, not wholly inartistic. But even they have not sufficed our needs. Our musicians were still houseless. Our students in the hostel had the same complaint to prefer. And the guest-house we had was so small that without a

really spacious structure for the accommodation of our guests, we could not come up to any decent standard of hospitality. Again were the engineering staff of the University busy with plans and estimates, again did brick-masons appear trowel in hand. Between 1936 and 1938 we raised no less than five substantial structures: our music school, a dormitory for the rest of the musicians after their exertions, the guest house which you see overlooking the park and two new blocks of hostel buildings. In 1939 another block still was needed for our hostel and another block was brought into existence.

It has been already said that ours is a residential university—the first of its kind, it will be conceded, in our part of the country. If the residential ideal is to be fully realised, it is obviously not enough to have rooms for students; teachers have to be provided as well as they. This fact we kept in view from the first. Our Professors, Lecturers and Pundits have all of them got residential quarters on the premises. The office staff are there too. The Vice-Chancellor's bungalow stands on the road to the University and is in fact the first considerable thing that strikes the Railway passenger's eye as the train crosses the Coleroon bridge and steams into South Arcot area.

And there we are with our men, materials and buildings. And yet our men and materials so grow everyday—God be thanked—that every day they call for more buildings. Our science students grow so numerous, and our books so multiply in number that we wish that brick walls and wooden shelves were elastic!

Whence, one may ask, all this growth? What makes all this expansion possible? The question is easily

answered. In the first instance, we must render thanks to an enlightened provincial government that has given and is every year giving us large money grants, that encourages us in every way in our endeavours and that even in times of war like the present does not wholly bang its door on us when we knock at it. And then we have had a singularly noble succession of Vice-Chancellors. He that first filled that office was Dewan Bahadur S. E. Ranganathan who has been since thought fit to fill a higher office in the Council of the Secretary of State. His successor was the Rt. Hon'ble V. S. Srinivasa Sastri who by scholarship and by a never to be ruffled temper has established his right, these five decades to preside alike over the destinies of educational institutions and offer counsel about the steering of the ship of the state clear of schools on tempestuous seas. And *his* successor, the present Vice-Chancellor, is Dr. Sir Kurma Venkata Reddi Naidu, one that has been in one capacity or another in the public eye ever since the century began, has been without interruption, chosen to high places in the Councils of the Empire from the very dawn of Democracy in the land, has seen and guided the birth and growth of self-governing institutions in the country, has been from time to time honoured with the personal regard of his sovereign and has filled the exalted office of Governor in the province of his own birth. How can an institution like ours help growing and expanding under the rule of heads like these? But above all we owe our rapid growth to the constant and anxiously watchful care of him whom the University claims as its parent, whose paternal love has placed at the disposal of this child of his all that it needs for its nutrition and development, whose head is

as wise in perceiving a noble cause as his heart is in giving support to it and in whom the high-minded charity of the East and the clear-headed business spirit of the West meet and proclaim that, if it is a mark of divine grace in the human being to strive, save and serve," then, East *plus* West is much the best.

THE PLACE OF MR. T. LAKSHMANA PILLAI OF TRAVANCORE IN CARNATIC MUSIC

By

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The productions of Mr. T. Lakshmana Pillai of Trivandrum, both as a Tamil Poet and a composer, have been before the public eye for such a long time, that it will not be inopportune at this moment to try to form an estimate of their merits and so to fix his place, especially as a Tamil composer, in the field of Carnatic Music. In the present article, I propose to deal with Mr. Pillai as a composer only.

In adjudging the merits of musical compositions, and the place of a composer in Carnatic Music, we have to take into consideration and examine some of the important aspects of his compositions such as:—

(1) The literary correctness and worth of the language employed in the compositions.

(2) The value of the thoughts and sentiments embodied in them.

(3) The excellence of the music in which they are clothed, which includes also the fertility of his musical imagination.

(4) The originality or creative power of the composer.

(5) The purity of the style of his music.

As regards the literary correctness and worth of the language employed in Mr. Pillai's compositions, we do

not need to dilate much here, as they have been acknowledged by such an eminent authority in Tamil as Dhakshinathiya Kalanidhi Maha Mahopadhyaya Dr. V. Swaminatha Iyer of Madras who, in the course of his presidential speech at one of the musical demonstrations given by Mr. Lakshmana Pillai at the First Line Beach, Madras, expressed the opinion that Mr. Pillai's Tamil was faultless. This has led to his placing the name of Mr. Pillai first among the living composers of South India, in the message which he recently sent to the Music Conference held at Annamalainagar this year.

As far the thoughts and sentiments conveyed by Mr. Pillai's compositions, it will be well to point out that the subject matter of the compositions falls under three or four main heads, such as Philosophical, Ethical, Devotional and Humanitarian. This will show the wide range of the thoughts and sentiments set forth in song, and will be found to be a healthy departure from the stereo-typed nature of the subjects usually treated of by other composers whose compositions are mostly of the *mampahi* type. In his compositions, Mr. Pillai shows a remarkable originality of thought and sentiment, which will be welcomed by the educated and enlightened section of the public, besides presenting a salutary model for future compositions. Even in his purely devotional songs, Mr. Pillai deals with the subject in his own original fashion. His compositions are cosmopolitan in outlook, and are imbued with a tenderness, fervour and depth of feeling, rarely met with elsewhere. They are not addressed to any particular deity, such as Rama, Krishna or Subramania, but to the one Supreme Being, whose manifestations or Avatars they may be taken to be, thus appealing to the followers of all religions that

acknowledge one God, and entirely free from any references which may tend to give even the slightest offence to the religious susceptibilities of even the most orthodox of every religion.

Coming now to the intrinsic excellence of the music in which the sentiments are clothed, one feels the same freshness, originality and exhilaration that one meets with in the compositions of the great Thiagaraja or Dikshatar; and this fact raises Mr. Pillai's compositions to the highest level of merit. In support of this statement, it is possible to quote from the testimonies of competent men like Mr. Tiger Varadachariar and others. But in this connection, I shall merely content myself with quoting the opinion of Mr. K. N. Sivarajan, B.A., expressed in the " People's Opinion " of which he was the editor. Said he on the 11th October 1919,

" His (Mr. Pillai's) compositions taken as a whole prove in the most convincing manner that Tamil is not a wit behind Telugu in its capacity to produce highest musical effects and also that he himself can take rank with the great Thiagaraja. Take with this, the wide variety, the striking individuality and the absolute freshness of his pieces; they are enough to show how fertile and original Mr. Lakshmana Pillai's imagination is in the creation of musical forms of incomparable beauty and attractiveness .....In their felicity of diction, aptness of melody, uncommon originality of form, and fecundity and variety of variations, his compositions rank with the best pieces of Thiagaraja. They bear marks of genuine inspiration and as creations of Mr. Lakshmana Pillai's musical imagination, will ever remain to gladden the hearts of generations yet unborn. It is the supreme privilege of genius to serve

humanity even after its bones had smouldered into dust. Enshrining beauties of rare musical forms, Mr. Pillai's compositions, we are sure, must live for all time to come."

Indeed, the beauties of Mr. Pillai's musical compositions elicited the admiration of the highest order of musicians, such as Messrs. Ganavisaradha Bidaram Krishnappa, Konerirajapuram Vaidyanatha Iyer, Govindaswamy Pillai, Naina Pillai of Conjeevaram, Ramachandra Bhagavatar of Trivandrum, Ganavisaradha M. S. Ramaswamy Iyer, Doraswamy Iyer of Ernakulam and Samalam Iyer of Tinnevelly, many of whom expressed a desire to study them. The first named musician actually studied a dozen songs from Mr. Pillai direct, as also did Srimati Saraswathi Bai and others from Madras.

In the matter of the introduction of variations in musical compositions, Thiagaraja having been the pioneer, Mr. Pillai kept that model in view. He however, never borrowed combinations from Thiagaraja or any other composer, but relied on the exuberance of his own imagination. His originality in this direction never wavered, as will be apparent to any listener of his compositions.

Lastly, the style of music employed by Mr. Pillai in his compositions is unexceptionally pure, like that of Thiagaraja. He never yield to the temptation of introducing Hindustani or other foreign styles into his music for the sake of temporary pleasure or for embellishment, or for popular applause, such aberrations, in his opinion being injurious to the true genius of Carnatic music.

Thus, viewed from every standpoint, it may be affirmed without hesitation that Mr. Pillai is one of the greatest living composers in Carnatic music, and this accounts for his being styled as 'Tamil Thiagaraja' by Mr. M. S. Ramaswamy Iyer, and recently, by Srimati Saraswathi Bai during her demonstration of Mr. Pillai's songs at the Annamalai Music Conference.

Mr. Pillai was given the title, some years ago, of Isai Tamil Selvar by the Madras Provincial Tamil Conference, held at Tinnevelly. It will be seen therefore that he was deservedly honoured with a full size oil painting by the public of Travancore, which is now placed inside the Travancore University buildings. Another portrait of Mr. Pillai was also unveiled some time ago at Tinnevelly.

Among the most popular of his songs may be mentioned the following ten:—

Initial words.		*Raga.*
என்ன செய்தாலும	...	Kambodi
நின்னை முச் சரித்தால்	...	Nelambari
சங்கடமே ஜகம்	...	Kunthalavarali
நானவர் யாரையும்	...	Kamas
நீராடி	...	Sahana
அருட்பெரு	...	Shanmukhapriya
என் பிழை யாவும்	...	Kamas
அன்பருளம்	...	Vachaspathi
கடவுளே யறியா	...	Kanada
நன்றி கூறுவமே	...	Begada

CHIDAMBARAM AND THE DIKSHITARS OF THE SIXTEENTH CENTURY A.D.

By

Bharatakalanidhi Vidyasagara Vidyavacaspati

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M.A. (Madras)

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Chidambaram has always been famous not only for its spiritual and religious excellence but also for its high intellectual traditions.

In its long history from the beginning of the Christian era, the sixteenth century was really an epoch-making era in its literary tradition. The great Polyhistor Sriman Appaya Dikshitar spent the last part of his life at Chidambaram. Appaya Dikshita's literary activities ranged from 1570 to 1620 A.D. The reputed author of more than 104 works distributed over all branches of Sanskrit language and literature, he was a star of the first magnitude in the literary horizon of Chidambaram, which attracted unto it, because of his presence, all the learned scholars of the day from far and near, north and south.

The great Bhattoji Dikshita, the son of Lakshmidhara Pandita, the pupil of Sri Sesha Krishna and the author of standard works in grammar like the Siddhantanta Kaumudi, Praudhamanorama and Sabda-Kaustubha came to Chidambaram to meet the illustrious Appaya Dikshita and sat at his feet for being initiated into the intricacies of the Vedanta Sastra. In his

Tattvakaustubha, Bhattoji Dikshita has exhibited ably his profound mastery of the subject.

Among the many works of Appaya Dikshita, the Tantrikamimamsa deserves special mention as therein he has made a direct quotation from the Smriti-Muktaphala of the venerable Vaidyanatha Dikshita. Sriman Vaidyanatha Dikshitar is well known throughout India as the standard Law-giver of the South. Born in Kandaramanikkam a village in the Tanjore District, his literary activities must have come to a close shortly before Appaya Dikshita's began. The Smriti writer Vaidyanatha Dikshita must be deemed to be identical with the author of the Ramayanadipika a commentary on the Ramayana. The author shows his *Ramabhakti* not only in his commentary on the Ramayana but also in the benedictory stanzas prefixed to each of the seven Kandas of his magnum opus the Smriti—Muktaphala. Besides, the stanzas in which the composition of the Smriti—Muktaphala and the Ramayanadipika are referred to, are significant of the title of our author wherein he refers to himself as Vaidyanathadhvrin and not as Vaidyanatha or Vaidyanatha Dikshita as he is popularly referred to. There does not therefore seem to be any doubt regarding the identity of the authorship of the two works; and Vaidyanathadhvari or Dikshita must have been an immediate predecessor of Sriman Appaya Dikshita.

In his Ramayanadipika I-4-2 Vaidyanatha Dikshita refers to the view held by others that the actual increase in the number of Granthas in the Ramayana over the prescribed 24,000 should be due to the admixture of long-metres verses in the Trishtubh and the Jagati, which

exceed the thirty-two normal-lettered stanza. And this is the view actually held by the slightly earlier commentator on the Ramayana, Sriman Isvara Dikshita the author of both a Brihad—and a Laghu Ramayanasara-samgraha, the date of composition of the former being 1518 A.D.

The sixteenth century in South India counts thus the illustrious names of Isvara Dikshita, Vaidyanatha Dikshita, Appaya Dikshita and Bhattoji Dikshita among its literary votaries; and Chidambaram had the honour of attracting these to the feet of Lord Sri Nataraja whose cosmic Dance still continues in all its unabated vigour even to-day as in days of old.

Note.—All the works cited above are available in print or manuscript in the Madras Government Oriental Manuscripts Library.

NATTUKOTTTAI CHETTIARS

Their Banking System

By

P. J. Thomas, M.A., D. Phil., M.L.C.

On an occasion like the present, when we are honouring the most distinguished of the Nattukottai Chettiars, it may not be out of place to give a short account of the banking activities of the Chettiar community which have enabled them for long to serve the country, not only in the economic but also in the educational and other spheres of public activity.

In many respects, the Nattukottai Chettiars are the most remarkable bankers of India. To them banking has not been the tail-end of trade; they nearly always confined themselves to banking and their business methods are of a highly specialised character. The Chettiars' area of operation is also more extensive than that of other similar communities. From their home in Chettinad, they first expanded their business all over Madras Presidency and the Indian States adjoining thereto. Subsequently, attracted by the increasing opportunities for profit opened out by the growth of plantations in Ceylon, Malaya, Burma, and Straits Settlement, the Chettiars went over to those countries, and to-day they carry on an extensive banking business all over Southern Asia, including Siam, French Indo-China, Sumatra, Java, and neighbouring Islands. They have penetrated into the innermost fastnesses of those

countries; they finance the rice trade of Burma and have also important interests in Ceylon rubber and tea and Malayan rubber.[1] In fact their banking business in India is to-day only a small fraction of their total business.

The Chettiars are also called Nagarattars, because they belong to certain nagarams (or townships), 9 in number. At the head of each of those nagarams there is a temple, which is maintained by the common funds of the Nagarattars. The married couple (pulli) forms the social unit of the community, and each such unit has to contribute pullivari and asti-vari to the temple. They are devotees of Siva and are generally vegetarians. They have built fine temples and have established several choultries and poor houses, and have always shown readiness to contribute liberally to public charities. From ancient times, a percentage of the profits of all Chettiar firms has been set apart for charity (magimai).

Like the Marwaris and Jains, they are sparing in their expenditure on personal comforts and all their daily avocations are characterised by extreme simplicity and frugality. Yet they have been lavish in the making of ornaments and in the building of houses. The barren region of Chettinad is studded with numerous palatial houses which cost on an average Rs. 100,000 each to build; in Devakotta alone, there are many such houses. The total investment in houses and jewels is estimated at about Rs. 14 crores. When Chettiars go away on

1 Their connection with Ceylon and Malaya dates back to a time earlier than the boom in tea and rubber; but they first went there chiefly for trade and only subsequently took to banking. *Madras Banking Committee's Proceedings.* Vol. III, p. 1170.

business, their families generally stay in Chettinad. But they always come home to perform their ceremonies, and marriages are celebrated almost invariably in the ancestral homes.

Most of the indigenous banking communities of India do not carry on money-lending as their sole business. They may also be general merchants, commercial agents, dealing in bullion, cotton, grain, cloth and other produce, brokers or jewellers.[2] Often money-lending is only auxiliary to these occupations. Thus in Bombay, U.P. and C.P. the bankers trade in grain and cotton and carry on speculation. They purchase cotton and grain at harvest and store them against a rise of price. The Marwaris of Bombay operate on the cotton exchange, and to them money-lending is only a side-line. Elsewhere they are large landowners, or own mills and factories. In Bengal,[3] they finance a considerable proportion of the distributive trade. In fact most of the indigenous bankers are but businessmen using their capital to earn a profit and they undertake any kind of business which in their view will bring profit. This has always been the case in India. Money-lending was auxiliary to trade and with the increasing vogue of joint-stock banking in India, this tendency has grown more conspicuous than before.

The Chettiar and the Multani are the principal exceptions. Even among these two classes, there may be several pursuing other trades as well, but nearly always even those trades are allied to banking. For example, the Multani buys and sells gold and carries on

2 Jain, *Indigenous Banking*, pp. 43–45.

3 *Bengal Banking Report*, p. 185.

internal arbitrage operations and some of them also buy and sell commodities for their clients.[4] Arbitrage transactions and dealing in bullion are auxiliary to banking, and profitable, if safely pursued. The Chettiar sells gold, but the sales are mostly unredeemed pledges. There are also some who buy and sell gold as a regular business.[5] Speculation is usually associated with indigenous bankers, and in the case of several classes of them, it is a fact that they have been speculating in commodities as well as in bullion. Such speculation ruined several wealthy bankers in the past, and now there is much less of it than before. The Multanis seldom buy and sell commodities for themselves, and as for Nattukottai Chettiars, they avoid speculative dealings, and this partly explains the stability of their business even in bad times.[6]

It is true that several Nattukottai Chettiars have become proprietors of rubber and tea gardens, rice mills, saw mills and other factories, not only in India but in Ceylon, Burma and Malaya, but it must be admitted that this was not due to deliberate design but was thrown upon them by the failure of their debtors to pay up. Thus in Ceylon, Chettiars have become owners of several rubber and tea estates and oil mills; and in Burma, they have now much land in their possession. This apparently was not due to the Chettiars' desire to become landowners, and in several cases the land was sold away where an opportunity came; and although a certain

4 *Indian Finance, January* 18, 1930, p. 72.

5 *Burma Banking Report*, p. 197.

6 *Madras Banking Committee*, III, p. 1175. This was in the matter of rice imports to Ceylon, and this gave a windfall to the Chettiars of Tirupattur and around.

number of Chettiars have taken to cultivation of land in Burma by hired labour, it is not possible that the great majority of them will give up their hereditary profession.[7]

ORGANISATION OF THEIR BANKING BUSINESS.

The business of most of the banking communities of India is organised on the joint family basis. Members of the family work in common as farmers and the profits go to the common fund of the joint family. Not only do they live in common, but they generally keep a common mess. When such a firm takes outside partners, they are taken only as working partners with a share in the capital, and such partners are paid a fixed salary and bonus according to the profits of the business. Indeed as families get larger and larger division is effected, not only of the capital but also of the clientele.

The above, however, is not true of the Nattukottai Chettiars. With them, every married person of means has his own business or becomes partner in another business. When a Chettiar marries, he becomes independent. He may live in the same house as his parents, but he has his separate mess, and every year a budget allotment is made by his parents for his maintenance. This custom has made the Chettiar more independent and self-reliant than his compeers.

In spite of such pronounced individualism and self-help, the Nattukottai Chettiars have developed among themselves a strong tradition of mutual help and sodality. In all the principal towns, where they carry on business, they congregate in one common street and often live and

7 *See Burma Banking Report*, pp. 198-99.

work in the same premises although their business may be all separate. Wherever they go they maintain a common temple, and have many economic, social and other interests in common. Many of their firms are partnerships, and such partnerships may last many generations. The same person may have shares in several partnership concerns and thus there is strong interlock of interests between them.[8] Even when such interlocking does not exist, the Chettiars are prepared to guarantee each other, and in times of need, they are ready to give generous aid to distressed firms. They guarantee each other when borrowing from the joint-stock banks and such solidarity enhances their credit in the market. This system of mutual guarantee has also its evils, for when one firm fails many others may also be involed in the failure and a general crisis may result.

Such sodality is naturally stronger among the Chetties in distant centres. 'Existing as a small alien group with frequent blood relationship and with common economic interests, descent, language, worship and all caste associations, but divided in all these points from the population around them was sure to generate a feeling of sodality, especially as there was necessarily mutual dependence in some matters, such as the occasional need of liquid resources.'[9] In Rangoon, Singapore, Colombo and other outside centres, they all congregate in the same street and even have their offices in the same building. Thus all the Chetty firms at Rangoon are in Moghul

8 The firms are generally called by the initials of the different combining partners. Thus P. M. R. M. means the partnership of Palaniappen, Murugappen and Ramanathan. The name of the agent is often given after the initials.

9 *Burma Banking Report*, p. 194.

Street and in close vicinity of their temple, where they all meet in the morning daily for exchanging news and for fixing up interest and terms of business.

There is also a strong communal system of arbitration obtaining among the Chettiars. Attached to every temple (kovil) is a temple council (Panchayat), which is composed of the elders among them and adjudicates on all matters relating to marriage, monetary transactions, family disputes, etc. The manager of the Kovil arranges for meetings and records evidence; and the award is given orally and not usually in writing. If the parties do not abide by the decision, they may be ostracised, and their marriages may not be celebrated under the auspices of the Kovil.[10] Similarly when a man fails, a Panchayat is appointed to take up the matter and they generally settle affairs in such a way that intervention by the Court is avoided and the unsuccessful man is given a chance to start life again as employee of some other firm.

Similar institutions exist among other indigenous bankers also. However, of late such institutions are getting weaker owing to the onrush of individualism.[11]

Most of the indigenous banking firms are family businesses or partnerships. The Multanis are organized on a joint family basis and therefore the different members of the family manage the business in different parts of the country. The leading partners generally live at Shikarpur or Bombay, and the junior partners work as agents abroad. Besides members of the family, others are taken as working partners.

10 Thurston, *Castes and Tribes in S. India*, Vol. V, p. 263.
11 Jain, *Indigenous Banking*, p. 40.

The Chettiars form partnerships, especially when establishing firms abroad. Thus, excepting the Bank of Chettinad (which is a private limited company registered under the Indian Companies Act), the Chetty firms in Burma are partnerships organised in India and represented there by agents sent from India. The money is sent from India, and the accountants and clerks are also Indians. Both in India and abroad Chettiars maintain firms only in the larger towns and trade centres. Sometimes small agencies called *Ulkade* are opened in outstations and railway stations (*railkade*) and these are controlled by the agents in the larger centres.

The agent is the central figure in the Nattukottai banking business, whether within the country or abroad. He is often a relative of the partners and is engaged on a three years' contract during which his board and lodging is provided by the principal. Part of his salary ($\frac{1}{2}$ to $\frac{2}{3}$) will be paid a month after appointment and the other part after the expiry of half the period. The amount of the salary will depend upon the ability and position of the agent, the volume of transactions and upon the distance of the agency from the head office. In Burma, the usual rates range from 6,000 to 15,000 rupees for the triennium. Besides pay, the agent is also given on return a bonus which may vary from 6 to 10 per cent of the net profit earned during his term. Six months before the expiry of an agent's term, another person is sent to the spot, to get acquainted with the details of the business. The new agent classifies all the outstanding loans as good or bad and sends a report to the proprietors. If the two agents disagree reference is made to the proprietors. The outgoing agent will then return to

Chettinad and settle up with his employers, after which he will go home and take rest for three years. He may then offer himself for appointment to his old employers, or set up a business himself. If the agent is an able man, his employers may make him a partner in the business.

An agent has usually an establishment of 5 to 6 persons, of whom the principal are the Assistant (*aduthal*), the Cashier and the Accountant; others are usually young persons learning the business and generally help the principal employees by going on errand, etc. All these persons are selected with great care, and careful watch is kept on them. Severe punishment will be meted out in case of dishonesty, and, to a Chettiar, caste ostracism is a worse punishment than conviction by court.

An apprentice is usually paid no salary for the first triennium, he gets only his board and lodging and pocket money. On return home, he may, like the agent, receive a bonus. After a year's rest, he is again sent out on a fixed salary, anything between Rs. 1,000 and Rs. 2,000. The salary is increased at every succeeding periods of engagement. The apprentice gradually becomes accountant or cashier, and after 7 to 8 years may become an assistant agent and sent to an out-station. After about 15 years' experience, he becomes a full-fledged agent. The sons of large bankers have also to undergo nearly the same training, although the period may be shortened. The Chettiar is a firm believer in the maxim that he who wants to command must first learn to obey. Therefore the sons of wealthy families are also apprenticed.

The working capital employed by the Chetty community has been estimated by the Burma Banking Committee at about Rs. 120 crores, of which 75 crores are in use in Burma, 25 in F.M.S. and the Straits, 14 in Ceylon, 5 in Cochin China[12] and only one crore in Madras Presidency. According to the Madras Banking Committee's estimate, the amount of working capital in Madras is Rs. 6½ crores, and its volume of business is as much as 11 crores.[13] Another estimate was made by Mr. Saverinatha Pillai, Assistant Commissioner of Income-tax, in a memorandum which he placed before the Committee. According to him the volume of business in the Presidency is only 3 crores,[14] apparently excluding the Bankers of the Pudukottai State from his computation.

SOURCES OF THE CHETTY CAPITAL.

A banker is sometimes described as one who makes profit with other people's money and his own brains. Indigenous bankers in India do indeed make profit, but it is not chiefly with other people's money. The system of receiving deposits obtained from time immemorial, but often it was done to oblige the depositor more than to benefit the banker. However, with the increased opportunity for investment, a demand for deposit arose among bankers, and moneyed men deposited large sums with them. But there was always a reluctance on the part of Chettiars to receive current account deposits, and, as the joint stock banks showed no such reluctance, the bulk of Indian deposits went to them. At present the indigenous bankers deal with their own money or

12 *Burma Banking Report*, pp. 210–11.
13 *Madras Banking Report*, p. 186.
14 *Madras Banking Report*, Vol. III, p. 1174.

money borrowed from joint stock banks. The Nattukottai Chettiars still receive deposits, both on current account (*kata kanakku*) and on fixed deposit (*thavanai kanakku*). But such deposits form only a small part of their working capital. According to one estimate, about two-thirds of the Chettiars' working capital is supplied by the proprietors themselves, and of the rest more than one-half comes as deposit from other Chettiars. Thus only one-seventh of the capital comes from non-Chettiars. It used to be rather more, but owing to the failures of Chetty firms in recent times deposits from the public are not at present so abundant as they used to be.[15] The Chetty capital thus deposited is chiefly the money of married women and widows. Chetty women receive fairly large dowries at marriage, and these moneys are generally placed on deposit with a number of firms. Chettiars will not generally place all their money with one firm, but will distribute it among different firms for the sake of safety. The non-Chettiar capital that comes into Chetty firms is either deposited by the public or borrowed from joint stock banks.

The kinds of deposit best known to Chettiars are 'Tavani' deposits and "Veyan-vatti' deposits which are both fixed deposits. The Tavanai deposit is for a period of 2 months, and its interest is fixed monthly, on the 16th day of the Tamil month. The depositors are mostly Chettiars, and only these receive the full tavanai rate fixed, while the others have to be satisfied with a percentage or two less. The veyan-vatti deposits are fixed deposits at fluctuating rates of interest described by its excess in annas per Rs. 100 per mensem above the

15 *Burma Banking Report*, p. 213. *Madras Banking Report*, Vol. III, p. 1176.

current rate, and the usual period is three, six or twelve months. Deposit receipts or Promissory notes are given to the depositor; but it is understood that demand will not be made till the prescribed period is over. Deposits on current account are less popular owing to the necessity for keeping liquid resources that it involves. The rates on current account deposits are fixed monthly, on the 16th of every Tamil month, and they apply not only to ordinary current account deposits by Chettiars and others, but also to the rates paid by agents to the principals for working capital supplied, and veyan-vatti rates are calculated on the basis of the current rate as fixed monthly.

THE CLIENTELE OF THE CHETTIARS.

Chettiars lend to agriculturists as well as traders, but, in the case of S. India, it cannot be said that they finance agriculture or trade to any great extent. Agriculture in S. India is financed chiefly by the village money-lender, who may be a shopkeeper or a landowner. Some Chettiars do lend to these people and thus they may be said to indirectly finance agriculture. In Burma, on the other hand, Chettiars are first and foremost financiers of agriculture. In Lower Burma, their dealings are chiefly with landlords and agriculturists, but in Upper Burma traders are their principal clients. In fact, the Chettiars lend to all those who have personal credit, whether they be agriculturists, industrialists or traders. They lend for both short-term and long-term purposes, and the purpose of the loan is seldom a consideration for them. Most of the long-term loans given by them are for celebrating marriages or other social ceremonies or for other unproductive purposes. But

the amounts given for such purposes will depend upon the security offered. Generally money used to be lent on promissory notes, whether it be for long-term or short-term purposes. But now on account of depression security is demanded. It may be land, houses, gold and jewellery, or Government securities. For long-term loans, land and houses are the usual security demanded; gold and jewellery are always acceptable as securities as they are readily saleable. The rates of interest charged by Chettiars vary with the parties, the time of the year, the purpose of loans, the security offered, and the amount of the loan. Except on first class town mortgages, interest is not usually less than 12 per cent per annum.

The Chettiars have no fixed hours of work and are accessible at all times. Their principal holidays are Thaipuzam, Chitra-Pournami and Panguni Uthiram. Accounts are kept in Tamil, on a system of single entry, but two principal books are kept: the ' kurippu ' (journal of daily transactions), and ' Peredu ' (ledger, each page being allotted to one client). The ledger account for the borrower has three cash columns for interest received, credit and debit respectively, and the serial number of the documents also are entered therein. It is also customary to keep ' chittai ' books (rough notes), and ' bake ' (balance) books. Every month balance sheets are prepared by the agents and, with copies of chittai, are sent to the principal.

The Chettiars' system of accounting is elaborate and accurate. Without the use of interest tables and calculating machines, they can easily calculate interest to the lowest *immi* (1|3200th).[16] The Chetty boys are trained

16 The fractions in use in S. India are ara (½), kal (¼), arakkal (⅛), makani (1/16), ma (1/10), muntiri (1/320), immi (1/3200).

at an early age to such accurate calculations and they get a wonderful mastery of arithmetic in the course of their office work.

RECENT TRENDS.

In recent years the Chettiars have modernised their banking methods and have started commercial banks on the joint-stock basis. The Bank of Chettinad, a private limited company, is the most notable of such ventures, and the Raja of Chettinad is its Managing Director. Of late, the Chettiar capital has also penetrated into large-scale industry, and to-day a good few cotton mills and other factories are owned or controlled by the Chettiars. This is a desirable line of development and it is particularly gratifying to the present writer, as he had repeatedly suggested in the past such new outlets for Chettiar enterprise.[17]

But such developments have lately been impeded by various factors, the most potent being the freezing of investments resulting from the Great Depression of 1929-33. When the agriculturist debtors lost their purchasing power, they were unable to pay their debts, and a large part of the Chettiar capital thus got locked up in land. In Burma alone, the Chettiars were forced to become owners of extensive areas amounting to nearly 3 million acres, being a fourth of the total occupied area in Lower Burma. Measures have been in contemplation for liquefying such torpid investments, but various difficulties have arisen. The repatriation of such capital may be a source of profit not only to the Chettiars but to the country as a whole.

17 *Journal of the Madras University*, 1933, p. 38.

In spite of various adverse factors, Chettiars have been able to utilize the new opportunities offered by the development of hydro-electric power and the expansion of communications. They have shown ample evidence of financial virility, alertness and go-aheadness. Let us hope that this great banking community will be in the forefront of the movement for the economic development of India which is likely to gather strength during and after the war.

ENDOWMENTS FOR HIGHER EDUCATION

By

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In connection with the movement for the political and economic emancipation of the country, the need for education is imperative. The masses should have sufficient elementary education to take an intelligent interest in their own affairs as well as those of the community. At the same time there should be adequate provision for higher education because it is from the ranks of those who have received such education that we can find leaders of thought and action—either to lead the country in politics and business or to help in the ever-growing administrative work of a modern Government.

We find that the Provincial Governments in our country have been giving increasing attention to the spread of primary education. Legislation has been passed towards this end. Municipalities and Local Boards have been encouraged to undertake the work, and though a great deal remains to be done, good progress has been made in recent years.

While this is as it should be, secondary and higher or University education does not receive that attention from the State which it deserves. We find that in both these spheres what may be called ' the commercial spirit ' has crept in. A large number of High Schools and Colleges are run on the commercial principle, by which is meant that the attention of those in charge of such institutions is directed more towards earning profits than

towards efficiency in teaching. There are a number of Proprietary High Schools in the country in whose case, it is quite easy to see how the commercial spirit works. We do not have Proprietary Colleges; but we have Colleges run by Societies which collect funds from the public to run them. A good number of High Schools are also organised in the same way. In some cases, the same Society runs a school and a college or has a number of such institutions under its control.

It may be pointed out that whereas Proprietary Concerns may pocket the profits, in the case of Societies the profits do not go to private individuals. The Societies utilise such resources for extending their activities, and to this extent there is no moral wrong in the work of the Society, though it is a question whether educationally it is sound.

But the question arises as to how is it that it is possible to realise surpluses by running, let us say, a College. The answer is simple. The number of students attending colleges is growing. The desire to have a University hall mark has spread and most parents wish that their sons or daughters obtain University degrees, if they can afford them. The fee income of the colleges is thus bound to increase. This receipt can and ought to be spent on recurring and non-recurring expenditure for the institution. This is not always done. The main item of recurring expenditure is the salary of the staff. The salaries of the College Teachers have gone so low in recent times that the right type of persons are not likely to be attracted to this profession in future. If this happens, and it has already happened in many cases, the foundation of higher education will be weak and the

advantages which the country would legitimately expect will be lost. Unfortunately the outlook regarding the qualifications, status and work of a College Teacher has been governed partly by the examination system of our Universities and partly by the supply of highly educated persons seeking such work overrunning the demand. The examination system puts a premium on coaching of students, and discounts all higher work on the part of teachers. They are confined to certain text books in their subjects beyond which they need not go, because it does not pay to do so either to them or to their students. The students believe in somehow passing the examinations on the margin and not in obtaining knowledge of any subject as such. The number of educated young men who have obtained good degrees either in India or from foreign Universities has increased in recent years. The reason why they seek employment in colleges is not that they want to pursue a scholastic career in all cases; in many cases they have no other alternative, as the avenues of employment in the country for people with high academic distinctions are limited on account of various reasons. The need for such persons is often exploited and they have to work as teachers in colleges on what may be called subsistence salaries. It is obvious that one cannot expect proper work from men placed under such circumstances and they invariably look out for more remunerative type of work at the earliest opportunity; or supplementary sources of income in any case.

Besides it is not difficult to find instances in which the persons on the staffs of colleges possess minimum qualifications and have no inducement to do good work. They simply carry on somehow. With this tendency in the personnel of our College Teachers, the basis of

higher education has become weak and must therefore be prepared to face the fact that the average graduate turned out by our Universities is a man of poor calibre, limited outlook and often fit for nothing. If we visualise the colossal loss to the country in the form of the waste of time and energy of the best youth of the country at the best period of their life in Colleges, when they are drudged through the examination for a pass degree by the type of teachers referred to above, we shall immediately see the urgent need for a radical change in the existing system.

This must not be construed to mean that we do not have good Teachers in Colleges and good students. But these are exceptions, and they are there in spite of the system which hampers their work and provides little or no stimulus.

If the leaders of thought in the country are really sincere about the future of the country, they should immediately set about thinking ways and means by which this evil in our educational system can be eradicated without any loss of time. Immediate steps must be taken to see that the status and remuneration of the College Teacher is raised, that his profession is made more attractive and is respected by all classes of people, and that he is enabled to do his best to raise his own standard of learning in his subject and that of his students. Not even the best syllabus in any subject to be found in our University calendars will be of any use, unless the persons who are expected to deal with it are of the right type. And this cannot be achieved in the present circumstances.

The chief point of attack is to see that the commercial spirit in the running of our Colleges is abandoned. This can be done only by having large endowments from which the expenditure of the Colleges can be met. The fees will always be a receipt which will help to reduce expenditure. But the excess expenditure must be met from sources, which are fixed and permanent, and independent of the whims of third parties. Grants from Government of adequate amounts under present conditions are not likely to be forthcoming. Even if they do, they are likely to fluctuate with the fortunes of the Government. Permanent endowments alone can solve the problem. We have many charitable trusts whose resources are being used for less important purposes. Legislation should be passed to divert them for endowments for higher education. At the same time donor who have funds to give in charity should be persuaded to give suitable endowments for collegiate institutions.

In this connection the Hon'ble the Raja of Chettinad has set a noble example by donating a large sum for the benefit of the Annamalai University. It is to be expected that his foresight and generosity will be imitated by all those who have been favoured by fortune. It is a fitting tribute to him that this Commemoration Volume should be presented to him by admirers on the day on which he completes his 60 years.

SOUTH INDIAN MUSIC

By

Tiger K. Varadachari

The entrancing power of real Music is universally admitted. Even the child that sleeps in the cradle is lulled to sleep by the sweet tunes of its beloved mother. The cows, and the venomous cobra are enticed by captivating tunes. In Perunkathai, one of the minor Tamil classics we read of an wild elephant in rut being appeased by the melodious strains poured forth from a guitar. In the Pattuppattu of Tamil literature we read of highway robbers who let go their victims unmolested being overpowered by the chorus of divine music. Who does not know of the sweet melody of the magic flute of Sri Krishna, which made the Gopis of Brindaban forget themselves and dance to the tunes of the sweet music?

What then is the special virtue that is inherent in Music. It is often said that the whole world is musical or nathamayam and that music is nothing but natural sounds well-organised and well-tuned. Paranar speaks of the Lord that rules this Universe as "பரிபுரும் பண்ணைப்ப பரந்தான்" and Carlyle observes that Real Music can take us to the very edge of Heaven. Real Music tends to create love and devotion and this love tends towards amity among living beings. In the Tamil Periyapuranam we read that Amayanayanar's flute attracted even animals and that they actually forgot

their nature enmity for the time being, being over-powered by the naptimes effects of music.

This powerful music had been present in every age and clinic in the crude or refined form. Very good and ordered music existed in the Tamil land from times immemorial. It is often said that in the Samaveda we find the real basic elements of music. In the Tamil land we find that music existed from a very long time. Agastya is said to have written an elaborate treatise on Music. In Paripadal we have stanzas to which special poems have been allotted and one is likely to think that most of the Pānars or bands must have sung their poems to the accompaniment of the lyre. It will be curious to note here that the fine natural divisions of the Tamil land *viz.* mullai, kurinji, palai, marudam and neydal had each its own yāl as well as the pan suited to it. The wandering minstrels and hords who corresponded to the Rhapsodes of Circeca were the recipients of very grand presents from their patrons and were held in high esteem.

In the 5th century B.C. we hear of the Natya-Sastra of Bharata. About the 2nd century A.D. we have the Tamil classic Silappadikaram which is a fine repository of materials concerning ancient music. In the Arrangerrukathai of this splendid work, we see profuse references to ancient works on music on Raga, Bhana and Tala. It is well-known that Isai which stands between Iyal and Natakat-tamil is a connecting factor between the two. In the above work we have some glimpses of the various dances, or Kuthus of the period and we are incidentally treated to the various kinds of musical instruments known as the Torkaruvi, Tulaikkaruvi, Narappukkaruvi and Kanjakkaruvi. Even the

minute details of the stage and its appertenances have been scrupulously given and the various combinations of the tunes have been dealt with. Here we do not have the Saptasvaras named after Shadja, Rishapa, etc., but we have in their stead the divisions known as Ulai, Ili, Vilari, taram, kural, tuttam and kaikilai. The swaras no doubt correspond in number but the identity of the above two divisions remains still a mystery. I can here suggest, however, that future researches of interested Tamil scholars who are themselves experts in Music may bring to light the real connection that exists between the Music of the age of Silappadikaram and the music of later days.

The next stage in the history of South Indian Tamil Music was reached when the Tevaram hymnists moved from place to place chanting their divine hymns wherever they went. Being great experts they were able to flood South India with their hymns well-tuned and adapted to the different poems. Each pan had its appropriate kattalais and a lady descendant of Tirunilakanta-Yalpanar, who set the hymns of Sambhanda in his yāl, actually classified the above pans. The insistence made by the Tevaram hymnists on the absolute necessity of singing their verses in their appropriate pans, reveals the fact that they were themselves masters in the art and that they were quite alive to the ennobling effects of music. Tirugnanasambhandar has styled by Sekkizhar as "கானத்தின் ஏழுபிறப்பு" or the embodiment of the seven svaras of Music. The Alwars too who flourished from the 2nd to the 9th century A.D. have contributed vastly to the growth of religious and devotional music. The next stage in the history of Music falls in the 13th century which saw the publication of the Sangita Ratnakara by

Sarangadara. This work has practically revolutionised music and has ever since stood as a clear exposition of Carnatic music. A commentary was written for this work in the 15th century, when Purandara Dasa the famous devotee poured forth his emotional verses. About the middle of the 16th century one Rama Amatya wrote his Swaramala Kalanidhi. Later on music was highly encouraged by the Naik Kings. Achyutappa Naicker had an able minister by name Govinda Dikshitar and Venkatamakhi the son of this Dikshitar wrote his Chaturdandiprakasikai and he is generally considered to have improved and reformed the 72 melakartas. Elaborate changes were made in the old conception of music and we may well say that modern music begins with Venkatamakhi Kshetragna was a contemporary of this musician.

The princes of Tanjore were liberal patrons of art and the royal palace of Sarfoji could boast of a number of Asthanavidvans both local and instrumental. In the later 18th and the 19th centuries many Zamindars and Matatipaties gave their best encouragement to Music of the Mutts special mention must be made of Tiruvavaduturai, Dharmapuram and Tiruppanandal and of the Zamindaris Ariyalur, Ettayapuram, Ramnad and Marungapuri deserve special notice.

Of the instruments that were in vogue in ancient times the yāl deserves special attention: The full length of a yāl string was divided into 22 srutis. The characteristics of srutis have been well depicted in old works and the three pitches known as Mandaram, Madhyana and Taram have been well dealt with. The interaction of swaras has been well described and the same methods

of creating the various rasas through different tunes could be seen in them. "Moreover, we can see different ragams or pans allotted to the different parts of the day with respect to the different effects they were likely to produce on the hearer Marudam had been assigned to early morning and Sevvali to the evening tide."

Thus we see the development of music in all its various aspects in olden days. At present the Carnatic music is holding its sway and the musical compositions are mostly in Telugu or Samskrit. Sri Thyagaraja the prolific composer and divine musician departed this life in 1846 and his Keertanams are everywhere sung in Cutcheries and Kalakshepams. His illustrious contemporaries were Muthuswami Dikshidar and Syama Sastri. When Dikshitar was at Tiruttani, a sacred shrine dedicated to Muruga, he composed his famous Krithi known as "மாகலகுருகுக" and even now his songs and Kritis are distinguished by the above words. He has been depicted as a performer of miracles and it is said that his Kriti ஆநந்தா மிருதகர்ஷணி couched in the Ragam known as அமிர்தவர்ஷணி actually brought forth rain when he was at Ettayapuram. He was a strict follower of Venkakumabhi.

It must however be said here that though Venkatamakhi recognised 72 melas based on the 12 notes of the gamut, not all these 72 melas were in constant use. Except the lakshana gitams there do not appear to have been compositions in all the 72 janakaragas. It is however satisfactory to note that the late Kotiswara Aiyer, the grandson of Kavikunjara Bharathi has composed some pieces for the 72 melas referred to above. This musician was my best friend and his attainments

were of a high order. He was good enough to consult me and I had the pleasure of suggesting some improvements in his compositions.

This short sketch of the history of music will be incomplete if mention is not made of that noble figure in the music world, Mahavaidyanada Aiyer. A born genius, he showed signs of his remarkable ability at a very early date and was styled Mahavaidyanada Aiyer even in his 12th year. Himself a musician of the highest order and his brother Ramaswami Aiyer, a great composer held their leading position for a number of years in the musical world and among his direct disciples we may mention Sabesa Aiyer of music fame. Patnam Subrahmanya Aiyer was a contemporary of this musical giant. Having had the privilege of his acquaintance I can speak with first-hand knowledge of some aspects of this musician. He used to practise music in the little hours of the morning. His songs were of the cultured type which involved great skill and effort. Akarasatakam was his special feature and his gamakas were of a very high order. When he took to singing thanams he was at his best. He has composed a good number of Kirtanas and they can be identified by the Mudra Venkatesa.

Poochi Aiyangar, the Samsthana Vidvan of Ramnad alias Srinivasa Aiyangar was the disciple of Patnam Subrahmanya Aiyer, one Raghava Aiyer of Coimbatore was another famous musician of the time and his disciples Pallavi Venu and Masilamani Mudaliar were also good musicians. Besides these we have had a splendid galaxy of very able musicians who had contributed greatly to the advance of Music.

At the beginning of the 20th century, a fear was entertained in some quarters that music had fallen on evil days. It is now very gratifying to note that every attempt is made to see that pure Tamil songs and Kirtanams are revived and that only Tamil songs are sung in public and private entertainments. It will be as clear as daylight that any individual could appreciate the songs quite well only if they are in his own mother-tongue and that songs in any other language, however refined could not produce the same impression as songs in the mother-tongue. The Tamil language is very rich in these songs. The Tamilians were expert composers and singers and gave vent to their feelings pleasurable or painful by songs like கந்துகவரி, அம்மானைவரி, ஊசல்வரி, குறவைப்பாட்டு and பிழக்காணம் songs mourning over the dead. Besides these we have had,

"ஏற்றப்பாட்டும் இறவைப்பாட்டும்
காவடிப்பாட்டும் கப்பற்பாட்டும்
படையினெழுச்சியும் பள்ளியெழுச்சியும்
சிந்தமுஞ்சந்தமுந் திருத்தாலாட்டும்
கல்லுளிப்பாட்டுங் கவணைப்பாட்டும்
பாவைப்பாட்டுங் பலகறைப்பாட்டும்
மறத்தியர்பாட்டுங் குறத்தியர்பாட்டும்
பள்ளுப்பாட்டும் பலகடைத்திறப்பும்
வள்ளைப்பாட்டும் பிள்ளைப்பாட்டும்"

and other folk songs.

Coming to the major ones Arunachala Kavi's Ramanatakam, Kavikunjaran's Kandapuranam Kirtanai, Ramaswami Aiyer's Periyapurana Kirtanai, the famous pada sahityam of Subbarama Aiyer, Mathurakavi and others, the Pulliss, Kuravanjis and other songs are too numerous to mention and it is high time that every attempt to find them out and place them before the public

is made. The Tevaram hymns, Tiruppugazh, and Kanadiccindu have all of them their pans or the musical modes and I am sure that the present Renaissance will be responsible for the promotion and publication of similar songs.

Fortunately the lively interests evinced by Rajah Sir Annamalai Chettiar for the encouragement of pure Tamil songs has materialised in the shape of the Tamil Music Conference that held its sittings only a few days back. This Conference has passed resolutions which are very likely to improve the status and popularity of pure Tamil songs. I must congratulate myself on the excellent opportunity given to me by the Rajah of Chettinad of presiding over the College of Music for a number of years. I must acknowledge here the remarkable readiness with which he came forward to help the growth of music in this University by effecting then and there any improvements that were suggested from time to time. When one realises the extraordinary craving for music that is perceivable at present which, I fear, has culminated in a way in the degeneration of real ordered music, the efforts of a philanthropist like the Rajah Saheb will be conducive to the compositions of pure Tamil songs planned on the lines of real and well-ordered music. A Kalavinodha of a high order his services to the sacred cause of learning and especially musical learning are unparallelled and I invoke the twin-deities enshrined in Chidambaram to bestow on this Bhoja of the Tamil land and his family the long life and the choicest blessings. He has completed his sixtieth-birthday, May he live to see many more returns of his birth-day.

DIAMAGNETIC SUSCEPTIBILITY OF IONS

By

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AND

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ABSTRACT.

The aim of this article is to present a connected account of recent work on the magnetic susceptibility of ions. The influence of ionic interactions on magnetic properties is briefly outlined from the point of view of Van Vleck's paramagnetic term. Some emphasis is naturally laid on the connected investigations published from the Physics laboratory of the Annamalai University.

The molecular susceptibility of a polyatomic molecule without a resultant spin is represented by Van Vleck[1] by the formula

$$\chi_{mol} = -\frac{Le^2}{6mc^2}\sum\overline{r^2} + \tfrac{2}{3}L\sum\frac{[m_0(n^1;n)]^2}{h\nu(n^1;n)}$$

The first term is the well-known term of Langevin while the second is a paramagnetic term independent of temperature and is brought about by the distortion of the electronic system due to interatomic forces such as are obtained in diatomic and polyatomic molecules. A substance is diamagnetic or paramagnetic depending upon whether the first or the second term is larger.

Pauling[2], Stoner[3], Slater[4] and Angus[5] have evaluated the atomic susceptibility of mono-nuclear ions by wave mechanical methods and hence the susceptibility of a complex ion or molecule could be calculated from the value of the constituents. However the disagreement between these calculated values and observed experimental values are quite definite and are very large in some cases. This is what one would expect from the fact that atoms when they combine bring about a distortion of the outer electronic orbits. The second term in

the Van Vleck expression gives the effect of such distortion on the magnetic susceptibility. According to Van Vleck such distortion would introduce a paramagnetic term and thus the susceptibility of a diamagnetic molecule or the ion concerned will be reduced.

It is evident from the foregoing that the paramagnetic term should vary with the different linkages in the molecule and any new constraints brought into play or any linkage that is loosened would have an effect on the distortion and hence on the susceptibility of the substance under consideration. Hence when a change in χ value is observed, one has to infer that there is a definite change in the electronic system of the molecule or ion.

This suggests that it would be possible to discover new constraints or linkages or a disruption of the same when a molecule is placed in a particular circumstance by evaluating the susceptibility of the molecule in that case. To give an example a mixture containing two types of molecules could be studied to find if there is any interaction between them which would show itself in the deviation that is exhibited from the additive law.

The interaction between molecules was studied over a wide range[6] by observing the effect of temperature and dilution on organic liquids. Molecules with large dipole moments were chosen for the investigation, since the electrostatic field in such cases may have an effect on the superficial orbits of the molecules. In the cases of nitrobenzene, acetic acid and acetone no departure from additive law was observed which clearly showed that the interaction is quite feeble and is not sufficient in any case to distort the orbits appreciably. Even in the case of acetic acid and water where compound formation is definite

from viscosity and Raman effect data the susceptibility value is not affected. Hence if there is any departure from additivity one has to infer that a serious change has taken place in the electronic system. With this background an attempt is made in this paper to make a systematic study of the changes that take place when different types of salts are dissolved in suitable liquids.

When a salt is dissolved in a liquid, generally the binding in the solid state is broken off and new constraints are brought about because of the attachment of solvent molecules to the different ions of the salt. The change in susceptibility that ought to be expected therefore when a salt is dissolved in a liquid is due to the difference in the paramagnetic term in the solid state and in the state of solution.

It has been found that in general, a salt has a greater susceptibility in the state of solution than in the solid state. Table I gives the susceptibility of some simple salts in the solid state and in the state of solution.

TABLE I.*

No.	Substance.	Specific susceptibility. χ_S Solid	χ_D Solution	$\chi_D - \chi_S$	Author.
1	Sodium chloride ..	.5150	.5270	.0120	Hocart[7]
2	Potassium chloride ..	.5243	.5310	.0067	„
3	Calcium chloride ..	.7147	.7291	.0144	„
4	Sodium formate ..	.3667	.3691	.0024	Rao and Sriraman[8]
5	Barium formate ..	.2929	.2946	.0017	„
6	Calcium formate ..	.3018	.3049	.0031	„
7	Sodium acetate ..	.4584	.4620	.0036	„
8	Barium acetate ..	.3661	.3679	.0018	„

It is seen that there is a small difference in the susceptibility value in the two states, the value in the state of solution being slightly greater in all cases. The difference has been explained by Weiss[9] as being due to

* All values of χ in this paper are to be multiplied by 10^{-6}

deformation produced in the ion in solution. Assuming that changes in diamagnetic susceptibility are only half as sensitive as refractivity, a correction has been applied to the ionic values from experimental values of refractivity. While it should be conceded that the asymmetric nature of the field in a liquid produces a distortion, its effect would only be to diminish the diamagnetic susceptibility and not to increase it. Moreover it has been already observed that the effect of such a symmetry in the field does not produce any marked changes in the value as evidenced by the constancy of the susceptibility over a wide range of temperature[6] in the case of nitrobenzene for which the anisotropy of the polarisation field changes with temperature considerably.[10] The observed effect therefore must be explained by the depolymerization of the complex water molecules on introducing an electrolyte into it.

It is well known that water contains the two polymers di-hydrol and tri-hydrol in great abundance at ordinary temperatures.[11] It has been possible to calculate the susceptibility of the two polymers from their relative abundance at different temperatures and the susceptibility of water at these temperatures.[12] It is found that the susceptibilities of both the complexes are smaller than that of the simple molecule just as one would expect from the foregoing considerations. Hence a greater abundance of the simple molecule due to the splitting up of the complexes would result in an increase over the additive value. A progressive heating would produce an increase in the χ value due to a correspondingly greater proportion of the complex breaking into simpler ones until finally a temperature is reached at which there are no more polymers to be disrupted. When such a stage is

reached the χ value would also remain constant even on further heating. This value would therefore correspond to the sum of the susceptibilities of the ion and water in the simplest state and hence the ionic susceptibility could be calculated from the known value of water containing only the simplest type of molecule. Cabrera and Fahlenbrach[13] have found that at 120°C. the χ for water attains the maximum value which corresponds to this simplest state. In the calculation of ionic susceptibility, this maximum value for water should be taken and that value of the solution which does not alter on increase of temperature must be used. Failure to take account of this fact may result in an error of as much as 4% in the ionic susceptibility.

Table II gives the susceptibilities of H_2SO_4 and some salts specially chosen for their homopolar nature. An examination of the table reveals that in the case of other compounds except $HgCl_2$ and H_2SO_4 there is a large change in the χ value on solution. It is well-known that the halides considered here have nearly coavalent linkages between the anion and the cation which therefore would produce a large distortion in the superficial orbits of the anion. The susceptibility of the salt is

TABLE II.

No.	Substance.	Specific susceptibility. χ_S Solid	χ_D Solution	$\chi_D - \chi_S$	Solvent.	Author.
1	Sulphuric acid ..	.387	.397	.010	Water.	Varadachari[14]
2	Cadmium chloride.	.411	.425	.014		Subramanian[15]
3	Cadmium bromide.	.382	.411	.029		"
4	Cadmium iodide ..	.297	.363	.066		"
5	Zinc iodide ..	.306	.340	.034		"
6	Cadmium bromide.	.382	.415	.033	Methyl alcohol.	"
7	Cadmium iodide ..	.297	.364	.067		"
8	Mercuric chloride .	.301	.301	0		"

therefore smaller than the sum of the susceptibilities of the two ions in the free state. On solution, however, in

water or alcohol there is a partial disruption or at least a loosening of the linkage resulting in the anion becoming more free. This would mean a decrease in the distortion of the orbits and a corresponding reduction in the paramagnetic term. Hence in solution the diamagnetic susceptibility increases and tends to approach the value in the free state. Evidence is not wanting from Raman effect data[16] which definitely shows a decrease in the intensity of the lines on solution.

H_2SO_4 illustrates an intermediate position between the salts of the type of NaCl and KCl on the one hand and the halides of cadmium, zinc, etc., on the other, the linkage between the SO_4 ion and hydrogen being less covalent than in the latter group. Hence the change that is found in this case is smaller than the halides considered. In fact as the concentration of the acid in aqueous solution is varied definite minima are observed corresponding to the formation of complexes with water at definite molecular proportions.

$HgCl_2$ is an illustration of the principle that so long as there is no dissociation of the molecule there is no change in the susceptibility despite the presence of the solvent molecules surrounding the solute molecules. Further since there is no dissociation the polymers are unaffected and hence the effect observed in Table I is entirely absent. In such cases therefore the susceptibility of the solution is that given by the additive law. Raman effect data also support such a conclusion since there is no alteration in the intensity of the Raman line on solution, the covalent bond being too strong to be broken up by the dipole of the solvent.

Fajans[17] has shown that the deforming power of a cation is large when its size is small and its charge is

great. On the other hand anions suffer greater deformation when their size and charge are both large. This idea finds verification in the changes that are observed as we go from chlorides to iodides where there is a progressive increase in the size of the ion. When a cation combines with an anion to form a molecule, the susceptibility of the latter is the sum of the susceptibilities of the constituent ions when there is no distortion in any of them. If the same cation combines with different halogen ions it produces greater deformation in the larger ions and hence the susceptibility of the anion on combination is smaller than its value in the free state. Hence the difference between the susceptibility of the molecule and the sum of the susceptibilities of the constituent ions becomes larger as the size of the anion and hence the magnitude of the distortion increases. When the molecule disrupts in solution there is a release in the constraints and hence an increase in the susceptibility, this being more pronounced as we proceed from chlorine to iodine.

Table III exhibits a study of iodic acid and its salts wherein a large change in susceptibility results on solution. Such a change is only to be expected from the fact that the iodate ion is very large in size and hence easily susceptible to deformation.

TABLE III.

No.	Substance.	Specific susceptibility. χ_S Solid	χ_D Solution	$\chi_D - \chi_S$	Author.
1	Iodic acid ..	.2667	.2352	—.0315	Rao and Sriraman[8]
2	Lithium iodate ..	.2661	.2298	—.0363	„
3	Potassium iodate ..	.2785	.2617	—.0168	„
4	Sodium selenite ..	.2990	.3442	+.0452	„

The Raman spectra[18] of iodic acid and its salts in the solid state and in solution have been studied by

Venkateswaran. The acid in the solid state exhibits a number of Raman lines the more prominent of which have the frequencies 1397, 1249, 782, 713, 633, 377 and 328. In fairly dilute solution the first two lines disappear completely and the frequencies 713 and 782 produce a broad diffuse band. The higher frequencies mentioned are entirely due to HIO_3 molecule which disappear in dilute solutions. This incidentally shows that the linkage between the hydrogen and the iodate ion has to be regarded as homopolar which on disruption would increase the diamagnetic susceptibility. The broad band at approximately 779 would indicate because of its breadth and diffuseness the formation of complex ions such as I_2O_6 which also finds evidence from chemical data. This polymerization which shows itself in the formation of the band accounts for the large deformation which is produced on the iodate ion in solution. This would result in a decrease in the diamagnetic susceptibility in solutions.

We have therefore two opposing influences to consider (1) the dissociation of the molecule (rather feeble) which results in the increased diamagnetism and (2) the polymerization and formation of complexes which would reduce the diamagnetism to a large extent particularly because of the large size of the ion. The latter however predominates and hence a net reduction in susceptibility value results. This explanation applies to a varying degree to its salts and their solutions.

The case of sodium selenite is peculiar in that solution brings about a change in the valency of the selenious ion. It is possible to calculate the susceptibility of selenious acid and sodium selenite from the known ionic values assuming the valency of 6 for selenium. The

experimental values agree with the calculated value for the solids. In solution, however, a change in the susceptibility of the salt is observed which could be accounted for by assuming a change in the valency of selenium from 6 to 4 on dissolving the salt in water. Such an assumption is justified by Raman effect data.[19]

Thus a study of diamagnetic susceptibility of different types of salts both in the solid state and in solution gives us an insight into the nature of the linkages involved and also the mechanism of solution in general. The formation of complexes and their relative abundance could be inferred with a fair degree of certainty. It is also possible in favourable cases to discover changes in valency and to decide between rival constitutional formulae.

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WOMEN'S RIGHTS IN THE PERFORMANCE OF DHARMA

By

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Siromani and Visarada.

Before proceeding to the subject proper, let us understand the significance of the word Dharma with which we are concerned here. The words Dharma, Sri and several others are so rich in significance that they cannot be rendered satisfactorily into other languages. We have got different meanings for the word Dharma according to different systems of Philosophy.

The special significance of the word Dharma with which we are concerned here has been explained by Jaimini, the Sutrakara of the Purva Mimamsa system, by the Sutra चोदनालक्षणोऽर्थो धर्मः—Dharma is the cause of good and not of evil, having Vedic injunction for its sole authority. Sabaraswamin, the Bhasyakara of the P.M. Sutras, has explained the word चोदना, thus:[1] चोदना is any vedic injunction which urges men to any particular action. From the word आहुः[1] it is clear that even the Bhasyakara follows the traditional meaning of the word चोदना, It may predicate a याग (sacrifice), दान (giving) होम (offering) and the like.

याग and होम have been defined by Jaimini. The याग enjoined by Vedic injunction consists of sacrificial materials, Gods and the action त्याग.[2]

1. चोदनेति क्रियायाः प्रवर्तकं वचनमाहुः
Sabaraswamin on P. M. S. 1-1-2.
2. जै० सू० 4-2-27.

A होम[3] is that in which in addition to the constituents of a याग, there is प्रक्षेप offering oblation into the fire.

दान has been defined by Sabaraswamin as the transfer of one's ownership of a thing to another.[4] In all these three varieties of धर्म, the idea of giving up (उत्सर्ग) is a common factor.

No one will have an inclination for the performance of Dharma, unless he is aware that it will produce the desired reward. It has been established by Jaimini[5] that, in injunctions like[6] 'one desirous of Heaven, should perform the दर्शपूर्णमास sacrifice', Svarga is that which is to be attained (साध्य) and याग the means of its attainment (साधन). Svarga is the desired object which naturally prompts the man to achieve it.

Now let us consider whether all beings—men, animals and Devas—are entitled to perform Yaga. Jaimini has decided that everyone who can perform याग with all its accessories (अङ्ग) is entitled to do it.[7]

Gods cannot perform sacrifices; for, firstly there are no other higher Gods for them to worship and secondly they have no corporal existence.[8] त्याग cannot be made

3. जै० सू० 4-2-28.
4. On जै० 4-2-28.
5. अधि 6-1-1.
6. दर्शपूर्णमासाभ्यां स्वर्गकामो यजेत ।
7. जै० सू० 6-1-5.
8. पू० मी० 9-1-4.

in favour of one's own self and without त्याग, there is no sacrifice. The statements such as[9] 'Gods performed सत्र sacrifice' are only *arthavadas*. The nature of praise involved in this is that even the Devas who have accomplished their objects, performed sacrifices and that it goes without saying that men of knowledge shall perform sacrifices.

Animals also desire pleasure. When they are tortured by heat, they resort to shade. When they are distressed by cold, they resort to sunshine. Not only this, animals have a desire for a reward even in the next life. Dogs[9a] are said to observe a fast on the fourteenth day of the fortnight and hawks on the eighth day. From these facts, we cannot conclude that animals have a right to perform Dharma. They have no knowledge of the Veda. The performance of Dharma requires a proper understanding of the Veda. They cannot understand that a particular sacrifice will lead to a particular reward either in this or in the other world. Their observance of fasting must therefore be due to some other causes such as disease. Apart from this, they have no wealth which is essential for the fulfilment of याग. Thus it is evident that neither Devas nor animals are entitled to the performance of Dharma.

Now let us examine whether women also have a right in Vedic rites. ऐतिशायन says[10] that only males who

9. देवा वै सत्रमासत.

9a. शुनश्चतु र्दश्यामुपवसतः पश्यामः।
श्येनांश्चाष्टम्याम्। Sabaraswamin on जै० सू० 6–1–4.

10. पू० मी० सू० 6–1–6.

are desirous of Heaven are entitled to perform sacrifices. He bases his arguement on the masculine gender found in the word स्वर्गकामः.

Another objection also is raised. Dharma can be fulfilled only with substances such as व्रीहि and आज्य. Without wealth, these articles cannot be obtained. Women are neither mistresses of their fathers' property nor of their husbands', because they are sold away by their fathers and purchased by their husbands. In olden days during the period of marriages some valuables such as[11] a pair of cows were given to the fathers of the brides. As they are themselves property, they cannot be the owners of wealth. They may even earn money by spinning, tailoring and by other similar work; but they have no right even over this money, because it is stated in a Smrti[12] that the wife and others have no property and whatever is earned by them becomes the property of him to whom they belong and that on these grounds women have no independent right in the performance of Dharma.

These arguments will not stand scrutiny. In connection with the status of women, Jaimini says[13] that in the opinion of Badarayana all—without any distinction of class, including women—desirous of rewards have the right to perform Dharma. Jaimini expresses his own view supporting that of Badarayana for whom he has

11. आर्षे गो मिथुनं । शतमतिरथं दुहितृमते दद्यात्
Sabaraswamin on P. M. S. 6–1–10.

12. भार्या दासश्च पुत्रश्च निर्धनाः सर्व एव ते।
यत्ते समधिगच्छन्ति यस्य ते तस्य तद्धनम् ॥

13. जै० सू० 6–1–8.

special reverence. When we say ' man is mortal ' it also signifies the mortality of woman. Similarly, the word स्वर्गकामः includes all individuals without any specification of sex.

Apart from this, the desire for obtaining a reward is as strong in women as in men. It is only on the authority of Smrti that women are declared to have no property. The Sruti ' यजेत ' urges everybody to perform Dharma. If there is a contradiction between Sruti and Smrti texts, the superiority of Sruti over the Smrti has been established by Jaimini.[14] Therefore in this case, discarding the authority of Smrti, we conclude that women are entitled to own money and to perform Dharma.

The Smrti which says that the wife has no property should be understood to prohibit independent financial transactions. Such transactions may lead to difficulties and complications. Therefore the Smrti restricts her independence only in respect of financial transactions.

Now we have to meet the objection that a bride is purchased by her husband and that she is herself property. If a pair of cows is the price of a bride, the price should vary according to her beauty and quality, just as the price of a commodity in a market varies according to its qualities. As the offer of a pair of cows is uniform, we have to admit that this offer is only a religious formality.

The very word पत्नी indicates that she has a right in the performance of Dharma. This word has been derived by Panini's Sutra[15] from the word पति meaning

14. P. M. Adhi. 1-3-2

15. पत्युर्नो यज्ञसंयोगे पा० सू० 4-1-33.

proprietor. Unless she has a right to the reward that accrues from a याग, the word पत्नी will not be significant.

The तैत्तिरीयश्रुति also says[16] 'A wife is certainly the mistress of the household. The husband shall make an offering only with the permission of his wife.'

Thus it has been established that a woman can have property and an equal right with her husband in the performance of Dharma.

The next question arises whether the husband and wife may perform the याग separately or should do it jointly. It may appear at first sight that the wife also has independent right.

We have reasons to admit the joint rights of the couple in the performance of Dharma. In sacrifices ghee has to be purified by the couple by seeing it.[17] This आज्यावेक्षण is an अङ्ग of the sacrifice. If they have separate rights in याग, it will not be possible to have the ghee purified by the couple.

It cannot be contended that when the wife performs the sacrifice, she may engage her husband for purifying the ghee by his sight and that when the husband does it, he may engage his wife to purify it; because the word पत्नी means the proprietress, not a hired one and that word is correlated to पति. पति and यजमान are synonyms. यजमान means the proprietor of the sacrifice, not a purchased one. Therefore if a sacrifice is performed

16. पत्नी हि पारीणह्यस्येशे पत्न्यैवानुमतं निर्वपति तै० सं 6-2-1.

17. पत्न्यवेक्षितमाज्यं भवति, यजमानावेक्षितमाज्यं भवति ।

individually by either of them, the sacrifice becomes defective by the absence of an अङ्ग. Then the sacrifice itself will not become effective.

Another reason also can be assigned in favour of joint rights in श्रौतकर्म. Partition between husband and wife has been forbidden.[18] Her status as wife enables her to have proprietory rights even over the property earned by her husband. If either of them does not desire to perform a sacrifice, the त्याग which is an essential part of याग cannot be performed. Therefore sacrifice shall be performed jointly and त्याग shall be made together.

The Smrti definitely says[19] 'A woman should not be ignored in the performance of धर्म, अर्थ and काम. All religious acts shall be performed jointly.'

Another Smrti says[20] ' Commencing from the time of marriage unity should be maintained in sacrifices and their rewards.'

The Vedic text says[21] ' A wife reaps the fruit of good actions along with her husband. They both bear the yoke of a sacrifice. Being of one mind, they overcome their enemies. They attain the unfading light in the celestial world.

18. न भर्त्रा सह विभजेत।

19. धर्मे चार्थे च कामे च नातिचरितव्या। सह धर्मश्चरितव्यः।

20. पाणिग्रहणाद्धि सहत्वं कर्मसु, तथा पुण्यफलेषु।

21. संपत्नी पत्या सुकृतेन गच्छताम्। यज्ञस्य युक्तौ धुर्यावभूताम्। संजानानौ विजहतामरातीः। दिवि ज्योतिरजरमारभेताम्।

These texts undoubtedly point out that the wife has equal right with her husband in the performance of sacrifice and also in the enjoyment of its rewards.

If joint right is admitted, the singular number conveyed by the affix in यजेत may appear incongruous. Here we have to view the agentship (कर्तृत्व) of husband and wife in a sacrifice as indivisibly one and it belongs to both (व्यासक्त) as देवतात्व of the Gods अग्नि and सोम in the अग्नीषोमीययाग.

This joint right is restricted only with regard to श्रौतकर्म where Vedic mantras dominate; because women have been prohibited from the study of Veda for various reasons. Every woman has got an independent right with regard to दान and पूर्त even during the life-time of her husband. Even after her husband's death, she is entitled to perform दानः and पूर्त. विज्ञानेश्वर has established by the application of द्वयो प्रणर्यान्त न्याय[22], the widow's right to succeed to the property of her husband who lived separately from his brothers.

It has already been stated that a woman can earn wealth by spinning and other similar work. याज्ञवल्क्य[23] has clearly stated the various sources of wealth to women.

22. पू० मी० 7-3-7.

23. पितृमातृपतिभ्रातृदत्तमध्यग्न्युपागतम् ।
आधिवेदनिकाद्यं च स्त्रीधनं परिकीर्तितम् ॥ 143
बन्धुदत्तं तथा शुल्कमन्वाधेयकमेव च ॥ या०व्यव० । 144

दान on auspicious occasions to deserving persons has been highly praised in Dharma Sastras. पूर्त[24] has been elucidated by जातूकर्ण. It is an act of pious liberality such as sinking of wells, construction of pleasure lakes, tanks and temples, giving of food and creation of temple gardens. It has been said[25] that one who performs sacrifice attains स्वर्ग. But one who does पूर्तकर्म is said to attain मोक्ष also.

So far it has been proved that the wife has got joint right with her husband in the performance of श्रौतकर्म and independent right in दान and पूर्तकर्म. It has also been proved that a woman gets property through her father and other relatives on some occasions and she has an equal right over the property earned by her husband.

These facts prove that in ancient times women were given equal status and independent position in religious and household affairs. Some Smrti texts which check the freedom of women are intended for the maintenance of their chastity which Hinduism considers a priceless possession for the fair sex.

Woman's tenderness of heart and ready sympathy for human suffering have made दान and पूर्त, their favourite forms of धर्म, and the world owes to women some magnificent deeds of charity. Even more often they have been the inspirers of such deeds on the part of

24. वापीकूपतडागादिदेवतायतानि च ।
अन्नप्रदानमारामाः पूर्तमित्यभिधियते ॥
25. इष्टेन लभते स्वर्गं पूर्त्तेन मोक्षञ्च विन्दति ।

their male relations who have associated their benefactions with their loved ones. One recalls in this connection the Kalyani and Kamala Nehru hospitals. But why go so far? On the happy occasion of the षष्टयब्दपूर्तिमहोत्सव of Raja Sir Annamalai Chettiar, one is reminded of the three Sri Minakshi Colleges, including the Samskrit and Tamil Colleges, which that Prince of Charities established in memory of his beloved mother whose name is identical with that of the Goddess of Madura, and which have blossomed into the Annamalai University.

Long Live Raja Sir Annamalai Chettiar and his family and Long Live the Annamalai University.

मङ्गळं दिशतु नो विनायको
मङ्गळं दिशतु नस्सरस्वती ।
मङ्गळं दिशतु नस्समुद्रजा
मङ्गळं दिशतु नो महेश्वरी ॥

THE BRITISH EMPIRE IN A CHANGING WORLD

By

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The British Empire as we know it to-day is substantially the creation of the 19th century. While the Mother country moved towards democracy by slow and easy stages the British communities which developed in Canada, Australia and Newzealand were democratic from the first. Throughout the first half of the 19th century an aristocratic ruling class was responsible for Imperial relations and those relations were by no means easy or amicable. In the Mother country it was generally assumed that colonial self-government was a half-way house to independence. Self-government was readily granted, but independence did not follow. In the history of Canada the great landmark was Durham's Report. Lord Durham advocated the union of Upper and Lower Canada and the grant of full responsible government. A Canadian ministry was to be formed representing the strongest party in the Canadian Parliament exactly on the lines of the British Cabinet. The British Governor appointed by the King was to assume a neutral position outside party politics; a position akin to that of the King of Great Britain. It was not till 1846, when Lord Elgin became Governor-General, that this materialised. Australia too was given self-government and the right to draft its own constitution. In the course of the next twenty-five years Cape Colony and Newzealand were given the same rights. It must however be noted that the Colonial Reformers in conferring the benefits meant

them to apply only to domestic affairs in the colonies. They meant to exclude from them the enactment of tariffs and the disposal of unoccupied lands. These, they held, were general interests of the Empire. But no statute limiting the powers of the self-governing colonies was ever enacted and the fiscal limitations were never imposed. Thus, the wisdom or indifference of those who expected the ultimate independence of the colonies co-operated with the zeal of the colonial reformers in opening the way to the modern system.

By 1860 a further step was taken. (Great Britain in the meantime had adopted Free Trade). Canada and four of the Australian colonies had secured self-government including the right to levy tariffs on goods from the Mother country. In 1857 Canada formed itself into a Federation which the Mother country ratified. Thus with curious suddenness came Modern Imperialism. Imperialism was first and foremost an emotion. " With a shock of delight the men of 1880 rediscovered the British Empire. They began to take pride in the marvellous achievement which had brought one quarter of the population of the earth into a single fellowship of peace. They saw themselves as citizens of something far wider than a little nation-state concentrated exclusively on the pursuit of the own interests. Regarding the Empire no longer with complacency but with dismay the dissolution of this august fellowship, they set themselves to give greater reality to the haphazard and accidental bonds by which alone it seemed held together." Many causes contributed to this change. The future seemed to be with the great military powers. Russia and Germany were becoming rivals to the British for the possession of colonies. The scramble for Africa began

though it was luckily settled without recourse to war. The Reform Bills at home drove the Mother country to the side of her democratic colonies overseas. Aristocracy was being rapidly merged into the plutocracy of big business. Joseph Chamberlain was the spokesman of this big business. Capital and industry increasingly demanded tropical products as raw materials and new markets for their surplus production. Imperialism offered a way to both. Citizens of the self-governing British dominions after escaping from the control of the British government had at last found in their common allegiance to the Crown the best expression of the membership of world-wide Empire.

Imperialist policy took two forms; expansion and close unity. The first resulted in the conquest of the Transvaal, the opening up of Rhodesia and the acquisition of Nigeria, Kenya, Uganda and the Sudan. On the other hand, the attempt to formulate a scheme of Imperial Federation ended in total failure. Equally barren was Joseph Chamberlain's policy of an Imperial Zollverein or Customs Union launched in 1903. The British Government was not prepared to abandon her Free Trade system which this would involve. The Liberal opposition raised the cry " your food will cost more " and the 1906 elections saw the death of the Zollverein. Meanwhile, accident gave the British a method of adjusting Imperial relations. At the Jubilee of Queen Victoria in 1887, the Prime Ministers of the colonies were present and the Colonial Secretary held an informal meeting of these ministers. In 1897 at the Diamond Jubilee of the Queen this was repeated and a third conference followed in 1902. In 1901 the Australian Colonies had federated into the Australian

Commonwealth. The main scope of these conferences was only discussion. No decision could bind the various ministers assembled. The South African war also had taught the British that they could have the colonies not at the point of the pistol but by " close affection that grows by common names, from kindred blood, from same privileges and equal protection. These articles which though light as air are strong as links of iron."

The Imperial Conference of 1907 discussed Imperial defence, and a system of uniform organisation for the forces of the Dominions and Great Britain was established. Australia and Newzealand adopted universal military training. When the Great War came in 1914 the self-governing dominions rendered every possible service to Britain. It falsified one of the confident hopes of Germany that the British Empire was a mere fiction, that Canada and Australia were independent nations, as indifferent to the welfare of Britain as the United States of America, that India was only longing for an opportunity to escape from British rule. These misgivings were shared to some extent even by British politicians, notably Lord Morley. But the Empire did not disappear. Gallipoli will always be a sacred, even a tragic, memory to Australia and Newzealand. The Canadians served on the Western front. Botha and Smuts in Africa rendered yeomen services and India contributed the largest share in men and money.

This impressive demonstration of the loyalty of the Dominions to the common cause rekindled the hope that some form of Imperial Federation might be brought about as a consequence of the War. On the other hand, to the Dominions the War was a sort of ' coming of age.'

In the pride of their achievements on the battlefields of Europe they realised that they were indeed independent nations each with a great destiny in the world. The place that their statesmen found on the Imperial War Cabinet gave them hopes of treating with Britain as independent nations. In fact the Empire had become the British Commonwealth of Nations. This fullgrown manhood of the Dominions was fully illustrated at the Peace Conference in 1919. Canada demanded separate representation for herself and got it. The Treaty itself was signed separately by the Prime Ministers of the Dominions also. These ministers in turn submitted the Treaty to the Dominion Parliaments for ratification. This was recognised by the League of Nations. In 1928 Canada was elected a member of the League Council.

Before the War it was recognised that the Dominions, though self-governing, in all other respects, accepted implicitly the lead of Great Britain in foreign policy. Now, each Dominion claimed the right to pursue its own foreign policy. Canada and the Irish Free State (born in 1921) appointed ambassadors at Washington to transact their own foreign relations with the United States of America. The threat of war between Great Britain and Turkey in 1922 brought forth an important declaration from the Prime Minister of Canada. He said " Under our system of responsible government, the Canadian Parliament should determine, except in the case of threatened or actual invasion, whether the country should participate in wars in which other nations or other parts of the British Empire may be involved." Clearly an Empire of which one part could decide to be at peace while the rest were at war was a political organisation unknown to history.

These problems were then discussed at the Imperial Conference of 1926. On the initiative of Lord Balfour the following conclusions were unanimously adopted. " The Dominions are autonomous communities within the British Empire, equal in Status, in no way subordinate one to another in any respect to their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations." This was not all. The discussions of 1926 were resumed in 1930 and practical shape was given to these conferences in the Statute of Westminster in 1931 which for all practical purposes is the last word on the relations governing the Empire and the Mother country. It made clear the powers of the Dominion Parliaments and was intended to promote the free cooperation among members of the British Commonwealth of Nations. Section 3 of the Statute runs:—The Parliament of a Dominion has full power to make laws having extra-territorial operation."

Section 4 says:—" No Act of Parliament of the United Kingdom passed after the commencement of this Act shall extend or be deemed to extend to a Dominion as part of the law of that Dominion unless it is expressly declared in that Act that the Dominion has requested and consented to the enactment thereof."

So, the present position of the Dominions is that they are practically independent states except for one reason. As other links of Empire have been removed one by one, attention has more and more been concentrated on the Crown as the point of unity in diversity, the symbol of that free association which is the essence of the Commonwealth. The Statute of Westminster still

further stressed the fact that even the title of the Crown has to be accepted by Dominion legislaion and it is a striking fact that the title of King George VI in the Dominions rests solely upon Dominion law. The Statute also puts an end to the controversies concerning the divisibility of the Crown.

In recent years the problem of Dominion neutrality has been discussed a great deal. The dominions of the British commonwealth share many of the characteristics of the European 'neutral group.' They are small powers incapable of defending themselves against aggression by any of the great military dictatorships. They have even less direct interest in the issues likely to give rise to an European war. They are all distant from Europe as well as disinterested in its more explosive immediate problems. Thus, regarded as separate sovereign State they face the problem of neutrality like the United States of America. But apart from the tremendous bonds of sentiment, blood and history and the exceedingly close economic bonds, they have an interest of national security that makes it practically impossible for them to be neutral as between Great Britain and any other foreign power. This feeling of helplessness is naturally galling to nationalistic sentiment in the Dominions. In Canada and South Africa this feeling has led to bitter controversies, over rights of neutrality and secession from the Commonwealth. Strangely enough, however, inspite of their desire to remain neutral, they followed the lead of Britain in imposing Sanctions on Italy, though they soon found out how futile it was. In the present great struggle though South Africa postponed its decision for a time

and then came in one of the side of Britain, the other Dominions were the first to mobilise. Hence the problem of neutrality is not a matter of principle but one of expediency and prudence. The Dominions are likely to decide on neutrality or active participation according to the situation in which they find themselves. Here, there need be no uniformity.

What then of the future of the Commonwealth? The history of the various Dominions offers different solutions. The interest of Canada in the colonial question is secondary and remote. Her affinity is to the United States, and she has realised the importance of her connection with the States by concluding a number of economic agreements. There is also a movement in Canada to cut her off from the practical restrictions which her union with Great Britain imposes. Therefore it follows that her future is inextricably bound up with the future of the United States of America. The interest of South Africa, on the other hand, in the colonial question, is direct and immediate. It has to be noted that she is not connected with Britain by ties of sentiment and blood. The country has an overwhelmingly large Dutch population who have forgotten their native homes and have come to consider Africa their land. Nor has the Boer War been completely forgotten. No wonder then, if she has begun to talk in terms of secession. The possession of Tanganiyaka and South West Africa has made her conscious of her power and she is determined to hold them against any encroachments of the European powers. So the future of South Africa lies in the direction of complete independence and secession might again become a live issue. As regards Australia and Newzealand, they have not yet begun to revolt so openly

against even this nominal tie of the Crown, probably, because of their dependence on Britain for protection from foreign forces. There is no doubt that Australia fears Japan and without the aid of Britain her position might become hopeless. Thus Australia and Newzealand will probably remain longest within the Empire. The Irish Free State has already broken away. In all but name she is a republic. If she repudiates her connection with the Crown, which she might very well do, she too will have become a sovereign State. India and the Crown colonies are fast developing a spirit of defiance. Indeed it seems that the present war will probably see India at least a Dominion, while the other colonies will correspondingly progress towards that status; for war is the most forcible of teachers. A struggle whose watchword is freedom must bring greater freedom to those who wage it. The present war is bound to rouse the citizens to a more vivid consciousness and a keener sense of their national dignity. In any case unless brute force triumphs in Europe there is every hope that the war will bring political freedom to those who fight the battle for freedom.

THE LAW OF DEMAND

By

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The modern formulation of the Law of Demand as given to us by Prof. J. R. Hicks in his latest work *Value and Capital* and some years earlier by Prof. Gustav Cassel in his *Theory of Social Economy,* marks a departure from the traditional Marshallian formulation in that it is done without the aid of the concept of marginal utility. Prof. Hicks replaces marginal utility by marginal rate of substitution and the law of diminishing marginal utility by the law of diminishing marginal rate of substitution, and carries out an analysis of demand with the individual scale of preference as the starting point. This is done as he says, to remove from the analysis " all concepts which may be tainted by quantitative utility." The inspiration for this is admittedly derived from Pareto's use of indifference curves, though Pareto himself did not, even after the discovery of the new method, eschew the utility concept from his exposition. Prof. Gustav Cassel does the same thing on the ground that the law of diminishing marginal utility is an altogether formal law concerned with psychological processes and wholly unnecessary for the economic theory of prices.

The objection these theorists have is to the use of quantitative utility in Marshall's analysis of demand. In their view there is no valid method of measuring utility and perhaps not even the possibility of conceiving

it quantitatively. So they attempt to eschew subjective elements altogether from their theory and having done that, they claim for it a superiority over the old. Now if it is true that the use of quantitative utility vitiates the law of demand, then it naturally follows that the concept of utility should be excluded from the analysis, and any theory which does that, is superior. So the central question that awaits examination is whether any justification can be found for Marshall's method of measuring utility. This paper is an attempt to conduct such an examination.

But first let us dispose of the question whether on general grounds a theory which contains subjective elements is necessarily inferior to the one which excludes them altogether. Now there cannot *per se* be any objection to the inclusion of subjective elements in an objective theory, provided it is possible to convert what is subjective into exact objective terms. When subjective elements really play a part, it is not by arbitrarily excluding them, but by honestly trying to convert them into objective terms that we get a true insight into phenomena. We cannot, therefore, take any formal objection to the introduction of the utility concept in the law of demand. As a matter of fact, a complete and satisfactory explanation of demand must take us right back to the psychological processes that lie behind human conduct. The supreme merit of the utility approach is that there is in it an attempt to relate objective human conduct in the market place to the end which it seeks to further. The attainment of satisfaction or utility is an end, final and ultimate in itself. It is an end in a sense in which the scale of preference from which the new

theorists start, can never be. It is idle to argue that human beings behave in a particular manner just because they desire to give effect to their scale of preference. The scale of preference and the particular conduct that is based on it are both mere instruments for the attainment of that end which lies back of them *viz.* the maximization of satisfaction. It follows then that an explanation of demand couched in terms of ends is, on the face of it, more acceptable than one that is based on a mere instrument. It is immaterial to this question whether the supposed ends are economic or non-economic. The end that the individual human being seeks to attain may be rational or irrational, economic or non-economic, instinctive, habitual or impulsive, but there must be an end towards which alone means can be directed. One may, for instance, believe with Prof. Robbins that there are no economic ends and yet ask for an explanation of demand in terms of ends, for that alone will give the fullest revelation of human behaviour. This reasoning implies that far from being an inferior theory, the utility theory of demand if it can be legitimately expressed in quantitative terms is the only satisfactory theory of demand.

The next question is whether there is the possibility of quantitatively measuring utility. To investigate this point, we have to submit the Marshallian method to a rigid examination. Briefly stated, Marshall's method is to measure the utility derived from the consumption of a commodity and to express the measurement in terms of money. Every individual is supposed to have a definite marginal utility of money, and that utility is used as the measuring rod to measure the utilities

that commodities yield. The question now is whether this is a satisfactory method. If we for the moment take for granted that there is a definite marginal utility of money for each individual, this method will be found to be quite legitimate and even admissible in a science which lays claim to objectivity. All the logical requirements of measurement are here fulfilled. Utility is measured in terms of itself as is done in all physical measurements. All measurements, physical or otherwise, will be found on reflection to be relative and based on arbitrary standards. Whether it is length or weight or volume or area that we measure, we do it with an arbitrary standard of length or weight etc., and express the measurement as a ratio. We do nothing more nor less than this when we measure utility with the marginal utility of money. And if the measurement of length or weight can be given a quantitative significance, there will be slender ground for refusing it to the measurement of utility. It may, however, be contended that since the marginal utility of money is different for different persons, it cannot be admitted as a valid standard. This objection does little damage to the measurement of utility, for if it is an objection at all it applies equally to all measurements. We may, for instance, ask whether the standard of weight or length when used by different people has an identical significance for them. Is it not true that a pound weight on the palm of a child of two is very different in the sense of weight it gives from the same pound weight on the palm of a grown up man 6′ 2″ in height and 45″ in girth? The subjective sense of weight of that which is used as a standard may be and will be different to different persons, but that does not vitiate its use as a measure,

since objectively it is the same always. Similarly a unit of money though it has different marginal utilities for different people, can still be legitimately used as a standard, for the objective significance it has, *viz.* its purchasing power, is at a particular moment of time the same for all. It is because money has this double quality that it is eminently suited as a standard for measuring utility. Subjectively every person has a marginal utility for money which enables him to measure the utilities he has for other commodities. Objectively money has a purchasing power which is the same for all members of a community at a given moment of time. Thus it is possible to compare the money expressions of utility, one with another.

All this has been on the assumption that every individual has a definite marginal utility for money. This matters needs scrutiny now. Unfortunately here we do not receive much help from Marshall himself. Nowhere in his *Principles* has he undertaken a systematic exposition of the concept of marginal utility of money. The incidental remarks that he has made, do not give us a clear idea of what his notion of that utility was. He took it almost for granted, and did not give much attention to it, for it was so self-evident to him. However, we have to analyse it in order to find out whether it is really suitable as a standard of measure.

Money has no direct utility for man, but only an indirect or derived utility. That utility depends on the utilities yielded by the goods and services on which money is spent. If a person's income is given and the market prices of various commodities are known, and if we know also his manner of spending his income, the

marginal utility of money to him will be seen to be identical with the utility derived from the least important use to which money is put. That utility will be the marginal utility of income to him. The marginal utility of income is what he will habitually attach to every unit of money that he handles, so that it is immaterial whether we speak of the marginal utility of income or the marginal utility of money. From this it is clear that to derive the marginal utility of money, certain factors have to be given among which market prices figure prominently. It may on that account be argued with much plausibility that the utilization of this concept in formulating the law of demand involves circular reasoning. But this is not really so. We have here to distinguish between the original concept derived from given objective factors and the secondary fictitious concept that the human mind forges for itself. If the given factors exist unchanged for a good length of time as in the case of most persons they do, the marginal utility of money may to an individual come to have a significance apart from the factors from which it was originally derived, and as a secondary fictitious concept attain an independent status. A little introspection and our own personal experience of what others do, will be sufficient to confirm this. Such secondary fictitious concepts the human brain delights to create. But on the ground that they are secondary they cannot be rejected, for they are really ready-reckoners of the mind wielding a paramount influence on human conduct. They occupy in the mental process the same position as may be assigned to reflex action in the nervous system. No individual person goes to the market and bids for goods with a mental vacuum. Every one of any experience has

already in him an independent marginal utility of money which he brings to bear on his choice of offers. This much is admitted by the new theorists, for in the relative scale with which they work, money figures along with commodities, sometimes have a higher rank and other times having a lower. This will not be possible unless money is conceived to have for every individual a utility of its own. So then the assumption that every individual has a definite marginal utility of money made earlier in the analysis is now seen to be quite warranted.

We may then conclude that Marshall's method of measuring utility is for all practical purposes quite legitimate, and there is no need to consider that thereby his doctrine has become tainted. This does not mean that the law of demand cannot be formulated without the aid of the utility concept. All that it means is that among the alternative modes of exposition the Marshallian system is equally valid with any other. However, one may be permitted to express the doubt whether a law of demand which starts from a scale of preference will ever attain that finality which in Marshall's theory constitutes its greatest attraction.

ORIENTAL LANGUAGES

சிவமயம்.

செட்டி நாட்டு டாக்டர். ராஜா. சர். அண்ணுமலைச் செட்டியாரவர்கள்

ஷஷ்டியப்த பூர்த்தி வாழ்த்து.

அறுசீர்க் கழிநெடிலடி யாசிரிய விருத்தம்.

திருக்கயிலாய பரம்பரைத் திருவாவடுதுறை யாதீனத்து

ஸ்ரீ : ஸ்ரீ மகா சந்நிதானம் அவர்கள் உத்தரவுப்படி

ஓடுக்கம். இராமலிங்கத் தம்பிரான்.

பூநாடு மலர்க்கமலப் பண்ணவன்றன்
படைப்பெனுமிப் புவனி மீது
வானாடு மமரர்கணங் தானாடும்
பெற்றிமையின் வளங்கண் மேவித்
தேனாடு மலர்க்கொன்றைச் சிவபெருமான்
றிருவருளின் றிறமென் றேத்தக்
காணாடு காத்தானென் றெருபதிபாண்
டியனாட்டிற் கவினு மாதோ. 1

அணையதிரு நகரதன்கண் வாழ்க்கைபெறுஞ்
சிறப்புடையா ரான்பொற் பாதங்
கனவுநிலை யுறுபொழுது மறவாத
பெருஞ்செல்வர் கருத்தி லென்றுங்
தினையளவு மறுவில்லார் திருநீறுங்
கண்டிகையுஞ் சிவனு மெய்யர்
தனவணிக ரெனவுலக முரைக்குமொரு
மரபின்வரு சால்பு மிக்கோர். 2

அப்பெரிய மரபின்கட் டோன்றியதா
லொருகுடும்ப மஃதியா தென்னின்
மெய்ப்பரிவு சிவன்கழற்கே விளைத்தவுணர்
வொடுந்தோன்றி மேம்பட் டென்றுஞ்
செப்பரிய சிவதருமங் கொள்ளைகொளப்
பிறந்ததெனுஞ் சிறப்பின் மேவு
மொப்பரிய வீயசென வுரைபெறுமோர்
குடும்பமிவ ணுரைக்குங் காலே. 3

அங்ஙாளி லனையகுடும் பத்தினர்செய்
சிவதரும மளப்பின் றன்றி
முன்னுளிற் புலிமுனியும் பதஞ்சலியுக்
தொழுதேத்த முக்க ணெங்தை
சென்னுடு மலர்க்கூந்தற் சிவகாமி
கண்களிப்பச் செய்யு மாடற்
பொன்னுடு மம்பலஞ்சூழ் திருத்தளியைச்
செம்பியர்போற் புதுக்கி ஞரால். 4

உண்டிமுதற் றேயுணவின் பிண்டமென
வுரைத்திடுமிவ் வுலக மற்று
மூண்டிகொடுத் தோருயிரைக் கொடுத்தவரே
யெனவுரைக்கு முறுதி நோக்கி
யுண்டிவறி ஞருக்குதவித் தில்லையில்வா
ழந்தணரா முறுவர்க் கெல்லா
மூண்டியிரு பொழுதுமவர் பெறவமைத்தா
ரெனினிதனி னுயர்ந்த துண்டோ. 5

இவ்வண்ணம் பேரறங்கள் பலவொருநூற்
றாண்டாக் வியற்று மந்தச்
செவ்வண்ணத் திருமரபி லிராமசா
மிப்பெயர்கொள் செல்வன் றோன்றி

மைவண்ணத் திருமிடற்றெம் பெருமான்வாழ்
புலியூரின் வாழ்க்கை மேவி
யுய்வண்ண நன்னீரு முயர்தரப்பள்
ளியுநிறுவி யுயர்வு பெற்றான். 6

உத்தமனு மவனிளவல் செட்டிநாட்
டரசனென வுலக மோது
மெய்த்தகுசீர் திகழ்தருமண் ணுமலையென்
பானிந்த விரிநீர் ஞாலத்
தெத்திறமுந் திலேநகரைக் கலேநகராச்
செய்வமென வெண்ணி யாங்கு
முத்திறங்கொள் கலாசாலே நிறுவிப்பல்
கலேக்கழக முற்று வித்தான். 7

அங்கயற்க ணம்மைதிருப் பெயரான
கலாசாலே யவைமூன் றேங்கு
மங்கயற்கட் கலாசாலே யாங்கிலமே
பயிற்றுவிக்கு மஃதொன் றேனை
யங்கயற்கட் செந்தமிழ்நூற் கலாசாலே
தமிழ்பற்று மன்றி மற்றென்
றங்கயற்கட் போதனைசெய் கலாசாலே
யாகுமிவ ணறையின் மாதோ. 8

வேறு

அண்ணு மலேப்பல் கழகமெனு
மதனே டிசையின் கலாசாலே
கண்ணு வியைத்துத் தமிழகத்திற்
கவின்கொ ளிசையின் கனியமுத
முண்ணு தாரு முண்கவென
வூட்டி வளர்க்கு மிவன்பெருமை
யெண்ணு நின்றே சேடனுமு
னேகி யொளித்தான் பாதலமே. 9

வேத முதலே முதலாக
விரிந்த பலசாத் திரத்தொகுதி
காத லாகி யெங்கள்பிரான்
காழி நாதன் முதலானே
சோது முறைக ளோரேழு
மூவன்றன் கல்விக் கொடைபெறுவா
னீதி முறையின் வந்தவெனி
னிகழ்த்த நிற்ப தினியென்னே. 10

இன்ன வாறிங் கறம்பலவு
மியற்று மண்ணு மலையண்ண
றன்ன தறுபா ணெண்டுநிறைக்
தானெம் பரமா சாரியனு
நன்னர் நமச்சி வாயகுரு
நலமா ருளா லாண்டுகளும்
பொன்னி மணலிற் பலவாகப்
புகழோ டினிது வாழியவே. 11

தாய் மொழியும் விக்ஞானமும்

(ரா. அனந்தவைத்தியநாதன் எம். ஏ. அண்ணமலை யுனிவேர்சிடி.)

"எதுவுந் தமிழில், எல்லாந் தமிழில், எங்குந் தமிழில்" என்ற கோஷம் நமது நாட்டில் இங்கும் அங்கும் எங்கும் முழங்குகிறது. இது தமிழ் மக்களின் உற்சாகமான ஆர்வத்தைக் குறிக்கும் அறிகுறி. நாம் இன்று விக்ஞான காலத்தில் வசித்து வருகிறோம் என்பது மிகை யாகாது. இவ்விக்ஞானத்தின் மர்மங்களே அறியவேண்டு மென்னும் பொதுமக்களின் தாகத்தைத் தீர்க்க வேண்டியது அவசியமே. ஆனால், இக்கலியோ மேல் நாடுகளிலே ஆழ்ந்து வேரூன்றி, அந்தந்த நாட்டு அரசாங்கத்தாரின் உதவியாகிய உரத்தில் கொப்புங் கிளைகளுமாய்க் கொழுத்து ஓங்கி வளர்ந்து, மக்களின் செல்வமும், நாடுகளின் வளப் பமும், கற்றோரின் நுண்ணறிவும், இளைஞரின் ஆராய்ச்சி முயற்சியும் பொங்கித் ததும்பும்படியாகப் பூக்களையும் காய்களையும் சொரிந்து கொண் டிருக்கிறது. பிறநாடுகள் ஒவ்வொன்றிலும் அவ்வந் நாட்டுத் தாய் மொழியில் வெளியாகும் நூல்களும் பத்திரிகைகளும் மேற் கூறிய தற்கு அத்தாக்ஷிகளாகும். ஏன், நம் நாட்டிலும் அதைப் பயிர் செய்து பயன் பெறலாகாது? இவ்வுயர்வான எண்ணம் நம்மிற் பலரின் உள் ளத்தில் பதிந்து கிளர்ச்சி செய்து கொண்டு வருகிறது. இவ்வித நூல் களும் பத்திரிகைகளும் தமிழில் இல்லையே என்று பரிதவிப்போர் பலர். இதைக் குறிக்கவே ஸ்ரீ சுப்பிரமணிய பாரதியார் 'தமிழ்த் தாய்' என்ற பாட்டில் கூறுகிறார்:

இன்றொரு சொல்லினைக் கேட்டேன்!—இனி
ஏது செய்வேன்! எனதாருயிர் மக்காள்!
கொன்றிடல் போலொரு வார்த்தை—இங்கு
கூறத் தகாதவன் கூறினன் கண்டீர்.
"புத்தம் புதிய கலைகள்—பஞ்ச
பூதச் செயல்களின் நுட்பங்கள் கூறும்

மெத்த வளருது மேற்கே—அந்த
மேன்மைக் கலைகள் தமிழினில் இல்லே.
சொல்லவுங் கூடுவ தில்லே—அவை
சொல்லும் திறமை தமிழ் மொழிக் கில்லே
மெல்லத் தமிழினிச் சாகும்—அந்த
மேற்கு மொழிகள் புவிமிசை ஓங்கும்"
என்றந்தப் பேதை உரைத்தான்—ஆ
இவ்வசையெனக் கெய்திட லாமோ.
சென்றிடுவீர் எட்டுத் திக்கும்—கலேச்
செல்வங்கள் யாவும் கொணர்ந்திங்கு சேர்ப்பீர்.

மேற்கூறியபடி தகாத வசை மொழிகளைத் தொடுக்கிறார் சில பேதையர். வெளியிற் சொல்லாவிடினும் 'தமிழில் முடியுமா' என்று சந்தேகிக்கும் அறிவிற் சிறந்தோரிற் சிலரும் உளர். கம்பர், வள்ளுவர், இளங்கோ முதலிய நிகரிலாப் புலவர்கள் பிறந்த இந்நாட்டில், பலவித சாத்திர மணம் வீசும் இத்தமிழ் நாட்டில் பிறந்த எங்களது பெருமையை என்னென்றுரைப்பது என்று பழங்கதைகள் சொல்வதில் மகிமை இல்லே. பிறநாட்டார் நம்மை வணங்கும் படியாக 'பிறநாட்டு நல்லறிஞர் சாஸ்திரங்களைத் தமிழ் மொழியில் பெயர்த்தல் வேண்டும்; இறவாத புகழுடைய புது நூல்களையும் தமிழ் மொழியில் இயற்றல் வேண்டும்.' என்ற பாரதியாரின் எண்ணம் என் இன்னும் பூர்த்தியாக வில்லே?

நமது அறிவு வளர வளர அதைத் தெளிவாகப் பிறருக்குப் புகட்டுவதற்கு நமது பாஷையும் ஒத்து வளரவேண்டும். இவை முன்னும் பின்னுமாக வளர்ந்தால், தகராறுதான்; இடையூறுகள் பல ஏற்படும். புதிதாகப் பல சொற்களே ஆக்கும் அவசியம் ஏற்படும். நமது வாழ்க்கையிலும் நாகரீகத்திலும் விக்ஞானம் பலவாறாக ஈடுபட்டு ஊசலாடுகிறது. விக்ஞானக் கிளே ஒவ்வொன்றிற்கும் அதற்குரிய பரிபாஷை இருத்தல் அவசியம். மற்ற நாடுகளில் இப் பரிபாஷைகள் உள. நம் நாட்டிலும் பரிபாஷையைச் சிருஷ்டிக்கவேண்டும். அதை எங்ஙனமாக்குவது என்பது விவகாரம்.

'நாமகரணம்' அல்லது 'பெயரிடுதல்' என்பதில் மக்களுக்குள் அபிப்பிராய பேதம் இருப்பது இயல்பே. ஒருதாரணத்தை எடுத்துக்கொள்வோம். ஓரருமைக் குழந்தை பிறந்துவிட்டால், அதற்கு

என்ன பெயர் கொடுப்பது என்பதைப்பற்றி நடக்கும் விவாதத்தின் போக்கு நன்கு தெரிந்ததே. தன் பெயரை வைக்கவேண்டுமென்று சம்பந்திகளுக்குள் மனஸ்தாபம்; அப்பாவுடன் சண்டை; அம்மாவுடன் விவகாரம்; மாமிமாமனுடன் மனக்கசப்பு; புருஷன் பெண்டாட்டிக்குள் சச்சரவு; உற்றாருறவினருடன் காட்டமான சர்ச்சை: புராணப் புராதனப் பெயர்களைச் சீர்தூக்கிப் பார்த்தல், டாக்கிகளில் நடிக்கும் நக்ஷத்திரங்களின் நூதன நாமங்களைக் கடைதல், இதுவரை இடாத இனிய இசையுடைய சிறு பெயர்களுக்கு அலைதல்—அப்பப்பா! போதும் போதும். விக்ஞான வார்த்தைகளை ஆக்குவதிலும் தீவிர அபிப்பிராய பேதங்களும் கொடுஞ் சண்டை சச்சரவுகளும் கூத்தாடுகின்றன. இதைக்கண்டு பயந்து பலர் தமது முயற்சிகளை நிறுத்திவிடுகின்றனர். சண்டை ஓயட்டும் பின்பு தமிழில் எழுதலாம் என்பார். சமுத்திர அலை ஓய்ந்து நீராட எண்ணுவதுபோலுள்ளது இது. நீந்தத் தெரிந்த பிறகே தண்ணீரில் இறங்குவேன் என்பதுபோல், மொழி பெயர்ப்புத் தயாரானவுடன் விக்ஞான நூல்களைத் தமிழில் எழுதிவிடுகிறேன் என்று சொல்வாருமுண்டு.

கலைச் சொற்களை ஆக்குவதில் முக்கியமாக நான்கு கஷ்டிகள்.

(1) "தூய தமிழ் மொழிகளையே கையாளவேண்டும்; பிற மொழிகளினின்று கடன் வாங்கக்கூடாது; அங்ஙனஞ் செய்தால், தமிழ் உருமாறி விடலாம்; பிற மொழிகளைக் கற்பதில் தமிழ் நாட்டு மாணவர் துன்புறுவார்; பிறமொழியை வழங்க, தமிழ்மொழி சிறப்பிழந்து உயிர்ற்றதாகாதா? பிற மொழியைக் கையாள, தமிழிலில்லாத பல எழுத்திலா ஓசை இருக்கின்றனவே. ஆரியக் கடன் சொற்களைக் குறிக்க, ஸ, ஷ, ஜ, ஹ, ஸ்ரீ முதலிய பல எழுத்துக்களை ஏற்று, தமிழின் வேண்ட நெடுங் கணக்கை வீட்டிக்கொண்டே போகின்றனர். இது போதாதென்று மேல்நாட்டு அரிச்சுவடியிலுள்ள b, d, f போன்ற எழுத்துக்களின் ஓசையைக் குறிக்கத் தமிழ் புதிய எழுத்துக்களைக் கற்பனை செய்யவேண்டு மென்கிறார்கள். இவை தமிழ் இலக்கணத்திற்கும் இசைக்கும் இசகுபிசகான இடங்கேடல்லவா? தமிழோ, ஒரு பொருள் பல சொற்களில் சிறப்பாக வளம் பெற்றிருக்க, அதையே கொள்ள வேண்டாமா? யாது நேரினும், தமிழின் கற்பைக் காப்பதே தமிழரின் கடமை" இது ஒரு கஷ்டி.

(2) 'ஸம்ஸ்கிருத பாஷையின் விசேஷ லக்ஷணம் ஸமாஸம். சந்தேகமில்லாமல் அர்த்த புஷ்டியுடன் நூதன வார்த்தைகளைச் சரளமாய் சிருஷ்டிக்க ஸம்ஸ்கிருத பாஷையே தகுமானது. லக்ஷணமான தாதுக்களை யெடுத்து விசேஷ நாமங்களைச் செய்வது சுலபம். மேலும், ஆதி காவியங்களிலும் ஆயுர்வேதாதி சாஸ்திரங்களிலும் ஸம்ஹிதைகளிலும் விக்ஞான பதங்கள் அபரிமிதமாகக் காணப்படும்' என்பார் வடமொழி அபிமானிகள்.

(3) இது என்ன அநியாயம். டெக்னிகல் டெர்ம்ஸ்களுக்கு மொழி பெயர்த்தலா? ஸயன்ஸ் வளர்ந்து பெருகி வருகிறது. அது இன்டர்நாஷனலானது. முன்னேறி வரும் உலகத்துடன் நாமும் முன்னேற வேண்டாமா? ஸயன்ஸ் டெர்ம்ஸை அப்படி அப்படியே ட்ரான்ஸ்லிடரேட் செய்வதுதான் அட்வாண்டேஜ். அதுதான் கரெக்ட் ஆட்டிட்யூட். மேலும் சண்டை சச்சரவில் காலத்தையும் புத்தியையும் சக்தியையும் ஏன் வீணுக்கவேண்டும்" என்று கூறுவார் சில ஆங்கிலப் பிரியர்கள்.

(4) 'ஸயன்ஸ் டெர்ம்ஸ் என்கிறார்களே அவற்றிற்கு எந்தெந்தத் தமிழ்ச்சொற்கள் மிகப்பொருத்தமாக வழக்கத்தில் இருக்கின்றனவோ அவற்றை உபயோகிப்பதே உசிதம். இன்னும் பொருளைத்தெளிவு படுத்தும் பொருட்டுப் பழக்கத்திலுள்ள வடமொழி வார்த்தைகளை வேண்டிய சந்தர்ப்பத்தில் உபயோகிப்பது நலம். எங்கெங்கு மொழி பெயர்க்க முடியவில்லையோ அங்கங்கு ஆங்கிலப்பதங்களைக் கொள்வதே சௌகரியம்' என்பார் சமரஸக்கக்ஷியினர்.

சந்தர்ப்பத்திற் கேற்றவாறு இதையும் அதையுமோ, அதையும் இதையுமோ சேர்த்துக் கொள்ளலாம் என்று சொல்லும் அல்லது நினைக்கும் வேறுகக்ஷிகளுமுள. என்ன கதம்பம்! என்ன சிக்கலான குழப்பம். இதைவிட்டு மீளுவதற்கு வழியுண்டா?

பெயரிடுவதில் நம்நாட்டில் மட்டுந்தான் அபிப்பிராயபேதம் என்றெண்ண வேண்டாம்; மேல்நாடுகளிலும் இவ்விதக் குழப்பமும் அபிப்பிராயபேதமும் தாண்டவமாடி நின்றன. பதின்மூன்றும் நூற்றாண்டிற்கு முன், அங்கு ஒழுங்கான பரிபாஷை இடையாது; மனோராஜ்யப் பெயர்களே நடமாடின. 19-ம் நூற்றாண்டிற்கூட, ஒரு பொருளுக்குப் பன்னிரண்டு பெயர்கள் இருந்தனவாம். லவாசியர், பெர்ஸீலியஸ் போன்ற

பல விக்ஞான துண்ணறிவாளர்களின் அபிப்பிராயங்களே விக்ஞான உலகம் ஏற்றுக்கொண்டதன் பயனுகவே, இப்பொழுது அங்கு ஒழுங் கேற்பட்டுவிட்டது. இந்நாளிலும் அவ்வப்போது பெயரிடுவதில் சில சச்சரவுகள் ஏற்பட்டு வருகின்றன.

விக்ஞான வார்த்தைகளே ஆக்குவதற்குத் தகுந்தமுறைதான் யாது என்பதைச் சிறிது ஆராய்வோம். நியாயஸ்தலங்களில், வக்கீல்கள் வாதாடும்பொழுது, சட்டப் புஸ்தகங்களிலிருந்து 'அதாரிட்டிகளே' எடுத்துக்காட்டுவது வழக்கம். அதுபோல, எடுத்துக்கொண்ட விவ காரத்திற்கும் ஓர் அபூர்வமான 'அதாரிட்டி' காட்டுகிறேன். மெல்லார் விக்ஞான உலகில் ஒரு பெரிய 'அதாரிட்டி'. அத்திறமை வாய்ந்த பேராசிரியர் ஓரிடத்தில்[1] எழுதியுள்ள கருத்தை இங்கு குறிப்போம். "விக்ஞான சம்பந்தமான சிறப்புச்சொல் தெளிவாயிருக்கவேண்டும்; சந்தேகம் குழப்பம் யாதும் ஏற்படாதபடி நேர்மையாய் ஒன்றைக் குறிக்கவேண்டும். இதனே இரண்டுவிதங்களில் செய்யலாகும் (1)பாஷை யிலுள்ள வார்த்தைக் குறைவால் நாடோடியாய் வழங்கும் சில சொற் களுக்குப் புதிய அந்தஸ்தைக்கொடுத்து, சிறப்பிலக்கணங்கூறி, குறிப் பாக ஒன்றையே குறிக்கும்படி செய்யலாகும் (உ-ம் atom, energy, force, power). (2) புதிதாக வார்த்தைகளைக் கற்பித்தல் (உ-ம் electron, telegraph). புதுப்பெயர்கள் முதலில் விபரீதமும் அன்னிய மாயும் கர்ணகடோரமாயும் இருந்தும் நாளடைவில் அவை நமது செவிக்குப் பழக்கமாகிவிடும்; விரசமாயிரா; பிரயாசையின்றி அவற்றை எளிதாய் வழங்கமுடியும். (இது நமது அநுபவம்.) பொருள், முறை, செயல் இவற்றின் போக்கை நாம் அறியக்கூடாமலிருப்பின், அவற்றைக்குறிக்க, ஏதோ அர்த்தமில்லாத பெயர்களைக் கொடுப்பது நலம். அப்பெயர், தப்பானதும் பொருத்தமில்லாததுமான சொல்லை விட உயர்வானது..... க்ரீக் அல்லது லாடின் பாஷையிலுள்ள தாதுக்களைக்கொண்டு புதிய சொற்களே ஆக்குவதே உத்தமம்.....இதில் அநேக சௌகர்ய முண்டு". இம்முறையையே மேல்நாட்டினத்தும் பின்பற்றி வருகின்றன.

நாமும் மேற்கண்ட முறையை மேற்கொள்ளுதலே முறை. சந்தேக மேற்படாவிடின் வழக்கத்திலிருந்து வரும் தமிழ்ச் சொற்களே

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யும் வடமொழிச் சொற்களையும் உபயோகிப்பதில் யாதொரு தடையும் கிடையாது. Air என்பதை 'வளி' என்பதைவிட 'காற்று' என்றே குறிப்பிடலாம். இலக்கணங்கள் என்பதைவிட 'குணங்கள்' என்று Properties என்பதைக் குறிப்பதில் சௌகரியமுண்டு. Solar System என்பதை ஞாயிற்றுத் தொகுதி என்கிறார் சிலர்; சூரிய மண்டலம் என்றால் எளிதில் பொருள்படுகிறது. Atom, molecule என்பவற்றை முறையே பரமாணு, அணு என்று மொழி பெயர்ப்ப தற்கு நமது பழைய சாஸ்திரங்கள் ஆதார மளிக்கின்றன. இவ்வகை வேலையில் நாம் விசால மனதுடையவர்களாயும், ஜாதிமத துவேஷம் இல்லாதவர்களாயும், உயர்ந்த விக்ஞானம் நம்நாட்டில் செழித் தோங்கி மக்களுக்குப் பல துறையில் பலனளிக்க வேண்டும் என்ற நோக்க முடையவர்களாயும் இருத்தல் மிக அவசியம். தமிழ் மொழி வளர வேண்டும், தலை தூக்கி நிற்கவேண்டும், எங்கும் புகழ்பெற வேண்டும், பூரண உயிருடன் துள்ளாடிக் குதித்து உலாவவேண்டும் என்ற எண் ணமுடைய தமிழபிமானி சண்டை சச்சரவில் ஈடுபடமாட்டான். ஏனெனில் 'ஒன்று பட்டா லுண்டுவாழ்வே; நம்மில் ஒற்றுமை நீங்கில் அனைவர்க்குந் தாழ்வே.' விக்ஞானம் உண்மையையே நாடி நிற்பது. அவ்வுண்மையைக் கண்டு பிறருக்குப் போதிப்பதே விக்ஞானியின் நோக் கம். ஆனதால் அவர் ஒரே லக்ஷியமுள்ளவராயிருத்தல் வேண்டும். நான் பிடித்த முயலுக்கு மூன்றே கால் என்று சாதிக்கலாகாது; அவலை நினைத்து உரலை இடிக்கலாகாது. ஒரு பாஷை, நாகரீகத்தை யொத்து வளரவேண்டுமானால், பிறபாஷைகளினின்று சில சொற்களைக் கடன் வாங்க வேண்டித்தான் வரும். ஆங்கில பாஷை இன்று உலகெங்கும் பரவி மேன்மைப் பதவி அடைந்திருப்பதன் மர்மம் இதுவே. சர்வ சம்மதமாய்ப் பிறமொழியினின்று தாராளமாக ஆங்கிலேயர் வார்த்தை களைத் தமது அகாதியில் சேர்த்து விடுகின்றனர். Sulphur என்பது सुल्व + अरि (தாமிரத்தின் விரோதி) என்ற பதங்களிலிருந்து ஆக்கப் பட்டது. Ekaboron, dwisilicon என்பதிலுள்ள ஏக, த்வே என் பவை வடமொழி முன்னிலைகள். Silicon என்ற ஒரு தனிப்பொருளின் பெயர் Silica (மணல்) என்பதிலிருந்து வந்தது. அவ்வோசைக் கிணங்க அதை 'சிலகம்' என்று சொல்லலாம். சிலா = சிலை = கல் என்பதிலிருந்து உண்டாவதால் அது மிகப் பொருத்தமானதாகும். அதே விதமாக, Phosphorus (phos வெளிச்சத்தை phero வகிக் கிறேன்) என்பதை பாஸ்வரம் என்று விடலாம் (भास = பிரகாசித்தல்).

சில உப்புக்கள், அமிலங்கள் என்பவற்றின் குணங்களைக் காட்ட மேல் நாட்டு முறையிலுள்ள per, meta, ortho, hypo, para என்பவற்றை முறையே பர, மித, பூர்வ, உப, அபர என்றுக்கிவிடலாம். எவ் வெப் பெயர்கள், ஓர் விஞ்ஞானியையோ, தேசத்தையோ, ஊரையோ, புராண தேவதையையோ முன்னிட்டுக் கொடுக்கப்பட்டனவோ அவற்றை அப்பெயர் கொண்டழைப்பதே தர்மம். உ-ம். வோல்ட், ஆம்பியர், ஓம் (Ohm), பாரடே, ஹென்ரீ, காலியம், ஐரோபியம், ஸ்ட்ரான்ஷியம், மாக்னீஸியம், வனேடியம், தோரியம் முதலியன.

தமிழ் மக்களாகிய நாம் இந்தியர்களுமாவோம். இந்திய தேசம் முழுவதற்கும் பொதுவாயிருக்கும்படி விஞ்ஞான வார்த்தைகளை அமைப்பதே தருமம், நலம், சௌகரியம். வடமொழியை ஆதாரமாகக் கொண்டு விசேஷ விஞ்ஞான வார்த்தைகளை அமைப்பின், அவை, நமது ஆந்திர, கன்னட, மலையாள, வங்க, மராட்டிய சகோதரி சகோதரர் களுக்கும் பொதுவாய் நிற்கும். எல்லோரும் ஒத்துழைத்து நலம் பெற லாகும். புதிதாய் ஆக்கிய அநேக சொற்கள் நம்மிற் பலரைப் பயந் தோடச் செய்யும். ஆங்கில விஞ்ஞான வார்த்தைகளும் சின்னங்களும் நம் மாணவர்களைப் பயந்தோடச் செய்யவில்லையா? பயங்கொள்ளலா காது. மனவுறுதியுடன் திடங்கொண்டு போராடுவதே பெருமை. ஒத்துழைத்து ஒரு மனப்பட்டு ஒரு முடிவுக்குப் பலர் வந்துவிட்டால் இருள் நீங்கிச் சுகம் பெறுவோம் என்பது திண்ணம்.

இக்கலைச் சொற்களை ஆக்குவதில் முயற்சி எடுத்துக்கொள்ளும் கழகங்கள் பல உள. ஆனல், நோக்கம் ஒன்றாயினும், அவற்றுள் பல குறைகள் காணப்படுவது வருந்தத்தக்கது. இது பொருட்டு, சென்னை அரசாங்கத்தார் சில கமிட்டிகளை அவ்வப்போது நியமித்து வருகின்றனர். 1932ல் நியமிக்கப்பட்ட கமிட்டியின் ஆலோசனையை ஆதாரமாகக் கொண்டு பள்ளிக்கூடங்களிற் போதிப்பதற்கேற்ற பல புஸ்தகங்கள் வெளியாயுள்ளன. அவை பாட புஸ்தகங்களாகவும் வைக்கப்பட்டிருக்கின்றன. கலைச் சொற்களைச் சீர்திருத்தி அமைப்ப தற்கு இப்பொழுது ஒரு கமிட்டி நியமிக்கப்பட்டு வேலைசெய்து கொண்டும் வருகிறது. ஆங்கிலத்திலும், தாய்மொழியிலும், உரிய கலையிலும், வடமொழியிலும் அப்பியாசமும் தேர்ச்சியுமுடையவர்களே கலைச்சொற்களைச் சரிவர ஆக்கத் தகுதியானவர்கள். ஒவ்வோர் வார்த்தையின் முழு சரித்திரத்தை அறிந்தால்தான் அதற்குச் சரியான

மொழி பெயர்ப்பை ஆக்க இயலும். பல துறையில் பிரசித்திபெற்ற பண்டிதர்களைக் கூட்டித் தீர ஆலோசித்துப் பரிசீலனை செய்து ஒரு முடிவிற்கு வந்தால், அத்தீர்மானங்களை நாடு மனப்பூர்வமாக ஏற்கும். ஏற்கும்படி வற்புறுத்தவேண்டி நேரிடில், அங்ஙனஞ் செய்யவும் வேண்டும்.

விக்ஞான நூல்களைத் தாய்மொழியில் இயற்றுவதில் பேரார்வம் காட்டும் கல்விக் கழகங்களில் அண்ணாமலை யுனிவேர்சிடி தலை சிறந்து நிற்கிறது. இச்சர்வகலாசாலை செய்துவரும் இப்பேருதவியைத் தமிழ் நாடு ஒருபோதும் மறவாது போற்றிவரும் என்பது திண்ணம். காலேஜ் வகுப்புகளுக்குத் தகுந்த விக்ஞான நூல்களைத் தமிழில் நன்றாய் எழுதுபவர்களுக்கு ஆயிரம் ரூபாய் பரிசு வழங்கப்படுமென்று அண்ணாமலை யுனிவேர்சிடியார் அவ்வப்போது செய்த விளம்பரங்களின் பயனாக, பல ஆசிரியர்கள் வெகுசிரமப்பட்டுப் புஸ்தகங்களை எழுதி அனுப்பியுள்ளார். தகுந்தபடி பரிசீலனை செய்து, நவீன தர்க்கம், நவீன ரஸாயனம், பௌதிக சாஸ்திரம் என்ற நூல்களுக்குப் பரிசுகளும் அளித்திருக்கின்றனர். இவற்றில் இரண்டு பரிசுகள் யுனிவேர்சிடியிலுள்ள இரண்டு ஆசிரியர்களுக்கு வழங்கப்பட்டன என்பது குறிக்கத் தகுந்தது. இன்னும் ஸங்கீதம், சரித்திரம், பொருளாதாரம், பிராணி சாஸ்திரம், தாவர சாஸ்திரம் முதலிய கலைகளைப்பற்றிய நூல்கள் தயாராகியும் தயாராகிக் கொண்டும் வருகின்றன. இவை யாவும் யுனிவேர்சிடி ஆசிரியர்களாலேயே எழுதப்படுபவை என்பது யுனிவேர்சிடியின் நோக்கத்தையும் அங்குள்ளோரின் திறமையையும் ஊக்கத்தையும் காட்டுகின்றன. இப்பெரும்புகழ் யுனிவேர்சிடியைச் சார்ந்ததாகும். இவ்வுயர்தரக் கல்விக் களஞ்சியத்தை ஸ்தாபித்தவர் ராஜா ஸர் அண்ணாமலை செட்டியாரவர்கள். ஆகையால் இம்மாபெருங்கீர்த்தி அவரையே சார்ந்ததாகும். அவர் நீடூழி வாழ்க! அவர் மனைவி மக்கள் நீடூழி வாழ்க! அவர் தொடுத்த நற்காரியங்கள் யாவும் மேன்மேலும் விருத்தி அடைக! அவர் தொடுக்கும் எல்லா நற்செயல்களும் இடையூறின்றி இனிதாக முடிக! எங்கும் மங்களம் பொங்கித் தங்குக!

தமிழ் செய்த தவம்: நமது தலைமுறையில்

கு. அருணாசலக் கவுண்டர், திருநெல்வேலி.

1928-ம் ஆண்டு: அப்போது நான் சிதம்பரம் ஸ்ரீ மீனாட்சி தமிழ்க் கல்லூரியில் பயின்றுகொண்டிருந்தேன். டாக்டர் உ. வே. சாமிநாதையரவர்கள் எங்கள் தலைமை ஆசிரியர். நமது அண்ணாமலை யண்ணல் தில்லையிலும் திருவேட்களத்தும் தாம் உருவாக்கிய பல்வேறு கல்வி நிலையங்களை - மதிமூட்டும் மாடங்களை - மாணவர் விடுதிகளை, மேலும் இருபது லக்ஷம் காணிக்கையுடன் அளித்து, பல்கலைக்கழகம் ஒன்று காண விழைகின்றார் என்ற செய்தி விண்ணும் மண்ணும் போர்த்தது. உலகினர் வியந்தனர். முரசு முழங்கினால் அது எவ்வளவு பெரிய வீரமுரசாயினும் அதன் ஓசை பரவுவது ஒரு காத அளவே. மழைமுகில் வான் அதிர இடித்து முழங்கினும், அதன் எதிரொலி ஓடுவது ஒரு யோசனை தொலைவே. ஆனால் நமது வள்ளல் வழங்கினார் வாரி வாரி-லக்ஷக்கணக்கில் என்ற சேதி, அன்று 'அடுக்கிய மூவுலகுமே கேட்டது'. ஈதல் - அதனாலாம் இசையுடன் வாழ்தல் - இது அன்றி உயிர்க்கு வேறு ஊதியம் ஏது?

இரகசியத்தை பிரபு ஒருவரின் பெருங்கொடையைச் சிறப்பித்துப் பேசுகின்றாள் ஔவை. நூற்றில் ஒருவரே அறிஞர் பேசும் சபை களில் சொல்லுதற்கு உரியர் என்பானேன்? அங்கே செல்லுதற்கும் உரியர். அவருள்ளும் புலமைப் பெருக்கால் பொருள்களை உய்த்துணர் வோர் ஆயிரத்தொருவரே. வார்த்தையின் நயந்தெரி கவிஞர்களோ பதினாயிரத்தொருவர் என்றால், சொல் நலமும் பொருள் நலமும் சுவை கண்டு துய்ப்போர் - அம்மதுரைத் தமிழுக்கு அள்ளி வழங்குவோர் கோடிக்கொருவரே.

ஆர்த்தசபை நூற்றொருவர்; ஆயிரத்தொன் றும்புலவர்;
வார்த்தை பதினா யிரத்தொருவர்;—பூத்தமலர்த்
தண்டா மரைத்திருவே! தாதாகோ டிக்கொருவர்
உண்டாயின் உண்டென் றறு.

ஆனல், இருநூறு லக்ஷம் தமிழர்க்கு இன்றிருக்கும் தாதா - தரும தேவதை நம் அண்ணுமலையண்ணல் ஒருவரே. தமிழுக்குத் தலையே தந்திடுங் குமணவள்ளல்கள், உயிரே உதறிடும் நக்கீரம் பெருமான்கள் உலக சரித்திரத்தின் அதிசய புருஷர்களே.

பொருட் செல்வத்துடன் செவிச் செல்வமும் ஒருங்கே படைத்த பிரபு சிகாமணி நம் அண்ணல். அறிவு நூல் ஆர்வக் கலைகளே உணவாக அருந்தி வளர்ந்தது அவர்களது அன்பு உள்ளம். முன்னேப் பழம் பெருமையில் முகிழ்த்து அலர்ந்த கவிப்பூந்துணர், அவர்கள் வாழ்க்கை யைச் சூழ்ந்து மணம் வீசியது. காவிரிப்பூம்பட்டினக் கலங்கரை விளக்கம், சீனம் வரைப் பரவிய சோழர் ஏகாதிபத்தியம், கம்பனுடைய கோசலம் - இவை நமது அண்ணல் காணும் இன் கனவுகள். இவர்கள் செய்த புண்ணியத் திருப்பணியால் அன்னம் பாலிக்கும் தில்லைப் பொன்னம்பலம், ஞானப்பூங் கோயிலாக மாறியது. ஆனந்தக் கூத்த னுடன் அங்கே சிந்தாதேவி செழுநடம் புரிகின்ருள். ஆதாவின்றி அகம்சாம்பி நாணத்தால் தலைகவிழ்ந்து நின்ற தமிழரசி, இன்று தரணி ஆளுகின்ருள்.

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நாட்டுக்கோட்டை—நகரத்தார் என்றுலே நமது கண்முன் தோன்றுவன : உயரிய தங்கள் இலட்சியங்களேப் போலவே, தமிழ் நாடெங்கும் அவர்கள் எடுத்த கோயில்கள் ; தங்கள் மனம் போலத் தெளிந்த பொய்கைகள் ; பூஞ்சோலைகளுமே. கோயில்களே நமது சமயச் சிறப்பு ; சிற்பச் செல்வம் ; ஆடரங்கு. 'மக்கள் தங்கம் உயர்ந்து வளர்கெனக் கோயில்கள் சூழ்ந்ததும் இந்நாடே' சோழ பாண்டிய விஜயநகர வேந்தர்களுக்குப் பிறகு, தமிழர் சமய வாழ்வைப் பொன்னே போலப் போற்றிய பெருமை நகரத்தாருக்கே உரியது. ஆனல், பொன் வேய்ந்தும் முலாம் பூசியும் நெய்விளக்கெடுத்து, நிபந்தங் கள் விட்டு, திருக்கோயில்களே ஒளிபெறச் செய்ததுபோல, இவர்கள் அன்று தமிழ் மக்களது உள்ளத்தையும் அறிவொளி வீசும் பொற் கோயிலாக்க முயலவில்லே. சைவம் அவர்கள் கையில் தழைத்தது போலத், தமிழர் நற்கலேயும் நாகரிக மாட்சியும் வளரவில்லே. வேதம் ஓதுதற்கும் தேவாரம் இசைத்தற்கும் தனித்தனியே பாடசாலைகளே நிறுவினர் ; அன்னசத்திரங்கள் ஆயிரம் அமைத்தனர். ஆயினும்

ஏன்? இதனினும் மேல் ஆங்கொரு ஏழைக்கு எழுத்தறிவித்தல் அல்லவா?

முன்னுளோர் எல்லாம் பின்வருவோர்க்குத் தேடிவைக்கும் பெருஞ் செல்வமே கல்வி; அது வெள்ளத்தே போகாது; வெந்தணலில் வேகாது; கொடுக்கவுந்தான் நிறையுமே அன்றிக் குறைவுறாது. அகத்தில் அது இன்பமடையைத் திறக்கும்; புறத்திலே புகழை நாட்டும்; சிற்றுயிர்க் குற்றதுணை. கல்வியைப்பற்றிய இம்மூல உண்மைகள் எல்லா நாடுகளுக்கும் பொதுவே. எனினும் மக்களின் பண்புக்குத்தக நாடுகள் தோறும் கல்வியின் வழி வேறு பிரிகின்றது. இங்கிலாந்தின் கல்வித் திட்டத்தில் விளையாட்டுகள் கட்டாயம்; இத்தாலியிலோ கலைகளுக்குத் தலைமையிடம்; தன் மதிப்புடன் பிழைக்கக் கூலி கிடைக்கும் எவ்விதத் தொழிலும் இகழ்ச்சிக்கு உரிய தில்லை என்ற பாடம் அமெரிக்கப் பள்ளிகளில். ஆனால் நம் நாட்டிலோ நாம் அரசியல் நிலையில்தான் வீழ்ந்து கிடக்கின்றோம் என்பதில்லை; நமது வாழ்க்கைக் கலைகளிலும் இலக்கியக் கருவூலத்தும் உயர்ந்தன எல்லாமே பின்தள்ளி ஒதுக்கப்பட்டிருக்கின்றன. தமிழறிவு நம் மவர்க்கு, நாம் நினைப்பதினும் மிகக் குறைவே. ஆங்கிலத்தால் அழிவில்லை; ஆக்கமே எனினும், அதன் பண்பமைந்த கல்வியால் நம்மவர்,

ஆங்கிலம் ஒன்றையே கற்றார்; அதற்கு
ஆக்கையோ டாவியும் விற்றார்;
தாங்களும் அந்நிய ராளர்; செல்வத்
தமிழின் தொடர்பற்றுப் போனர்.

உத்தியோக நிலையம், சட்டசபை, மாசனக்கூட்டம் எங்கே சென்றாலும் அங்கே, வாய்மை வீற்றிருந்த இடத்துப் பொய்மை, அறம் தவழ்ந்த இடத்து மறம், கடமைக்கு மாறாக உரிமைகளையே காண்கின்றோம். ஒழுங்கு இல்லை; குழப்பங் குடிகொண்டது. ஆழ்ந்த சிந்தனைக்கு மாறு ஹாஸ்யத் துணுக்குகளோ? கட்டுப்பாடு தொலைந்தது; கட்சிப் பிணக்கு மலிந்தது. இது மேல்புலக் கல்வியின் விளைவு. அக்கல்வியால் நாம் அடைந்த நன்மையினும் தீமையே மிகுதி. நாம் இழந்த மனத்தை மீண்டும் பெறவேண்டுமானால், நமக்குரிய கலைப் பெருக்கும் கவிப் பெருக்கும் காலத்துக்கேற்ற இயல்பில் கடல் வெள்ளம் போல் பாய்ந்து பெருகுவது எத்துணை அவசியம் என்பதைச் சொல்லவேண்டா.

வங்க நாட்டிலே அதன் எழுச்சிக்குக் கட்டியங் கூறினவர் இராம மோகன ராயர். அவர் உள்ளத்து அரும்பிப் பங்கிம் சந்திரர் எழுத்திலே தவழ்ந்து, தாகூரடிகள் கவிதையிலே வங்க மண்ணே மலர்த்திய தெய்விக இயக்கம் ஒன்று, தெலுங்கரை விழிப்புறுத்தி மராடத் திலகரின் வீரமுழக்காய் தமிழ் வானத்து அதிர்ந்தது. தமிழர் இயக்கம் உருவாகி எழுந்தது. பழந்தமிழர் பெருமையை ஆதர வாகக் கொண்ட அது, வறண்டயர்ந்த தமிழ் நிலத்துப் புத்தமுதாகப் பொங்கியது; புது வாழ்விற்குரிய தாய்ப்பாலாகச் சமைந்தது. 'சொல்லில் உயர்வு தமிழ்ச் சொல்லே' என்ற துணிவு பிறந்தது. 'தமிழ் கூறும் நல்லுலகின்' மீது காதல் கனிந்தது. 'கும்பிட்டு வாழ்கிலோம் யாம்' என்ற தன்மான உணர்வு தலை எடுத்தது. தமிழை வளர்க்கும் சங்கங்கள் பல சிங்கப் புலவர்களைச் சேர்ந்து அமைந்தன. தெருவெலாம் தமிழ் முழக்கம்; சேரியெலாம் சீர் திருத்தம். "பாக்குத் தறித்து விளையாடும் பாலகர்வாய் நாக்கும் தமிழ் மணந்தது. தமிழருடைய இம் மலர்ச்சிக்குத் திருவனந்தை சுந்தரம் பிள்ளை நெறிகாட்டி நின்றார். நமது தேச பக்த ஆசுகவி பள்ளி எழுச்சி பாடினார். வீர விளக்கு வி. ஒ. சி, புலவர் திரு. வி. க. போன்றவர்கள் தமிழனைத் தலைநிமிர வைத்தார்கள். தாணி எங்கும் இணையிலா அவள் சரிதம் எழுதிச் சென்றவர் கனகசபைப் பிள்ளை என்பவர்.

அன்று இராசாங்க ஆதரவு நம் தாய் மொழிக்கில்லை. அதனால் தமிழடைந்த அவமதிப்பு சொல்லுந் தரமன்று. பாதிரிமார் அரசிய லார் பள்ளிகளும் கல்லூரிகளும் ஐரோப்பிய மோஸ்தரில் சமைந்தவை. அவை தமிழணங்கின் கொலுக்கூடம் ஆகவில்லை; ஆகவும் முடியாது. தாய்மொழிப் பணிசெய்வதில் சென்னைப் பல்கலைக் கழகம் அந்நாள் ஆர்வம் உடையதாக இல்லை. தங்கள் கலைவளர்ச்சிக் கென்று விசாகை யில் ஆந்திரரும் தனித்தொரு சருவகலாசாலை வகுத்தனர். வெளி யிடத்துக் கல்லூரிகள் பலவற்றை இணைத்து வைக்கும் பல்கலைக் கழக இயலுக்கு மாறுகக் குருகுல நீர்மையில், செழுங்கலை நியமம் ஒன்றை நிறுவினால் எல்லாக் குறைகளும் நீங்கும். தமிழ்க் கலைவளரும் என்று நினைத்தனர். வயிற்றுப் பிழைப்பல்ல வாழ்வு; வாழ்க்கையை அழகும் இனிமையும் கலந்தொழுக வைப்பதே கருமம் என்று உளங்கொண் டனர். ஆனால் இக்கனவு பலிக்குமா?

சிவன் எப்ப வருவார் ?
பலன் எப்ப தருவார் ?
பொழு தெப்ப விடியும் ?
பூ எப்ப மலரும் ?

மூவேந்தரும் கொடைக்கடம் பூண்ட வேளிர் குலத்தவரும் மாண்டனரே. திருநெல்வேலிப் பாண்டியரும் சேதுபதிகளோ மோ அருகினர்.

மெல்லத் தமிழ் இனிச் சாகும் அந்த
மேற்கு மொழிகள் புவிமிசை ஓங்கும்

தமிழுக்கு இந்த வசை எய்தலாகுமா ?

எங்கள் வாழ்வும் எங்கள் வளமும்
மங்காத தமிழ் என்று சங்கே முழங்கு

என்ற தெய்வ கீதம் கேட்டது. கீதம் வந்த வசத்தில் எங்கள் அண்ணாமலை யண்ணல்,

இருளை நீக்கி ஒளியினைக் காட்டினர்
இறப்பை நீக்கி அமுதத்தை ஊட்டினர்.

வாழிய நம் வள்ளல் !

3

சென்ற தலைமுறையில் தமிழ்க் கல்வி குருகுல முறையைத் தழுவியது ; குருட்டு மனப் பாடமே. மாணவன் ஆசிரியன் 'நக'லாக விளங்கினன். தானுக உணரும் சக்தி - குணங் குற்றங்களை உய்த் தறியும் ஆற்றல் அவனுக்கில்லை. கோழியைத் தான் பாடலாம் ; குஞ்சைப் பாடலாமோ என்ற கொள்கையில் அவன் வேரூன்றிக் கிடந் தான். முட்டையைப் பாடினரே ஒருவர். அற்பம் அற்ப மல்ல ; தனிவனத் தலரும் ஒரு சிறு மலருமே பெரிய கருத்தினை உணர்வினை எழுப்பவல்லது. சிறிது கற்ற அளவில் அவன் யமகம் சிலேடைச் சிலம்பங்களை வீசினன். சமய நூல் பயிற்சி மொழிப் புலமையோடு கல்வி முழுதும் முடிந்ததாகவே அவன் கருதினன். அதனால் வறுமை அவனிடம் நீங்கா நிழல் போல நிலைப்பதாயிற்று. செந்தமிழ் பாடிச் சென்றால்,

அண்ணந்து கேட்பர் அழகழ கென்பர் அதன் பிறகு
சுண்ணும்பு பட்ட இலையும் கொடார்.

அவன் சொன்னன் :

" ஏட்டைக் கட்டி எழுத்தோடு எழுத்து வைத்து
இசைத்துக் கட்டி இசைகட்டி, லோபர் மேல்
பாட்டைக் கட்டி, என் தொண்டையும் கட்டின ;
பாவம் கட்டின தென்றைக்குத் தீருமோ '

என்று கல்லாதவனைக் கற்றுப் என்னல் எத்துணைப் பாவம்? அவன் வாக்கில், காடெறியும் மறவன் நாடாள்வான் ஆவான்; போர் முகத்தை அறியாதவனும் புலியேறு ஆவான். இல்லது புனைதலைக் கவிதையின் எல்லையாக அவன் மதித்தான். வறுமையும் மடமையும் அடிமை யுணர்வும் மேலிட்டிருக்கும் தமிழ் நிலத்து வெறும் இலக்கியப் புலமை மட்டும் போதாது. தமிழ் மொழிக்குப் புதிய சுவை, தமிழ் உலகுக் குப் புதிய உணர்வு தமிழ் மக்களுக்குப் புதிய உயிர் தரும் கற்கண்டு மொழியில் கற்கண்டுக் கவிதைகள், வாழ்க்கையை வானில் உயர்த்தும் நூல்கள் தொழில் நூல் தொகுத்தலே நமது அண்ணலார் தமது கலை நியமத்தின் கடமையாகக் கொண்டார்.

நமது பழஞ் சரிதம் நன்கு புனையப் படவில்லை; நாகரிகமும் ஆய்ந்து அறியப்படவில்லை. நமது கலைகளை இலக்கியங்களை நவீன முறையில் நாடிஞரில்லை. வடமொழிப் பக்தியும் பற்றும் ஒரு புறம், ஆர்வக்குறைவு மறுபுறம் இவற்றுக் கிடையிலே தமிழா ராய்ச்சி தடைப் பட்டது. எனினும், சிலர் முயற்சியால் சிறந்த பல உண்மைகள் மெள்ள மெள்ளத் தலைகாட்டுகின்றன. காய்தல் உவத்தல் அகற்றி ஒரு பொருட்கண் ஆராயும் அருந்திறனும் பெருந்துணிவும் நம்மவர்க் கில்லை என்ற வீண் பழி சுமத்தப் படுகிறது. கெற்றிக் கண்ணைக் காட்டினலும் குற்றம் குற்றமே என்ற நக்கீரர் கதை நடுநின்று பகுத் தறியும் நம்மவர் ஆற்றலைச் சுட்டி யெழுந்த பழங்கதை அல்லவா? ஆனல், சென்ற தலை முறையில் எழுந்த சங்கோத்தர விருத்திகள் சண்ட மாருதங்கள் வைரக்குப்பாயங்கள் வீரகண்டா மணிகள் நமது ஆராய்ச்சி விளக்கை அணித்து விட்டன. மேலை நாட்டு ஆய்வு முறையை ஒட்டி நமது இலக்கியச் சுவை கவிதைகளைத் துய்த்தல் கலையுணர்தல் நமது அண்ணலார் அளிக்கும் பயிற்சியின் சிறந்த அமி சங்கள்.

4

மேற்குச் சீமைகளில் தன் நாடு தன் நகர் தான் என்ற குறுகிய தேசியமே கண்கண்ட தெய்வம். மானிட பலி தந்து அங்கே அதனை வழிபடுகின்றனர். 'ஒருவரை யொருவர் வதைக்கும் தேசியத்தால்— தனது நாட்டுச் சுதந்திரத்தால் பிற நாட்டைத் துன்புறுத்தல் கூடாது' என்பது தாகூரடிகள் கொள்கை. இதனை அவர் ஒரு கூட்டத்திலே அமெரிக்காவில் பேசியபோது அத்தேசத்தான் ஒருவன் சொன்னான்; 'இதனால் அல்லவா நீங்கள் அடிமைகளாக வாழ்கின்றீர். உங்கள் வள நாடு மற்றொருவன் ஆள்கின்றான்' என்று. அவனுக்கு அடிகள் மறு மொழி: இப்போது நாங்கள் புழுதியோடு புழுதியாக வீழ்ந்து கிடந்தாலும் எங்கள் பூமி புண்ணிய பூமி; உங்கள் செல்வத்தின்மீதோ தெய்வ சாபம் இருக்கிறது' என்பது. இதன் கருத்தாவது: குபேர சம்பத்தில் குதூகலித்திருக்கும் இந்த நிலை எந்தக் காலத்திலும் நீங்காதிருக்கும் என்று அமெரிக்கர் நினைப்பது தவறு. 'நிறை செல்வம் நீரில் சுருட்டும் நெடுந்திரைகள்'. நாமோ கடவுளையும் அறத்தையும் நம்பிக் கிடக்கிறோம். நாம் கைவிடப்படோம்; கீழே விழினும் மீண்டும் எழுந்திடுவோம். அமெரிக்கா வீழ்ந்தாலோ அதோ கதி தான். ஆதலின் தேசம் நிறம் சாதி குறுக்கிடலின்றி, உலக மக்கள் எல்லாம் உடன்பிறப்பென்று உணர்ந்து மனிதனுக்கு மனிதன் அன்பு செய்யும் உயரிய வாழ்க்கை இலட்சியம்,

"தூய உள்ளம் அன்புள்ளம் பெரிய உள்ளம்
தொல்லுலக மக்கள் எலாம் ஒன்றே என்னும் தாயுள்ளம்,'

'ஒன்றே குலமும்; ஒருவனே தேவனும்' என்ற உறுதி, 'யாதும் ஊரே; யாவரும் கேளிர்' என்ற எக்களிப்பு: இவை தமிழ்க் கல்வியின் பயன்.

நமது 'சமூகத்தின் விளைவுக்கு நீரா'கவும், 'உரிமைச் செம்பயிருக்கு வேரா'கவும் இருப்பது, அமுதென்று பேர்படைத்த நமதின்பத் தமிழே. நீதற்ற வாய்மை, நீதியால் வந்த நெடுந் தருமநெறி, என்னும் உயிரின் இரு பெருந் தத்துவங்களை ஆதாரவாகக் கொண்டிருப்பதால், தமிழணங்கு ஆயிரம் ஆயிரம் ஆண்டுகளாகவும் தன் நிலை தளராது, கன்னி எழிலுடன் இலங்குகின்றாள். திசை பலவும் சென்றேறித், தேசம் பலவும் ஒளி வீசிய தமிழ்க் கனல், நின்றவியாவாறு நெய்

வார்த்து, சூழ் இருள் நீக்கிய பெருமகன்—வண்மைத் தமிழை வாழ வைத்த வள்ளல் நமது அண்ணுமலை யண்ணல். தமிழர் மறந்தாலும் அவர்களைத் தமிழ் மறவாது.

என்றும் இருக்க உளங்கொண்டாய்
இன்பத் தமிழுக் காதரவாய்.
பொன்றும் உலகில் தமிழாலே
புகழ்கொண் டுயர்ந்தோர் பலர், பண்டே.
இன்று தமிழன் கலைவிளக்கை
ஏற்றி உலகில் ஒளி செய்தாய்.
என்றும் தமிழ்நின் உயிர்ப்பன்றே?
இறவாத் தமிழோ டிருப்பாய் நீ.

சு. அருணாசலம்.

திருக்குறளும் கம்பராமாயணமும்

(Vidwan, M. Arunachalam Pillai)

தெய்வப்புலமைத் திருவள்ளுவனென்னும் புலவர் பெருமானால், இற்றைக்கு ஆயிரத்தெண்ணூறு ஆண்டுகட்கு முன்னரே ஆக்கியருளப் பெற்ற திருக்குறளென்னும் சிறந்த நீதிநூலின் அருமை பெருமைகளை அறியாதாரிலர். அந்நூலின்கண் ஒவ்வொரு குறட்பாவினுங் காணப் படும் சொற்செறிவும் பொருட்பொலிவும் ஆழ்ந்த கருத்துக்களும் கற்பா ருள்ளத்தைக் கனிவிக்கும் இயல்புவாய்ந்தன. சங்கத்துச் சான்றோர் செய்யுட்கள் முதலாக இன்றுகாறும் எழுந்த நூலுரைகள் எல்லாவற்றி னும் திருக்குறளின் நறுமணங்கமழாதன இல்லையெனின் அதுமிகை யாகாது. அந்நூல், நம்செந்தமிழ் நாட்டில் தோன்றியதெனினும், அதன் சொற்பொருட் சுவையிலீடுபட்ட வேற்றுமொழியாளரும் வேற்று நாட்டவரும் ஒன்றற்கொன்றொவ்வாது மாறுபட்ட கோட்பா டுடையார் பலரும் அதனை விரைந்து பெற்றுத்தமக்கேற்ற பெற்றியின் அமைத்துச் சுவைத்து இன்புறுகின்றனரென்பதும் உலகறிந்த தொன் றும். இங்ஙனம் எல்லாவகையானும் மேம்பாடெய்திய அத்தெய்வத் திருக்குறணூலுக்குஅறிவாற்றல் நிரம்பிய பெரியார்பலர் உரை கண்டுள் ளாராயினும், இப்போது வழங்கிவரும் ஒரு சிலவுரைகளில் பரிமே லழகர் உரையே அந்நூலின் உண்மைப் பொருளைக்கண்டு தெளித்து இன்புறுதற்கு உதவியளித்து வருகின்றது. "வள்ளுவன் மீளவும் வந்துதித்துலகோர்க்கு, உள்ளிய பொருளை யுரைத்தன னென்ன,..... விழுப்பொருள் தோன்ற விரித்தினி துரைத்தனன்" என இவர் உரைப் பாயிரமும் பாராட்டுகின்ற தாகலின், இக்கட்டுரையில் அவ்வுரைக்கருத் தும் ஓரோவழி யெடுத்தாளப்படுதல் பொருத்தமுடையதாகும். கல்வி யிற் பெரியன், கவிச்சக்காவர்த்தி யெனச் சிறப்பித்துரைக்கப் பெறும் கம்பநாடர் தாமியற்றிய இராமாவதாரமென்னும் பெருங்காப்பியத்தில், திருக்குறளின் சொற்பொருள்களையும் கருத்துக்களையும் எடுத்தாண் டுள்ள முறையைச் சில செய்யுட்களின் வாயிலாக விளக்கிக்காட்டுதலே இக்கட்டுரையின் நோக்கமாகும். நம் கம்பநாடர் கூர்த்தமதிவலியும்

நிறைந்த நூலறிவும் ஒருங்கமையப்பெற்ற உயரிய நிலையினராதலின், பிறர் கூறுவன எல்லாவற்றையும் அவ்வாறே யேற்றுக்கொள்ளாமல் "எப்பொருள் யார் யார்வாய்க் கேட்பினு மப்பொருள், மெய்ப்பொருள் காண்ப தறிவு" என்னும் பொய்யாமொழியைக் கடைப்பிடித்துத் தாமும் பலவகையிலாராய்ந்து உண்மை துணிவதுடன் புதியமுறைகளை யுங் கையாளுவரென்பதை அவர் நூலின்கட் பலவிடத்துங் காணலாம். அவற்றுட் சிலவருமாறு :—

"ஈன்ற பொழுதிற் பெரிதுவக்குந் தன்மகனைச்
சான்றோ னெனக்கேட்ட தாய்"

என்பது புதல்வரைப் பெறுதல் என்னும் அதிகாரத்திலுள்ளது. "தன் மகனைக் கல்வி கேள்விகளால் நிறைந்தானென்று அறிவுடை யார் சொல்லக்கேட்டதாய் தான் பெற்ற பொழுதை மகிழ்ச்சி யினும் மிக மகிழ்வாள்" என்பது அதன் பொருள். இங்ஙனம் உரை யெழுதிய பரிமேலழகர், பெரிதுவக்குமெனவும் கேட்டதாயெனவும் தெய்வப்புலவர் கூறியதற்குக் காரணமிருத்தல் வேண்டுமெனக்கருதிக், "கவானின் மகற்கண்ட பொதுவுவகையினும் சான்றோனெனக் கேட்ட சிறப்புவகை பெரிதாகலிற் 'பெரிதுவக்குமெனவும் பெண்ணியல்பால் தானுக அறியாமையிற் கேட்டதாயெனவுங்கூறினு" மெனவும், "தாயு வகைக்கு அளவின்மையின் அஃது இதனுற் பிரித்துக் கூறப்பட்டது" எனவும் விளக்கமும் எழுதியுள்ளார். ஒருதாய், கருவுற்றநாள் முதல் மயற்கை நோயானும், தக்கவாறு உணவுட்கொள்ள இயலாமையால் உடல் மெலிந்து தன்வயமிழந்து அக்கருவைச் சுமந்து திரிதலாலுண்டா கும் வருத்தத்தானும், பொறையுயிர்க்குங்காலுண்டாகும் நோவானும் அடைந்த துன்பங்கள் அனைத்தையுமறந்து, தன்மடியின்கணிருந்து பல்லாற்றானும் இன்புறுத்தும் மகனைக்கண்டு உவகையெய்துகின்றாள். அம்மகன், எதிர்காலத்தில் நற்குண நற்செய்கைகளை யுடையனாய்த் தன்னை அகமகிழ்விப்பனே அல்லனுயிர்விப்பனே அஃது அது போழ்து அறியப்படாமையின் அவ்வுவகையைப் பொதுவுவகையெனவும், கல்வி கேள்விகளால் நிறைந்தானென்று அறிவுடையார் கூறக் கேட்டளவில், இப்பிறப்பானெய்தும் பெரும்பேற்றை அம்மகப் பேற்றாலெய்தினளாக உவகையுறுதலின் அதனைச் சிறப்புவகை யெனவும் எழுதியது மிகப் பொருந்தும். அன்றிக் கவானின் மகற் கண்டின்புறுதல், மகற்பெற்ற ரனைவர்க்கும் பொதுவாகலின் அதனைப் பொதுவுவகை யெனவும்,

சான்றோனெனைக் கேட்டின்புறுதல், நன்மகற்பெற்றூர்க்கே யுரித்தாக லின் அதனைச் சிறப்புவகையெனவுங் கூறினுரெனினும் அமையும். அறிவிக்க அறிந்து கடைப்பிடித்து ஒழுகுதலன்றித் தாமாக நன்றுந் தீதுங்கண்டுணரும் பெற்றிமை பெண்பாலார்க்கு இயல்பாக இல்லை யெனக்கருதினுராதலின் கேட்டதாயென்றதற்கு அவ்வாறு விசேடம் எழுதினர். அவை நிற்க.

நம் கல்வியிற் பெரியராய கம்பநாடர் இக் குறளை ஊன்றிப் பார்க் கின்றூர். சான்றோனெனைக் கேட்டதாய் ஈன்ற ஞான்றினும் பெரிதுவப்பாளெனவே, தந்தை மைந்தனது சான்றாண்மையைத் தானுக அறிந்து மகிழ்வனென்பது பெறப்படுகின்றது. தானுக அறிந்து மகிழ்தலினும் தக்கார் வாய்க்கேட்டுப் பெரிதுமகிழ்தல் ஒரு தந்தைக்கும் உண்டாதல் ஒருதலையாமென்ப துணர்ந்து, தாயைப் பற்றிக்கூறிய இக்குறட் கருத்தை ஒரு தந்தைக் கேற்றிக்கூற முற்படு கின்றூர். ஆன்றவிந்தடங்கிய கொள்கைச் சான்றோராகிய வசிட்ட ரையும் சூழ்ச்சித்துணைவராகிய அமைச்சர் பல்லாயிரவரையும் ஒருங்கு கூட்டி அவரைநோக்கி, இராமனுக்கு முடிசூட்டி அரசீந்து காட்டிற் சென்று அருந்தவஞ்செய்ய எண்ணியுள்ளேன். நும் கருத்தென்னை? யெனத் தசரதன் வினவியகாலை, வசிட்டமுனிவர் இராமனுடைய பெறற் கரும்பெருங் குணங்களையும் செயற்கருந் தீரச்செயல்களையும் பாராட்டிக் கூறத்தொடங்கி, அரசே, நின்குலத்துதித்த முன்னையோராய மன்ன வர் பலர் நேமியுருட்டிப் பூமிபுரந்தனராயினும் இராமனைப்பெற்றூர் எவருமிலர்; நின்னைப்பிரிந்த நிலமகள் கண்ணிழந்தாள்போலக் கவலை யுறுவண்ணம் நின்மகன் அவளைக்காத்தல் செய்வான்; ஆக்கல் காத்தல் அழித்தலென்னும் முத்தொழிலியற்றும் முதற்கடவுளர் மூவரை யொப்ப அத்தொழிலியற்றும் ஆற்றல்மிக்குடையான் அவனுகலின், அறத்தின் மூர்த்தியேவந்து அவதரித்தானென்று சொல்லற்கு ஏற்றவ னுகின்றன்; தன்னுயிர்க்கு நல்லனென்றுதல் தன்னைப் பயந்த நின் னுயிர்க்கு நல்லனென்றுதல் கூறுதல் அவன் பெருமைக்கு ஏலாது; உலகத்து மன்னுயிர்க்கெல்லாம் நல்லனென்றலே யேற்புடையதாகும்.; அவன் பெயரை ஒருமுறை ஓதியளவானே துன்பங்கள்பல நீங்குதலை அநுபவத்திற் கண்டறிந்தாராதலின், அந்தணர் முதலிய எல்லோரும் தாந்தாஞ்செய்த அறத்தின் பயனென்றே அவனை மதிக்கின்றனர்; கற்றவரும் மற்றவரும் தாம் உண்ணும் நீரினும் உயிரினுமேலாக

அவனைப் போற்றுகின்றனர்; மக்களிலாதல் வானவரிலாதல் அறநெறி பிழையாது ஆட்சிபுரிவோரில் இராமனைப்போலச் சிறந்தவர் ஒருவரு மிலர். ஆதலின் அவனுக்கு அரசுரிமையீதல் எவ்வாற்றானும் இயைவ தாகும். நீ முன்னர் வேள்விபல வியற்றி மேன்மையுற்றனை யாதலின் இனி அருந்தவம் புரிதலும் அடுக்கும். இவ்விரண்டும் விரைந்து செயற் பாலனவேயென்று கூறிமுடித்தார். இங்கிலையிற் கம்பர்கூறும் பாட லாவது,

> "மற்ற வன்சொன்ன வாசகங் கேட்டலு மகனைப்
> பெற்ற வன்றினும் பிஞ்ஞகன் பிடித்தவப் பெருவில்
> இன்ற வன்றினும் எரிமழு வாளவன் இழுக்கம்
> உற்ற வன்றினும் பெரியதோ ருவகைய னனன்"

என்பதாம். "தன் மகனைச் சான்றோனெனக் கேட்டதாய் ஈன்ற பொழுதிற் பெரிதுவக்கு" மென்ற குறட் கருத்தை ஒரு தந்தைக் கேற்ற முகமாக "மற்றவன் சொன்ன வாசகங் கேட்டலு மகனைப், பெற்ற அன்றினும்.....பெரியதோ ருவகையனனன்" என்று அச் சொல்லையும் பொருளையும் எடுத்தாண்டனர். இன்னும் இப்பாடலை யுற்று நோக்கிற் பல செய்திகள் புலனாகின்றன. வள்ளுவர், நல்ல மகனை யீன்றெடுத்த ஒரு தாயின் மன நிலையை அளந்து கூறினராத லின், ஈன்ற பொழுதிற் பெரிதுவக்கு மென்றலே அமையும். இவர் ஒரு தந்தை மேல் வைத்துக் கூறுதலால் அவ்வளவின் நிறுத்துதல் போதியதாகாது. மகனுடைய அறிவு ஆற்றல் முதலிய நலவளர்ச்சி யிற் கண்ணுங் கருத்துமா யிருப்பவன் தந்தையாகலின், இராமனுடைய வீரச் செயல்களைப் பற்றித் தயரதன் கண்டும் கேட்டும் அறிந்தவற்றை யும் நினைவிற்குக் கொண்டு வருகின்றார். அறுபதினாயிரம் ஆண்டுகள் கழிந்த பின்னரும் புதல்வர்ப் பேறின்றி 'எற்பின் வையகம் மறுகுறு மென்பதோர் மறுக்க' முற்ற மன்னனுக்கு அப்புதல்வற் பேறு அம் மறுக்கந் தீர்ந்து இன்புறுதற்கு ஏதுவாயிற்றாகலின், முதலில் மகனைப் பெற்ற அன்றினு மென்றார். பின்னர், மிதிலையிற் சிவதநுசை முறித்தா னென்ற தீரச் செயலைத் தூதர் வாய் மொழியானும் திருமுகத்தானுங் கேட்டறிந்த போழ்து, மூன் பெற்ற ஞான்றெய்திய உவகையினுமிகுதி யாக 'மலையென வளர்ந்தன வயிரத்தோள்களே' என்னும்படி உடல் பூரித்து உள்ளத்து உவகை பூத்தானதலின், இரண்டாவதாக வில்லி றுத்த செய்தி கூறினர். மிதிலையினின்று அயோத்திக்குத் திரும்புங்

கால், எதிர்ப்பட்ட பரசுராமனைப் பலவாறு குறையிரந்து வேண்டியும், அதற்கிணங்காது வெகுண்டு நின்று பொருதற் கழைத்த அவனுக் காற்றாது மயங்கித் துன்பக் கடலில் வீழ்ந்து கிடந்த மன்னவன், தன் மகனுல் அப்பரசுராமன் தோல்வி யுற்றமையைக் கண்டு 'களிப்பெனுங் கரையிலாக் கடலில் ஆழ்ந்தன'னுதலின், அவ்விரண்டினு மேற்பட்ட இவ்வென்றியை மூன்றுவதாகக் கூறினர். இம்மூன்றும் ஒன்றற் கொன்று மிகுதியாக உவப்பிப்பனவாகவும் இவ்வெல்லாவற்றினு மேலாக 'மற்றவன் சொன்ன வாசகங் கேட்டலும்.....பெரியதோரு வகையனுனன்' என்றதற்குக் காரண மென்னையெனின், மகனைப் பெற்றது முதலிய மூன்றும் தானே கண்டும் தூதர் வாய்க் கேட்டும் உவகையுறுதற்கு ஏதுவாயின. தான் மகவாசையால் மயங்கி அளவின் மேற்பட மகிழ்ந்திருத்தலுங் கூடும். பிறர்க்கு அவை மகிழ்ச்சிதாரா மலு மிருக்கலாம். இவை குறித்துப் பிறர் நினைவுயாதாகுமோ என்ற ஐயப்பாடு தயாதனுக்கு உண்டு. இதனை "மகவபின் அன்பினுல் மயங்கியானிது, புக்லீர் புகன்ற இப்பொம்மல் வாசகம், உகவையின் மொழிந்ததோ வுள்ள நோக்கியோ, தகவென நினைந்ததோ தன்மை யென்னென்றன்" எனப் பின்னர் அரசரை நோக்கி அவன் கூறிய வாற்றுலுணரலாம். அன்றியும், ஒருவர் மற்றொருவரைப் பாராட்டிக் கூறுவதிற் பலதிறம் உண்டு. பாராட்டப்படுவோர்பால் அதற் கேற்ற குணஞ் செயல்கள் இல்லையெனினும், அவராற் பெரும் பயனிற் பற்றுவைத்துத் தனியிடத்தில் அவரை வாயாரப் புகழ்ந்து கூறிவிட்டு, அறிவுடையார் முன்னிலையில் அங்ஙனங் கூற மனந்துணியாது வாய் வாளாதிருத்தலுஞ் செய்வர் தக்கவரல்லாதார். இங்கு அங்ஙனமன் றித் தன் ஐயப்பாடும் நீங்கும்படி, விழைவு வெறுப்பற்ற முனிவர் தலை வரும் தன் குலகுருவுமாகிய வசிட்டர், அறிவிற் சிறந்த அமைச்சர் அறுபதினுயிரவர் முன்னிலையில், தன் மகனைக் குறித்துத் தான் மதித் திருந்த அளவினு மேலாகப் பாராட்டிக் கூறிய உண்மை யுரைகளைச் செவி நிரம்பக் கேட்டுத், தந்தை மகற்காற்று நன்றியையும் மகன் றந்தைக் காற்றும் உதவியையும் ஒருங்கெய்தப் பெற்றேன், இதனினும் சிறப்ப இனி யெய்தற்பால தொன்றில்லை யென மிகவும் உவகையுற்ற னுதலின், பெரியதோருவகையனுனன் என்றார். அங்குத் தாயின் மன நிலையை விதந்து கூறியதோர் குறை யெடுத்து இங்குத் தந்தையொரு வர்க் கேற்றி அழகு படுத்தியிருப்பது பாராட்டத் தக்கதாம்.

"எளிதென இல்லிறப்பான் எய்துமெஞ் ஞான்றும்
விளியாது நிற்கும் பழி"

என்பது பிறனில் விழையாமை யென்னும் அதிகாரத்திலுள்ளதாகும். "எய்துதல் எளிதென்று கருதிப் பின் விளையும் பகை பழிபாவங்களைக் கருதாது அயலான் மனையாளிடத்து நெறி கடந்து செல்வானெருவன், மாய்தலின்றி எக்காலத்தும் நிலைநிற்குங் குடிப்பழியினை யெய்துவான்" என்பது இதன் பொருள். இங்ஙனம் ஓராண்பால்மேல் வைத்துக் கூறியது உபலக்கணத்தாற் பெண்பாற்கும் எய்துமாயினும், இத்தீச் செயல் ஒரு பெண் மகளிடத்து நிகழின் அவளும் எஞ்ஞான்றும் வீயாது நிற்கும் பழியினை யெய்துவ ளென்பதை வெளிப்படையாகக் கூறவேண்டுமெனக் கருதிய ஆசிரியர், தம் காப்பியத்தில் அதற்கு வாய்ப்பான தோரிடம் பார்த்து அமைக்கின்றார். அஃதாவது:—

"சரந்தரு சாப மல்லால் தடுப்பருஞ் சாபம் வல்ல
வரந்தரு முனிவ னங்கே வருதலும் வெருவி மாயா
நிரந்தரம் உலகில் நிற்கும் நெடும்பழி பூண்டாள் நின்றாள்
புரந்தரன் வெருவி யாங்கோர் பூசையாய்ப் போக லுற்றான்"

என்பதாம். அகலிகையானவள், தன் கணவனுருத்தாங்கி வந்த இந்திரனெடு கூடி இன்புற்றிருக்குங்கால், கௌதமர் ஆங்குவரவே, அவள் அச்சமுற்றொதுங்கி நின்றாள். இந்திரன் பூனை வடிவெடுத்து வெளியே போகத் தொடங்கினன் என்பது வரலாறு. இங்ஙிலையில், அகலிகை நெறி பிறழ்ந்து அயலானெருவனைக் காதலித்திலளாயினும், கணவனெனக் கருதிய இந்திரனெடு கூடிப் புதுமண மதுவின் தேறலை ஒக்க வுண்டிருந்த காலை, இவன் கணவனல்லன் அயலானென்பதை நன்கு உணர்ந்த பின்னும், முன்னர்ப் பயின்றறியாத அப்புதிய வின்பத்திற் பயிர்ப்பின்றி ஈடுபட்டிருந்தது பெருந்தவறுமாதலின், அவள் மேற் பழியைச் சுமத்துகின்றார். தான் கருதாத நிலையிலும் பிறனெரு வன் தன்னைக் காதல் நோக்கத்துடன் காண்டற்கு இலக்காய் நிற்பின் அதுவே தனக்கு இழுக்கெனக் கோடல் கற்புடை மகட்கு இயல்பாம். "மண்டிணி ஞாலத்து மழை வளந்தரூஉம், பெண்டிராயிற் பிறர் நெஞ்சு புகாஅர், புக்கேன் பிறனுளம் (ஆதலால்) புரிநூல் மார்பன், முத்தீப் பேணு முறையெனக் கில்லை" என்று பத்தினிப் பெண்ணொருத்தி கூறியது காணலாம். வரம்பிறந்து சென்று வஞ்சச் சூழ்ச்சியால் அயலான் மனைவியை அநுபவித்த இந்திரன் மேல் அப்பழியை யேற்றி

யிருப்பாராயின் திருக்குறட் கருத்தை நேரே யெடுத்தாண்டா ரென்ன லாம். இவ்விடம் அதற்கு மிகவும் பொருத்த முடையதாகும். அங் ஙன மன்றி அகலிகையின் பால் அப்பழியை அடைவித்தலால், மக ளிர்க்கும் அக்கருத்தை யேற்றிக் கூறவேண்டு மெனக் கருதினரென்பது வெளியாகின்றது. இனி இவ்விரு பெருமக்களின் பாடற் பகுதியை யும் ஒப்பிட்டுப் பார்ப்போம். அவை, "இல்லிறப்பான் எய்தும் எஞ் ஞான்றும் விளியாது நிற்கும் பழி" "மாயா நிரந்தரம் உலகில் நிற் கும் நெடும்பழி பூண்டாள்" என்பனவாம். இவற்றுள், எஞ்ஞான்றும் என்பதற்கு நிரந்தரம் எனவும், விளியாது என்பதற்கு மாயா எனவும், நிற்கும் பழி யெய்தும் என்பதற்கு உலகில் நிற்கும் நெடும்பழி பூண் டாள் எனவும் ஒவ்வொன்றற்கும் நேரான சொல்லே நிறுத்தமைத் திருத்தல் காணலாம். ஆயினும், நெடும்பழியென நெடுமைச் சொல் ஒன்றினை மிகுத்துப் பெய்திருத்தல் நோக்கத்தக்கது. ஆடவனொரு வன், அயலான் மனைவியைக் காதலிக்கும் நீய ஒழுக்கத்தை மேற் கொள்வானாயின், அதனாலுண்டாகும் பழி எஞ்ஞான்றும் மீயாது நிற்குமாயினும் அவன் வாளுள் ஒழிவில் தானுமொழியும். ஒரு பெண் மகள் பால் இப்பரத்தமைத் தீச்செயல் நிலவுமாயின், அதனாலுண்டாம் பழியை அவள் அளவினன்றி அவள் வயிற்றுப் பிறந்த பிள்ளைகள் மீதும் உலகம் ஏற்றித் தூற்றுமாகலின் நெடும்பழி யென்றார் எனக் கோடல் பொருந்தும். இங்ஙனம் வள்ளுவர் வாய்மொழியை மனத் துட் கொண்டு கூறினராயினும் தாம் கூறுமிடத்திற் கேற்ப நிறுத்துணர்ந்து சொற்பெய்திருக்குந்திறன் அறிந்து இன்புறுதற்குரிய தொன்றும்.

> "துஞ்சினார் செத்தாரின் வேறல்லர் எஞ்ஞான்றும்
> நஞ்சுண்பார் கள்ளுண் பவர்"

என்பது கள்ளுண்ணுமை யென்னும் அதிகாரத்திலுள்ளது. "உறங்கி னார் செத்தாரின் வேறுதலுடையரேனும் அக்காலத்து அறிவின்மை யால் வேறெனப்படார். அவ்வாறே, கள்ளுண்பார் நஞ்சுண்பாரின் வேறுதலுடையரேனும் அக்காலத்து அறிவின்மையால் வேறெனப் படார்; அவர் தாமேயாவர்" என்பது பரிமேலழகர் உரை. இக் குறளின் பிற்பகுதியே ஈண்டு எடுத்துக்கொள்ளப்படுவது. அது, கள்ளுண்பவரும் நஞ்சுண்பவரும் ஒரு நிலையினராவரென்பதாம். இங் ஙனம் கள்ளுண்டலும் நஞ்சுண்டலும் தம்முள் ஒக்குமென்பதை யேற்

றுக்கொள்ளுதற்குக் கம்பருள்ளம் ஒருப்படவில்லையாதலின், அவ்வதி காரத்திலுள்ள ஏனைய குறட்பாக்களையும் காணத் தொடங்கினர். பகை வர்க் கெளியராதல், நன்கு மதிக்கற்பாடும் நாணுமிழத்தல், சான்றோ ரானும் ஈன்ற தாயானும் வெறுத்தொதுக்கப்படுதல், பிறரால் எள்ளி நகையாடப்படுதல், பொருள் கொடுத்து மெய்ம்மறப்பு சோர்வு என்ப வற்றை மேற்கொள்ளல், திரிக்கப்படாமை முதலிய குற்றங்கள் கள் ளுண்டார்பாற் காணப்படும் என்று கூறப்பட்டிருத்தலைக் கண்டார். இங்ஙனம் பல்வகைத் துன்பங்களுக்குங் காரணமாய தீக்குணங்களும் அவற்றின் பயனுய நரகத் துன்பம் அநுபவித்தலும் பயப்படாய கள் ளுண்டற்கும், தன்னை யுண்டாரைத் தானுண்ணுதலாகிய ஒன்றே செய்யவல்ல நஞ்சுண்டற்கும் வேறுபாடு பெரிதுளதென்பதை உளத் துட்கொண்டு, இக்கருத்துக்களெல்லாவற்றையும் அடக்கி அவ்விரண் டன் இயல்பையும் விளக்குவாராய்,

> "வஞ்சமுங் களவும் பொய்யும் மயக்கமு மரபில் கொட்பும்
> தஞ்சமென் றுரை நீக்குந் தன்மையுங் களிப்புந் தாக்கும்
> கஞ்சமெல் லணங்குந் தீநங் கள்ளினுல் அருந்தி னுரை
> நஞ்சமுங் கொல்வ தல்லால் நரகினை நல்கா தன்றே"

என்றார். இனி, இக்குறட்பாவுக்குத் திரிக்கப்படுதலால் உறங்கினரும் நஞ்சுண்பாரு மொப்பர். கைவிடப்படுதலால் செத்தாருங் கள்ளுண் பாரு மொப்பர் என நிரல் நிறையாக்கிப் பொருள் கூறுவாரு முளர். அவ்வாறு கூறினும், ஒரு நாள் ஒரு பொழுதைத் துன்பம் பயப்பதாய இறத்தலுக்கும், பழிபாவங்களைப் பயந்து இம்மை மறுமை யிரண்டினும் இடையறாத் துன்பம் விளைக்கும் கள்ளுண்டலுக்கும் வேற்றுமை பெரிது முளதாகலின், கள்ளுண்டல் எவ்வாற்றானுங் கொடிதென்பது பெறப்படும். இங்கு, நஞ்சுண்பார் கள்ளுண்பவர் என்பதை மேற் கொண்டே கம்பர் அவ்விரண்டற்கும் வேற்றுமை காட்டுவாராயினர்.

> "பகல்வெல்லுங் கூகையைக் காக்கை யிகல்வெல்லும்
> வேந்தர்க்கு வேண்டும் பொழுது"

என்பது காலமறிதல் என்னும் அதிகாரத்திலுள்ளது. "தன்னின் வலிதாகிய கூகையைக் காக்கை பகற் பொழுதின்கண் வெல்லா நிற்கும். அதுபோல, பகைவரது இகலை வெல்லக் கருதும் அரசர்க்கு அதற் கேற்ற காலம் இன்றியமையாது" என்பது இதன் பொருள். வலிய

அரசராயினும் காலம் அல்லாத காலத்துப் போர் செய்யத் தொடங்குவ ராயின் எளியரானும் வெல்லப்படுவராதலின், காலமல்லா வழி வலியாற் பயனில்லை யென்பதை விளக்குதற்கு உவமையாக இதன் முற்பகுதி யெடுத்துக் காட்டப்பட்டது. மிதிலை வேந்தன்பாலுள்ள இறைவன் வில்லை வளைத்தாரே மைதிலியை மணத்தற்குரியாரென்று உறுதி கூறி யதை யுணர்ந்த மன்னர் பலர், அவ்வல்வில்லை வளைக்கும் ஆற்றல் இல ராயினமையின், மாரவேள் வளைகருப்பு மெல்வில்லுக்கும் ஆற்றராய்ச் சீதையின்மேற் காதல்கொண்டு மோதமர் விளைக்க மூண்டு மீண்டகாட் பொருதனர். அம்மன்னர் பலர் மூன்னிலையில் தன்னந்தனியனாய் நின்று போர் செய்து மெலிவுற்ற சனகன், தேவரை வேண்டிப் படை கள் பெற்றனன். இதனையறிந்த அளவில் அவர் அஞ்சியோடினரென்னு மிடத்தில்,

"வேந்தர், அற்காக்கை கூகையைக்கண் டஞ்சினவா மெனவகன்றார்"

என்றார் கம்பர். 'பகல்வெல்லுங் கூகையைக் காக்கை" என்றதன் அருத்தாபத்தியால், இரவில் காக்கையைக் கூகை வெல்லும் என்பது பெறப்படும். 'ஆயிரங் காக்கைக் கோர்கல்' என்றபடி, இரவுத் துணை பெற்ற வலிய கூகை யொன்றனைக் கண்டு, மிகப் பல காக்கைகள் வெருண் டோடுதல்போன்று, பலரொடும் பலகாலம் பொருது மெலிவுற்ற மிதிலை வேந்தன் விண்ணவரருளாற் படைவலி பெற்றனென்ற அளவில் பகை மன்னரெல்லோருந் திரண்டோடியமைக்கு, இவ்வருத்தாபத்திப் பொருளே தக்க எடுத்துக் காட்டாமென நினைந்து மாற்றிக் கூறிய திறம் போற்றற்குரியது.

இங்ஙனம் உலகியலை நுனித்துணர்ந்து மக்கள் உள்ளத்திற் பதியு மாறு செய்யுள் இயற்றுதலில் ஒப்பாரும் மிக்காரும் இலராய கம்ப ரென்னும் புலவர்பெருமான், திருக்குறளின் சொற்பொருள்களையும் கருத்துக்களையும் எடுத்துத் தம் நூலின்கண் தக்க இடனறிந்து அவ்வவ் விடத்திற்கேற்ப மாற்றியமைத்து அழகுபடுத்தி யிருப்பது சுவை யுணர்ந்து படித்து இன்புறுதற்குரியதாகும். இவைபோன்று இன்னும் பலவுளவேனும் விரிவஞ்சி இம்மட்டில் நிறுத்தப்பட்டது.

ஹானரபிள் டாக்டர், ராஜா ஸர் அண்ணமலைச் செட்டியார் அவர்களின்

அறுபதாம் ஆண்டு நிறைவு விழாக் கொண்டாட்டத்தில்

வித்துவான் மு. அருணாசலம் பிள்ளை பாடிய

வாழ்த்துப்பாக்கள்.

மூதுரீ ருலகில் முத்தமிழால் முரன்று வளீகா லொளிர்முத்தால்
மூவா மருந்து நுகர்பதியும் மொழிய லாகா துவமையெனத்
துதிசேர் வழுதி வளநாட்டில், தொழிலாற் பொருளா லறச்செயலால்
துகளி லின்பத் தாலிறைவன் தோழ னகரை வென்றுபுகழ்
கதுவா நிற்குங் **காடு காத்தா** னெனுநன் னகர்க் கணியாய்க்
கதிர்த்த செல்வன் முத்தையவேள் கருத்திற் கனிந்து செயுந்தவத்தாற்
புதுநீர் மையதா யறத்தினுருப் பொலிவுற் றெனவந் துதயஞ்செய்
பூமான் **அண்ணா மலையரசன்** புகழ்நீ டூழி வாழியவே. 1

தக்க குணஞ்சால் பொருள்வணிகர் தழைத்த மரபிற் பட்டினத்துச்
சாமி யுதித்த பெருங்குடியின் சால்பு வளரச், சைவநெறி
மிக்குப் பரவ, அருள்பெருக, மேன்மை யறங்கள் குதுகலிப்ப,
விளங்கு கலைமா துளங்குளிர, வியனுர் திருவும் பயனுறவே,
திக்கெட் டினும்வாழ் பவர்மகிழச், சிந்தா மணியும் ஐந்தருவும்
திகழுங் காம தேனுவொடு தெய்வ நிதியுந் திரண்டொருங்கு
மக்கள் வடிவின் வந்தமைபோல் மன்னிப் பிறந்த நன்னயஞ்சேர்
மன்னன் அண்ணாமலைக்குரிசில் வண்மைக் கிணையோ மழைமுகிலே! 2

எண்ணுங் கருமம் எண்ணியவா றியற்றுந் திறனும் நூலறிவும்
இணையில் சூழ்ச்சி மதிவலியும் எவரும் போற்றும் பெருந்திருவும்
நண்ணும் பெருமை யுறலாலும், ஞால முளகா றினிதியலும்
நலமா ரறங்கள் செயலாலும் நாளு மவைகண் டுளமகிழ்ந்து
கண்ணும் உயிரும் போலுலகங் காக்கு மரசர் பெருமானுர்,
கவினுர் டாக்டர் ராஜாஸர் முதலாம் விருது களுமுதவி
விண்ணின் மணிபோல் ஒளிபரப்பு வித்தா ரெனிலெம் பெருங்குணத்து
வேந்தன் அண்ணா மலைக்குரிசர் வேரு ருளரிம் மேதினிக்கே! 3

பாண்டி வளநா டாண்டமுடிப் பைந்தார்ச் செழியர் தமிழ் வளர்க்கும்
பண்பிற் சிறந்தா ரெனப்புலவர் பலரும் பலகாற் புகழ்ந்தனரால்
சுண்டு புகழ்அண் ணாமலைவேள் இயன்முத் தமிழும் வடமொழியும்
இனிய வடுகு மலையாளம் ஏற்ற முறும்ஆங் கிலமுதலா
வேண்டு மொழியும் உடன்வளர விழைந்து பலநூ றுயிரம்பொன்
விதைத்து நகர்கண் டறிவணங்கு மிளிருங் கோயில் பலசமைத்து
யாண்டும் இசைத்தூண் நாட்டினலால் யாரே மேலாந் தகையரென
யானே புகல்வேன் புலவீர்காள் யாவும் பெருவீர் பாடுமினே. 4

இன்ன தகைசால் பெருமான்நம் ஏந்தல் அண்ணா மலைவள்ளல்
இருமுப் பானண் டினிதினுறும் ஏற்றங் குறித்து நாற்றிசையும்
பன்னற் கரிய மகிழ்பூத்த! பரமன் திருமா மணிமன்றிற்
பாக முடையாள் காணநடிப் பவன்செய் யருளால் மேன்மேலும்
சொன்ன மலைபோல் நிலைபெற்றுத் துரிசில் யாக்கை யூக்கம்வலி
தொடர்ந்து வளர நூறுண்டிற் சுகமா மணமா லையுஞ்சூடி
மன்னும் வாழ்க்கைப் பெருந்தேவி மக்கள் ஒக்கல் புடைசூழும்
வாழ்வு தழைத்துப் பல்லாண்டு வாழ்க வெனயாம் வாழ்த்துவமே. 5

ராஜா சர் அண்ணாமலை வள்ளலார் வாழ்த்து

(By Bharathi Dasen)

அகவல்.

மலர்தலை யுலகிற்கு வான்பெரு நாடு
பலர்புகழ் ஞாயிறு படைத்தது போன்று
பண்ஆர் தமிழ்நாடு பகர் ராஜாசர்
அண்ணா மலைச்செட் டியாரை இந்தத்
தமிழர் இழைத்த தவத்தின் பயனாய்
அமிழ்தம் போல அளித்த தன்றே!

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அருளினால் அக்கதிர் அம்புலிதன்னை
இருளினால் படாமை இழைத்தது போல
நல்கலை நயந்த அண்ணாமலையார்
பல்கலை மதிக்கு - ஒளி பாய்ச்சி அருளினார்
விண்ணுக்கு அத்திங்கள் விளக்காவது போல்
மண்ணுக்கு அக்கழகம் மணி விளக்கன்றே!

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நிலவு பொழிந்து நிலவு பொழிந்து
குலவும் அத்திங்கள் குளிர்செய்வது போல்
நண்ணப் பெரும்பேறு நண்ணு ராஜாசர்
அண்ணாமலைக் கலைக் கழகமோ வெனில்
அறம் பொருள் இன்பம் ஆம்வீட்டறிவின்
திறம் பொழிந்து திறம் பொழிந்து
மடமையாம் வெப்பினை வறுமையாம் பிணியினை
நடமின்'என்று நடத்தித் தீர்த்துக்
குளிரினைப் பெரிதும் கொழிக்கின்றதுவே!

பன்னரும் புகழினைப் பாரெலாம் செலுத்திய
மன்னரும் அறிஞரும் வாழ்ந்தஇத் தமிழ்நாடு
இனிப்புறுங் கரும்பின் நுனிப்புறம் சுவைதேய்ந்து
போதல் போலப் புனிதம் தேய்ந்தும்
சாதல் போலத் தளிர்ச்சி எய்தியும்
குழிவுறும் கண்ணும் குனிவுறும் தோளுமாய்
அழிவுறக் கண்ட அண்ணாமலையார்
அருளரும் அம்பலத் தருகில் மக்கட்குத்
தெருளரும் அம்பலம் தேடி 'அண்ணாமலை
நகர்' எனப் பேரிட்டு நாவலர் உள்ளமே
நிகர் எனப் பெரிதாய், நேயர்போல் நல்லதாய்
பெருந்தமிழ் வேந்தர் பேழைபோல் கண்ணுல்
அருந்தமிழ்தாக அமைத்த நிலையத்துப்
பாவிரி புலவர் பலரையும் கூட்டிக்
காவிரிப் பெருக்கெனக் கல்விப் பெருக்கைத்
தென்னாட்டுளந் தொறும் சேர்த்துத் தென்னாடு
பொன்னாடாகப் புரிந்த நன்றியால்
அண்ணாமலைப்பேர் அதனை நாடொறும்
எண்ணாத் தமிழர் எங்கணு மில்லை!
தெங்கிளங் காய்தொறும் தித்திக்கும் நீர்போல்
இங்குளார் உளந்தொறும் இனிக்கின்ற தப்பெயர்!

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அனைவரும் அவ்வாறு - அப்பெரு வள்ளலை
நினைவ தோடு நிற்றலின்றி
உண்ணிலவும் அந்நினைப்பு - உவகையொடு புணர்ந்து
தண்ணிலவு புணர்ந்த வண்கடல் போலப்
பொங்கிட இங்கொரு புதுநாள் வந்தது
புதுநாள் என்னெனில் புகல்வேன் கேளிர்:
நாள்ஒவ்வொன்றும் நன்மதி எதுவும்
வேள்இந்த நாட்டுக்கு வினைத்த அறங்கண்டு
வாழ்த்திச் சென்றன ; வாளா கழிந்திலை
ஆண்டு - ஒவ்வொன்றும் அண்ணாமலையார்
ஈண்டு மக்கட்கு - இழைத்த நன்மைக்கு

நன்றி கூறுது நடந்த தில்லை!
அண்ணுமலையார் அருங்கொடை வாழ்வில்
எண்ணு வெறுநாள் எதுவும் இல்லை
அன்னுர் கண்ட அவ்-அறநாட்கள் எனும்
மின்னுர் பவள மெல்லிதழ்ப் பெண்கள்
பற்பலர் அரசரைப் பரவிப் போனபின்
அற்புதப் பெண்ணும் அறுபதாம் ஆண்டு
மான்போல் வந்து மலர்போற் சிரித்துத்,
தேன்போல் பேசிச் சேல்போல் விழியால்,
மங்குல் போலும் வள்ளலாரின்
தொங்கல் மார்பைச் சுவைத்து நிற்க,
அவர்அவ் வறுபதாம் ஆண்டை அணைந்தனர்.

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இருமுப்பான்-ஆண்டு எய்திய அண்ணலார்
வருநூற்றண்டையும் மணக்கத் தக்க
குன்றத் தோளையும் குளிர்மலர் விழியையும்
அன்றலர் மலர்முகத் தழகையும் கண்ட
அவர்மனை-என்னரும் அன்னையாரோ வெனில்
புதுமணம் கண்டமோதுதம் காதலர்
மதுமணம் கண்ட மலர்க்கை நீட்டி
அங்கம் சிலிர்க்க அணிசெய் திட்ட
மங்கல நாணையும், மணுளர் தம்மையும்
கிள்ளை முதிரை கொள்ளுவதுபோல்
அள்ளி முத்தம் அளித்து மகிழ்ந்தார்.

* * *

அன்பொடு செட்டிநாட் டரசர் அரசியார்
மன்றினில் திருமுக மலர்ந்து வீற்றிருக்கப்,
பொதிகைத் தென்றல் புதுமணம் புரிந்தது!
வதிகைப் பரிதி மணிவிளக் கெடுத்தது!
முழங்கு தென்கடல் மூசம் ஆர்த்தது!

* * *

பழங்குடிமக்கள் இழந்தவை அனைத்தும்
இவை என்று கொணர ஈன்றதம் மக்கள்
அவையினில் இளவரசழகு செய்தனர்.

பாருக்குள் பற் பலகோடி மாந்தரின்
வேருக்கு வித்தாய் விளைந்த தொன்மைச்
செந்தமிழ் மக்கள் திசையடங்கலும்
கந்தமிழ் மொழியால் தாம்தாம் வாழ்த்திய
வாழ்த்தொலி அனைத்தும் மகாவீணைதான்
வீழ்த்திய அமுத வெள்ளமோ ! தாமரை
விரிந்த வாய்தொறும் விண்ணை நனைக்கச்
சொரிந்த தேனூற்றுத் தொடர்போ ! வேய்ங்குழல்
இசையின் பிழம்போ ! இன்தமிழ்ப் பாட்டொடு
பிசைந்து கிடக்கும் பெரும்பயன் தானே !
அதிர்த்த தென்கடல் அகடு பூரித்து
உதிர்த்த முத்தமோ ! உலக மெல்லாம்
அகில்கமழ் குன்றின் அணித்து-உளார்கேட்கும்
முகில்கமழ் ஓசையோ ! மொய்த்த தமிழர்க்கு
நண்ணுப் பேறு-என நண்ணு ராஜா சர்
அண்ணுமலையார், அரசியார், மக்கள்
வாழ்க பல்லாண்டு வாழ்க சுற்றம்
வாழ்க' என்று வாழ்த்திய வாழ்த்தும்,
வெல்க அன்னார் விரிந்த கொள்கை
வெல்கஎன் றுரைத்த வெற்றி மொழியும்,
பல்குக செல்வம் பல்குக இன்பம்
பல்குக' என்று பகர்ந்த மொழியும்
உண்மை ஞாயிற்று நிலைபோல்
திண்மை உடையன ஆகுக சிறந்தே !

அமுதூட்டி அறிவூட்டும்கோயில்

(பாரதி தாஸன்)

என் சீர் விருத்தம்.

இரவினிலே உணவருந்தி நாற்காலி யிற்சாய்ந்
திருந்தேன்இத் தமிழ்நாட்டின் எளிமைதனை எண்ணி!
மாவேரிற் புழுப்போலே தீமைபல செய்து
மாய்கின்றார் பொதுநலத்தில் நாட்டமில்லை மற்றப்
பாதேச மக்களையும் பார்க்கின்றேம் அங்குப்
படிப்புக்கு வசதியுண்டு பிள்ளைகளைப் பெறுவார்.
குரலுடையார் இங்கெல்லாம் வெறுங்கூச்சலிடுவார்
பெருஞ்செல்வர் இருக்கின்றார் கொடைக்குணந்தானில்லை. (1)
என்றுநான் பலவாறு நினைத்திருக்கும் நேரம்
என்மனைவி வெற்றிலையும் கையுமாய் வந்தே
என்னயோ சனைஎன்றாள் என்னேடி மாதே
இராக்காலம் தருவதோர் இன்பத்தை இந்த
சின்னநிலத் தமிழ்மக்கள் அடைவதில்லை அறிவின்
திறமற்ற மக்களுக்குக் காதல்ஒரு கேடா
அன்புள்ள பிள்ளைகட்கோ அருங்கல்வி வசதி
அணுவளவும் இல்லையன்றே என்று நான் சொன்னேன். (2)
தன்னலமே அறியாதார் வாழ்ந்திருந்த இந்தத்
தமிழ்நாட்டின் வீழ்ச்சியினை நிலையெனவே எண்ணி
இன்னலுற்றீர் சரியன்று முன்னளில் உழவர்
இட்டவிதை ஒன்றிருக்க முளைப்பதுவே றுமா
கன்னல்நறுஞ் சாற்றைப்போல் இந்தஇராப் போதில்
கலைநுணுக்கம் பேசுகின்றார் மாணவர்கள் கேளீர்
அன்னதுதான் ராஜாசர் அண்ணுமலைப்பல்
கலைக்கழகம் அமுதூட்டி அறிவூட்டும்கோயில். (3)
திருக்கோயில் பலகண்டும் சத்திரங்கள் கண்டும்

தென்னுட்டில் வாழ்கின்ற அருமைத் தாய்மார்கள்
கருக்கோயில் விட்டுவந்த முருகப் பிள்ளைகள்
கலைக்கோலம் பெறப்பலவாம் நிலைக்கழகம் கண்டும்
இருக்கும்அவர் பிறசெல்வர் ஈந்துவக்கும் வழியை
இன்னதென்றும் காட்டிவிட்டார் இன்னமென்ன தேவை!
உருக்காதீர் நெஞ்சத்தை என்றுரைத்தாள் மணிவி. (4)
ஓகோகோ ஓகோகோ அப்படியா செய்தி
ஓரிரவில் ஒருதுளியும் இனிமேல் வீணுக்கும்
உத்தேசம் எனக்கில்லை வித்தார மயிலே
பாராள ஒரு பிள்ளை, படை நடத்தப் பசங்கள்,
பைந்தமிழ்க்குத் தொண்டுசெய்ய நல்லநல்ல மக்கள்
ஏராளமாய் வேண்டும். தவம்புரிவோம். கல்வி
ஈயத்தான் அண்ணுமலைக்கழம் உண்டே
பாராயோ என்றுரைத்தேன் காத்திருந்த பாவை
பறந்துவந்தாள் ஆந்த வெள்ளத்திற் பாய்ந்தோம்; (5)

போர் நீக்கிய புலவர்

(Vidwan A. Bhuvaraham Pillai)

பண்டைக் காலத்துக் கோப்பெருஞ் சோழன் என்னும் சோழ மன்னன் சோழ நாட்டை யாண்டு வந்தனன். நற்குணங்களாலும், ஆட்சித் திறனாலும், வீரத்தாலும், பெருங் கொடையாலும் சிறந்து விளங்கிய அம்மன்னன் தமிழ்ப் புலமையிலும் தலைசிறந்து விளங்கினான். அதனால் அக்காலத்து விளங்கிய பொத்தியார், பிசிராந்தையார், புல்லாற் றூர் எயிற்றியனார் முதலான புலவர் பலர் மன்னன்பாற் பேரன்புடைய ராய் அவனைத் தம் உயிராகப் போற்றி வந்தனர். மன்னனும் புலவர் களை அங்ஙனமே போற்றி வந்தனன். புலவரோடுகூடி அளவளாவி மகிழ்வதே பெருமகிழ்ச்சியெனக் கருதினன். இவ்வருங்குணத்தை வியந்து,

> "கோழியோனே கோப்பெருஞ் சோழன்
> பொத்தில் நண்பிற் பொத்தியொடு கெழீஇ
> வாயார் பெருநகை வைகலும் நக்கே"

எனப் பிசிராந்தையார் கூறுவாராயினர். (கோப்பெருஞ் சோழன் குற்றமற்ற நட்பினையுடைய பொத்தியென்னும் புலவனோடுகூடி உண்மை நிறைந்த மகிழ்ச்சியை யடைந்து உறையூரின்கண் உள்ளான்.) கோப் பெருஞ் சோழன் சோழநாட்டுத் தலைநகராகிய உறையூரின்கண் இருந் தான். பிசிராந்தையார் என்னும் புலவர் பாண்டி நாட்டுப் பிசிர் என் னும் ஊரின்கண் இருந்தார். இவ்விருவரும் ஒருவரை ஒருவர் கண்டு அளவளாவிப் பழகினரல்லர். ஒருவர் பெருமையை ஒருவர் கேட்ட தனையானே பெருநட்புடையராயினர். மன்னன் உயிர் நீங்கிய காலத்து அவனைப் பிரிந்திருக்க ஆற்றாது பொத்தியார், பிசிராந்தையார் முதலிய புலவர் தாமும் உயிர் நீத்தனர் எனின் அவர் தம் நட்பின் பெருமையும் அரசன் குணப் பெருமையும் அளவிட்டுரைத்தல் இயலுமோ?

நட்பின் உயர்நிலைக்கு எடுத்துக்காட்டாக விளங்கிய இம்மன்ன னுக்குப் புதல்வர் இருவர் இருந்தனர். அவ்விருவரும் குணப்பெருங் கடலாக விளங்கிய மன்னனுக்கேற்ற மாண்பின்றி மன்னனெடு மாறு படுவாராயினர். அம் மாறுபாடு முதிர்ந்து மன்னனும் புதல்வரும் போருக்கெழுந்தனர். இதனையறிந்த புலவர் புல்லாற்றூர் எயிற்றியனார் இப்போர் எங்ஙனம் முடிவுறினும் தம் ஆருயிர் நண்பனாகிய மன்ன னுக்கே இழிவைத் தருவதாகும் என்பதை ஆராய்ந்துணர்ந்து, அரச னுக்குத் தக்க நீதிகளை எடுத்துரைத்துப் போரை யொழிக்க விரும்பி அரசனை நோக்கி ஒரு செய்யுள் பாடினர். அச் செய்யுளில் புலவர் தம் கருத்தினை அரசனுக்குக் குறிப்பாகவும் வெளிப்படையாகவும் எடுத் துரைக்கும் அழகும், அரசனிடம் பேசும் முறையும் பெருஞ்சுவை பயப்பனவாக உள்ளன.

"மண்டமர் அட்ட மதனுடை நோன்ருள்
வெண்குடை விளக்கும் விறல் கெழுவேந்தே
பொங்கு நீருடுத்த விம்மலர் தலீயுலகத்து
நின்றலை வந்த விருவரை நினைப்பின்
தொன்றுறை துப்பின் நின்பகை ஞருமல்லர்
அமர்வெங் காட்சி மாறெதிர் பெழுந்தவர்
நினையுங்காலை நீயுமற்றவர்க்கு
அனையை யல்லை யடுமான் ரேன்றல்
பரந்துபடு நல்லிசை யெய்தி மற்றுநீ
உயர்ந்தோருலக மெய்திப் பின்னும்
ஒழித்த தாயமவர்க் குரித்தன்றே
அதனால், அன்னதாதலும் அறிவோய் நன்றும்
இன்னும் கேண்மதி இசை வெய்யோயே
நின்ற துப்பொடு நிற்குறித் தெழுந்த
எண்ணில் காட்சி இனையோர் தோற்பின்
நின்பெருஞ் செல்வம் யார்க் கெஞ்சுவையே
அமர்வெஞ் செல்வ நீயவர்க் குலியின்
இகழுநர் உவப்பப்பழி யெஞ்சுவையே
அதனால், ஒழிகதில் அத்தை நின்மறனே வல்லிரைந்து
எழுமதி வாழ்கநின் உள்ளம் அழிந்தோர்க்
கேமமாகும் நின்தாள் நிழல் மயங்காது
செய்தல் வேண்டுமால் நன்றே வானோர்

அரும் பெறல் உலகத்தான்றவர்
விதுப்புறு விருப்பொடு விருந்தெதிர் கொளற்கே"

என்பது (புறநானூறு 213) அச் செய்யுளாகும்.

அரசன் புலவர் பாற்பேரன்புடையனாயினும், பிற நட்பினரிடம் குறை கண்டபோது அக்குறை போக்கும் பொருட்டு அவர்பாலணுகி இடித்துரைத்தல் போல அரசனிடம் அணுகி இடித்துரைத்தல் கூடாது. அங்ஙனம் அணுகி இடித்துரைப்பின், அரசன் தன்னைப் புலவர் அவமதித்தனர் எனக் கருதிவிடின், புலவர் பால் அரசனுக் குள்ள அன்பு குறைவதோடு அவனைத் திருத்த முயலும் அவர் எண்ண மும் நிறைவேறு தொழியும்.

"அகலாதணுகாது தீக்காய்வார் போல்க
இகல் வேந்தர்ச் சேர்ந் தொழுகுவார்"

என்பது தெய்வப் புலவர் மெய்ம் மொழியன்றே? அன்றியும் தன் மக்கள்பாற் பேரன்பு செலுத்துதற்குரிய மன்னன், அதற்கு மாறாக அவர்கள்பாற் பெருஞ் சீற்றமுடையனாய்ப் போர் மேற்கொண்டிருக் கும் இந்நிலையில், போரிற் சென்ற கருத்தினைப் புலவர் சொல்லிப் புறக்கணித்தலும் கூடும். இவற்றை நன்குணர்ந்த புலவர் அரசன் சினம் தணிந்து தம் சொல்லில் நினைவைச் செலுத்துமாறு அவனை யிடையிடையே புகழ்ந்து முன்னிலைப்படுத்திக்கொண்டே, தம் கருத்து அவன் உள்ளத்திற் பதியுமாறு சிறிது சிறிதாகவும், படிப்படியாகவும் வற்புறுத்திக் கூறியுள்ளனர்.

"மண்டமர்.....வேந்தே"

என்ற பகுதியில் வேந்தே! நீ போரிற் பகைவரைக் கொன்று வெற்றி பெற்றவன்; மிக்க வலிமையும் தளராத முயற்சியுமுடையவன்; குடிக ளிடத்துக் கொண்ட அருளுக் கறிகுறியாகிய வெண் கொற்றக் குடையை யுடையவன்; எங்கும் பரந்த புகழை யுடையவன் என்றார். இதன்கண் வீரமும் புகழுமுடையவன் என்றதனால், வீரமுடையார் தம் வீரத்தை உலகம் புகழ்தற்குரிய நன்னெறியிற் செலுத்துதல் வேண்டுமேயன்றி உலகம் பழித்தற்குரிய தீய நெறியிற் செலுத்தலா காது; இப்போது நீ மேற்கொண்டுள்ள போர் நின் புகழைக் குறைப்ப தாக உள்ளது என்பதைக் குறிப்பாலுணர்த்தினர்.

"பொங்குநீர்.....அணையையல்லே"

என்ற பகுதியில் போர்புரியும் விருப்போடு நின்னெடு மாறுபட்டு வந்து நின் எதிரில் நிற்போர் நினக்குத் தொன்றுதொட்ட பகைவராகிய சேர பாண்டியரல்லர்; யீயும் அவர்க்குத் தொன்று தொட்ட பகையை யுடையையல்லே என்றார். (தொன்றுறை துப்பின் பகைஞர் =தொன்று தொட்ட வலி பொருந்திய பகைவர் எனக் கொள்க.) இவ்வுலகத்து நின்குணப் பெருமையை யறிந்த எவரும் நின்னோடு போர் புரிய விரும்பார் என்பார். "பொங்கு நீருடுத்த விம்மலர் தலை யுலகத்து" என்றார். அரசன் தன் புதல்வரைப் பகைவராகக் கருதிப் போருக்கெழுந்தமையால் அவரை 'நின்புதல்வர்' என்றல் அரசனுக்கு வெகுளி மிகுதல் கூடும் என்று கருதி "நின்றலை வந்த இருவர்" என்றார். இச்செய்யுளில் புதல்வர், மக்கள் என யாண்டும் புலவர் கூறுமை கருதத்தக்கது. பண்டைக் காலத்துச் சேர பாண்டிய சோழ மன்னர்கள் அடிக்கடி ஒருவரோடொருவர் போர்புரிந்து கொண்டிருந்தமையால் ஒருவர்க் கொருவர் பகைவராக விளங்கினர். அதனால் சோழ மன்னனுக்கு ஏணைய சேர பாண்டியர் தொன்று தொட்ட பகைவர் எனக் கூறப்பட்டனர்.

சோழன் நலங்கிள்ளிக்கும் சோழன் நெடுங்கிள்ளிக்கும் நிகழ விருந்த போரைக் கோவூர் கிழார் என்னும் புலவர் பெருமான் இடை நின்று நீதி கூறித் தடுத்தபோதும்,

"இரும்பனை வெண்டோடு மலிந்தோனல்லன்
கருஞ்சினை வேம்பின் தெரியலோனல்லன்
நின்ன கண்ணியும் ஆர்மிடைந்தன்றே
நின்னெடு பொருவோன் கண்ணியும் ஆர்மிடைந்தன்றே"

என்ற பகுதியால் (புறநானூறு. 45.) சோழர்க்குச் சேர பாண்டியர் பழம் பகைவர் என்பது உணர்த்தப்படுதல் காண்க. (பனைமாலை சேரர்க்குரியது; வேப்பமாலை பாண்டியர்க்குரியது; ஆத்திமாலை சோழர்க்குரியது. ஆர் = ஆத்தி.)

இங்ஙனம் மூவேந்தரும் அடிக்கடி போர்புரிந்து கொண்டிருந்தமையால் ஓரோவழி இவர்கள் நட்புடையராய வழி, அதுகண்டு புலவர்

பெருமகிழ்வு கொண்டு "நீவிர் இங்ஙனமே பிரியாது வாழ்வீராக" என வாழ்த்துவாராயினர். ஒரு காலத்துச் சோழன் குராப்பள்ளித் துஞ்சிய பெருந் திருமாவளவனும், பாண்டியன் வெள்ளியம்பலத்துத் துஞ்சிய பெருவழுதியும் நட்புடையராய் ஒருங்கிருந்தனர். இச் சேராச் சேர்த்தியைக் கண்ட காவிரிப்பூம்பட்டினத்துக் காரிக் கண்ணனர் என்னும் புலவர் பெருமகிழ்வுற்று அவ்விருவரையும் நோக்கி "உங்களுட் பிரிவை யுண்டுபண்ண முயல்பவர் சொல்லைக் கேளாது நீவிர் இருவீரும் இங்ஙனமே பலதேவனும் (பலராமன்) கண்ணபிரானும் போலப் பிரியாது வாழ்வீராக" என வாழ்த்தினர்.

"அடுமான்ஞேன்றல்" பகைவனைக் கொல்லுந் திறன் வாய்ந்த யானையை யுடையவனே! என்றதனால் "நாம் தோற்றுவிடுவோம் எனப் புலவர் கருதினரோ" என மன்னன் ஐயுறுதிருத்தற்கும், போரிற் சென்ற நினைவாற் பராமுகம் காட்டாது தம் சொல்லைக் கூர்ந்து கேட்டற்கும் மீண்டும் அரசனை வீரத்தாற் சிறப்பித்து முன்னிலைப் படுத்தினர்.

"பரந்துபடு நல்லிசை.....அறிவோய் நன்றும்"

என்ற பகுதியால் நீ இவ்வுலகத்தில் அறத்தானும் வீரத்தானும் பெரும்புகழடைந்து, இவ்வுலகை நீத்து நல்வினையால் தேவருலகையடைந்தபின் இச் சோழநாட்டரசு நின் மக்கட்கன்றே உரியது; அவர்கள் அறியாது கொண்ட பகைமை காரணமாக நீ இப்போது அவர்களைக் கொன்றுவிட்டால் பின் நின் அரசை யார்க்களிப்பாய்? இதனை (யான் கூறவேண்டுவதில்லை) நீயும் நன்றாக அறிவை என்றார். நமக்குப்பின் நம்மரசு நம் மக்கட்குரியது என்பதை யாமறியோமோ? இதனைப் புலவர் கூறி அறிவுறுத்துதல் வேண்டுமோ? என்று அரசன் கருதாதிருத்தற்கு "இதனை நீயும் நன்றாக அறிவை" என்றார். ('நன்றும்' என்பது 'அறிவோய்' என்பதனோடு கூட்டப்பட்டது.) இவ்வளவில் மன்னன் போர் நிறுத்தும் குறிப்பினனாகக் காணப்படாமையினால் 'இன்னுங்கேள்' என மேலுங் கூறுவாராயினர்.

"இன்னுங் கேண்மதி இசை வெய்யோயே"

யான் கூற விரும்பிய நீதி இவ்வளவேயன்று; இன்னும் உண்டு;

அதனையும் கேள்; புகழை விரும்புவோனே! என்றார். கொடியா ரைத் தக்கவாறு தண்டித்தல் அரசன் கடமை.

"கொலையிற் கொடியாரை வேந்தொறுத்தல் பைங்கூழ்
களைகட்டதனொடு நேர்"

என்பது தெய்வப்புலவர் வாய்மொழியன்றே? ஆதலின் நமக்குப் பின் இவ்வரசுக்கு இவர்கள் உரியர் என்பதற்காக, அறநெறி தவறித் தந்தை யென்றும் பாராது நம்முடன் போருக்கெழுந்த இவர்களைக் கொல்லாது விடுதல் தகாது என்று அரசன் கருதுதல் கூடுமாதலின், இவ்வளவேயன்று, இப்போரை யொழித்தல் வேண்டும் என்பதற்குத் தக்க காரணம் இன்னும் உண்டு, அதனையும் கேள் என்றார். இப்போர் நினக்குப் புகழ் தராது; இதனை நிறுத்துதலே புகழாகும், என்பதைக் குறிப்பாலுணர்த்துவாய் 'புகழை விரும்புவானே' என மீண்டும் விளித்தனர்.

"நின்ற துப்பின்.....பழி எஞ்சுவையே"

இப்பகுதியில், நிலைபெற்ற வலிமையுடையராய் நின்னுடன் போருக்கு வந்த அறிவில்லாத நின்மக்கள் தோற்றால் நின் அரசுரிமையை யார்க் களிப்பாய்? போரையே விரும்பும் செல்வமாகக் கொண்ட நீ அவர் கட்குத் தோற்றால் நின் படைகளெல்லாம் பெருமகிழ்ச்சி யடையும்படி பழியை இவ்வுலகத்து நிலை நிறுத்துவாய் என்றார்.

நின்மக்கள், எல்லாவகையானும் சிறந்த நின்னொடு போருக்கு வந்தமையால் எதனையும் ஆராய்ந்தறியும் அறிவில்லாதவராயினும், வலிமையிற் குறைந்தவரல்லர், தளராத வலிமை யுடையவரே என்பார் "நின்ற துப்பின் நிற்குறித் தெழுந்த, எண்ணில் காட்சி இளையோர்" என்றார். இதனால் இப்போரில் நீ வெல்லுதல் ஒருதலையன்று; அவர்கள் வெல்ல நீ தோற்றலுங் கூடும் என்பதை மக்கள் வலிமை கூறியதனாலும், இப்போருக்குக் காரணமான தவறு மக்கள்பாலதே என்பதை அவரறிவின்மை கூறியதனாலும் புலப்படுத்தினர். அரசன் நிச்சயமாகத் தோற்பான் எனத் தாம் கருதவில்லை என்பதை உணர்த் தற்கும், அரசன் பாராமுகமின்றிக் கேட்டற்கும் மீண்டும் "அமர்

வெஞ்செல்வ" என விளித்தனர். ஈண்டு "இகழுநர்" என்றது சேர பாண்டியர்களே. அரசன் தோற்றொழிந்தால், வென்ற புதல்வர் அடையும் மகிழ்ச்சியினும், 'சோழர் குடி பழிக்காளாயது' என்று கருதிப் பிற பகை மன்னர் அடையும் மகிழ்ச்சி பெரிதாகுமாதலின் மக்கள் மகிழ்ச்சியைக் கூறுது பிறபகை மன்னரடையும் மகிழ்ச்சியை எடுத்துரைத்தனர் புலவர். இங்ஙனமே மேற்காட்டிய "இரும்பனை வெண்டோடு" என்ற செய்யுளினிறுதியில் "நும்மோரன்ன வேந்தர்க்கு, மெய்ம்மலியுவகை செய்யுமிவ்விகலே" எனக் கோவூர் கிழாரும் கூறுதல் காண்க.

மக்கள் தோற்றால் அரசனுக்குப்பின் அரசுக்குரியரில்லாது நாடு அல்லலடையும்; அரசன் தோற்றால் அவனுக்குப் பெரும்பழி யுண்டாகும்; எனவே இப்போரில் வெல்லினும் தோற்பினும் அரசனுக்குத் தீமையன்றி நன்மை யுண்டாகாமையால் இப்போரை யவன் நிறுத்துதல் அவசியம் என்பதை விளக்கி வற்புறுத்தினர் புலவர். இவ்வளவில் மன்னன் போர் நிறுத்துங் குறிப்பினனுகக் காணப்பட்டமையால் 'இப்போரை யொழிக' வென வெளிப்படையாகக் கூறி மேலுஞ் சில கூறுவாராயினர்.

"அதனால், ஒழிகதில்.....கொளற்கே"

என்ற பகுதியில், எவ்வாற்றானும் இப்போர் நினக்கு நன்மை தாராமையால் இம்மறம் ஒழிவதாக; (மறம் என்றது ஈண்டுப் போரை) மிகவும் விரைந்து (நின் நகரத்திற்கு எழுவாயாக;) அஞ்சிவந்தோர்க்குப் பாதுகாவலாக உள்ள நினக்கு ஒரு தீங்கும் வாராமைக்கும், பின் தேவருலகில் அவர்கட்குரீ சிறந்த விருந்தினனுவதற்கும் நல்வினையைச் செய்க என்றார். அவ்வளவில் போரும் நிறுத்தப்பட்டது என்பது பின் உள்ள செய்யுட்களால் உய்த்துணரப்படும்.

போர் செய்தற்கெழுந்த நின் ஊக்கம் போரை நிறுத்தி விடுதலால் அடங்கிவிடாது, மேலுலக இன்பம் பெறுதற் பொருட்டு நல்வினை செய்வதிற் செல்லுதல் வேண்டும் என்பதை "வாழ்க நின் உள்ளம்" என்பதனால் உணர்த்தினர். (உள்ளம்=ஊக்கம். 'நின் தாள்நிழல்' என்றது நினக்கு என்றபடி) 'அஞ்சி வந்தோர்க்குப்

பாதுகாவலாகும் நீ' என்பது இப்போர் புலவர்கட்கு உயிராக விளங் கும் நினக்கு ஏதம் தரும் என யான் அஞ்சி, இதனை ஒழித்தற்கு நின்னை அடைந்துளேனதலின், இப்போரை யொழித்தல் மூலம் எனக்கு நீ பாதுகாவலாதல் வேண்டும் என்னும் கருத்தைப் புலப்படுத்துகின்றது.

சேரன் செங்குட்டுவன் வடநாடு சென்று கனகவிசயரை வென்று வந்தபின், சோழ பாண்டியர் தன்னை யிகழ்வாகக் கூறினர் என்பது கேட்டு அவர்கள்மேற் போருக்கெழுந்தனன். அப்பொழுது ஆண் டிருந்த மாடலன் என்பவன் "இனிப் போர்த்தொழிலை யொழித்து அறஞ் செய்தலில் நின் கருத்தைச் செலுத்துதல் நன்று" என்றனன். அங்ஙனமே செங்குட்டுவனும் போரை நிறுத்தி அறஞ் செய்தலை மேற் கொண்டனன். இங்குப் புலவர் புல்லாற்றூர் எயிற்றியனார் கோப் பெருஞ் சோழனுக்குப் "போரை நிறுத்தி அறஞ் செய்க" எனக் கூறியதும் மேல் செங்குட்டுவனுக்கு மாடலன் கூறியதும் ஒருவாற்று னைத்திருத்தல் காண்க.

ஞானரதிள் டாக்டர் ராஜா ஸர் அண்ணமலைச் செட்டியாரவர்களின்
அறுபதாம் ஆண்டு நிறைவு விழாக் கொண்டாட்டத்தில்

வித்துவான் A. பூவராகம் பிள்ளை பாடிய

வாழ்த்துப்பாக்கள்.

சீரார் வணிகர் குலவிளக்காய்ச் செய்ய தமிழர் தவப்பயனுய்
ஏரார் அறத்தின் தனியுருவாய் இம்மாநிலத்தில் வந்துதித்துக்
காரார் கொன்றைச் சடைப் பெருமான் கழல்கள் மலருந் திருவுளத்தோன்
பாரோர் புகழுண்ணுமலை மன்பண்பின் வாழ்க பல்லாண்டே. 1

நன்றே யென்றும் நினைந்ததனை நன்றே புரியும் அருந்திறலும்
ஒன்றே கூறும் உளத்தெளிவும் உறுதிப்பாடும் தெளிந்தார்கண்
சென்றே ஐயம் கொளாச் சீரும் செறிந்தோன் அண்ணுமலைப் பெரியோன்
இன்றே போலப் பன்னலமும் இயைந்து வாழ்க பல்லாண்டே. 2

கற்பார் விரும்பும் கலையனைத்தும் கற்குமா பல்கலைக் கழகம்
பொற்ப அமைத்தஃ தெஞ்ஞான்றும் பொலிந்து தோன்றப் பொருள்
[நிறைத்தோன்
நற்பாலறிஞர் புலவருடன் நாடாள் மன்னர் புகழுங் குண
வெற்பே நிகர் அண்ணுமலைவேள் விளங்கி வாழ்க பல்லாண்டே. 3

பிறையார் கண்ணிமுடிப் பெருமான் பெருமன்றம் பொன்னணிந்து
[துமாய்
நறையார் கண்ணி நாதனுறை நகரும் நன்கு திருத்தினலல்
முறையான் அறுபானுண்டு நிறை முதல்வன் அண்ணுமலைக் குரிசில்
குறையா ஒக்கல் நிறை செல்வம் கூடிவாழ்க பல்லாண்டே. 4

இன்பப் பாவாய் உரைவடிவாய் இறைவன் கோயிற்றிரு வுருவாய்
நன்மைவளர் அண்ணுமலைப்பல் கழகமாகும் நல்லுருவாய்
இன்னும் பலவாம் பேரறத்தின் எழிலாருருவாய் இயைந்தபுகழ்
மன்னும் அண்ணுமலை மன்னன் மகிழ்ந்து வாழ்க பல்லாண்டே. 5

"புகழாய பொருளொடு"

அண்ணமலைப் பல்கலைக் கழகத் தமிழ் விரிவுரையாளர்

திரு. அ. சிதம்பரநாதச் செட்டியார் (M. A) அவர்கள் பாடியது.

பலதாழிசைக் கொச்சகக் கலிப்பா

புகழாய பொருளொடு புலமைசா னலத்தோடு
தகவுகூர் திறமெய்தித் தணிவில்சீர்த் தாளாற்றி
மகம்பல வாற்றியும் மாணறங்க ளாக்கியும்
அகனமர்ந் தளித்திட்டும் முகனமர்ந் தியம்பியுஞ்
செகமுள்ள திசையெல்லாஞ் செட்டிநாட் டிசைசெல்ல
உகப்புடனே வாழ்தரும் உயரண்ணு மலைமன்னே !

(இது தரவு)

முன்னொருநாட் பாரிதான் முல்லைக்குத் தேரளித்தான்
இன்னொருநாட் போலவே எங்காளுஞ் சோறளிக்கும்
நின்வண்மை இருந்தவா தில்லைமூ வாயிரர்க்கே.

கரவா திரவலர்க்குக் காரியென்பான் புரவிதந்தான்
இரப்போர்கள் யாவருக்கும் எளிதிற் சோறளிக்கப்
பரம்பரையாய்ச் சத்திரங்கள் பரவுதில்லை வைத்தனையே.

ஆலமர் செல்வற்கே யருங்கலிங்கம் ஆயளித்தான்
மேலவாந் தில்லையில் மேவிடுங் கூத்தன்மால்
ஆயிரு பேர்க்குமமே யறப்பணி வகுத்தனையே.

அருநெல்லிக் கனிதன்னை அதிகமான் கொடுததிட்டான்
தருகலைகள் பலபயிலுங் கழகத்தே புலவருக்கும்
அருங்கலைகள் பயில்வார்க்கும் பலாயிரங்கள் தந்தனையே.

உள்ளிவரும் இரவலர்கட் குவந்தீந்தான் ஒருநள்ளி
உள்ளாதே யிருப்போர்க்கும் உவந்தியும் வேளண்ணல்
தள்ளாத மாணவர்க்குத் தனியுதவி செய்குவையே.

பேகனென்பான் பெருங்களுடன் பீலிக்குப் படாமளித்தான்
ஆகவத்திற் கதிகபணம் அங்நாள்போ லிங்நாளும்
ஆகுலமில் செட்டிநாட் டாரரசே யளித்தனையே.

ஆடுவார் மறந்தாரே பாடுதற்கே ஓரியினைப்
பாடல்சொல் பள்ளியினிற் பற்பலவா மன்றுகளில்
ஆடுகொள் நின்பெயர்தான் அடிக்கடியே சொல்லுவரே.

(இவை எழுந் தாழிசை)

எனவாங்கு,

நின்திறம் முற்றும் பாடுநர்க் கடங்கா
அன்னையாந் தமிழை யளிக்கும் வள்ளலே
மன்னரும் விழைசீர் அண்ணு மலையே
துன்னருஞ் சீர்த்திக் துணைவி மக்களொடு
பன்னெடுங் காலம் பாரினுள் வாழ்கவே.

(இது சுரிதகம்)

கல்வியும் கலைக்களமும்.

(Learning in the midst of Art)

[டி. கே. சிதம்பரநாத முதலியார், பி.எ., பி.எல்.]

சரித்திர கலையில் வல்லவரான டாக்டர் பந்தர்க்கர், கல்கத்தாவி லிருந்து இரண்டு வருஷத்துக்குமுன் வந்து, சென்னைப் பல்கலைக்கழகம் சார்பாக, ஆறு பிரசங்கங்கள் செய்தார். பிரசங்கங்களைச் சென்னைப் பல்கலைகழகத்தார் புஸ்தக ரூபமாக இப்போது வெளியிட்டிருக் கிறார்கள்.

டாக்டர் பந்தர்க்கர் எடுத்துக்கொண்ட விஷயம் "பூர்வ இந்தியா". இந்த விஷயம் சம்பந்தமாக, பூர்வமான வடமொழி நூல்களை ஆராய்ந்து அருமையான சரித்திர உண்மைகளை வெளியிட்டார். எத்தனையோ மேற்கோள்களைக் கொண்டு அதிபூர்வமான நாகரிகம் ஒன்று தேசத்தில் இருந்து வந்ததென்றும் பிறகு ஆரியக்கொள்கைகள் வந்தன என்றும், பூர்வமான கொள்கைகளுக்கும், பிற்பாடு வந்த கொள்கைகளுக்கும் சச்சரவுகள் ஏற்பட்டுக் கடைசியாய் சமரசமாய்க் கலந்துகொண்டன என்றும் எடுத்துக்காட்டினார். இப்படி வகுத்தும் சேர்த்தும் பார்ப் பதில் எவ்வளவோ ரஸம். இதிலெல்லாம் ஆசிரியர் பந்தர்க்கர் எவ் வளவோ ஈடுபட்டுத் திளைத்தவர். சரித்திர உண்மைகளைத் தேடுவதி லும் காண்பதிலும் அவருக்கு, (எழுபது வயதுள்ள அவருக்கு,) யாருக் கும் இல்லாத ஆத்திரம்.

கடைசி நாளும் பிரசங்கம் முடிந்ததும், ஒரு விஷயத்தைச் சொல்ல இடம்கொடுக்க வேண்டும் என்று சபையோரைக் கேட்டுக்கொண்டார். அதாவது :

"தென் இந்தியா, (சரித்திர வல்லார் சொல்லுகிறபடி) அற் புதங்கள் நிறைந்த நாடு. ஆனால் அற்புதத்தில் அற்புதம்

என்னவென்றால் இந்த நாட்டின் பண்பாடு சம்பந்தமாக யாதொரு சரித்திர வெளியீடும் இதுவரை வெளிவரவில்லை என்பதுதான்."

"People want to know something about Dravidian Culture. South India is a land of wonders; but the wonder of wonders is that the history of South India has not yet come out," (Hindu March 1, 1939)

இந்தப்படி ஆசிரியர் பந்தர்க்கர் சொல்லுவதற்குக் காரணம் எவ்வளவோ இருக்கிறது.

முதலாவதாகச் சொல்லவேண்டியது: நெடுகிலும் சென்னை யூனிவேர்சிடியார், சரித்திர பாடம் வகுத்ததும் அதைச் சொல்லிக் கொடுத்த முறையுந்தான். மாணவர்களுக்கும் ஆசிரியர்களுக்குமே அறியமுடியாத எட்டாத விஷயங்களைப் பற்றியே பாடம் பூமிக்குச் சம்பந்தமில்லாமல் ஆகாயத்தில் நக்ஷத்திரங்களைப் போலத்தொங்குகிற விஷயங்களை எடுத்துக்கொண்டு பிரமாதப்படுத்துகிறது. உதாரணமாக "கி. மு. 55-ல் ஜூலியஸ் ஸீஸர் குவாலைக் கைப்பற்றினார்". இந்த வாக்கியத்தை நாலாவது பாரத்தில் படித்தேன் — இங்கிலீஷ் பாஷையில்தான் ஏதாவது எனக்கு விளங்கியிருக்கும் என்று நினைக்கிறீர்களா? கி. மு. 55 என்றால் இன்னது என்று தெரியாது. ஜூலியஸ் ஸீஸர் யாரோ; 'குவால்' எங்கேயோ; கைப்பற்றுதல் என்றால் அடுத்த பையன் பெண்களைக் கைப்பற்றுதல் போன்ற ஒருகாரியம் போலிருந்தது. இப்படித்தான் விஷயம் விளங்கியது.

எம். ஏ. வரைக்கும் படிக்கும் சரித்திர பாடம் எல்லாம் இந்தக் கணக்குக்குத்தான் வந்தது. ஏதோ ஒரு புஸ்தகத்தில், ஏதோ ஒரு விஷயத்தை, யாரோ ஒருவர் எழுதினார். அதை மனப்பாடம் பண்ணவேண்டியது; வருஷ ஆகயில் அதைக் கடுதாசியில் எழுதிவிட வேண்டியது; ஆசிரியர்கள் அங்கீகரித்து, மார்க்கும் கொடுத்துவிட வேண்டியது; அவ்வளவுதான். இங்கிலாந்து தேசத்தின் பூர்வ சரித்திரம் தெரிந்துவிட்டதாக மாணவரும் ஆசிரியரும் எண்ணிக்கொள்ள வேண்டியது.

இதெல்லாம்மொம்பப் பரிதவிக்கவேண்டிய காரியமே. கொஞ்சம் யோசனை செய்தால், சரித்திரம் என்பது வார்த்தைகளால் ஆனதல்ல. உண்மைகளை மனதில் வாங்கி அனுபவிப்பதுதான் என்று தெரியவரும்.

இது சம்பந்தமாக பேராசிரியர் பெர்னர்ட் ஷாவும், ஆக்ஸ்போர்டு யுனிவேர்ஸிடியையும் கேம்பிரிட்ஜ் யுனிவேர்ஸிடியையும் ரொம்ப ரொம்பக் கண்டித்துப் பேசுகிறார். அந்த யுனிவேர்ஸிடிகளில் கற்பதெல்லாம், புஸ்தகத்தை வைத்துத்தான். விஷயங்களே நேர்முகமாக வைத்தல்ல; அது காரணமாகக் கற்பனையாவும் பிரயோசனமற்றவை; ஆங்கில பாஷையே கெட்டுப்போய்விட்டது என்று பெரும் புகார் சொல்லுகிறார். இதை மறுத்துச் சொல்ல விபரம் தெரிந்தவர்கள் முன் வருவதில்லை.

ஆக்ஸ்போர்டு கேம்பிரிட்ஜிலுள்ளவர்கள் தமிழ் நாட்டு வளமையைப்பற்றி எவ்வளவு புஸ்தகம் படித்தாலும் ஒன்றுமே தெரிந்து கொள்ள முடியாது. அப்படியேதான் நாமும் எவ்வளவு புஸ்தகம் படித்தாலும் இங்கிலாந்தைப்பற்றி ஒன்றும் தெரிந்துகொள்ள முடியாது. ஆனல், தமிழ் நாட்டிலுள்ள விஷயங்களே (புஸ்தகங்களே அல்ல) நேர்நேராகக் கற்கலாம். ஆயுள் நாள் முழுதும் கற்பதற்கு விஷயங்கள் எத்தனையோ இருக்கின்றன. அவைகளைக் கற்கும்போதுதான் உண்மையான சரித்திர உணர்ச்சி இதயத்தில் பிறக்கிறது. அந்த உணர்ச்சி பிறப்பதனலேயே, விஷயங்களில் ஈடுபாடும் உண்டாகிறது.

தமிழ் நாட்டில் சாதாரணமாக வெளிப்படையாகத் தெரிகிற காரியம்: கட்டிடங்களின் இரட்டைப் பாங்கு மதுரையிலுள்ள திருமலை நாயக்கன் மகால், தஞ்சாவூரிலுள்ள அரண்மனை. இந்தக் கட்டிடங்கள் பிற்காலத்தில் வடநாட்டுப் பாங்கை ஒட்டிக் கட்டியவை. இந்தப் பாங்கு அனேக வீட்டுகளுக்குள்ளும் புகுந்திருக்கப் பார்க்கலாம். இதை விட்டு வேறுக நிற்பது பூர்வமான நம்முடைய கோயில்களும், கோபுரங்களும். நமக்கிடையே கோயில்களும், கோபுரங்களும் உலகத்தில் எங்குமே இல்லாதபடி ஆயிரக் கணக்காய் நிமிர்ந்து நின்று, நம்மைப் பார்த்து, "இங்கே வா சிற்பக் கலையைச் சொல்லிக் கொடுக்கிறேன், சரித்திர உண்மைகளே எடுத்துக் காட்டுகிறேன்" என்று ஒவ்வொன்றும் நம்மோடு பேசுகிறது.

கோயிலுக்குள் போவோமானல் அற்புதமான ஓவியக்கலே விளங்கக் காணலாம். நடராஜ மூர்த்தியும் கோவிந்த ராஜரும் எவ்வளவு பெரிய விஷயங்களே அற்புதமான ஓவிய உருவத்தில் விளக்குகின்றனர்! எவ்வளவு புண்ணியம் செய்திருந்தால் இத்தகைய மூர்த்திகள் ஒரு நாட்டாருக்குக் கிட்டும்.

நடராஜமூர்த்தியின் தத்துவத்தையும் கலையுருவத்தையும் ஒருங்கே அனுபவித்த பெரியார் கூறுவது: "மனிதனுகப் பிறப்பது அவ்வளவு நல்ல காரியம் அல்ல; நான் எத்தனேயோ துன்பங்களுக்கெல்லாம் உள்ளாக வேண்டித்தான் இருக்கிறது; ஆனலும் தத்துவத்தையும் கலேயின் அருமையையும் ஒருங்கே காணப்பெற்றல் மனிதனுகப் பிறப்பதற்குப் பிரார்த்தனேயே பண்ணவேண்டும்" என்றார்.

குனித்த புருவமும் கொவ்வைச்செவ் வாயிற்குமிண் சிரிப்பும்
பனித்த சடையும் பவளம்போல் மேனியும் பால்வெண்ணீறும்
இனித்தமுடைய எடுத்தபொற் பாதமும் காணப்பெற் றல்
மனித்தப் பிறவியும் வேண்டுவ தேயிந்த மாநிலத்தே.

கோவிந்தராஜப் பெருமாளின் உருவத்தைத் தரிசித்தால், தியானித்தால், ஆணவம் எல்லாம் நம்மைவிட்டுக் கழன்று கடவுளின் சலனமற்ற ஆனந்தத்தில் நாம் கலக்கலாம் என்பதைக் காட்டும். பிரமனே வழிபட்ட மூர்த்தியை, இக்ஷ்வாகு சக்கரவர்த்தி, நமக்குக் கொண்டுவந்து அருளினன் என்று ஆவேசத்தோடு பேசுகிறார் கம்பர்.

மலர்அயனே வழிபட்ட பணியரங்கப் பெரும்பாயலப்
பரஞ்சுடரை யாம் காண
அணியரங்கம் தந்தானே அறியாதார் அறியாதார்!

சிற்பமும் ஓவியமும் இப்படி இருக்க, கோயிலுக்குள் பாடுகிற கவிகள் ஆயிரக்கணக்கான வருஷங்களாகப் பழுத்த தமிழ்க் கவிகள். இதை மாணிக்கவாசகர்,

தண்ணுர் தமிழ் அளிக்கும் தண்பாண்டி நாட்டானே

என்று உள்ளம் உவந்து பேசுவார்.

அப்படியேதான் சங்கீதமும் பல்லாயிர வருஷங்களாகத் தமிழ் நாட்டிடையே வளர்ந்து வந்த சங்கீதம். தமிழ்நாட்டுச் சங்கீதத்தை பிற தேசத்தார் ஒருவாறு கொண்டு போனர்கள். ஆனல் அப்படிக் கொண்டுபோனவைகளில் உயிரும் நுட்பமும் அவ்வாறு இருக்க முடியா. ஏதோ ஒரு முறையில் மாறி பிரத்தியேகமான சங்கீதம் என்றுகூடச் சொல்லத் தோன்றும். தமிழ் நாட்டில் குடியேறிய வேறு நாட்டவரும் தமிழிசையைக் கற்றுக் கொஞ்சம் அவர்களுடைய தாய் பாஷையில் சாகித்தியம் செய்துகொண்டார்கள். தெலுங்கர்களும் கன்னடர்களும் இந்த விதமாக சாகித்தியம் செய்துகொண்டார்

கள். வடமொழியிலும் செய்திருக்கிறார்கள். இந்த இசைகளில் இசை இலக்கணம் நன்றாய் அமைந்திருக்கும். இலக்கணத்தை யாரும் கற்றுக் கொள்ளத்தானே ஐரோப்பியர்கள் நம்முடைய தமிழிசையைப் பற்றி எவ்வளவோ திருத்தமாக இலக்கணம் எழுதியிருக்கிறார்கள். ஆனால் அவர்களுக்குத் தமிழிசையின் தொன்மையான பண்பு கைவருமா? வராது. எப்படி மேல் நாட்டாருக்குத் தமிழின் இலக்கணம் விளங்குவ தாயும், தமிழிலக்கியப் பண்பு விளங்கமுடியாதபடியும் இருக்கிறதோ அப்படியேதான் தமிழிசையின் ஸ்தூலமான இலக்கணம் யாருக்கும் தெரியவரலாம். ஆனால் தமிழிசையின் தொன்மையான பண்பு (Classic quality) கைவருவது கஷ்டந்தான். தமிழ்ப் பதங்களில் தான் தமிழிசையின் தொன்மையான பண்பு அப்படியே அமைந்து கிடக்கிறது. பாவசங்கீதத்துக்கு உறைவிடமாயிருந்த ஸ்ரீமதி வீணை தனம்மாள் தமிழ்ப் பதங்களைப் பாடும்போது கேட்டுக்கொண்டிருந்தால் ஆயிரக்கணக்கான வருஷங்களாகப் பழுத்து வந்த தொன்மைப் பண்பு வாய்ந்த சங்கீதம் நம்முடைய செவி வழியாக இதயத்துக்குள் பாய்வ தாகவே தெரியவரும். தனம்மாள் வீட்டிலுள்ளவர்கள் இப்போதும் அந்தவிதமாகப் பாடிக்கொண்டுதான் இருக்கிறார்கள். ராகங்களிலுள்ள ஸ்தானங்கள் அவர்கள் பாடலில்தான் தெளிவாய்க் காணலாம் என்று இசைவல்லார் (அனேகமாக வயதானவர்கள்) சொல்லுகிறார்கள்.

மேலே சொன்ன இருவகைச் சங்கீதங்களையும் ஒத்துப் பார்க்க வேணும்—ஒருபுறம் சாமான்யமாய் நடைபெறுகிற கீர்த்தனை வகை யைச் சேர்ந்த சங்கீதத்தையும், பக்கத்தில் தமிழ்ப் பதங்களையும் வைத் துப் பாடிப் பார்த்தால் வித்தியாசம் நன்றாய்த் தெரிந்துவிடும்.

இது சம்பந்தமாக ஒரு சங்கீத வித்வான் (நாகசுர வித்வான்) சொன்னதை ஞாபகமூட்ட விரும்புகிறேன்.

> "நான் எழுபத்தைந்து வர்ணங்களை நன்றாய்க் கற்றிருக்கிறேன். தெலுங்குக் கீர்த்தனங்களை ஒரு நாளைக்கு இரண்டு விழுக் காடு கற்றுத் திருப்திகரமாய் வாசிப்பேன். ஆகவே நூற் றுக் கணக்காகத் தெலுங்குக் கீர்த்தனைகளைக் கற்று வாசிக் கிறேன். ஆனால் தமிழ்ப்பதம் ஒன்றைக் கற்க முடிய வில்லை. அது அவ்வளவு உயர்ந்த பாணியில் அமைந்திருக் கிறது! என்னுடைய அனுபவம் போலத்தான் இதர சங்கீத வித்துவான்கள் அனுபவமும்."

என்று சொன்னார். சொன்னதற்குக் காரணம் என்ன? தொன்மைப் பண்பு (Classical quality) பாஷையோடும் உணர்ச்சியோடும் நேர்முக மாக நெடுநாள் கேட்டுவரவேண்டிய காரியம்.

இப்படியாக, பூர்வமான சங்கீதம், இடையிலே மாறுபட்ட சங் கீதம்; பூர்வமான கவி இடையே இலக்கண ஆசிரியர்களால் தமிழ்ப் பண்பு குன்றிய கவி; நாட்டியத்திலும் பூர்வமானது இடையே வந்தது. ஓவியத்திலும் சிற்பத்திலும் காலத்தைக் குறிக்கக் கூடிய வேறுபாடுகள், எத்தனை எத்தனையோ தமிழ் நாட்டில் கண்ட கண்ட இடமெல்லாம் கிடக்கின்றன. ஒவ்வொரு துறையிலும் ஆராயவும் அனுபவிக்கவும், வேண்டிய மட்டும் விஷயம் இருக்கிறது. இந்த வகையாக ஆராய்ந்தால் டாக்டர் பந்தர்க்கர் சொல்லுகிறபடி தமிழ் நாட்டின் உண்மையான பண்பாட்டுச் சரித்திரம் வெளிவரலாம்.

மேலே சொன்ன கலைகள் போகத் தமிழர் வாழ்க்கையில் எத் தனையோ விஷயங்கள் கூர்ந்து கவனித்து அனுபவிப்பதற்கே இருக் கின்றன. ஆகாரத்தின் தனித் தன்மை, உறவாடுவதின் தன்மை, கலியாணச் சடங்குகளின் தன்மை, கடவுள் வழிபாடுகள், காவடி, நடனம், புலவர்களை ஆதரித்தல், அனுபவித்தல், சமீபத்தில் இவைகள் சம்பந்தமான மாறுபாடுகள் எல்லாவற்றையும் ஆராய்ந்துகொண்டே இருக்கலாம்; ஒரு ஆயுள் போதாது.

இந்த விதமாக ஆராய்வதற்கு சென்னைப் பட்டணம் சரியான இடம் என்று சொல்ல முடியாது. நாட்டுப்புறம் ஒட்டியதாய், தமிழ் நாட்டுக்கிடையே இருந்தால்தான் வசதி. அண்ணாமலைப் பல்கலைக் கழகம் வாய்ப்பான இடத்தில் அமைந்திருக்கிறது. ஆசிரி யர்களும் மாணவர்களும் மேலே சொன்ன கலைகளையும் வாழ்க்கைப் பண் பாட்டையும் நேருக்கு நேராகவே பார்த்து உணர்ச்சியோடு ஆராய்வதற்கு இப்போது முன் வருகிறார்கள். சொம்ப சந்தோஷம்! சீக்கிரத்தில் இந்த முறை அமுலுக்கு வந்து விட்டால், நம்முடைய பண்பாட்டின் சரித்திரத்தைக் கற்பதற்கு, வட இந்தியாவில் மட்டும் இருந்தல்ல, மேலைய நாடுகளிலிருந்தும் நிபுணர்களை வருவார்கள். அண்ணாமலைப் பல்கலைக் கழகத்தின் புகழ் உலகெங்குமே தொனிக்கும்.

தேசிக விநாயகம் பிள்ளை பாடிய

வாழ்த்துப்பா

I

1. அண்ணு மலையரசே ஆழிசூ ழுலகம்
கண்ணுரக் காணவருங் கற்பகமே—விண்ணோரும்
நாடு மெழில்தில்லை நாயகனார் நல்லருளால்
நீடுநீ வாழ்க நிலத்து.

2. தங்குமிடம் காணுது தத்தளித்து நின்றதமிழ்
மங்கைதிரு வுள்ளம் மகிழ்ந்திடவே—பொங்கியெழு
மன்புநிறைந் தாதரிக்கும் அண்ணலே என்றென்றும்
மன்புவியில் வாழ்க மகிழ்ந்து.

3. பாரி கதை பாடிவந்த பாவலனுக் காயிரம்பொன்
வாரி வழங்கியமா வள்ளலே—சீரிய
செந்தமிழை ஈட்டுபெருஞ் செல்வக் களஞ்சியமாய்ச்
சந்ததமும் வாழ்க தழைத்து.

II

1. தில்லைப் பதியுடையான் சிற்றம் பலம்தன்னில்
அல்லும் பகலும்நின் ருடுகின்ருன்—எல்லைக்கண்
அண்ணு மலைமன் அமைத்த கலைக்கழகம்
கண்ணுரக் கண்டு களித்து.

2. சீருயரும் வணிகர்குலம் சிறக்கவந்தோன்
தில்லையிலே கலைவளரக் கழகம் கண்டோன்
பாரதரன் ருடெங்கும் புகழ்விரித்தோன்
பாடுமிசைத் தமிழ்வளரப் பண்ணை செய்தோன்
மாரியென வழங்கியறம் வளர்க்குஞ் செல்வன்
வள்ளலண்ணு மலையரசன் சுற்றத்தோடு
வாரிதிரு ழுலகில் வாழ்க மாதோ!
வளர்பிறைபோல் வளர்ந்துநிதம் தழைகமாதோ!!

டாக்டர் : ராஜா : ஸர் : அண்ணாமலைச் செட்டியார் அவர்கள்மீது பாடிய

வாழ்த்துப்பா.

எழுசீராசிரிய விருத்தம்

D. Devapiriam

வார் பெறு பரத நாட்டினில் எங்கும்
இலகுமுப் பானிலக் கம்பொன்
நேர்பெறு கொடையிற் பெய்துபல் கலைசேர்
நிலையமொன் றெருவனைத் தில்லைச்
சீர்பெறு நகரிற் றிகழ்தர வமைத்த
செவ்விய தனிப்புகழ்ப் பெருமை
பேர்பெறு மண்ணா மலையெம தருமைப்
பெருமகின் றனக்கலா லுளதோ?

கட்டளைக்கலிப்பா.

காம னன்னவன் கல்வியின் மாண்பினைக்
கழக நாட்டிப் புவிக்கறி வித்தவன்;
பூமன் காரினைப் போன்றநல் வண்மையன்,
பொங்கு வான்புகழ் போர்த்தவன் பூந்தமிழ்த்
தாமன் றண்செட்டி நாடு தழைப்பவன்
தனிகன் நேயன்அண் ணாமலையென்னு மெய்ந்
நாமன் றில்லை நடிப்பவன் றண்ணருள்
நண்ணி வாழ்கவிங் கெண்ணில்பல் லூழியே.

கட்டளைக்கலித்துறை.

கந்தா மணிவிளக் கேபெரு வைகிய நற்குடிக்கோர்
சிந்தா மணியே செழுந்தேனு வேதிருத் தில்லையின்பால்
எந்தாய் கழகமொன் றண்ணா மலைமன்ன னெம்பொருட்டாய்த்
தந்தாய் எமைப்புரந் தாய்மட மென்னுஞ் சழக்கொழித்தே.

வெண்பாக்கள்.

நின்னுமத் தானீ நிறுவியவிம் மாண்கழுக
மன்னுநல் லண்ணு மலைவள்ளால் — எங்ஙாளு
நாட்டுமுன தொப்பில் நயப்புகழை யிப்புவிக்குக்
காட்டு மறிகுறித்தூண் காண்.

ஆதலால் அண்ணு மலைநின் அருள்வாழி
பூதலத்துன் மெய்ம்மைப் புகழ்வாழி — ஏதமிலுன்
சீர்வாழி யுன்பொற் றிருக்கழகம் வாழியுன
தூர்வாழி நாளு மூயர்ந்து.

கவிராஜ பண்டிதர், ஜெகவீர பாண்டியனர் இயற்றியவை

அறுசீர் ஆசிரிய விருத்தம்.

கொண்டாட்டத்தின் தகுதி.

1. தருமநிலை தழுவிவளர் தனவணிகர்
குலத்திலுயர் தவத்தில் வந்தே
அருமணியாய் ஒளிர்அண்ணு மலையாசன்
அறுபதாண் டாண்டு கண்ட
பெருமைதனை உறவுரிமை யுடனெவரும்
உளமுவந்து பேணுகின்றார்
ஒருமையுடன் உதவினரை இருமையிலும்
எவ்வுயிரும் உவக்குமன்றே.

கொடைவள்ளல்.

2. செட்டிநாட் டரசனெனச் சீமையெங்கும்
பேரோங்கச் சிறந்து நின்றான்
வெட்டிநாட் டரசாட்சி வேல்வலியால்
கொண்டவர்கள் வெள்கி நிற்கப்
*பட்டிநாட் டுயர்கல்வி பார்பரவச்
செய்துதான் படைத்த செல்வம்
கொட்டிநாட் டொருபெரிய கொடைவள்ளல்
எனும் புகழ்மீக் கொண்டுவந்தான்.

கலைநிலை.

3. ஒருகாலும் நீங்காத உயர்கல்வி
யில்லையெனின் உலகின் மக்கள்
இருகாலின் மாக்களென இழிவுறுவர்
அவ்விழிவிங் கேறு வண்ணம்

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*பட்டி = கலைபயில் கழகம்.

வருகால நிலையறிந்து வகைதெரிந்து
கலையறிவை வளர்ப்போர் எல்லாம்
அருகாலும் தருமணியா ஆருயிரின்
பேரொளியாய் அமர்வாரன்றே.

கல்வி நல்கியுள்ள காட்சி

4. அன்னபெருஞ் சிறப்புடைய கல்விதனை
யாவருக்கும் அருள வேண்டி
மன்னுபரஞ் சோதியாய் மன்றிலொளிர்
எம்பெருமான் மருவியுள்ள
பொன்னகரின் அருகண்ணு மலைநகரென்
றெரு நகரம் புதுக்கி யங்கே
பன்னுபல கலைவளர்த்துப் பல்லோரும்
இன்புமுறப் பணிசெய்துள்ளார்.

பல்லாண்டு வாழ்க

5. சுவானே தெய்வமென இயலறிந்த
புலவர்முனம் இசையுணர்ந்து
நாவாரச் சொன்னமொழி நானில
மெல்லாந் தெரிய நலமிகுந்து
கோவாகி உயர்அண்ணு மலையென்றும்
குணமலையாய்க் குலவி நின்று
பாவாரும் கீர்த்தியுடன் பல்லாண்டு
வாழ்கவெனப் பாவுவோமே.

சிவமயம்.

உருபு மயக்கம்

R. Kandaswamiar.

இக்காலத்து ஒரு சாரார் வேற்றுமைப் பொருண் மயக்கம், உருபு மயக்கமாகிய இவ்விரண்டனுள் உருபு மயக்கமாவது ஒரு வேற்றுமைக் குரிய பல உருபுகளில் வைத்து ஒருருபு சென்று நின்ற நிலைக்களத்து அவ்வேற்றுமைக்குரிய வேறுருபு சென்று நிற்றலாகுமெனக் கூறித் தங்கோணிறுவதற்கு "தூங்கு கையா னெங்கு நடைய" என்னுந் தொடர் மொழிக்கண் ஒடு வருபு நிற்றற்குரிய நிலைக்களத்து ஆனுருபு சென்று நின்றமையின் உருபு மயக்கமெனக் கூறுகின்றனர். இப்பெரி யார் கொள்கையின்படி உருபு மயக்கம் வேற்றுமை மயங்கியலிற் கூறிய சூத்திரங்களின் ஒரு பகுதியினும் படாது வேற்றுமை யிலக்கணங் கூறிய சூத்திரங்களின் கண்ணே யடங்குவதை யாவருமறிவர். இவர் தங் கூற்றை நிறுவுதற்குத்தக்க சான்றுகள் கூறி நிலைபெறுத்துவாரா யின் புலத்துறை முற்றிய நலத்தகையார் பலர்க்கும் நன்மை தருவ தொன்றாகும். அங்ஙனமின்றி எமது கருத்தென்று கோடு மென்பாரா யின் யாமென் செய்யலாம். நிற்க,

இப்பெரியார் கொள்கையின்படி உருபு மயக்கமெனக் கொள்வோ மாயின் ஆசிரியர் தொல்காப்பியனார் ஏழாம் வேற்றுமைக் இலக்கணங் கூறிக் "கண்கால்" முதலியவாகப் பத்தொன்பான் வாய்பாடு பற்றிப் பொருளுரைத்துக் கூறினர். அச்சொற்களெல்லாம் கண்ணென்வேற் றுமை யுருபு நின்ற நிலைக்களத்துச்சென்று நிற்குமாயின் உருபு மயக்க மாவான் செல்லும். இச்சொற்களையெல்லாம் ஆசிரியர் இளம்பூரணர் இவர் கொள்கைக் கேற்ப உருபெனவே கூறிப்போந்தனர். சொல்லதி காரத்திற்குரை கண்ட சேனாவரையர் உரையாசிரியர் கொள்கையின் படி உருபாயின் "கண்ணென" முன்னோதியவர் பின்னுங் கண்ணென

வோதுவாயின் கூறியது கூறலாமாகலானும், ஏனைய வேற்றுமைகட்கு உருபும் பொருளும் கூறிய ஆசிரியர் ஏழாவதற்குப் பொருள் கூறாது உருபு கூறுவாயின் குன்றக் கூறலாமாகலானும் அப்பத்தொன்பதும் பொருளேயாமென்றனர். இவர் கூறியாங்கு அவைகளே யுருபெனக் கொண்டு இவைகள் கண்ணென்னுமுருபு நின்ற நிலைக்களத்துச் சேறல் உருபு மயக்கமெனக் கோடுமெனின் தனக்கினமான வேறுருபின்றிய ஐ, கு முதலிய வேற்றுமைகள் சென்று நிற்கும் நிலைக்களத்தும் இவ்விரண்டற்கும் இனமாக உருபு வேறின்மையால் இவ்விரு வேற்றுமைக் கண்ணும் உருபு மயக்க மின்றுமெனப் பொருள்படும். படவே "யாதனுருபிற் கூறிற்றாயினும் பொருள் சென் மருங்கின் வேற்றுமை சாரும்" என்ற தொல்காப்பியனார் உருபு மயக்கத்திற்குக் கூறிய இலக்கணத்தோடு மாறுகொள்வதன்றி "இளையரிராணற் கிழங்கு மணற் கீன்றதூஉ" எனவும் அலகிலற்புதக் கூத்துமையினைக் காட்டும் எனவும் "இங்ஙகர்க்கே வாழ்கின்றேம்" எனவும் ஆன்றோர் பலருங்கூறிய உருபு மயக்கத்தோடு இகலுற்று நின்றமையுங் காண்க.

இனி இவர் கருத்தின் வண்ணம் கொள்வது உருபு மயக்கமாயின் வேற்றுமைகட் கோதிய இலக்கணச் சூத்திரங்களே அமையும். இவற்றை யொழித்து வேற்றுமை மயங்கியலென ஓரோத்திற்குப் பெயர் கொடுத்துச் சூத்திரங்களுஞ் செய்தல் வீணாரவாரமே யன்றிச் சிறிதும் பயனின்று மென்றொழிக.

இவர் நுனித்தறிந்தோதிய உருபுமயக்க விலக்கணம் வேற்றுமை மயங்கியலிலுள்ள உருபு மயக்கச் சூத்திரத்தினும் பொருண் மயக்கச் சூத்திரத்தினு மடங்காமையின் வேறென்ம் மயக்கச் சூத்திரத்துளடங்குமோ யாமறியேம். இரண்டாவதற்கு ஐ என்னும் உருபை யன்றி இனமாக வேறுருபின் றென்பது உலகறி பெற்றியேயாம்.

இனமுள்ளதும் இனமில்லதுமாகிய எல்லாவுருபும் மயங்கும் என நுனித்துணர்ந்தன்றே "யாதனுருபிற் கூறிற்.....வேற்றுமை சாரும்" என்றார். இவர் கொள்ளும் மயக்க விலக்கணம் வேற்றுமை மயங்கியலுளடங்காமையின் அசம்பவ மென்னுங் குற்ற முடைத்தாகலுங் காண்க.

இங்ஙனம் இம்மயக்கங்களே நுனித்துணர்தல் அருமை யென்பது தோன்ற இலக்கணவிளக்க நூலார் "அவ்விரு திறனுஞ் செவ்விதி னுடி, இவ்வென வறிதலியல் புணர்ந்தோரே" எனக் கூறிய சூத்திரம் போற்றத்தக்கதாகும்.

ஆசிரியர் சேனவரையர் இப்பத்தொன்பதும் ஏழாம் வேற்று மைப் பொருள் என்றார் என மேற்கூறிப் போந்தாம். இவை யுருபா யின் "ஊர்ப்புறத் திருந்தான்" "ஊரகத் திருந்தான்" என மகர வீற்றிற்கு விதித்த அத்துச்சாரியை பெறுவாகலின் உருபன்றெனவும், உருபல்லவேல் "என்னுழை யிருந்தான்", "என்முன் சொன்னன்" முதலிய சொற்களில் நிலைமொழி யுருபிற் கோதியசெய்கை யேற்ற வாறென்னை யெனின் "அதற் பொருட்டாகலின்" எனவும் "தம் மூடைய கண்ணளியும்" எனவும் நான்கனுருபும் ஆறனுருபுமாகிய இவ்விரண்டன் பொருள்படப், பொருட்டு என்பதும், உடைய என் பதும் வந்து நிலை மொழிச் செய்கை யேற்று நிற்றல் போல ஏழாவதன் பொருள்படவந்த "உழை, முன்" னென்பன நிலைமொழிச் செய்கை யேற்றதாகலின் இவையெல்லாம் உருபன்று என்க; இவையெல்லாம் உருபின் பொருள்பட வந்த பிற சொல்லாமென்று கொள்க.

இவ்வாறு உருபின் பொருள்பட வருஞ் சொற்கள் பலவாகும். அவை வருமாறு: ஆல், ஆன், பொருட்டு, நிமித்தம், காட்டிலும், பார்க்கிலும், அ முதலியனவாகும். இவற்றைப் பிற்காலத்துள்ள நூலாசிரியரெல்லாம் உருபெனவும், சொல்லுருபெனவுங் கொண்டு நூல் செய்வாராயினரென்க. ஆசிரியர் தொல்காப்பியனார் விதந்தோதிய வுருபுகளன்றி யேனையவெல்லாம் உருபின் பொருள்பட வந்த சொல்லேயாம். உருபன்றென்பது தொல்காப்பியராணையின் நூலு ணர்ந்தோர் கொள்கையாமென்க. இவையெல்லாம் உருபின் பொருள் பட வந்தன வென்பதற் கிலக்கணம் யாண்டுப் பெறுதுமெனின் கூறுதும்: ஆசிரியர் தொல்காப்பியனார் மூன்றும் வேற்றுமைக் கிலக் கணங் கூறிப் பொருளுணர்த்துமிடத்து "இன், ஆன், ஏது" என வும், நான்காம் வேற்றுமைக் கிலக்கணங் கூறிப் பொருளுணர்த்து மிடத்து "அதற் பொருட்டாதலின்" எனவும், ஆறும் வேற்றுமைக் கிலக்கணங் கூறிப் பொருளுணர்த்துமிடத்து "உடைமையின்" எனவும், இரண்டாவதற்கும் நான்காவதற்கும் நிரிபோதும் வழி உரு

பின் பொருள்பட வந்த "ஆன்" என்னும் சொல்லையும் உருபாக வுபசரித்து "ஐ ஆன்குச் செய்யுட் கவ்வுமாகும், ஆகா வஃறிணைக் கானல்லாதன" எனவும் உடம்பொடு புணர்த்தி இலக்கண மோதினமையின் இலக்கணமாம்; ஆதலின் இன்றுதல் யாண்டைய தென்க. இவையெல்லாம் உருபன்று. உருபின் பொருள்பட வந்த சொல்லாதல் தெளிவா மென்க.

இனி "யானையைக் கோட்டைக் குறைத்தான்" என்னுந் தொடர்மொழிக்கண் வரும் ஐயுருபிரண்டனையும் உருபுமயக்க மெனவும் "கிழங்கு மணற் கீன்ற" வென்புழி வரும் நான்காம் வேற்றுமையினையும் உருபுமயக்க மெனவும் கொள்ளும் சீவிர் "தூங்கு கையானேங்கு நடைய" என்புழி வரும் ஒடுவையும், ஆனையும் உருபு மயக்கமெனக் கொண்டால் வரும் இழுக்கென்னையெனின் ஈண்டு "யானையைக் கோட்டைக் குறைத்தான்" என்புழி மயக்கமாவது உருபேற்ற சொல்லும் உருபு நோக்கிய சொல்லும் பொருட் பொருத்த முறத் தம்முள் இயையாமையின் மயக்கமாதலின்றும்; இரண்டுருபும் ஒரு பொருட்கண் அடுக்கி வந்தமையின் மயக்கமாயினவென்க. "கிழங்கு மணற் கீன்ற" வென்புழி நான்காவதன் பொருளான் அவ்வுரு பேற்ற சொல்லும் உருபு நோக்கிய சொல்லும் தம்முளியை யாமையின் அவற்றையியைக்கும் ஏழாவதன் பொருட்டாயினவாற் றான் மயக்கமாமாறு கண்டுகொள்க. "தூங்கு கையான்" என்புழி உருபடுக்கிவரின் உருபு மயக்கமெனக் கோடும். அங்ஙனமன்றி ஒடு நிற்றற்குரிய விடத்தில் ஆனுருபு நின்று நிலைமொழியோடு வருமொழி பொருட் பொருத்தமில்லது போலத் தோன்றினும் அவற்றை யியைத்தற்கு வேறொரு வேற்றுமைப் பொருளன்றி அவ்வேற்றுமைப் பொருளே வருதலின் உருபு மயக்கத்தின்பாற் படாதிழுக்காதலறிக. ஒடுவும் ஆனும் இரண்டு வேற்றுமையாக வைத்து மயக்கங் கூற லாகாதோவெனின் "வேற்றுமை மயக்கமாவது ஒரு வேற்றுமையது ஒரு பொருட் கண்ணுக, சில பொருட் கண்ணுக வேனைய வேற்றுமை யுஞ் சேறலன்றே' அவ்வாறன்றிச் சிறிதொழித்து எல்லாப் பொருட் கண்ணும் இரண்டு உருபும் சேறலானும், வடநூலுள் பொருள் வேற்றுமை யல்லது உருபு வேற்றுமையான் ஒரு வேற்றுமையாக ஓதப்படாமையானும் ஈண்டு எல்லா வாசிரியரும் (ஒடு, ஆன் இரண் டனையும்) ஒரு வேற்றுமையாகவே ஓதினமையானும் இரண்டெனக்

கோடல் பொருத்தமில் கூற்று" மென்று மூன்றும் வேற்றுமைச் சூத்திரவுரையில் சேனவரையர் கூறியவாற்றானுணர்க.

ஆசிரியர் சேனவரையர் வேற்றுமை மயங்கியல் முதற் சூத்திர வுரையில், உருவு மயக்கமாவது தன் பொருளிற்றீர்ந்து பிறிதொன்றன் பொருட்கட் சேறலெனவும், பொருண்மயக்கமாவது தன்பொருளிற்றீ ராது பிறிதொன்றன் பொருட்கட் சேறலெனவுங் கூறி "யாதனு ருபின்" என்பதனால் உருபுமயக்க முணர்த்தினார்; அல்லனவற்று னெல்லாம் பொருண் மயக்க முணர்த்திற் றெனவும் வரைந்தனர். "யாதனுருபின்" என்னுஞ் சூத்திரத்து உருபு மயக்கமாவது உருபு நோக்கிய சொல்லும் உருபையேற்றசொல்லும் தம்முட் பொருட் பொருத்தமுறத் தழுவாது நிற்கும் என்றும், பொருண் மயக்கமாவது உருபேற்ற சொல்லும் உருபுநோக்கிய சொல்லும் பொருட்பொருத்த முற உருபு விரிந்தாயினும் தொக்காயினும் நிற்கப் பிறவேற்றுமைப் பொருள்கள் வந்து மயங்குமென்றும் பொருள்பட வரைந்திருத்தல் காண்க.

இங்ஙனம் வருதலே பொருண் மயக்கமுமாமென்பதனைப் பிர யோக விவேகநூலாரும், 'தன் பொருளிற்றீராது பிறிதொன்றன் பொருட்கட் சென்று உருபேற்ற சொல்லும் உருபு நோக்கிய சொல்லும் சிறு பான்மை தம்முளியை புடைத்தாதல்' என்று கூறியவாற்று னுணர்க. உருபு மயக்கத்திற்கு ஏனைய உரையாசிரியர் காட்டிய உதாரணங்களையே காட்டியிருத்தலின் வரையாது விடுத்தாம்.

இங்குப் பொருண் மயக்கத்திற்கும் உருபு மயக்கத்திற்கும் கூறிய இலக்கணங்களைக் கொண்டு, "முதன் முன்னவரின்" என்னுஞ் சூத் திரவுரையில் நச்சினார்க்கினியர் இவ்விரு மயக்கத்திற்குங் காட்டிய உதாரணங்களை நோக்கின் நன்கு புலனும். அவை வருமாறு. "யானை யைக் கோட்டின்கண் குறைத்தான்" பொருண் மயக்கம். "யானை யைக் கோட்டைக் குறைத்தான்", "மணியை நிறத்தைக் கெடுத் தான்" ஒரு தொடரின் இரண்டுருபு மயங்கலின் உருபு மயக்கம். "மணியை நிறத்தின்கண் கெடுத்தான்", "தலைமகனைச் செலவின்கண் அழுங்குவித்தல்" இவை பொருண் மயக்கம். "தலை மகனது செலவை அழுங்குவித்தல்" "தலைமகனைச் செலவை அழுங்குவித்தல்" "சாத்

தனை நூலை ஒதுவித்தான்," "யாற்றை நீரை விலக்கினன்" இவை உருபுமயக்கம்.

இனி இலக்கண விளக்க நூலாசிரியர் "பொருண் மயங்குதலும் உருபு மயங்குதலும் தெரிநிலையுடைய வேற்றுமைக்கண்ணே" எனவும் "அவற்றுள், பொருளின் மயக்கம் பிறிதொன்றன் பொருளொடு, தன் பொருள் விடாது தலைமயங்குதலே" எனவும் "உருபின் மயக்கம் ஒருருபின் பொருளொடு, தன் பொருள் விடுத்துத் தலை மயங்குதலே" எனவும் "அவ்விரு திறனுஞ் செவ்விதினுடி, இவ்வெனவறிதலியல் புணர்ந்தோரே" எனவுங் கூறலான் யாம் கூறியதே பொருந்துமாறு காண்க. இவ்வாசிரியர் இப்பொருண் மயக்கம் உருபுதொக்கு மயங்குவனவும் உருபு விரிந்து மயங்குவனவும் உளவென்றார். இதனைத் 'தொக்குழி மயங்கு' என்ற நன்னூற் சூத்திரத்தானுமுணர்க. விரிந்து மயங்குவன மேற்கூறிய உதாரணங்களானுமுணர்க. இங்குக் காட்டிய இறுதிச் சூத்திரத்தின் உரையின்கண் இவ்விருவகை மயக்கமும் செவ்வனே வரைந்துள்ளனர். ஆண்டுக் காண்க. இலக்கணக் கொத்து நூலாரும், சின்னூலாகிய நேமிநாதத்தாரும் இங்ஙனமே கூறியிருப்பதையும் அந்நூலானும் உரையானும் நன்கறிந்து தெளிக. உருபு மயக்கத்தைப் பற்றி முன்னர்க் கூறிய ஒரு சாரார் கருத்து இவ்விலக்கண நூல்களொன்றினும் வாராமையான் ஐயுறத் தக்கதேயாம்.

வாழ்த்துரை.

(Panditha mani, M. Kathiresa Chettiar)

பெருமை மிக்க ராஜா ஸர் அண்ணுமலைச் செட்டியார் அவர்களின் அறுபதாம் ஆண்டு நிறைவு விழா நடைபெற இருப்பது தெரிந்து அள விலா மகிழ்ச்சி யடைகின்றேன். கனம் ராஜா ஸர் அவர்கள் வாணிகத் துறையில் நிகரற்ற திறமை படைத்தவர்கள்; பொருளீட்டற்குரிய வினைத்திறங்களைப் பகுத்துணர்வதிலும், அவ்வுணர்வைச் செயன் முறைகளில் பயன்படுத்துவதிலும், அங்ஙனம் நெறியறிந்தீட்டிய பொருளை உலகத்திற்குக் காலம் அறிந்து ஒப்புரவறங்களைச் செய்வதி லும் தமக்கு ஒப்பாக எவரையுங் கூறமுடியாத நிலையில் சிறப்புப் பெற்று விளங்குபவர்கள்; இன்னோரன்ன செயற்கருஞ் செயல்களால் இவர்களுடைய புகழ் இந்நிலவுலகமுழுதும் பரந்து ஒளி செய்வ தாயிற்று. திருவுடையார் அறிவுடையராதலும், அறிவுடையார் திருவுடையராதலும் எளிதில் அமைவனவாகா. நம் ராஜா அவர்கள் திருவும் அறிவும் ஒருங்கே வாய்க்கப் பெற்றவர்கள். அறிவுடையார் குழுவில் திறம்படப்பேசும் சொல்வன்மையும், எச்செயலையும் வரை யறுத்துக் காலம் கடவாமல் நிறைவேற்றும் மதிவலியும், நிருவாக முறையில் பேராற்றலும் நன்கு படைத்தவர்கள். ஈட்டிய பொருளை வழியறிந்து அறஞ்செய்து புகழ் வளர்க்கும் பெருமை இவர்களுக்கே யுரியது. அண்ணுமலைப் பல்கலைக் கழகம் இவர்களுடைய சிறந்த புகழுருவமாக அமைந்ததொன்று. இப் பல்கலைக் கழகத்தில் எல்லாக் கலைகளும் வளர்ச்சி அடைகின்றன. சிறப்பாக இயற்றமிழும், இசைத் தமிழும் திருந்திய முறையில் வளம் பெற்று வளர்கின்றன. கனம் ராஜா அவர்களின் நன்கொடை பெற்ற அற நிலையங்கள் உலகத்தில் மிகப் பலவாம்.

நாட்டுக்கோட்டை நகரத்துத் தன வைசிய மரபு இவர்கள் அடைந்து வரும் பதவிகளால் பெரிதும் விளக்கமுற்றுத் திகழ்கின்றது. இவர்கள் குடிப்பிறப்பால் இளையாற்றங் குடிக்கோயிலில் பட்டினச் சாமியார் வகுப்பைச் சார்ந்தவர்கள். குலமுதல்வரோ சிவஞான ப்

பெருஞ்செல்வராக விளங்கிய பட்டினத்து அடிகளே ஆவர். இதனால் குலத்தாலும், நலத்தாலும், குணத்தாலும், புகழாலும், குறையா ஞான பலத்தாலும் உயர்ந்தவர்கள் நம் அரசர் பெருந்தகையாராவர். இவர் களுடைய செயற்கருஞ் செயல்களையும், பலவகை ஆற்றல்களையும், மதிவலியையும் அளந்துரைத்தல் அரிதாகும். இந்தியாவிலும் ஏனைய நாடுகளிலும் இவர்கள் பெயர் கல்லெழுத்துப்போல அறிவுடையார் உள்ளத்தில் பதிந்து விளக்கமுறுவது எனின், அது மிகையாகாது. எத்துணையோ அரிய வேலைகளுக்கு இடையில் மறப்பு என்பது சிறி தும் இன்றிச் சிறிய காரியங்களையும் நினைவு கூர்ந்து செய்து முடிக்கும் நினைவாற்றல் இவர்களிடத்து அமைந்திருத்தல்போலப் பிறர் இடத்துக் காண்டல் அரிதாகும். கற்றவர்களை நன்கு அறிந்து சிறப்பியற்றும் இவர்களது உயர்குணம் மிகவும் பாராட்டத்தக்கது. மாட்சிமை மிக்க இந்திய சக்கரவர்த்தி அவர்களாலும், பல்கலைக் கழகங்களாலும் இவர் கள் முறையே அடைந்து வந்த பட்டங்கள் மிகப் பலவாம். இது வரை கிடைத்த பட்டங்களைவிட இன்னும் உயரிய பட்டங்கள் இருக்குமாயினும் அவற்றிற்கும் இவர்களே பெரும் தகுதி வாய்ந்த வர்களென்பது உலகம் அறிந்த தொன்று.

பூர்வ புண்ணிய விசேடத்தால் சிறந்த அறிவும், கல்வியும், நற்குணங்களும் வாய்க்கப்பெற்ற குமார ராஜா. ஸர். முத்தையா செட்டியார் முதலிய புதல்வர் மணிகளை உடையவர்கள். இவ்வரசர் பெருந்தகையார்க்கு அணிமையில் கடைபெற விருக்கும் அறுபதாம் ஆண்டு நிறைவு விழா உலக விழாவாக் கொண்டாடத்தக்க தொன்று.

இன்னும் இவர்கள் வாழையடி வாழையாகக் கிளையொடு சுற்றந் தழைக்க இந்நில வுலகத்தில் பல்லாண்டு பல்லாண்டு வாழ்ந்து மக் களுக்கு நலம் புரியவும் இங்ஙனமே எண்பதாம் ஆண்டு வைர விழாவும் இவர்களுக்கு நிகழக்கண்டு இவ்வுலகம் இன்புறவும் இறைவன் திரு வருள் பாலிக்க வேண்டுகின்றேன்.

வாழ்த்துப் பாக்கள்

இசைத்தமிழ்ச் செல்வர் தி. லக்ஷ்மண பிள்ளை.

1. பாவேந்தர் போற்றுகின்ற பைந்தமிழைப் போற்றுதற்காய்
மூவேந்தர் முன்னுள் முளைந்தெழுந்தார்—காவேந்திப்
பண்ணூர் தமிழ்ப்பாப் பயிர் வளர்க்க இன்றெழுந்தார்
அண்ணா மலையா மரசு.

2. வெள்ளைக் கமலத்தில் வீற்றிருப்பாள் நம் இசையோ
டுள்ளக் கமலத்தில் உற்றிருக்க—மெள்ள முளைந்
தண்ணாமலைக் கழகம் அன்பிற் செயல்புரியும்
பண்ணுளார் போற்றப் பரிந்து.

3. அன்பே யமைகின்ற அண்ணாமலை வேந்தர்
மன்பே ரறத்தின் மகிமையெலாம்—பொன்போலக்
காட்டினார் செல்வர்க்குக் கல்விக் கழகத்தில்
காட்டினார் நீங்கா நலம்.

உயர்திருவாளர், இராசா சர் அண்ணமலை செட்டியார் அவர்களை

வாழ்த்தியது.

ச. முத்துக்குமர சுவாமி (வித். 3-ஆம் ஆண்டு)

நேரிசை வெண்பா

1. அண்ணு மலைமன்ன ணுற்று முதவிதனை
எண்ணிணு லெண்ணரிய எண்ணிணுல்—மண்ணில் முக்
கண்ணிணுன் காத்த கருவுயிர்க ளத்தனையும்
எண்ணுவதோ டொக்கு மிது.

2. திட்டமுட னேவகுத்த சட்டிபூர்த் தித்தினத்தில்
மட்டவிழ் கோதையர்கள் மங்கலமாய்—இட்டமுடன்
பண்டைத் தமிழ்பாடப் பண்புடனே கேட்டுநீ
எண்டிக்கு மேத்த விரு.

3. பண்ணுர் தமிழ்தனையும் பற்பன் மொழிகளையும்
மண்ணுேர்கள் கற்பதற்கு மாண்புடனே—எண்ணிய
அண்ணு மலைமன்ன அன்புடனே யெந்நாளும்
புண்ணியனைப் போற்றிவாழ் வாய்.

விஞ்ஞான வீரர்

(டி. பி. நவநீத கிருஷ்ணன் M.A.,
பௌதிக நூல் விரிவுரையாளர், அண்ணாமலைநகர்)

விஞ்ஞான முன்னேற்றத்தையே பெரிதாய்க்கருதி தம் உயிரையும் திரணமாய் எண்ணி பலவகை இன்னல்களுக்குட்படினும் மனந் தளராது தொண்டாற்றின விஞ்ஞானிகள் பலர் ஆவார். புதிர்க் கதிர்கள் (X-rays) முதன் முதலில் ராண்ட்ஜன் (Rontgen) என்ற விஞ்ஞானியால் கண்டுபிடிக்கப்பட்டன. அதன் தன்மைகளைப்பற்றிப் பல விஞ்ஞானிகள் ஆராய்ச்சிகள் செய்யலாயினர். அக்கதிர்கள் அதிக மாய்ப் படுவதால் உடலின் தோலும் தசையும் மிகவும் பாதிக்கப் பட்டுப் புண்கள் உண்டாகின்றன. பல ஆண்டுகளுக்குப் பின்னரே, ரப்பாலும் ஈயத்தாலுமான கவசங்களைப் பூணுவதால், இப்புண்கள் ஏற்படாதவாறு தடுக்கலாம் என்று கண்டுபிடிக்கப்பட்டது. அதுவரை புதிர்க்கதிர் புண்ணுல் பீடிக்கப்பட்டும், விஞ்ஞானத் தொண்டே தம் கடமையெனக்கருதி புதிர்க்கதிராராய்ச்சியில் பல விஞ்ஞானிகள் ஈடு பட்டனர். இவ்வாறுனவரில், களாரன்ஸ் டாலி (Clarence Dally) என்பாரும் ஒருவர். அவரது இரு கைகளும் சூட்டுப் புண் போன்ற புண்களால் பீடிக்கப்பட்டன. அவரது தலைமயிரும் முக மயிரும் உதிர்ந்துவிட்டன. இடதுகையில் புற்றுப் புண் மூண்டது. பின் வலது கையும் பாதிக்கப்பட்டது. புண் மருத்துவ சிகிச்சைகள் யாவும் பயனற்ற வையாயின. முதலில் இடது கையையும் பின்னர் வலது கையையும் வெட்டியெடுத்து விட வேண்டியதாயிற்று. ஆயினும் செயற்கைக் கைகளி னுதவி கொண்டு, அவர் தம் பணியாற்றி வந்தார். ஏழாண்டுகளாய் இவ் வாறுன நரகவேதனை அனுபவித்த பின், இறுதியில் கூற்றுவன் இவர் மீது இரக்கங்கொண்டு விடுதலை யளித்தான். புதிர்க்கதிர்களைப்பற்றின ஆராய்ச்சியில் ஈடுபட்டு இவ்வாறு வேதனைப்பட்டவர் பலர். இக்காலத் தில் இவ்வாறுன துன்பத்திற்குட்படாது பணியாற்றுதற் கேற்ற புதிர்க் கதிர்க் கருவிகள் கண்டுபிடிக்கப்பட்டுள்ளன. ஆதலின், இனி இத்துறையில் பணியாற்றும் விஞ்ஞானிகள் வேதனைப்படவும் உயிர் துறக்கவும் நேரா.

மலேக்காய்ச்சலின் (Malaria) காரணத்தையும் அதற்கான சிகிச்சை முறையையும் பற்றி ஸர் ரோனல்ட் ராஸ் (Sir Ronald Ross) என்ற மருத்துவ அறிஞர் ஆராய்ந்து வந்தார். அக்காய்ச்சல் வராதவாறு தடுப்பதற்கான வழிகளை அவர் கண்டுபிடிக்க எண்ணினார். கொயினை சாந்து (Plasmoquine) என்ற மருந்தை உண்பதால் அக் காய்ச்சல் வராதிருக்கும் என்று கண்டுபிடித்தார். அம்மருந்தைப் பற்றிய சோதனைக் குட்பட பதினைந்துபேர் இசைந்தனர். மூவர் மருந்துண்ணுதிருந்தனர். ஏனையவர் மருந்தை அருந்தினர். அதன்பின் மலேக்காய்ச்சலுக்குக் காரணமான கொசுக்கடிக்கு எல்லோரும் உட் படுத்தப்பட்டனர். மருந்துண்டவர் காய்ச்சலால் பீடிக்கப்படாது தப்பினர். மருந்துண்ணுதவர் பதினைந்து நாட்களுக்குப்பின் காய்ச்சலால் பீடிக்கப்பட்டனர். இங்ஙனம் விஞ்ஞான முன்னேற்றத் திற்கெனத் துணிவுடன் காய்ச்சலின் வாய்ப்படுதற்கு முன்வந்தவர் இலட்சிய வீரரே யன்றே?

மஞ்சள் காய்ச்சல் (Yellow Fever) என்ற மற்றொரு கொடிய நோயைத்தடுக்கும் ஆராய்ச்சிகளிலும், இவ்வாறே ஐவர் சோதனைக்குட் பட முன்வந்தனர். ஆனல், அவ்வமயம், மருந்து பயனற்றதாயிற்று. ஐவரில் இருவர் நோய் வாய்ப்பட்டு இறந்தனர். இவர் லாஸியர் (Lazear) என்ற பெயர் பெற்ற அமெரிக்க நாட்டு மருத்துவரும், க்ளாரா மாஸ் (Clara Maas) என்ற தாதியுமாவர். பேராசிரியர் ஆட்ரியன் ஸ்டோக்ஸ் (Professor Adrian Stokes) என்பாரும் இந் நோயைப்பற்றின ஆராய்ச்சியில் ஆப்பிரிக்காவில் ஈடுபட்டிருந்த காலத்தே அந்நோயால் பீடிக்கப்பட்டு உயிர்துறந்தார்.

புற்றுப் புண்ணை (Cancer)ப் பற்றிய ஆராய்ச்சிகளிலீடுபட்ட பலர், அப்புண்ணை வலியப்பெற்றுக் கொண்டனர். அவர்கள் இன்ன ரென்பதை இன்றும் நாமறியோம். யாருமறியாத இவ்வீரரே விஞ் ஞானத்தின் சிறந்த வீரர் என்பதில் ஐயமில்லை.

குஷ்டரோக நிவாரணத்திற்கான முறைகளைப் பற்றின ஆராய்ச்சி யில், டாமியன் பாதிரியாரும் (Father Damien) ஸர் ஜார்ஜ் டர்னர் (Sir George Turner) என்பாரும் மிகவும் ஈடுபட்டனர். டாமியன் பாதிரியார் பெல்ஜிய நாட்டினர். அவர் ஒரு துறவி. குஷ்டரோகிகள் மட்டும் வசித்துவந்த மாலோகை (Molokai) என்ற தீவிற்குச் சென்றுத் தம் ஆராய்ச்சிகளைச் செய்யலாயினர். அங்கே, பன்னீ

ராண்டுகளுக்குப் பின்னர் அக்கொடிய நோயால் பீடிக்கப்பட்டு இற்றார். ஸர் ஜார்ஜ் டர்னர் ப்ரெடோரியா (Pretoria) என்ற நகரின் புறத்திருந்த குஷ்டரோக நிலையத்தில் ஆராய்ச்சிகள் செய்து வந்தார். பின்னர் தம் நாடு சென்றபோது, அந்நோய் வாய்ப்பட்டு உயிர்துறந்தனர். தியாக மூர்த்திகளான இவ்விருவரின் அரும் ஆராய்ச்சிகளின் பலனாய் பல குஷ்டரோக நிவாரண முறைகள் கண்டுபிடிக்கப்பட்டன. இன்னும் இரு தலைமுறைகளில் அந்நோயே இவ்வுலகினின்று மறையும்படி செய்வதற்கேதுவான நிவாரண முறைகளுக்கு அவர்கள் வழி காட்டியுள்ளனர்.

சென்ற சில ஆண்டுகளாய் சாவுமணி வண்டு (Death watch Beetle) என்பவற்றால் ஏற்பட்ட நாசங்களைப்பற்றி கேள்வியுற்றுள்ளோம். அவை விலையுயர்ந்த மரங்களைக் குடைந்து அழிக்கின்றன. அதனால் பல்லாயிரம் பொன் மதிப்புடைய மரங்கள் அடியோடு நாசமாயின. இவ்வண்டுகளை அடியோடு கொல்லுவதற்கான விஷவாயுவைக் கண்டுபிடிக்கும் ஆராய்ச்சியில், பேராசிரியர் மாக்ஸ் வெல் லெப்ராய் (Professor Max well Lefroy) என்பவர் முனைந்தார். அவர் இங்கிலாந்தில் சிற்றின நூல் அறிஞரில் (Entomologist) சிறந்தவர். தான் கண்டுபிடித்த வாயுக்களின் தன்மைகளை அறியும் பொருட்டு அவற்றைத் தாமே துணிவுடன் முகர்ந்து பார்த்தார். அவ்வாறு செய்தபோது பன்முறை இறக்கும் தறுவாயிலிருந்தும் உயிர் பெற்றெழுந்தார். அவரது அருஞ்செயலைப்பற்றி போற்றி செய்தித்தாள்கள் எழுதின. அதைக் கண்ட பேராசிரியர் வருத்தமுற்றார். "இச்சிறு நிகழ்ச்சி மிகைப்படுத்தப்பட்டு விளம்பரமானதைக் கண்டு நான் வியப்புறுகிறேன். அது எனக்கு வருத்தத்தையும் புண்டு பண்ணுகின்றது. இவ்வாறான சிறு விபத்துக்கள் விஞ்ஞான ஆராய்ச்சிகளிடை நாடொறும் உண்டாகும் நிகழ்ச்சிகளேயாம். அவற்றை விஞ்ஞானிகள் ஒரு பொருட்டாய்க் கருதுவதில்லை" என்று அவர் கூறினராம்.

இரண மருத்துவத்தில் பெரிதும் பயன்படும் மயக்க மருந்துகளைப்பற்றின ஆராய்ச்சிகளில் ஈடுபட்ட ஸிட்னி ராசன் வில்சன் (Sidney Rawson Wilson) என்ற மருத்துவர் அவ்வாராய்ச்சியின் கண் தம் உயிரையிழக்க நேர்ந்தது.

போரில் உபயோகிக்கப்படும் விஷவாயுக்களால் கொல்லப்படாதிருப்பும் வழிகளைப் பற்றின ஆராய்ச்சிகளில் ஈடுபட்டு மாண்ட விஞ்ஞானி

கள் பலர் ஆவர். அவரில் தலையானவர் லப்டினன்ட் கர்னல் ஹாரிஸன் (Lieutenant Colonel Harrison) என்பாரும், காப்டன் அலக் சாண்டர் கெம்பல் (Captain Alexander Gemmel) என்பாருமாம்.

பேராசிரியர் ஜே. பி. எஸ். ஹால்டேன் (Professor. J. B. S. Haldane) காற்றறைக்குள் நடை பெறும் நிகழ்ச்சிகளை அறிதற்கான ஆராய்ச்சிகளிலீடுபட்டார். காற்றறையில் வெளியே யிருந்து உள்ளே எதுவும், உள்ளே யிருந்து வெளியில் எதுவும் செல்ல இயலாது. அவ் வறையில் அவர் தம்மை அடைத்துக் கொண்டார். கரி ஒருயிரி (Carbon monoxide) எனும் வாயுவை உட்கொள்வதால் ஏற்படும் விளைவுகள் யாவை யென்பதை அறியவே அவர் துணிவுடன் இச்சோ தனைக்குத் தம்மைத் தாமே உள்ளாக்கிக் கொண்டார். தன்னுடன், அவ்வாயுவை உட்கொள்ளாது, உயிரியத்தை (Oxygen) உட்கொண் டிருந்த மற்றொருவரை தமது நிலைமை அவ்வப்போது எப்படி யிருந் தது என்பதைக் கவனித்துக் குறித்துக் கொள்ளுமாறு செய்தார். வாயுவை உட்கொண்ட சிறிது காலத்திற்குப்பின் அவர் மெய்மறந்த நிலைமையை யடைந்தனர்; தன் கையிலிருந்த கண்ணுடியின் பின்புறத் தில் முகத்தைப் பார்த்துக் கொண்டிருந்தார். இன்னும் இது போன்றே அவர் செயல்கள் விந்தையாயிருந்தன. ஆடியும் பாடியும் குடி வெறியுடன் இருப்பதுபோல் தோன்றினர். இவை யாவற்றையும் அவருடனிருந்தவர் கண்டார். இங்ஙனம், ஹால்டேன் பல சோதனைகளுக்கு உட்பட்டார். இவற்றின் விளைவாய் தரையின்கீழ் வேலைசெய்யும் கனித் தொழிலாளருக்கும், வானில் பவனத்திற் கப்பாலும் பறக்கும் விமானிகளுக்கும் மிகவும் பயன்படும் அறிவைப் பெற ஏதுவாயிற்று.

ஸர் ஹென்ரி ஹெட் (Sir Henry Head) என்ற மருத்துவ விஞ் ஞானி, பல வேறுபட்ட உணர்ச்சிகளுக்குக் காரணமான நரம்புகள் யாவையென கண்டுபிடிக்கும் நிமித்தம், தம் இடது முழங்கையின் கீழிருந்த உணர்ச்சி நரம்புகள் துண்டிக்கப்படுமாறு செய்தார். இச் சோதனையினின்று, நரம்புகள் இருவகையானவை யென்றும், ஒரு வகையானவை சூடு, குளிர், வலி இன்னோரன்னவற்றை உணர் விப்பவை யென்றும், மற்றொரு வகையானவை, ஊறுணர்ச்சியை அறிவிப்பவையென்றும் கண்டுபிடித்தார். வெட்டப்பட்ட நரம்புகள் பின் ஒன்று கூடி அவர் யாதொரு ஊனமுமின்றி தப்பினரெனினும்

அவை துண்டிக்கப்பட்டபோது, அவ்வாறு நரம்புகள் ஒன்று சேரு மென்று எவரும் எண்ணவில்லை. எனவே விஞ்ஞானத்திற்கென தம் உறுப்பையும் உயிரையும் இழக்கத் துணிந்த ஹெட் ஒரு இலட்சிய வீரரேயாவர். கஸ்டாப் டேலன் (Gustaf Dalen) என்ற ஸ்வீடன் நாட்டு விஞ்ஞானி, மக்கள் நடமாட்டமற்ற தனிமையான கடற்கரை யோரங்களில் விளக்குகள், இரவில் எரியவும் பகலில் அணைந்திருக்கவும் செய்வதற்கான சாதனங்களைக் கண்டுபிடிக்கும் ஆராய்ச்சிகளிலீடுபட்டு வெற்றிபெற்றார். அவ்விளக்குகள் ஆழ்கடல் சென்று மீன்பிடிக்கும் செம்படவர்க்கும் மாலுமிகளுக்கும் பெருந்துணையாயுள்ளன. அவ் வாராய்ச்சியிலீடுபட்டிருந்த காலத்து, கரியடுவாயு (acetylene gas) போன்ற வாயுக்கள் அமுக்கிவைக்கப்பட்டிருந்த குழல்களைக் கையாள வேண்டியிருந்தது. ஒருநாள் அக்குழலொன்று வெடித்ததனால் டேலன் ஒரு கண்ணை இழந்தார்.

விஞ்ஞானிகளின் வீரச்செயல்கள் சோதனை மன்றத்தினுள் மட்டும் ஆற்றப்படுபவையன்று. அறிவை நாடி அவர்கள் உயர்ந்த மலை கள் மீதேறுகின்றனர்; ஆழ்கடலினுள் மூழ்குகின்றனர்; பனி வெளி களைக் கடக்கின்றனர்; விண்ணில் பறக்கின்றனர்; எரிமலைகளினுள் புகுகின்றனர். சி. ஜி. கர்டிஸ் (C. G. Curtis) என்ற நிலநூல் விஞ்ஞானி மாண்ட் பெலி (Mont Pelee) என்ற எரிமலை வெடித் தெரிந்து கொண்டிருந்தபோதே அதன் வாயினுள் சென்றார். அவ் வாயின் விளிம்பு சாம்பல் மயமாய் இருந்தது. மூச்சைத் திணரச் செய்யும் கந்தகப்புகை எங்கும் நிரம்பியிருந்தது. இவற்றைக் கடந்து கர்டிஸ் அவரது துணைவருடன் சென்றனர் உள்ளே. உள்ளே கல் மாரியும் மண் மாரியும் கலந்த கடும் மழை பெய்துகொண்டிருந்தது. அவர்கள் இவ்வாறு மழை, புயல், புழுதி, புகை யாவற்றையும் பொருட் படுத்தாது அங்கு நடந்தேறின இயற்கை நிகழ்ச்சிகளைக் காண முயன் றனர். ஆயினும் அக்குகை புகையாலும் புழுதியாலும் மூடுண்டிருந்த மையின் எதையும் காண இயலாது போயிற்று. பின் ஒருவாறு உயி ருடன் வெளியேறினர்.

ஆயினும், வைட் (White) என்ற மற்றொரு விஞ்ஞானி கொலம் பியா (Columbia)வினுள்ள ப்யூரேஸ் (Purace) என்ற பதினைந்தாயிரம் அடி உயரமான எரிமலையின் வாயினுட் சென்றனர். அங்கு முற்றும் கொழுந்துவிட்டெரிந்து கொண்டிருந்த அனலின் காட்சியைக்கண்டார். அத்தீயானது பலதிற நிறங்களுடன் ஒளிர்வதைக் கண்டார். அந்நிறங்

கள் அங்குள்ள உப்பியம் (Sodium) சிவப்பியம் (Strontium), நிலவியம் (Magnesium) நிறமியம் (Chromium), இன்னோன்னவை சுடர் விட்டெரிவதால் தோன்றுபவையென்று கண்டார்.

அலெஸ்ஸாண்ட்ரோ மல்லாட்ரா (Allesandro Malladra), ப்ராங்க் பெர்ரட் (Frank Perret) என்றோர் வெஸூவியஸ் (Vesuvius) எரிமலையின் வாயினுட் சென்று ஆயிரம் அடிக்குக் கீழிருந்த அதன் அடிப்புறத்தைச் சேர்ந்தனர். தீக்குழியில் ஒளிரவைக் கழித்தனர். பலவகையான அற்புத நிகழ்ச்சிகளைக் கண்டனர். அவற்றைப் படம் பிடித்தனர். இவ்வாறு கண்டறிந்தவற்றின் உதவி கொண்டு அவ்வெரிமலை வெடித்து எரிவதற்குப் பல நாட்களுக்கு முன்னரே, அந்நிகழ்ச்சியைப் பற்றிய முன்னெச்சரிக்கையைப் பெற்று, அவ்விபத்தால் ஏற்படும் உயிர்ச்சேதத்தையும் பொருட் சேதத்தையும் தவிர்க்கலாம் என்று அவர் கண்டுபிடித்தார்.

பிகார்ட் (Piccard) என்ற பெல்ஜிய நாட்டு விஞ்ஞானி, பவனத் திற்கப்பாலுள்ள மேற் படலத்தை (Stratosphere)ப் பற்றிய ஆராய்ச்சிகளில் முதன் முதலாய் ஈடுபட்டனர். அவர் ஒரு பெரும் புகைக் கூண்டில் ஆறுமைல்கள் விண்ணில் சென்று தம் ஆராய்ச்சிகளைச் செய்தார். பின்னர் அவரே, பத்தேகால் மைல்கள் உயரம் சென்றார். இதன்பின், பல நாட்டு விஞ்ஞான ஆராய்ச்சியாளரும் இவ்வாறான மேற்படல ஆராய்ச்சிகளிலீடுபட்டு வானில் பறக்கலாயினர். அவ்வாராய்ச்சிகளின் விளைவாய், ஒலி பரப்பலுக்கும், விமானப்போக்கு வரத்திற்கும் உதவி செய்யும் அறிவுப்பெருக்கம் ஏற்பட்டுள்ளது. விண்ணியல் கதிர்களை (Cosmic Rays)ப் பற்றின அறிவும் அதிகரித்துள்ளது.

ஆண்டு தோறும் இவ்வாறான விஞ்ஞான வீரரின் எண்ணிக்கை அதிகரித்துக்கொண்டு வருகிறது. அறிவைப்பெருக்கும் அரும்பணியில் அவர் எதையும் செய்யத் துணிகின்றனர். விஞ்ஞான ஆராய்ச்சிகளில் அவர் பெற்ற வெற்றிகள் பலவாம். மக்கள் எல்லோரும் அவ் வெற்றிகளின் பயனை அடைகின்றனர். வெற்றியடைபவரைப் பல நாட்டினரும் போற்றுகின்றனர். விஞ்ஞானம் பல நாடுகளிடையுள்ள வரம்புகளை யறியாது. விஞ்ஞானத்தின் விளைவியல்கள் உலகிற்கே பொதுவானவையாம். அவற்றைக் கண்டுபிடிக்கும் முயற்சியில் துணிவுடன் ஈடுபட்ட எல்லோரும் மக்களினத்திற்கே பொதுவான உண்மை விஞ்ஞான வீரர்.

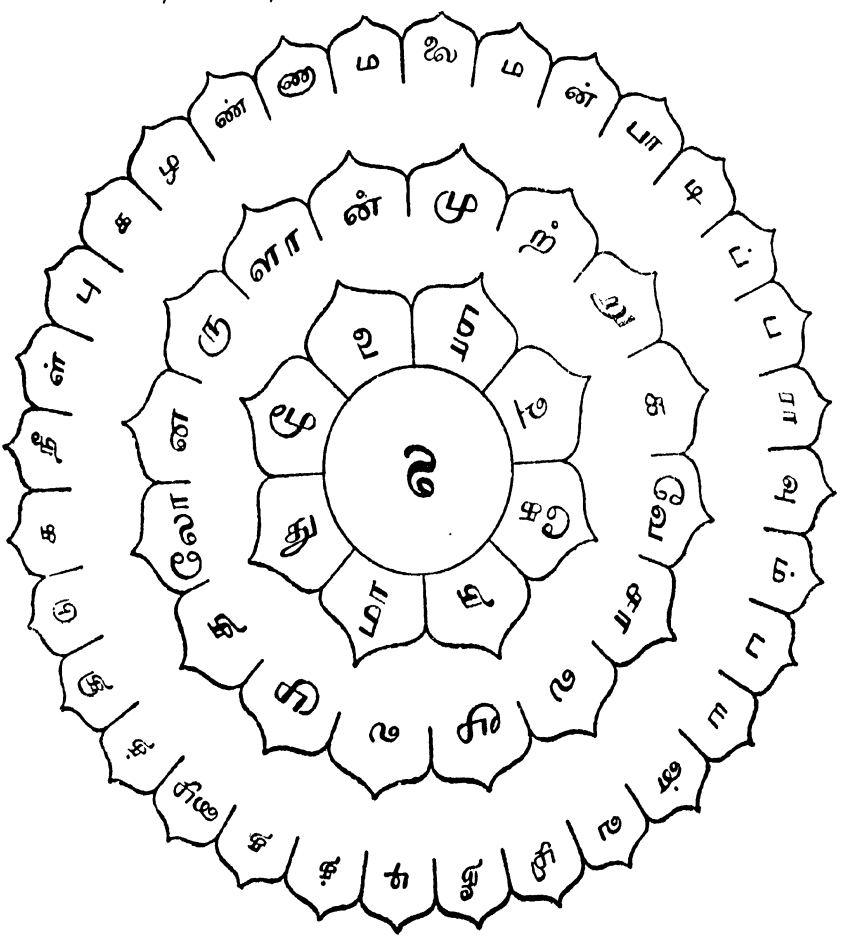
ஆனரபிள் டாக்டர் ராஜா சர். S. R. M. அண்ணமலைச் செட்டியார்
அவர்கள் KT. L. L. D.

அறுபதாம் ஆண்டு நிறைவு விழா நாள்

பாராட்டு

பதும பந்த சித்திரகவி

மாலதுல மூலவல மாலவுல கேல நல
மூலமுதலோ னருளான் முற்றுகவே—சாலவழி
நீடித் தழைத்திடுக நீள்பு கழண்ணமலை மன்
பாடிட் பராவும் பயன்



VIDWAN. T. P. PALANIAPPA PILLAI, B. O. L.
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தமிழ் இசை வளர்ச்சித் தலைவர்

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இத்தமிழ் நாட்டின்கண் பண்டு தொட்டு, சேர, சோழ, பாண்டிய மன்னர்களாலும், மற்றும் பல சிற்றரசர்களாலும் போற்றப்பட்டு வந்த, இயல், இசை, நாடகம் என்னும் முத்தமிழும் இடைக் காலத்தில் அவற்றின் நிலையினின்றும், சிறிது வழுவியிருந்தும், இயற்றமிழ்க் கலை யானது, சில பெரியோர்களின் பெரு முயற்சியால், இறந்துபட்டவை போக, நின்றதில் பெரும்பான்மையானவை வெளிவருவாயின. ஆனால் இசைத் தமிழ்க் கலையோ என்றால் நாளுக்கு நாள் கீழ் நிலையை அடைந்து கொண்டு போவதோடல்லாமல் தமிழில் இசைப் பயிற்சி உண்டாயிருந்தது என்று சொல்லுவதற்குக் கூட இடமில்லாதவாறு, போய் விடுமோ, என்று ஐயுறவேண்டிய நிலைக்கு வந்து விட்டது. அதனைப் பழைய நிலைக்குக் கொண்டுவர வேண்டியது அரசர்களின் கடனுதலால், அதனை உணர்ந்து நமது அரசர், ராஜா. சர். அண்ணா மலைச் செட்டியார் அவர்கள், பல கலைகளையும் உயர்த்த வேண்டுமெனப் பெரியதொரு எண்ணம் கொண்டு தமிழுலகம் போற்ற அண்ணாமலைப் பல்கலைக் கழகம் நிறுவினர். அதனினும் சிறப்பாக எந்நாட்டாராலும் போற்றத் தகுந்ததும் இதுவரையும் எவராலும் செய்யப்பட்டிராத அரும்பெருந் தொண்டாம் இசைக் கலையை வளர்க்கும் அரும் பணியை மேற்கொண்டு, உயர்ந்த முறையில் தொண்டாற்றி வருகின்றார். அவ் விசைக் கலையானது. தமிழில் பல்லாயிர ஆண்டுகட்கு முன்னரே இருந்து வந்தது என்றதற்கு ஆதாரங்கள் பல இருக்கின்றன. அவற்றுள் தலை சிறந்து விளங்குவன. "இசை நுணுக்கம்", "பெரு நாரை", "பெருங்குருகு", "தாளவகை ஒத்து". முதலியனவாகும். பழைய தமிழ் நூலாகிய "பரிபாடல்" என்பதிலும், இசையினைப் பற்றி அறி யலாம். இவ்விசை இலக்கணத்தை உணர்ந்தே, இடைக்காலத்திற் றோன்றிய "தேவாரம்" "திருவாய் மொழி" இவைகளை இயற்றிய இசைப் புலவர்களாகிய சைவசமய குரவர்களும், வைணவ ஆழ்வாராதி களும் செய்திருக்கின்றனர் என்று புலனாகின்றது. இன்னும் அவை

கள் இசையுடனே தமிழ் நாட்டின்கண் பயிலப்பட்டு வருகின்றன. அவை எக்காரணத்தாலோ, இசையின்பாற் பட்டதாகத் தற்கால இசை வல்லுநர்களால், கொண்டாடப்படவில்லை. இதனைக், காலஞ் சென்ற தஞ்சை, ராவ்சாகேப், கே. சீனிவாசம் பிள்ளை அவர்கள் "தமிழ் வரலாறு" என்ற நூலில், "தேவாரப் பண்களில் காணப்படும், பண் செவ்வழி, தக்காராகம், பழம்பஞ்சுரம், தக்கேசி, நட்டராகம், சீகாமரம், குறிஞ்சி, காந்தாரம், இன்னோரன்ன பிறவும் இக்காலத்திற் கொண்டுள்ள, ராகதாள அமைப்பை விடச் சிறந்தனவாக இருந்தன" என்று குறிப்பிடுகின்றார். இதனையே வற்புறுத்திப் பரிதிமாற் கலைஞன் எனத் தமிழ்ப் பெயர் தாங்கிய சூரிய நாராயண சாஸ்திரியார் அவர்கள் தாம் எழுதிய "தமிழ்மொழியின் வரலாறு" என்ற நூலில், "இடைக் காலத்திற் றோன்றிய இசைத்தமிழ் இலக்கியநூலாகிய மூவர் தேவாரங்களும், தமிழிற்கே உரிய பண்ணும் திறனும் பயின்றனவாக ஒளிர்கின்றன. இத்தேவாரங்களுக்குப் பின்னர் எற்பட்ட இசைத்தமிழ் இலக்கிய நூல்களில் வடமொழி ராக அமைப்பும் தாள வகையும் காணப்படுகின்றன என்றும் அதுவுமன்றி இக்காலத்தில் நிலவுறும் இலக்கியமும், இலக்கணமுமாகிய இசைத்தமிழ் நூல்கள் எல்லாம், "மேள கர்த்தா" என்னும் வடமொழி நூலைத்தழுவியே அமைக்கப் பட்டிருக்கின்றன" என்றும் கூறுகின்றார். ஆதலின் அதற்கு முன்னரே தனித்தமிழில் இசைநூல் இருந்திருக்கவேண்டும் என்பது தெளிவாகின்றது. இறைவன் கீர்த்தியைப்பாடும் பாட்டிற்கு, கீர்த்தனம் என்றும் அழகாகப் பெண்கள் பலர்கூடி வரிசையாக நின்று பாடும் பாட்டிற்கு "வரிப்பாட்டென்றும்" சிறு சிறு முடிபுகளாகக் கேட்போர் எளிதில் அறிந்துகொள்ளும் பாட்டிற்குச், "சிந்து" என்றும், இவையல்லாது, ஆனந்தக்களிப்பு, கும்மி, என்றும், பெயரிட்டு, பலபாட்டுகள் செய்திருக்கின்றனர் என்றது மறுக்க முடியாத உண்மை. சிலப்பதிகாரம் என்ற நூல், இயல், இசை, நாடகம் என்ற முத்திறக்கலையையும், உடைத்தாயிருத்தல், இன்று கண்டு வருகின்றோம். அதுவுமன்றி நூலாசிரியர் பெயர்கூடக் காணப்படாத அவ்வளவு பழமையான "முக்கூடற்பள்ளு" முதலான நூல்கள் இசையோடு கூடியதாக இன்றும் காணப்பட்டு வருகின்றன. அவைகளில் நாம் இன்னும் கேட்டிராத பல இசை நுணுக்கங்களும் அமைந்துள்ளன. 96 பிரபந்தங்களில் ஒன்றாகிய "கலம்பகம்" என்னும் பிரபந்தத்தில், குறம், மறம், அம்மானை, தாழிசை என்

பண போன்ற இசைகள் எல்லாம் காணப்படுகின்றன. இனியும், நாடகத்தமிழ் நூல்கள் அளவிறந்தனவாக இருந்தன என்று கேட்கப் படுகிறது. அவற்றுள். "பரதம், அகத்தியம், முறுவல், சயந்தம், குண நூல், செயிற்றியம்" என்பன இருந்தனவாகக் காணக்கிடைக்கின் றன. இதனால் அறியக்கிடப்பது என்னவென்றால், இசையினைப் பற்றிக் கூறும் நூல்கள் தமிழில் இல்லையானால் இயலும், இசையும் கூடியதாகிய நாடகம் இல்லாதிருந்திருக்கவேண்டும். அப்படிக்கில்லாமல் பல அரிய நாடக நூல்கள் இருந்ததனால், அவற்றிற்கு மூன்றாகவே இசை நூற்களும், இசைவல்லுநர்களும், இருந்தனர் என்பது விளங்கு கின்றது. ஆனால், இத்துணைச் சிறப்பினை உடையதாகிய தமிழ் இசை, இப்போது இல்லாமைக்குக்காரணம் என்ன என்று கேட்பார்களே யானால், இடைக்காலத்தில் தமிழ் நாட்டில் வந்து குடியேறியவர்களில், சைனர் முதலான மோக்ஷகாமிகள், இசை காமத்தைத் தூண்டுதலால், அது வீடுபேற்றிற்குத் தடையாகும் என்று சிறிது சிறிதாக அகற்ற லாயினர். வந்தோரை ஆதரிக்கும் குணம் படைத்ததமிழர்களும், அதனையே கைக்கொள்ளலாயினர். இக்கதையினை அறிந்த அரசர் தனித் தமிழிலேயே வளர்க்கவேண்டும் என்ற ஆர்வங்கொண்டு, அதற்கு அரும்பெரும் பாடுபட்டுவருகின்றார். அன்னாருக்குத் தமிழ் மக்களாகிய நாம் என்றும் மறக்க முடியாத கடப்பாடுடைய வர்கள் ஆவோம். அத்தகைய அரசவள்ளலார் பல்லாண்டு வாழ்ந்து, பல்கலை அனைத்தையும், உயர் நிலைக்குக்கொண்டுவந்து பல்லுலகமும், வாழ்த்தவாழுமாறு, எல்லாம் வல்ல இறைவனை வணங்குகின்றேன்.

† அழிந்த சிலவை

சிவமயம்.

பாலகவியார் துணை.

Bala Kavi V. Ramanatha Chettiar (Devakottai)

கனம் டாக்டர் ராஜா சர் அண்ணாமலைச் செட்டியாரவர்களின்

அறுபதாண்டு நிறைவு மணத்திற்குக் கூறிய

வாழ்த்து.

திருவிற் பொலியுந் தென்னர் தமிழ்ச் செல்வ நாட்டிற் றனவணிகர்
மருவித் திகழும் பதிகளிற்பல் வளத்தா லோங்கி வளருவது
தருவிற் றிருவிற் சுரபியினிற் சாரு நிதியில் மணியிலொரு
பொருவி லமரா புரியெனவே புகலப் பெருஞ்சீர் பொருந்துவதால். 1

பெரிய கோயிற் சிவலோகன் பிறங்கு மருளாற் றிருவாளர்
உரிய நலஞ்சேர் காஞ்சு காத்தா னுங்கே யுறைவணிகர்
கரிய வால மிடறடக்கிக் கருணை புரியுங் கயிலாய
கிரிய னித்ய கலியாணி னிளரும் பணியிற் கிழமையுளோர். 2

குலவுஞ் சீர்த்தி யிளையாற்றக் குடியாங் கோயில் மரபுடையார்
நிலவும் மரபி லெழுகிளையில் நின்ற புகழ்ப்பட் டணசாமி
யிலகும் பிரிவில் முத்தையவேள் இயற்றுதவத்தா லிவண்வந்தான்
உலக முழுது மிசைபரப்பி யொருவ னென்ன வுயர்தவத்தான். 3

அறிவிற் றிருவி லாண்மையினி லழகிற் கொடையி லாற்றலினில்
நிறையிற் பொறையிற் கல்வியினில் நிலையிற் பொலிவி னேயமதில்
குறிகொள் தவத்திற் பெரும்புகழில் குணத்திற்றனே தனக்கொப்பா
யுறையுங் கனவா னுயரண்ணா மலைவே ளென்றே யுரைபெறுவோன். 4

அரசர்க் கரசர் மிகமதித்திங் களித்த புகழ்சேர் டாக்டர்சர்
அரசர் முதலாம் பட்டங்களார்ந்து தில்லையம்பலக்கூத்
தரசர் மகிழப் பலபணிசெய் தழியாப் புகழை யடைந்து சிவ
னரசர்ப் பேச னருள்மிகுந்தா ணண்ணு மலைநன் னகர்கண்டான். 5

தண்ணுர் தமிழும் சமயமும்வான் தகவிற் செழிக்கச் செயல் புரிவான்
அண்ணு மலைப்பல் கலைக்கழக மமைத்திவ் வுலகுள் ளளவுமிசை
விண்ணே ருலகுஞ் செலப்படைத்தான் மேலாக் தமிழிற் கணிதமுயர்
பண்ணு தியவல் லார்தமக்குப் பரிசி லளிக்கும் பண்புடையான். 6

கல்வி நிலையம் பலகண்டு கற்பார்ப் புரக்குங் கனமிகுந்தான்
செல்வம் பிணியற் றிருத்தலெனத் தெளிந்து பலவாம் பதிகளினில்
மல்லல் மருந்துச் சாலைவைத்த வள்ள லறத்தின் வரம்புகண்டோன்
இல்லை யெனுமொன் றில்லாதோ னினிய மொழிக ளியம்பிடுவோன். 7

வெற்றி விசுவிற் புரட்டாதி மேவு முங்நான் கின்ன ளிற்
கற்றைச் சடையான் கருணையினுற் கருது மாறு பத்தாண்டு
முற்று மணத்தைக் கொண்டுயர்ந்தான் முதல்வன் அருளாற் பல்லாண்டு
சுற்றம் புதல்வர் துணைவசொடு சுகமே வாழ விறைஞ்சுதுமே. 8

நலம் பெருகுக.

பெருமைதங்கிய டாக்டர் செட்டிநாட்டு ராஜா ஸர்
அண்ணமலைச் செட்டியார் Kt., L. L. D. அவர்களின்
அறுபதாம் ஆண்டு நிறைவுவிழாவில்
அண்ணமலைப் பல்கலைக் கழகத்துத் தமிழாசிரியர்

பண்டிதர், லெ. ப. கரு. இராமநாதன் செட்டியார் கூறியவை

(நேரிசை வெண்பா)

1. அண்ணு மலைவேர் தறுபதாம் யாண்டுவிழாக்
கண்ணுரக் கண்டுநனி காதலித்து — விண்ணோர்கள்
கண்ணிமையா ராயினெவர் கண்டறிந் தம்மாண்பை
எண்ணி யுரைப்பா ரிவண்.

2. செல்வ வணிகன் திகழ்செட்டி நாட்டரசன்
கல்வி மிகுபல் கலைக்கழகம் — எல்லாரும்
போற்ற நிறுவினேன் பொன்மனெவி மக்களொடும்
ஏற்றமிக வாழ்கவினி தே.

3. தில்லைச்சிற் றம்பலவன் சீரருட் செல்வத்தால்
எல்லையில் கீர்த்தி எழிலீகை — கல்வியரம்
மன்னிவள ரண்ணு மலைவள்ளல் வாழ்கவுளத்
துன்னியன வுன்னியவா றுற்று.

உயர்திரு, அண்ணாமலை யரசர்

(பண்டித. லெ. ப. கரு. இராமநாதன் செட்டியார்)

பெருமை தங்கிய டாக்டர் செட்டிநாட்டு ராஜா ஸர் சர். ராம. மு. அ. அண்ணாமலைச் செட்டியார் Kt; L. L. D. அவர்கள், இராமநாதபுரம் ஜில்லாவைச் சேர்ந்த காஞ்சுகாத்தான் என்னும் நகரில், தனவணிகர் மரபில், இளையாற்றங் குடிக்கோயிலிற், பட்டினச்சாமி என்ற பிரிவைச் சேர்ந்த முத்தைய செட்டியாரவர்கட்கு மீனாட்சி ஆச்சி அவர்களிடம் விஷ்ணுவாண்டு புரட்டாசித் திங்கள் ௩ஈ (30-9-1881) ஆம் நாளில் தோன்றிய தவப்புதல்வராவார்கள். நிகழும் விஷ்ணுவாண்டு புரட்டாசித் திங்கள் ௩உ (28-9-1941) ஆம் நாளில் இவர்களின் அறுபதாம் ஆண்டு நிறை வெய்துகின்றது. இவர்கள்,

"மங்கல மென்ப மனைமாட்சி மற்றதன்
கல நன்மக்கட் பேறு"

என்பதற் கேற்பத், தம் மனைக்கு விளக்காய் நற்குண அரசியாய்த் திகழும் சீதை ஆச்சி என்னும் நங்கையோடும், அறிவறிந்த மக்கள் எழுவரோடும், அவர்கள் மக்களோடும் மகிழ்ந்து வாழ்கின்றார்கள். சீதை ஆச்சியார் தம் பெயருக்கேற்ப எட்டு இலக்குமிகளாகவே இலங்குகின்றார்கள்.

குமார ராஜா

இவர்களின் முதற் புதல்வரும், சென்னையிற் கல்வி மந்திரியாயும், இருமுறை மேயராயும், பன்முறை சட்ட சபை உறுப்பினராயும், ஜஸ்டிஸ் கட்சித் தலைவராயும், இன்னும் பல கூட்டங்களில் தலைவராயும், உறுப்பினராயும் அமர்ந்து சிறந்த பல செயல்கள் செய்து, நாட்டுக்கும் மொழிக்கும் பேருதவி புரிந்து வருபவர்களும், அறிஞரெல்லாம் மதிக்குமாறு, உள்ளத்திற் பதிந்து உணர்ச்சி ததும்பச் சொற்பொழி வியற்றுந் திண்மை, அறிவின் தண்மை, வண்மை முதலிய உயர்குணங்கட்கு

உறைவிடமும் ஆகிய குமாரராஜா ஸர் முத்தைய செட்டியார் B. A. அவர்களை அறியாதார் ஒருவருமிலர்.

"நீவா ழியர்கின் தந்தை
தாய்வா ழியர்நிற் பயந்தசி னோரே"

என அவர்களை வாழ்த்துவோமாக.

கல்வியும் நுண்ணறிவும்

அண்ணுமலை யரசர், தமிழிலும் ஆங்கிலத்திலும் நல்ல தேர்ச்சியுடையவர்களாய், மாபெருங் கூட்டங்களில் தலைமை தாங்கிக், கேட்டாரனைவரும் வியப்புற்று வயப்படுமாறு சொற்பொழி வாற்றுதலைக் கண் கூடாகக் காண்கின்றோம். இவர்கள் திறந்து வைத்து அறிவுரை வழங்கிய அறநிலையங்கள் பல. நகரத்தார்களின் தொண்ணூற்றாறார்க் கூட்டத்திலும், பிற கூட்டங்களிலும் யாவரும் உடன் படுமாறு பேசி இவர்கள் செய்த நலங்கள் பல. தம் குலவிச்சையாகிய வாணிகத் தொழிலில் நிகரற்ற திறம் படைத்தவர்களென்பதற்கு இவர்களின் பரந்த வாணிகமும் விரிந்த செல்வமுமே சான்றும். தனவணிகருட் பாங்கி வைத்தல் முதலிய முறைகளை முதலில் மேற்கொண்டு நடாத்தி வருகின்ற சிறப்பு இவர்கட்கே யுரியது. இன்கம்டாக்ஸ் கமிஷனில் ஒருறுப்பினராயிருந்து இவர்கள் தம் நுண்ணறிவாற் செய்த நன்மைகள் தனவணிகர்களாலும் மற்றைச் செல்வர்களாலும் என்றும் மறக்கப் படாதன.

லண்டன்மாநகருக்குச் செல்லுங்கால் வங்கத்தில் இவர்களோடு அளவளாவிய ஓராங்கிலேயப் பெரியார், 'இவர்கள் அறிவு இவ்வுலக முழுதையும் ஆளும் ஆழமுடையது' எனக் கூறியதாக யான் கேள்வியுற்றதுண்டு.

"இருவே றுலகத் தியற்கை திருவேறு
தெள்ளிய ராதலும் வேறு"

எனத் தேவர் கூறிய உலகியல்புக்கு மாறுக இவர்கள்பாற் செல்வமும் அறிவும் திகழ்தல் பெருந் தவப்பயனேயாம்.

பிற சிறப்பியல்புகள்

இவர்கள் தில்லைச் சிற்றம்பலவன் திருவடிகளை உள்ளத்துட் பதித்தவர்கள்; "மடியிலான் தாளுளாள் தாமரையினாள்" "முயற்சி

திருவினையாக்கும்" என்னும் முதுமொழிகளை நன்குணர்ந்து சோம்பு தலை வேரறக் களைந்து விடாமுயற்சியை மேற்கொண்டவர்கள்; எச் செயலையும் எண்ணித் துணிந்து எண்ணி யாங்குச் செய்து முடிக்குந் திண்மை வாய்க்கப்பெற்றவர்கள்; இவர்களின் அசைவிலா ஊக்கமே ஆக்கம் அதர்வினைய் வருதற்கும் உலகத்துயர்ந்த வள்ளியரென யாவ ருங் கொள்ளுதற்குங் காரணமாயுள்ளது.

"இழுக்காமை யார்மாட்டு மென்றும் வழுக்காமை
வாயி னஃதொப்ப தில்"

என வள்ளுவர் பெருமான், வாய்த்தலரிதென்று கூறிய மறவாமைக் குணம் இவர்கள்பால் இனிது நிலைபெற்றுளது.

"சொல்லுதல் யார்க்கு மெளிய வரியவாஞ்
சொல்லிய வண்ணஞ் செயல்"

என்னும் பொய்யா மொழியில் யாவருக்கும் எளிய வெனவும் அரிய வெனவுங் கூறப்பட்ட சொல்லுதலுஞ் செய்தலும் இவர்கட்கு முறையே அரியவாகவும் எளியவாகவும் அமைந்துள்ளன; இஃ தொன்றே இவர்கள் வீறுடைமைக்குத் தக்க சான்றும்.

நாம் அரசசாதற்கியைய ஆட்சி புரியுந் துறையில் ஒப்புயர்வற்ற வர்கள்.

"இதனை யிதனை லிவன்முடிக்கு மென்றுய்ந்
ததனை யவன்கண் விடல்"

என்னும் அறிவுரைக்கு இவர்கள்பாற் பல உதாரணங்கள் நாம் கண்டு வியக்குமாறு உள்ளன.

அறம்

செல்வரிற் பலர் தம் செல்வத்தைத் தமக்கும் பிறர்க்கும் பயன்படுத் தாது, பற்றுள்ள மென்னும் இவறன்மையை மேற்கொள்ளுகின்றனர்; இவர்கள் அங்ஙனமின்றிச் "செல்வத்துப் பயனே யீதல்" என உணர்ந்து இயற்றிய அறங்கள் எத்துணையோ பல.

உடற்குறுதிபயக்கும் உண்டிச் சாலைகட்கும், மருத்துவச் சாலை கட்கும், உயிர்க்கு உறுதி பயக்குங் கல்வி நிலையங்கட்கும், தெய்வத் திருக் கோயில்கட்கும் பெரும்பொருள் வழங்கியுள்ளார்கள். "மக

னறிவு தந்தையறிவு" என்னும் முதுமொழிக்கிணங்க இவர்கள் தந்தையார், சிற்றம்பலத்திற் பொன்வேய்ந்ததும், தமையனூர், தில்லையில் ஒருயர்தரப் பள்ளி நிறுவியதும், உண்ணு நீரளித்ததும் முதலிய முன்னோர் செய்த அறங்கள் உன்னி மகிழற்பாலன.

ஈத்துவக்கும் இன்பம் அறிந்த அண்ணுமலே வள்ளல்

"எத்துணே யாயினு மீத்த னன்றென
மறுமைநோக் கின்றே வன்றே
பிறர், வறுமைநோக் கின்றவன் கைவண் மையே"

என்றுங்கு மறுமை நோக்காது பிறர் வறுமை நோக்கிப் பேரருளாற் செய்த அறங்கள் பலவற்றைப் பலர் வாயிலாகப் பன்முறை கேட்கின்றேம்; இங்ஙனங் கொடுப்பாரைக் காண்டலரிது. வள்ளல்களின் இயல்புகளென நூல்களிற் படித்தறிந்தவற்றை இவர்கள்பால் நேரிற் கண்டு வியக்கின்றேம். இவர்களேப் பாடியும், சிறந்த தமிழ் நூல்களே இவர்கட்கு உரிமையாக்கியும் புலவர் பெருமக்கள் பெற்ற பரிசில்கள் பல. யான் இளமைப் பருவத்துக், கொழும்பில், இவர்கள் ராஜாப் பட்ட மெய்தியதைப் பாராட்டிப் பாடியபோது, என் ஆசிரியருக்குப் பல பவுன்கள் வழங்கிய வள்ளன்மையையும் மறவாது ஈண்டுக் குறிப்பிடுகின்றேன். மூவேந்தருமற்றுச் சங்கமும் போய்ப் பாவேந்தர் காற்றிலிலவம் பஞ்சாகப் பறக்கையிலே தேவேந்திரதாருவைப்போல் இவர்கள் தோன்றி ஆதரித்துப், பல்கலேக் கழக வாயிலாகவும் வேறு பல வழிகளிலும் தமிழை வளர்த்து வருவது இவர்கட்கேயுரிய தனிப் பெருஞ்சிறப்பாம். அண்மையில், இவர்கள் தமிழிசை வளர்ச்சி கருதிப் பெரும் பொருள் வழங்கியதும், அண்ணுமலேப் பல்கலேக் கழகத்திற் பெரியதொரு தமிழிசை மாநாடு நிகழ்ந்ததும் அறிஞ ரறிந்தனவே. "அருளின துறையுள் நல்லறத்தின் வேலி" உள் மருளறு தமிழ் மொழி வளர்க்குமன்னவர் என்று இவர்களேக் கூறுதல் மிகப் பொருத்தமாம்.

அண்ணுமலேப் பல்கலேக்கழகம்

அறங்களுட் சிறந்தது மக்கள் அகக்கண்ணைத் திறக்கும் கல்விகற் பித்தலே என நன்குணர்ந்த இப்பெரியார், தம் பெயரால் அண்ணுமலே நகர் என ஒரு நகரமைத்து, ஆண்டு அண்ணுமலேப் பல்கலேக்கழகம் என ஒரு கலேக்கழகம் நிறுவிய பெருமை உலகம் அறிந்ததே; அண்ணுமலே நகரின்

அமைப்பு, மனத்தைத் தூயதாக்கிக் கல்வியை வளர்க்குநிலையில் மிளிர்கின்றது; பல்கலைக்கழகம், தகுதிவாய்ந்த அதிகாரிகளையும், கல்விசான்ற ஆசிரியப் பெரியார்களையும், கலைபயில் விநோதர்களாகிய பன்னூறு மாணவ மாணவிகளையுந் தன்னகத்துக்கொண்டு கலைமகள் இல்லம் போற் கவினுறுகின்றது. ஏனையிடங்களிற் கற்பிக்கப்படாத தமிழ் ஆனர்ஸ் வகுப்புக்கல்வியும், ஏனையிடங்களில் இல்லாத பண்டிதர் பயிற்சிக்கல்வியும், இன்னும் பல சிறந்த கல்விகளும் மல்கப்பெற்று அறிவின் திருவுருவாய் விளங்குகின்றது. கரும்பயிலைக் கூலிகொடுத்தல் போலத் தமிழ், வடமொழி, இசை இவற்றைப்பயிலும் மாணவர் கட்கு இலவசக்கல்வியும், செல்வமும் உதவப்படுகின்றன; ஏனைக்கல்வி பயிலு மாணவரிலும் பலர் இலவசமாகப் பயில்கின்றனர்.

ஆங்கிலேய ராட்சிக்குட்பட்ட இடங்களிற், பிறருதவியின்றி ஒருவரால் நிறுவப்பெற்ற பல்கலைக் கழகம் இஃதொன்றேயெனின், இதனை நிறுவிய இப்பெருந்தகையாளர் புகழ் இவ்வுலகம் உள்ளளவும் நிலைபெறுமென்பது வெள்ளிடை மலையாம்.

"கைம்மாறு வேண்டா கடப்பாடு மாரிமாட்
டென்னுற்றுங் கொல்லோ வுலகு"

என்றவாறு, இவ்வுலகம் இவர்கட்குக் கைம்மாறுரியும் ஆற்றலில்லாதது; ஆதலாற் பன்முறை பல்லாண்டுகூறுங் கடப்பாடுடையதாம்.

அரசாங்கம்

இவர்கள் சென்னை அரசாங்க சபையிலும், டில்லி அரசாங்க சபையிலும், இன்னும்பல அரசியற் கழகங்களிலும் உறுப்பினராயமர்ந்து ஆற்றிய நற்செயல்கள் பற்பல; பதவியை விரும்பாமற் செய்த அருஞ் செயல்களும்பல. வைசிராய் அவர்கள் ஆலோசனைக்காக இவர்களை டில்லிக்கு அழைத்தார்களெனின் இவர்கள் அறிவாற்றல்கள் அளவிட்டுக் கூறுந்தரத்தவோ?

இவர்கள் தகுதியையும் ஆற்றலையும் அறிந்த அரசாங்கத்தார், இவர்கட்கு **ராவ்பஹதூர்**, **திவான் பஹதூர்**, **ஸர்**, **ராஜா** என்னும் பட்டங்களையும், சென்னைப் பல்கலைக் கழகத்தார் **டாக்டர்** என்னும் பட்டத்தையும் வழங்கியது போற்றத் தக்கதே. இப்பட்டங்கள் இப்பெரியாரைச் சேர்ந்தமையாற் சிறப்புற்றன என்றே கூறவேண்டும்.

ராஜா

பிறசெல்லாம் மறத்தினுல் அரசரானுர்கள்; இவர்கள் அங்ஙன மின்றி அறத்தினுல் அரசரானுர்கள்; இதனைக் குறித்து யான்,

மறத்தினு லாகிய மன்னரைப் போலா
தறத்தினு லாய வரசே

எனப்பாடிய துண்டு. இவர்கள் பரம்பரையாக ராஜாப் பட்ட மெய்திய போது கோவிலூர், கொழும்பு, சிங்கப்பூர், இரங்கூன் முதலிய இடங்களில் நிகழ்ந்த பாராட்டுச் சிறப்புக்கள் தனிப்புத்தகமாக எழுதத் தக்கன; 19-5-1929ல் கொழும்பில் நடந்த சிறப்பை, யானும் காணும் பேறு பெற்றதுண்டு; வரவேற்பதற்குப் புகைரத நிலையத்திற் பதினுயிரக் கணக்கான மக்கள் திரண்டனர்; புகைரத நிலையமுதற் செட்டியார் தெருவரை யந்திரவூர்திகள் ஓட வியலாமல் நகர்ந்தன; செல்ல வழியின்றி நின்ற வூர்திகள் எத்துணேயோ பல. பாராட்டுக் கூட்டம் பெரிய தொரு மண்டபத்தில் நிகழ்ந்தது; ஆண்டு, ஆயிரக் கணக்கான பெருமை வாய்ந்த மக்கள் குழுமினர்; சிறந்த கல்வியும், கீர்த்தியும் நிறைந்த ஸர். பொன். இராமநாதன் அவர்கள் தலேமை பூண்டு பாராட்டி வாழ்த்தினுர்கள். அந்நாளிற் கொழும்பு நகர் முழுதும் திருவிழா நிகழ்வது போலவே காணப்பட்டது.

தனவணிக ரனேவருங் கோவிலூரிற் கூடிப் பாராட்டிய பெருமை ராஜா அவர்கட்கேயுரியது.

லண்டன்மாநகர்

இவர்கள் பொதுவாகப் பர்மாவிலுள்ள இந்தியர் நலமும், சிறப்பாக ஆண்டுள்ள தனவணிகர் நலமுங் குறித்து லண்டன்மா நகருக்குச் சென்று லேண்டுவன செய்து உதவினுர்கள். இவர்கள் அரசியாருடன் லண்டன்மாநகருக்குச் சென்று, அவண் வீற்றிருந்த அரசர் பெருமானுலும் ஏனே அரசியற்றலேவர்களாலும் போற்றப் பெற்று வந்ததும், அதன் பயனுக இரங்கூன் சட்டசபையில் தனவணிக மக்களுக்கு ஓரிடமும், வேறு சில நன்மைகளும் உண்டானமையும், அந்நன்றிக் கறிகுறியாகக் கோவிலூரில் தனவணிகர் நடாத்திய பாராட்டுக் கூட்ட நிகழ்ச்சிகளும் இன்றும் நினேவிலுள்ளன; அக்கூட்டத்தில் யானும் பாராட்டி மகிழ்ந்ததுண்டு.

தனவணிகருள் நம் மன்னர் பெருமானேக்கண்டு ஆளவளாவி மகிழ்ந்த பெரியார் இந்நாள் வரை இவர்கள் ஒருவரேயாவர். பெண் கள் கடல் கடத்தலாகாது என்று கருதிய வணிகர் குலத்தில் தம் மனைவி யாரை நெடுந்தூரத்திலுள்ள லண்டன்மா நகருக்கும், அங்கிருந்து பிரான்சு முதலிய இடங்களுக்கும் இவர்கள் அழைத்துச்சென்று வந்தது போற்றத்தக்கது. இதற்கு முன்னொரு முறையும் இவர்கள் லண்ட னுக்குப் போய் வந்ததுண்டு. தனவணிகர் தொன்றுதொட்டுச் செல்வம் உடையராயினும் அரசாங்கத்தாரால் நன்மதிப் பெய்திப் பட்டங்களும் பதவிகளும் பெறுதற்கு ராஜா அவர்களே சிறந்த காரணமாவார்க ளென்பது மறுக்க வொண்ணுதது. உலகப் பெருமக்கள் சிலருள் இவர்கள் ஒருவரென்பது அறிஞரனேவர்க்கும் ஒப்ப முடிந்ததே. இவர் களே ஒரு முடிசூடா மன்னரென்று கூறின் அது பிகையாகாது.

"வாணன் புகழ்க்கெல்லை வாழ்த்துவோர் நாவெல்லை"

என்றாங்கு இவர்கள் பெருமைக்கு எல்லை, என்றும் புகழும் புலவோர் நாவெல்லையேயாம். அதனே "விரிப்பினகலும் தொகுப்பினெஞ்சும்".

வாழ்த்துரை

நாட்டுக்கும் மொழிக்கும் பேருதவி புரியும் இவர்களின் அறுபதாம் ஆண்டு நிறைவுத் திருவிழாவைக் கொண்டாடுதல் எல்லோருக்கும் முதற் கடமையாகும். இவர்கள் உருவச் சிலே பெரிய நகரங்களெங்கும் நிறுவப்பெறவேண்டும். இவ்வேந்தர் வரலாறு அறிஞரால் விரிவாக எழுதப்பெற்றுப் பெரியாரும், இனி உலகம் உயர்நிலே யடைதற்குக் காரணமாகவுள்ள எல்லா மாணவ மாணவியாரும் பயிலப்பெற வேண்டும்.

எல்லாப் பேறுகளும் பெற்றிலங்கும் நம் **ராஜா அண்ணுமலே வள்ளல்**, இன்னும் பல பட்டங்களும் பதவிகளும் பெற்று, இன்புற் றும், பல்லாண்டு வாழுமாறு திருவருள் புரியக், கருணேக் கடலாகிய சிற்றம்பலவன் திருவடிகளே நீள நினேந்து நித்தலும் தொழுகின்றேன்.

சிவமயம்.

முருகவேள் துணை

செட்டி நாட்டரசர் சீர்த்தி

(K. R. M. Ramaswamy Chetty)

Editor "Sivanesan"

மங்கலப்பாண்டி வளநாட்டின்கண், பரம்பரைச் சைவர்களாக வாழும் தனவணிகப் பெருமக்களின் ஒன்பது கோயில்களுள் முதன்மையான இளையாற்றக்குடிக் கோயிலில் ஏழு பிரிவுகளுள், சிவநேசனும் தனதனே தங்குல முதல்வராக, காவிரிப்பூம்பட்டினத்தில் வந்துதித்து, பீடுயர் சிறப்புடன் பெருவாழ்வு பெற்றும், மருதவாணரை மகவாகப் பெற்றும், தத்துவஞானம் பெற்றும் விளங்கிய பட்டினசாமியார் வழித் தோன்றலும், நடு நிலையாளரும், பெருந்திருவாளரும், பெருந்திறலாளரும், பெருங் கொடையாளரும், பேரறிவாளரும், எல்லையில் புகழ்சேர் தில்லையம்பதியில் உமையம்மையோடுறை திரு மூலட்டானேசுவரருக்குப் பொற்பணியினுஞ் சிறந்த கருங் கற்பணி புரிந்தும், சிவகாமியம்மையுடனுய தில்லைக்கூத்தரின் பொற் சபையதனைப் பொற்புறப் புதுக்கியும், அன்னசாலையாதிய வமைத்தும், திருக்கருவூரானிலை எனுந் திருத்தலமதனில் கிருபாநாயகி, சௌந்தர நாயகியுடனுறையும் பசுபதீசுவரரின் திருக்கோயில் திருப்பணி சிறப்புறப் புரிந்தும் செகமெலாம் புகழச் சீரிய வாழ்க்கையை நேரியமுறையில் நடாத்திய பெருந்தகைப் பெரியாரும் ஆகிய காளுடுகாத்தான், சா. ரா.ம. முத்தைய செட்டியாரவர்களின் அழியாப்புகழ் அளவிடற்கரியது.

அவர்கள் சிவபுண்ணியப் பெரும் பேற்றினுல் "பெறுமவற்றுள் யாமறிவதில்லை யறிவறிந்த மக்கட்பேறல்ல பிற" என்னுந் திருக்குறளுக் கிலக்கியமாக நன்மக்களைப் பெற்றார்கள். அவர்களுள் இளையா

ராய் அண்ணுமலை செட்டியார் என்னும் பெயருடன் செப்புதற்கரிய சீர்த்திமாணுய் விளங்குகின்றவர்களே நம் செட்டி நாட்டரசரவர்கள்.

இவர்கள், இளமைதொடங்கி, தங்களருமைத் தந்தையாரவர்களேத் தெய்வமாகப் பேணி "தந்தைசொன் மிக்க மந்திரமில்லே" என அவர்கள் சொல்லும் நல்வழிகளே உறுதியாகக் கொண்டு அவர்களுக்கு உதவியாகக் கணக்குக் காரியங்களே யெல்லாம் கவனித்துக் கை தேர்ந்தார்கள்.

வைகறைத்துயிலெழுதல், தெய்வசிந்தனை செய்தல், காலத்தை வீணுக்காமல் கருமமாற்றுதல், மடியின்மையாதிய கைக்கொண்டு "ஊக்கமுடைமை யாக்கத்திற் கழகு" என்னும் இலக்கணத்திற்கும்,

"ஆக்கமிங் கொருவரா லணுக வேண்டுமேல்
ஊக்கமுண் டாவரே லுறுவ ரன்னது
நீக்கமில் கொள்கையி னிற்ப ரேயெனின்
மேக்குறு பெருந்திரு விரைவின் மேவுமால்"

என்னும், கச்சியப்ப சிவாசாரியாரவர்களின் திருவாக்குக்கும் சான்றாக அயரா ஊக்கமுடையராய்ப் பெருந்திருவாளராய்ப் பிறங்குகின்றார்கள்.

"மனைக்கு விளக்கு மடவாள்" என்றன்றோர் கூறியவாறு இவர்களின் புண்ணியப்பயனுகத் திருவினும் நல்லாளாகிய சீதையாச்சியாரை மணந்து மனையற மாட்சியை மாண்புடன் நடாத்தித் தமது தந்தையாரைப்போல நன்மக்கட்பேறு பெற்றார்கள்.

மகனறிவு தந்தையறிவு என்ற முதுமொழிப்படி இவர்களின் தவப்புதல்வர்களான, முத்தைய செட்டியார், இராமசாமி செட்டியார், சிதம்பரம் செட்டியார் ஆகிய மூவர்களும் மகாமதியூகிகளாய் நற்குண நற்செய்கைகளிற் சிறந்து எடுத்த கருமத்தை எழில்பெற முடிக்கும் ஆற்றலுடையவர்களாய், தங்களின் அரும்பெறற்றந்தையாராகிய கனம் ராஜா அவர்களுக்கு உறுதுணையாய் ஊக்கமும் ஆக்கமும் ஒரு சேர மந்திரி, மேயர் முதலிய பதவிகளேயும், சர் முதலிய பட்டங்களேயும் சந்ததி விளங்க நன்மைதர்களேயும் பெற்று விளங்குகின்றார்கள்.

"பெண்டு வாய்க்கும் பிள்ளை வாய்க்கும் புண்ணியவானுக்கு பண்டம்வாய்க்கும் பணதிவாய்க்கும் பாக்கியவானுக்கு" என்ற பழமொழியை நம் ராஜா அவர்களின் பரம்பரை உலகில் நிலைபெறச் செய்துளது.

மனிதமக்களாதிய மாண்புடன் புகழுக்கு நிலைக்களமாக விளங்கும் செட்டி நாட்டரசரவர்களின் சீர்த்தி செப்புதற்கரியது.

கொண்டுவிலை கொடுக்கல் வாங்கல் தொழில்முறைகளை மிக்க மேன்மையாக நடத்திப் பொருளீட்டுந்துறையில் இவர்களுக்கு இவர்களை ஒப்பாவார்கள். இவர்களின் பேராற்றல் கருதியே அரசாங்க உரிமையுள்ள பொருட் சேமிப்பு நிலையங் (Bank) களிலும் இவர்களைக் கவர்னராகக் கொண்டார்கள்.

எவ்வளவு பெரிய காரியமாயினும் எண்ணியவெண்ணியாங்கு இனிது முடிக்கும் ஆற்றலும், கல்வியுடைமை பொருளுடைமை எனு மிரண்டு செல்வமும் நிறையப்பெற்றும் ஒரு சிறிதும் செருக்கின்றிக் காட்சிக் கெளியராய் இன்முகங்காட்டி இனியவை பேசுமெழிலும், இன்னுசெய்தாரை நன்னயஞ் செய்தொறுக்கு மியல்பும், பரோபகாரப் பண்பும், பெருங் கொடையளிக்கும் பெருந்தகைமையும், கண்டவர் மனத்தைக் கணத்திற் பிணித்து எவ்வெவர் தம்மையுந் தன்வயிற் படுத்துந் திறமையும், கணக்கறிந்து பயன்றரு சொற்களையே நிறையுடன் கூறும் நேர்மையும், அடுத்தவரை யாதரிக்கும் ஆண்மையும், செல்விருந் தோம்பி வருவிருந்து பார்த்திருக்கும் செம்மையும், இடையறு முயற்சியும், உலையாதுஞற்றும் ஊக்கமும், வகைதெரிந்து முடிக்கும் வன்மையும் மிக்க இவர்களே.

"மெய்வருத்தம் பாரார் பசிநோக்கார் கண்டுஞ்சார்
எவ்வெவர் தீமையு மேற்கொள்ளார்—செவ்வி
அருமையும் பாரார் அவமதிப்புங் கொள்ளார்
கருமமே கண்ணாயி னார்."

என்னும் வெண்பாவுக்குச் சான்றாக விளங்குகின்றார்கள்.

மிகக் கூர்மையாகக் கணக்குகளில் வல்லுநராகலின் தமிழ்க்கணக் கில் தேர்ந்தவர்களுக்குத் தக்க பரிசும் வழங்குகின்றார்கள்.

இத்தகு பெருமைவாய்ந்த உத்தமப் பெரியாரும் தனவணிக குல திலகருமாகிய செட்டி நாட்டரசரவர்களின் சீர்த்தி சென்னை மாகாணத்தில் மாத்திரமன்றி இப்பரதகண்டத்தும் ஏனைய கண்டங் களிலும் பரந்து விளங்குகின்றது.

'அறிவுடை யொருவனே அரசனும் விரும்பும்' என்ற பெரியார் மொழிப்படி இவர்களறிவின்றிறனை அரசியலாரறிந்து பாராட்டி இவர் களுக்கு ராவ்பகதூர், சர், ராஜா, டாக்டர் ஆதிய பட்டங்கள் வழங்கி அரசாங்க நிர்வாக சபைகள் பலவற்றிலும் அங்கம் வகிக்கச் செய் தார்கள்.

சென்னை மாகாணத்தில் ஏனையோர்கள் செய்தற்கரியதான பெரியதோர் பல்கலைக் கழகத்தைத் திருவேட்களத் தெல்லையில் நிறுவி, அதில் ஆங்கிலம், தமிழ், ஆரியம் ஆதிய பல கலைகளையும், இங்கிதமான சங்கீதக் கலையையும் இனிமையாக யாவரும் பயின்று இன்புறும் வண்ணம் இயற்றிய பெருமை இவ்வுலகமும் எவ்வுலகமும் போற்றுந் தரத்ததாம்.

இப்பெரிய நிலையத்தை நிறுவியதனால் இவர்களது பேராற்றலும், இதற்குப் பெரும் பொருளுதவியதனால் இவர்களின் பெருந்தியாகமும், இப்பல்கலைக் கழகத்திற்குவேண்டும் வசதிகளுடன் பல கட்டிடங்களை அணியணியாக வமைத்துச் சாலைகள், சோலைகள், நீர் நிலைகள் தாராள மாக வுண்டுபண்ணி அண்ணுமலை நகராக்கிக் கண்கவர் வனப்புடன் காட்சியளிக்கச் செய்திருப்பதனால் இவர்களின் அறிவாற்றலின் மாட்சி யும் யாவரும் போற்றற்குரியன.

"தேனின்றிற் புகழொடு தோன்றுக" என்னுந் தேவர் திருவாக் கின்படி மன்னர் மன்னரும் மதிக்கும் புகழ்பெற்ற இவர் களின் தந்தையார் காலத்தில் செய்த சிதம்பரம் கோயில் திருப்பணி யில் சிலபாகம் வழக்கின் காரணமாக முற்றுப் பெறாமலிருந்ததை இவர்கள் முன்வந்து அவ்வழக்குகளை யொழித்துத் திருப்பணியை

முற்றுவித்து, சிவகாமிநேசரும் தில்லையம்பல வாணருமாகிய நடராஜ ராஜரையும், திருமகளுடனுறை கோவிந்தராஜப் பெருமாளையும் ஒரே இடத்தில் நின்று நன்றாகக் கண்டு தொழும்படி செய்த பேராற்றல் எல்லாரும் போற்றுந் தகையதும் இறைவரின் பேரருளுக் குரியது மாகும்.

பொது நன்மைக்குரிய காரியங்கள் எவற்றையும் முடிக்கும் பேராற்றல் இவர்களுக் கிருக்கின்றமையால் " இதனை இதனாலிவன் முடிக்கு மென்று ஆய்ந்து அதனை அவன்கண் விடல் " என்ற திருக்குறளின்படி அக்காரியங்களை இவர்களின் பாரமாகவே விடுவதும் இவர்களன்புடனு வந்து முடிப்பதும் இயற்கை. அவைகளுள் பர்மாப் பிரிவினை குறித்துத் தங்கள் சொந்தச் செலவில் சீமைக்குச் சென்று மாட்சிமை பொருந்திய சக்கரவர்த்தியவர்களைப் பேட்டிகண்டும், பாராளு மன்றத்தில் எடுத்து ரைத்தும் காரியத்தைச் சாதித்து வந்ததும் ஒன்றாகும்.

செட்டி நாடென்பது தொண்ணூற்றாறு நகரங்களெனத் தொன்று தொட்ட வழக்கேயாயினும் செட்டி நாடென்று ஓர் ஊர் உண்டா? என்று பலர் கேட்கவும் குறை கூறவும் ஏதுவின்றி 'செட்டி நாடு' என்று ஒரு நகர நிர்மாணஞ் செய்யக் காடுகொன்று நாடாக்கிக் குளந்தொட்டு வளம் பெருக்கிக் கோயிலொடு குடிநிலை வாயிலொடு புழையமைத்து அணிபெறச் செய்யும் கனம் ராஜா சர் அண்ணாமலை யண்ணலாரின் செயற்கருஞ் செயல் யாவரும் வியக்கும் பான்மைய தாகும். " செயற்கரிய செய்வார் பெரியர் " என்பது பொய்யாமொழி.

இவர்களின் செயற்கருஞ் செயல்களையும் சீரின் சிறப்பையும் எடுத்து விளக்குவதரிது. இத்தானும் இடம் பெறாது. ஆதலின்

" வையநின் னகரிசெம்பொன் வடதிரி நினது பீடம்
வெய்யவ னினதுதீபம் வேலைமஞ் சனநீர்ச்சாலை
செய்யவள் நினதுபாரி திங்கள்நின் கவிகை செவ்வேல்
ஐயநின் பெருமையார்க்கு மளவிடற் கரிதே என்றார். "

என்னும் புராணச் செய்யுளைக்கூறி முடிக்கின்றேன்.

எல்லா நலனும் இயைய எழிலுடன் மிளிரும் எங்கள் செட்டி நாட்டரசரவர்கள் பிறந்த அறுபதாவதாண்டு நிறைவுமணம் காணுகாத் தானில் அவர்களின் மாளிகையில் மேலாம் விசுவாண்டு கன்னித்திங்கள் பதினென்று (27—9—1941)† இக்கட்டுரை எழுந்தது.

திருவாழ் செல்வச் சீரியோராகிய இப்பெருந்தகைப் பெரியாரின் அறுபதாவதாண்டு நிறைவுமணம் இனிது நிறைவேறவும், உயர் நலமும் உயர் குணமும் பொருந்தி மிளிர்கின்ற இவர்களும் இவர்களின் மனைவி மக்களாகிய வழித்தோன்றல்களும் பல்லாழி பல்லாழி வாழவும், இவர் களின் செல்வமும் சீரும் மென்மேல் ஓங்கவும், இவர்களின் நல்லறங் கள் யாவும் நாளுலும் வளரவும், இவர்களின் சீர்த்தி பல்கிப்பெருகிப் பாரெலாம் பரவவும், இவர்களின் பரம்பரை ராஜ பரம்பரையாக எந் நாளும் இனிது விளங்கவும் வேண்டுமென இவர்களின் குல தெய்வ மாக நித்ய கல்யாணியோடுறையும் கைலாயநாதரையும் வழிபடு தெய்வ மாகச் சிவகாமியம்மையோடுறையும் தில்லையம்பல வாணரையும் மன மாரச் சிந்தித்து வாயார வாழ்த்திப் போற்றுவோமாக.

† மூலகாளன்று கடைபெறும் மகிழ்ச்சிக்கு அறிகுறியாக.

பாரதியாரும் ஏனைய பெரியாரும்

(S. Rudrapathiar, Maharaja's College, Mysore)

சுமார் இருபதாண்டுகளுக்குமுன் நந்தண்டமிழ் நாட்டில் நந்தாப் புகழ் பெற்று விளங்கிய திரு. சி. சுப்பிரமணிய பாரதியாரைப் பற்றி அறியாதார் இந் நாட்டில் யாரும் இரார் என்று கருதுகின்றேன். உறங்கிக் கிடந்த தமிழரைத் தட்டி யெழுப்பிய தனிப் பெருமை அன்னார்க்குரித்தாகும். இவரது பாடல்கள் கற்பார்க்கு எளிதில் பொருள் விளங்கக்கூடியனவாயிருக்கின்றன. நமது பைந்தமிழ் நாட்டில் தோன்றி நமது தமிழன்னைக்கு அழியாப் புகழ் தந்த நாவலர் பாவலர் முதலிய பெரியோர்கள் நூற்களில் காணப்பெறும் சீரிய கருத்துக்கள், பாரதியார் தம் பாடல்களில் நேரிய முறையில் பொன்னே போல் போற்றியுள்ள பான்மை படிப்போர் மனம் ஈர்க்கும் பான்மைத்து. அவற்றை இக் கட்டுரைமூலம் சிறிது ஆராயப் புகுகின்றேன். கலைத்துறை முற்றிய நலத்துறையாளர்கள் இக் கட்டுரையில் குற்றம் கண்டுழி அதைப் பொறுத்துக்கொள்வார்களாக.

பாரதியார் நமது செந்தமிழ் மொழியில் மிகவும் ஈடுபட்டவர். மிகுந்த அன்புள்ளவர். "பாஷாபிமானமே தேசாபிமானம்" என்ற கொள்கையுடையார்.

"பெற்ற தாயும் பிறந்த பொன்னுடும்
நற்றவானிலும் நனி சிறந்தனவே"

என்று பாரதியார் பறை சாற்றுகின்றார். அவரே அவ் வாக்கிற்கு ஓர் சிறந்த எடுத்துக்காட்டாக விளங்கினார். இவர், தாய் மொழியாந் தமிழன்னையிடம் வைத்திருந்த எல்லையில்லாத அன்பைப் போலவே, நமது பரத கண்டமாம் சரதமா தேவியிடமும் அளவற்ற அன்பு செலுத்தி வந்தார். இதைப்போலவே இறைவனிடமும் நிறைந்த அன்புள்ளவராகத் தெரிகின்றது. இம்மூவகைப் பற்றைப் பற்றிச் சிறிது விளக்கமாகப் பார்ப்போம்.

இவர் செந்தமிழ் புலவர்களைப் பாராட்டு முறை நம் பாராட்டிற் குரியதாகும்.

"கல்வி சிறந்த தமிழ்நாடு—புகழ்க்
கம்பன் பிறந்த தமிழ்நாடு"

என்று, கல்வி வளம் பொருந்திய தமிழ் நாட்டில் கவின் புகழ் வாய்ந்த கவிச் சக்கரவர்த்தியாகிய கம்ப நாட்டாழ்வார் தோன்றிய தமிழ்நாடு என்று தமிழ் நாட்டைப் புகழ்ந்த பாரதியார்

"வள்ளுவன் தன்னை யுலகினுக்கே தந்து
வான்புகழ் கொண்ட தமிழ்நாடு—நெஞ்சை
அள்ளும் சிலப்பதிகாரம் என்றோர் மணி
யாரம் படைத்த தமிழ் நாடு"

என்று தெய்வப் புலமைத் திருவள்ளுவனரை, உலகத்திலுள்ள எல்லா மதத்தினரும் எல்லாக் குலத்தினரும் எக்காலத்தும் பயனுறும் வண்ணம் ஈன்றளித்துப் புகழ்கொண்ட ஈடில்லாப் பெருமை தமிழன்னைக்குத்தான் உண்டு என்னும் கருத்துப்பட, பாரதியார் பாடியுள்ள அடிகளில் செறிந்து கிடக்கும் நயம் அறிந்தின்புறற்பாலது. கற்போர் நெஞ்சைக் கொள்ளும் சிலப்பதிகாரம் என்னும் ஓர் அழகிய மாலையை நம் தமிழன்னை யணிந்துள்ளாள் என்று கூறியுள்ளார். பாரதியார் இம்மூன்று புலவர்களின் நூல்களில் தம்முள்ளம் தோயப்பெற்று அவற்றின்கண் காணப்பெறும் அழகெனும் வாரிதியில் மூழ்கித் திளைத்தவராதலால்,

"யாமறிந்த புலவரிலே கம்பனைப்போல் வள்ளுவர்
போல், இளங்கோவைப்போல்
பூமிதனில் யாங்களுமே பிறந்திலமே, உண்மை,
வெறும் புகழ்ச்சியில்லை;

என்று நிறைந்த மொழிகளால் அப்புலவர் பெருமக்களைப் போற்றுவது நாம் கவனிக்கத்தக்கது. பாரதியார் ஆங்கிலம், வங்காளம் முதலிய வேற்று மொழிகளையும் அவ்வம் மொழிகளில் உள்ள கவிகளையும் நன்குணர்ந்திருத்தல் வேண்டுமென்பது கீழ்வரும் வரிகளாற் புலனாகின்றது. அவர் நம்மொழிப் புலவர்களை மேற்காட்டிய முறையில் புகழ்ந்தோடமையாது,

"யாமறிந்த மொழிகளிலே தமிழ்மொழி போல்
இனிதாவது எங்கும் காணேம்"

என்று தமிழின் தன்னேரில்லாச் சிறப்பிற்கும் இனிமைக்கும் சான்று பகருகின்றார். தமிழ் மொழி அமிழ்தம் போன்ற இனிமை வாய்ந்தது என்பது இவர்தம் கருத்தாகும். அதனால்,

"தெள்ளுற்ற தமிழமுதின் சுவைகண்டார்
இங்கமரர் சிறப்புக் கண்டார்"

என்று கூறியுள்ளார். "தமிழ் விடுதூது" ஆசிரியர் தமிழை இமையோர் தரு புத்தமிர்தத்தினும் இனிமையுள்ளதாக மதிக்கின்றார் என்பது,

"இருந்தமிழே! யுன்னில் இருந்தேன் இமையோர்
விருந்தமிழ்த மென்றாலும் வேண்டேன்"

என்ற வரிகளால் விளங்குகின்றது. இன்னும் முற்றத் துறந்த மாணிக்கவாசக சுவாமிகள் கூட,

"தண்ணார் தமிழளிக்கும் தண் பாண்டி நாட்டானே"

என்ற அடியில் தமிழ் குளிர்ச்சி பொருந்தியதென்பதைக் குறிக்கின்றார். திருச்சிற்றம்பலக் கோவையில் பாங்கன் வினவும் துறையில்,

"சிறைவான்புனல் தில்லைச் சிற்றம்பலத்தும்
என் சிந்தை யுள்ளும்
உறைவான் உயர்மதிற் கூடலின்
ஆய்ந்த ஒண்தீந் தமிழின்
துறைவாய் நுழைந்தனையோ, அன்றி
ஏழிசைச் சூழல்புக்கோ
இறைவா! தடவரைத்தோட் கென்கொலாம்
புகுந்தெய்தியதே"

என்ற பாசுரத்தில், தலைவன் உடல் மெலிவுக்குச் சங்கத்தமிழின் இனிமையில் தோய்ந்து, இயற்றமிழ் பயின்ற காரணமோ வென்றும், அன்றி இசைத்தமிழில் ஈடுபட்டு அதில் தோய்ந்த காரணமோ வென்றும், பாங்கன் கேட்பதாகச் செய்யுள் செய்துள்ள நமது வாதவூரடிகள்

தமிழ்மொழியில் எவ்வளவு அன்புடையவராயிருத்தல் வேண்டும் என்பது தெற்றெனப் புலனாகின்றது.

உம்பரும் போற்றும் கம்பநாட்டாழ்வார், தமிழ் மிகவும் இனிமை யுடையதென்றும், ஒருவர் தமிழின் இனிமையில் ஈடுபட்டால் வேறொரு காரியத்திலும் மனம் செலுத்தார் என்றும் கூறுவது இவண் கருதத் தக்கது. சுக்கிரீவன், சொல்லின் செல்வனாகிய அனுமனுக்கு இலங்கை செல்லும் வழி கூறும்போது,

"தென்தமிழ்நாட் டகன் பொதியில் திருமுனிவன் தமிழ்ச்
சங்கம் சேர்கிற் பிரேல்
என்றுமவண் உறைவிடமாம் ஆதலினால்
அம்மலையை இறைஞ்சி யேகிப்
பொன்திணிந்த புனல் பெருகும் பொருநை யெனும்
திருநதி பின் பொழிய நாகக்
கன்றுவளர் தடஞ்சாரல் மகேந்திரமாம்
நெடுவரையும் கடலும் காண்பீர்"

என்று கூறியிருப்பதால் கம்பரின் கருத்து வெளியாகின்றது.

அடுத்தபடியாக நமது பாரதியாரின் நாட்டுப்பற்றைப்பற்றிச் சிறிது ஆராய்வோம். "பாப்பா" என்ற பாட்டில் அவர் தாய் நாட்டைப் போற்றுவது கவனிக்கத்தக்கது.

"தமிழ்த் திருநாடு தன்னைப்பெற்ற—எங்கள்
தாயென்று கும்பிடடி பாப்பா
அமிழ்தில் இனியதடி பாப்பா—நம்
ஆன்றோர்கள் தேசமடி பாப்பா"
"செல்வம் நிறைந்த ஹிந்துஸ்தானம்—அதைத்
தினமும் புகழ்ந்திடடி பாப்பா
சேதமில்லாத ஹிந்துஸ்தானம்—இதைத்
தெய்வமென்று கும்பிடடி பாப்பா"

என்ற வரிகளில் பாரதியாரின் நாட்டுப்பற்று நன்கு புலனாகின்றது. மிக எளிய நடையில் கற்போர் மனத்தில் பசுமரத்தாணிபோற் பதியும் வண்ணம் எழுதியிருக்கின்றார். இளங்குழந்தைப் பிராயத்திலேயே நாட்டுப்பற்று நம் குழந்தைகளுக்கு ஏற்படவேண்டுமென்பது இவர்

கருத்து. அதனால்தான் சிறு பிள்ளைகளுக்காக எழுதிய "பாப்பா" என்ற பாட்டில் இங்ஙனம் கூறியுள்ளார்.

நாம் வாழ்ந்து வரும் நாட்டை நாம் போற்றுதல் தலையாய கடன் என்று பாரதியார் தெரிவிக்கின்றார். வாயினால் மாத்திரம் 'வந்தே மாதரம்' என்று கூறிவிடுதல் நாட்டினிடம் பற்று செலுத்தியதாக ஆகாதென்றும், நம் நாட்டு ஏழை மக்கள் படுந்துயரம் கண்டு இரக்கங் கொண்டு, அன்னார்க்கு ஆவனபுரிதல்தான் நாட்டினிடம் அன்பு செலுத்தும் முறையென்றும் பாரதியார் கருதுகின்றார் என்பது கீழ்வரும் பாக்களால் தெரிகின்றது.

"சொந்தச் சகோதரர்கள்
துன்பத்தில் சாதல்கண்டும்
சிந்தை யிரங்காரடா—கிளியே
செம்மை மறந்தாரடா"
"தாயைக் கொல்லும் பஞ்சத்தைத்
தடுக்க முயற்சியுறார்
வாயைத் திறந்து சும்மா—கிளியே
வந்தேமாதரம் என்பார்"

என்ற நடிப்புச் சுதேசிகள் என்ற பாக்களில் தேசத்தை வணங்கும் முறை நன்றாகக் கூறியுள்ளார்.

"ஏதமிலா இன்சொல் மரகதமே ஏழ்பொழிற்கும்
நாதனமை யாளுடையா ளுடுரையாய்—காதலவர்க்கு
அன்பாண்டு மீளா அருள்புரிவா ளுடென்றும்
தென்பாண்டி நாடே தெளி"

என்று வாதவூரடிகள் திருத்தசாங்கத்தில் அருளியுள்ளார். அடிகள் அவதரித்த தென்பாண்டி நாட்டைச் சிவபெருமானது திருநாடென்கின்றார்.

"திருவம்மானே" யென்னும் பகுதியில்
"அப்பாண்டி நாட்டைச் சிவலோக மாக்குவித்த
அப்பார் சடையப்பன்" என்றும்,
"தென்னானைக் காவானைத் தென்பாண்டி நாட்டானை"

என்றும், நமது ஆளுடைய அடிகள் திருவாய் மலர்ந்தருளி யிருப்பதி லிருந்து, தாம் திருவவதரித்த பாண்டி நாட்டைப் போற்றும் முறையும்,

"தென்னுடைய சிவனே போற்றி
எங்நாட்டவர்க்கும் இறைவா போற்றி"

என்ற அடிகளால் பாண்டி நாட்டைத் தன்பாலுள்ள தென்னாட்டார்க் குரிய சிவனே போற்றி என்றும், அதே சிவன் எல்லா நாட்டார்க்கும் இறைவனுய்த் திகழ்கின்றான் என்றும், நாம் கூர்ந்து கவனித்தால் அடி களுக்குப் பொதுவாகத் தான் பிறந்த தென்னாட்டிலும், சிறப்பாகப் பாண்டி நாட்டிலும் எத்தகைய அன்பு இருந்தது என்பது விளங்கும்.

இனி பாரதியார் இறைவனிடம் வைத்த எல்லையற்ற அன்பை ஒரு சிறிது ஆராய்வோம். இவர் இந்து மதத்தில் ஒன்றாகிய சாத்த மதத்தைச் சார்ந்தவர். காளியின் கருணை வாய்க்கப் பெற்றவர். முருகப்பிரானை முழுமனதுடன் போற்றுகின்றார். எல்லாத் தெய்வங்களையும் இனிது ஏத்துகின்றார். சமரச ஞானம் கைவரப் பெற்றவராகத் தெரிகின்றது.

முருகனை மனமுருகும் வண்ணம் பாரதியார் பாடிய பாட்டு மிக வும் பத்திச் சுவை சொட்டக் கூடியதாகும்.

முருகா—முருகா—முருகா

வருவாய் மயில் மீதினிலே
வடிவே லுடனே வருவாய்
தருவாய் நலமும் தகவும் புகழும்
தவமும் திறமும் தனமும் கனமும்—என்று

கூறப்பெறும் பகுதியில் முருகனை,

"முடியா மறையின் முடிவே, அசுரர்,
முடிவே கருதும் வடிவேலவனே"

"சுருதிப் பொருளே வருக
துணிவே கனலே வருக
கருதிக் கருதிக் கவலைப் படுவார்
கவலைக் கடலைக் கடியும் வடிவேல்"

என்ற வரிகளில் எவ்வளவு அரிய கருத்துக்களை வெளியிட்டுள்ளார். அடியார்களின் மனக்கவலையை ஆண்டவன் போக்குகின்றான். இறைவனை வணங்காதார் தம் மனக்கவலையை மாற்ற முடியாது என்பது,

"தனக்குவமை யில்லாதான் தாள்சேர்ந்தார்க் கல்லால்
மனக்கவலை மாற்ற லரிது"

என்ற வள்ளுவர் வாய் மொழியால் விளங்குகின்ற தன்றோ? இதே கருத்தைப் பாரதியார் தம் நூலில் நன்கு தெரிவிக்கின்றார்.

இன்னும் அதே பாட்டில்

"அறிவாகிய கோயிலிலே
அருளாகிய தாய் மடிமேல்
பொறிவேலுடனே வளர்வாய் அடியார்
புதுவாழ் வுறவே புவிமீ தருள்வாய்"

என்ற வரிகளில் உள்ள நயம் நாம் ஓர்ந்தின்புறற் பாலது. இறைவன் அறிவு விளக்கம் உள்ள இடத்தில், கருணை நிறைந்த இடத்தில், விளங்குகின்றான் என்ற உண்மையைப் பாரதியார் இங்கே தெரிவிக்கின்றார்.

"சத்தாகி யென் சித்த மிசை குடிகொண்ட அறிவான தெய்வமே" என்ற தாயுமான சுவாமிகளின் திருவாக்கு இங்கு ஒப்பு நோக்கத் தக்கது.

கல்வி யறிவு விளக்கமற்ற நெஞ்சில் ஆண்டவன் தங்குவதில்லை யென்ற உண்மையைக் "கல்லாதார் நெஞ்சில் நில்லா ஈசன்" என்ற அருமைத் திருவாக்கால் நன்கறியலாம்.

ஆறுதலை யென்னும் பாடலில்

"வெற்றி வடிவேலன்—அவனுடைய
வீரத்திணைப் புகழ்வோம்;
சுற்றி நில்லாதே போ!—பகையே
துள்ளி வருகுது வேல்"

என்ற வரிகளை வாசிக்கும் போதே வீரவுணர்ச்சி ததும்புகிறதல்லவா? அத்துடன் வேலாயுதம் துள்ளி வருவது போல் நம்மனக்

கண்முன் தோன்றுகின்றது. முருகனது வேலாயுதம் அடியார்களது அகப்பகையையும் புறப்பகையையும் ஒருங்கே கொல்லும் என்பது பாரதியார் துணிபாதலால் பகைக்கு எச்சரிக்கை கொடுப்பார் போல் "முருகன் வீரவேல் துள்ளி வருகின்றது, ஓடிப் பிழைத்துப் போ" என்று சொல்லுகின்ற அழகை நாம் ஓர்வோமாக.

"அஞ்சுமுகம் தோன்றில் ஆறுமுகம் தோன்றும்
வெஞ்சமரில் அஞ்சலென வேல்தோன்றும்—நெஞ்சில்
ஒருகால் நினைக்கில் இருகாலும் தோன்றும்
முருகா என்றேதுவார் முன்"

என்றருளிய நக்கீரர் திருவாக்கு இவண் நினைக்கத் தக்கது. கொடிய போரில் பகைவருக்காக அஞ்சவேண்டா மென்று வேலாயுதம் தோன்றும் என்கின்றார். இக்கருத் தொற்றுமை பாரதியார் பாசுரத்தில் கண்டின்புறுவோமாக.

"ஆறுசுடர் முகங்கண்டு விழிக்
கின்பமாகுதே—கையில்
அஞ்சலெனும் குறிகண்டு மகிழ்ச்சி
யுண் டாகுதே"

என்ற அடிகளில் பாரதியார், மாந்தர் கண் பெற்ற பயன் இறைவனைக் காணுதல் என்றும், அங்ஙனம் காணின் விழிக்கின்பம் உண்டாகின்ற தென்றும், அபயகரத்தைப் பார்த்ததும் பிறவிப் பயம் ஒழிந்து ஆனந்தம் உண்டாகின்றது என்றும் கூறப்பட்டுள்ள கருத்து நம் உள்ளத்தைக் கொள்ளை கொள்ளுகின்றது.

இங்கே,

"கண்காள், காண்மின்களோ கடல்
நஞ்சுண்ட கண்டன் தன்னை"

என்றருளப் பெற்ற ஆளுடைய அரசின் திருவாக்கு கருதத்தக்கது.

தேசமுத்து மாரி என்ற பாட்டில்,

"ஆதாரம் சக்தி யென்றே
அருமறைகள் கூறும்
யாதானும் தொழில் புரிவோம்
யாதுமவள் தொழிலாம்"

என்று கூறியுள்ள வரிகளில் சில அரிய கருத்துகளைப் பார்ப்போம். சக்தி தான் உலகிற்கு மூலாதாரம் என்று பெரியோர்கள் கூறுகின்றனர். அதையே இவரும் கூறியுள்ளார். எத்தொழில் செய்யினும் இறைவியின் தொழிலாகும் என்கின்றார். அவனன்றி யோரணுவும் அசையாதெனும் ஆப்தர் மொழியின் உண்மை இவர் வாக்கில் காணப்படுகின்றது.

" துன்பமே யியற்கை யெனும்
சொல்லை மறந்திடுவேம்
இன்பமே வேண்டி நிற்போம்
யாவுமவள் தருவாள் "

என்ற பாட்டில் " இன்பமே யெங்காளும் துன்பமில்லை " என்னும் அப்பர் பெருமான் கருத்து பிரதிபலிப்பதைக் காணலாம்.

பாரதியார் சக்தியிடம் வரம் கேட்பதை யாராய்வோம்.
கேட்பன - என்ற தலைப்பின்கீழ்க் கூறுவது

" நல்லதோர் வீணை செய்தே — அதை
நலங்கெடப் புழுதியில் எறிவதுண்டோ ?
சொல்லடி சிவசக்தி — எனைச்
சுடர்மிகு மறிவுடன் படைத்து விட்டாய்
வல்லமைதாராயோ இந்த
மாநிலம் பயனுற வாழ்வதற்கே ?
சொல்லடி சிவசக்தி — நிலச்
சுமையென வாழ்ந்திடப் புரிகுவையோ ?
விசையுறு பந்தினைப்போல் — உள்ளம்
வேண்டியபடி செலும் உடல் கேட்டேன்
நசையறுமனம் கேட்டேன் — நித்தம்
தசையினைத் தீசுடினும் சிவ
சக்தியைப்பாடு நல்லகங் கேட்டேன்
அசைவறுமதி கேட்டேன் — இவை
அருள்வதில் உனக்கேதுந் தடையுளதோ ? என்பதாகும்."

கிடைத்தற்கரிய மானிடப்பிறவியை யெடுத்த ஒவ்வொருவரும் பிறருபகாரத்திற்காகப் பாடுபடவேண்டும். இன்றேல் ஓர் நல்ல வீணை செய்து புழுதியில் எறிவதொக்கும் என்கின்றார். மாநிலம் பயனுற வல்லமை

வேண்டுமென்கின்றார். மாநிலத்து மாந்தர் நன்மை கருதி யுழைத்தால் இன்பம்தானே வந்துசேரும் என்பது அவர் கருத்து. இங்கு "அன்பர் பணிசெய்ய வென்னை ஆளாக்கி விட்டுவிட்டால், இன்பநிலை தானே வந்தெய்தும் பராபரமே" என்றருளப் பெற்ற தாயுமான சுவாமிகளின் வாக்கு நினைவுக்கு வருகின்றது.

"நசையறுமனம் கேட்டேன்" என்ற அடியின் நயம் அறிந்தின் புறவேண்டும்.

நசையற்றமனம் இருந்தால் இறையருள் கிட்டுமென்பது பெரியோர்கள் கருத்தாகும்.

"பற்றற்ற கண்ணே பரம்பொருள் தோன்றும்"
"அற்றது பற்றெனில் உற்றது வீடு"
"பற்றற்ற கண்ணே பிறப்பறுக்கு மற்று
நிலையாமை காணப்படும்"

என்ற சீரிய வாக்குகளின் கருத்துட்கொண்டு தனக்கு நசையறுமனம் வேண்டுமென்கின்றார். கைம்மாறு வேண்டாக் கடப்பாடு மேன்மையுடைத்தென்ற கருத்துள்ளவர். இக்கருத்தைப் பகவத்கீதையில் பகவான் ஒரு காரியத்தைப் பலனெதிர்பாராது செய்யவேண்டு மென்கின்றார். இதை நிஷ்காமியம் என்றும் பெரியோர்கள் சொல்லுவார்கள்.

"தசையினைத் தீசுடினும் சிவ
சக்தியைப்பாடு நல்லகங் கேட்டேன்"

என்றவரிகள் பாரதியாரின் தீவிர பக்தியைக் காட்டுகின்றது. இங்கே குலசேகரப் பெருமாள் அருள்வாக்கு நினைவுக்கு வருகின்றது.

"வாளா லறுத்துச்சுடினும், மருத்துவன்பால்
மாளாத காதல் நோயாளன்போல், மாயத்தால்
மீளாத்துயர்தரினும் வித்துவக் கோட்டம்மா நீ
ஆளாவுனதருளே பார்ப்பனடியேனே"

என்ற பாசுரத்தின் கருத்து, பாரதியாரின் வாக்கில் தொனிப்பதை நாம் அறிந்து மகிழ்வோமாக.

பாரதியார் மஹாசக்தி பஞ்சகம் என்னும் தலைப்பின்கீழ்,

" கரணமுந்தனுவும் நினக்கெனத் தந்தேன்
காளி நீ காத்தருள் செய்யே
மரணமும் அஞ்சேன் நோய்களையஞ்சேன்
மாரவெம் பேயினையஞ்சேன்
இரணமும் சுகமும் பழியும் நற்புகழும்
யாவுமோர் பொருளெனக் கொள்ளேன்
சரணமென்றுனது பதமலர் பணிந்தேன்
தாயெனைக் காத்தலுன் கடனே "

என்று கூறியுள்ளதைச் சிறிது ஆராய்வோம். இச்செய்யுளில் மணி வாசக சுவாமிகளின் அணிவாசகமாகிய திருவாசகத்தில் காணப்பெறும் அரிய கருத்துக்கள் காணப்பெறுகின்றன. " அன்றே யென்றனுவி யும் உடலும் உடைமை யெல்லாமும், குன்றேயணையாய் நீ ஆட் கொண்டபோதே கொண்டிலையோ " என்ற வரிகளில் உள்ள கருத்து, " கரணமும் தனுவும் நினக்கெனத் தந்தேன் " என்றவரியில் காணப் படுகின்றது. " மரணமும் அஞ்சேன் நோய்களையஞ்சேன் " என்பதன் கருத்தினை " பிணியெலாம் வரினுமஞ்சேன் பிறப்பினோடிறப்பு மஞ் சேன் " என்ற திருவாசக அடியோடு ஒத்துப்பார்க்க வேண்டும், " மார வெம்பேயினை யஞ்சேன் " என்பதின் கருத்து " வலைக்கையார் கடைக்க ணஞ்சேன் " என்றவரியில் பிரதிபலிக்கின்றது. " இரணமும் சுகமும் பழியும் நற்புகழும் யாவுமோர் பொருளெனக் கொள்ளேன், சரண மென்றுனது பதமலர் பணிந்தேன் தாயெனைக்காத்தலுன் கடனே " என்ற வரிகளில் " தகைவிலாப் பழியுமஞ்சேன் " என்ற திருவாசகத் தின் கருத்தும்,

" உற்றுரை யான்வேண்டேன் ஊர்வேண்டேன், பேர்வேண்டேன்
கற்றுரை யான்வேண்டேன், கற்பனவும் இனியமையும்
குற்றுலத் தமர்ந்துறையும் கூத்தா உன் குரைகழற்கே
கற்றுவின் மனம்போலக் கசிந்துருக வேண்டுவனே"

என்ற திருவாசகத்தின் கருத்தும், காணப்பெறுவதைக் கண்டு களிப்போமாக.

விநாயகர் நான்மணிமாலை என்ற தலைப்பின்கீழ்ப் பாரதியார் செய்துள்ள ஒரு செய்யுளை நோக்குவோம்.

"தவமேபுரியும் வகையறியேன் சலியாதுற நெஞ்சறியாது
சிவமே நாடிப் பொழுதணைந்தும் தியங்கித் தியங் கிநிற்பேனை
நவமாமணிகள் புனைந்தமுடி நாதா கருணாலயனே,
தத்துவமாகியதோர் பிரணவமே, "அஞ்சேல்" என்று சொல்லுதியே"

இச்செய்யுளோடு திருவாசக அடியாகிய

"தவமேபுரிந்திலன் தண்மலரிட்டு முட்டாதிறைஞ்சேன்"

என்பதையும், திருவருட்பா வடியாகிய

"தவமேபுரியும் பருவமிலேன் பொய்ச்சகடைக்கண்,
அவமேபுரியும் அறிவிலியேனுக் கருளுமுண்டோ"

என்பதையும்,

"வெஞ்சேலனைய கண்ணார்தம் வெகுளிவலையி லகப்பட்டு
நைஞ்சேன் நாயேன் ஞானச்சுடரே நானோர் துணைகாணேன்
பஞ்சேரடியாள் பாகத்தொருவா, பவளத் திருவாயால்
"அஞ்சேல்" என்ன ஆசைப்பட்டேன் கண்டாயம் மானே"

என்னும் பாசுரத்தையும் ஒத்து நோக்கினால் நம்முன்னோர் கருத்துக் களைப் பாரதியார் பொன்னேபோல் தன்பாடல்களில் பொதிந்து வைத்தமை நன்குபுலனும்.

செட்டி நாட்டரசரும் அண்ணமலை ஸர்வகலாசாலை ஸ்தாபகரும் ஆன ஆநரபில்
திவான் பஹதூர் டாக்டர் ராஜா ஸர் அண்ணமலை செட்டியாரவர்களது
சஷ்டியப்தபூர்த்தி யன்று புலியூர், கோடம்பாக்கம் வேத
ப்ரவசன மந்திரத்தலைவரும், தமிழில் ரிக்வேதம், மான
ஸோல்லாஸம், ஸௌந்தர்யலஹரி, சத்திநிபாதக்
கோவை முதலிய நூல்களினாசிரியருமான

சிவத்தியாகநந்த மஹர்ஷி பாடியளித்த

வாழ்த்துப்பா.

24 சீர்க் கழி நெடில்.

நகரத்தார் தவப்பயனுய் நாடதனின்
முன்னேற்றம் நலக்க வெண்ணும்
நற்குடிக்க ணவதரித்து நாணயமே
வைசியர்தம் நன்மைக் கேது
நாடிடினென் றிரங்கோனின் வங்கிதனில்
நவநெறிச்சீர் நாட்டு வித்தோய் !
நாங்களுன தறிவுநுணுக் கம்முணர்ந்துங்
கிழவனிவன் ஞானத் தென்றே
சகமெச்சுஞ் சதுர்படைத்த வுன்னைமதித்
தறியோமாய் வயதான் மூத்த
தன்மையது வெனவெண்ணி யேமாந்தோம் !
அணமலை ! உன் சால்பு மென்னே !
சருவகலா சாலையொன்றித் தமிழகத்து
நிலவவெனத் தலைமை சாரத்
தன்பெயரே கொண்(டு) அதனைத் தன்பெயரா
லானகர் தனிலமைத்தோய் !
இகமுற்றுர்க் கெழின்மூலம் கல்வியே
யாகுமென வெண்ணி யோங்கும்

எங்கள்புலி முனிநடங்காண் பதியேற்ற
முறைநிறுவி யெழிலார் கீர்த்தி
யின்பமதைப் பெற்றனையென் றதுவொன்றே !
எம்போல்வார்க் கெல்லாக் காலும்
எண்ணியு மெண்ணுமலும்நீ யீத்துவக்கும்
வள்ளன்மை யியம்பப் போமோ ?
தகவுற்ற செட்டிநாட் டரசே ! உன்
தண்ணளியைத் தக்கோர் சொல்வார் ;
தயைபொறுமைச் சான்றாண்மை டாக்டரெனச்
சார்புலவ ! அரசு ரென்னுங்
தக்ககுடிப் பட்டமதை வழிவழியாச்
சாருற்றாய் ! ஐய ! நிற்குச்
சகலசக மங்கலங்கள் பல்லாண்டு
பல்லாண்டாய்த் தழைக்க நன்கே.

வாழ்த்துப் பாட்டு

Rao Sahib V. P. Subramania Mudaliar, G.B., V. C.

அறுப தாண்டு நிறைவுற்ற
அண்ணல் மேலப்பே ராசர்பிரான்
உறுதி பயக்கும் தனதுபெயர்
உற்ற உயர்பல் கலைக்கழகம்
நிறுவி உயர்வொப் பற்றபுகழ்
நிலைக்கப் பெற்றோன், உடல் கலமும்
மறுவில் பிறபல் கலமனைத்தும்
மருவி வாழி நீடூழி.

வெ. ப. சு.

பூஞ்சோலை

(Vidwan, G. Subramania Pillai, M.A., B.L.)

இராகம்-சகானா

'("எனதையாப் பழனிமலை வேலா" என்ற மெட்டு)

1. பண்ணிற் பிணைத்தகவிச் சிறகால் — உனைப்
பறந்து விரைந்தெடுத்துச் செல்வேன்
கண்ணே பொருணைநதிக் கரையில் — அங்கே
கண்ணைப் பறிக்குமொரு சோலை.

2. பாலோ வெனப்பொழியும் நிலவில் — சோலைப்
பளிங்கைப் பழித்தநடுச் சுனையில்
ஆலோ சனைகள்மிக மூண்டு — அல்லி
அன்பர் வருகைதனை மீறும்.

3. அல்லீ நினைப்பதென்னை வென்றால் — பகல்
அணைந்து சுகித்தவென்றன் மாரன்
புல்லிப் பொருந்தாது நிலவில் — கடல்
புகுந்து மறைந்தேனை வெண்ணும்.

4. கொஞ்சித் திரைத்துவிளை யாடி — நீலம்
கோடி மீனைவானிற் காணும்
மிஞ்ச மணக்குமலர் ரோஜா — காதில்
மெல்ல மறைந்துகதை பேசும்.

5. பிச்சி இருவாட்சி கொன்றை — மல்லி
பின்னு முள்ளபல மலர்கள்
பச்சை சிவப்புவெண்மை மஞ்சள் — பல
பாம னருளொளியைக் காட்டும்.

6. விரித்த இதழ்களிடை மலரில் — மணம்
விலைக்கும் புதுமைதனைக் கண்டு
சிரித்து மகிழாத நெஞ்சம் — சிவன்
சில மூணர்வதுண்டோ பாரில்.

7. குமுத மலரினெளி கண்டு — மதி
குனிந்து குலவமனம் நாடும்
அமுதம் பொழியுந்தன் காத்தால் — அதை
அன்பாய் மணந்தங்கே கூடும்.

8. போன திசையெல்லாம் பூவை — மனம்
போன படியுழக்குங் காற்றும்
கான வொலியையீரிற் கேட்டு — ஓடைக்
கரையிற் கரைந்துருகி நிற்கும்.

9. அந்தக் கரையருகே மதியின் — கீழ்
அந்த விதமென்மனங் குழைய
நந்த வனங்கள்சுற்றி வந்து — நாமும்
நந்தாத இன்பம்விளைத் திருப்போம்.

(பண்ணிற்)

(Adapted and enlarged from Heinrich Heine's "Auf Flugeln des Gesanges" or "On the Wings of Melody.")

பெருமை தங்கிய டாக்டர் செட்டிநாட்டு ராஜா ஸர். அண்ணமலை
செட்டியாரவர்கள் அறுபதாம் ஆண்டு நிறைவுவிழாவில்
அண்ணமலைப் பல்கலைக்கழகத்தமிழ்
விரிவுரையாளர்

வித்வான் G. சுப்பிரமணிய பிள்ளை M.A., B.L, பாடிய

வாழ்த்து.

1. அண்ணு மலையாணை யார்வமுடன் கல்விதனை
எண்ணுமு ஸீத்தளித்த ஏந்தலே — விண்ணுடாய்த்
தில்லை வெளியைத் திருத்தியிட்ட தீரனை
வெல்லத்தான் வேந்துண்டோ வேறு.

2. பொன்னைக் கொடுத்துப் புகழெய்தித் தாங்கழிவார்
அன்னையார் தீந்தமிழுக் காதரமாய் — மன்னுங்
கலையளித்த சேவகா கண்ணை சிதையா
நிலைகளித்துப் பெற்றனையே நீ.

3. கீதமும் பாட்டுங் கிளரொலிநற் கல்விகளும்
வேதனும் வெள்கிடும் விஞ்ஞான — வோதைகளும்
அண்ணு மலைநகரி லண்ணலே நின்னிசையென்
றெண்ணருஞ் சொல்வ ரிசைந்து.

4. பொட்டல் வறுங்களமும் போதரும்பிப் பூத்தளிக்கத்
தொட்டது பொன்னுந் துரையேநின் — னிட்டமகன்
எத்திசையும் போற்ற வினும்பெறுவன் முத்தையா
சித்தங் களித்திடுநற் சீர்.

5. முப்பா னிரட்டி முதுமைய தாகுமென
லொப்பாமோ சால வுரவோய்நீ — எப்போதும்
இப்போதே போல வினிதாக வாழ்ந்திடுக
அப்பாலுஞ்* செய்யும் அருள்.

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*பால்—ஊழ்

தமிழ்நூல் வளர்ச்சியும் ஆராய்ச்சியும்

(Prof. K. Subrahmanya Pillai, M.A., M.L.)

தமிழின் தொன்மையினையும் சிறப்பையும் பல தமிழறிஞர்கள் எடுத்துப்பேசியும், தமிழை வளர்த்தற்குரிய தனிப்பெருங் கல்விநிலையம் இப் பல்கலைக் கழகமென்று பல பேரறிஞர்கள் விதந்தோதியும் இன்னும் தமிழ்மொழி ஆக்கம்பெறுதற் குரிய முயற்சிகள் சிறந்து நிகழாமைக்குக் காரணம் உண்மைத் தமிழ்ப்பற்று, தக்க தமிழர் உள்ளத்தில் வேரூன்றுமையே யாகும். தமிழ்மொழி உலகிலுள்ள எல்லா மொழிகளினுந் தொன்மையான உயிர்வாழு மொழியென்று இலங்கை உயர்திரு. ஞானப்பிரகாசப் பாதிரியார் கூறியுள்ளார். அவர் ஏறக் குறைய எழுபது மொழிகளோடு தமிழை யொப்பிட்டுப் பார்த்து வெளியிடக்கருதிய நூல் வெளிவருதற்குப்போதிய பொருளுதவுவார் இனித் தான் தோன்றுதல் வேண்டும். காலஞ்சென்ற உயர்திரு. பா. வே. மாணிக்க நாயக்கர் அவர்கள் தமது அரிய ஆராய்ச்சித் திறனால் உலகிலுள்ள பேச்சொலிக் குழாங்கள் அனைத்திற்கும் மூலமான முதலொலிகளும், அவற்றோடு கலந்து கலப்பொலிகள் எழுவதற்குப் பயன்படும் சார்பொலிகளும் தமிழிலே உண்டெனக்கண்டு அவற்றினுதவியால் எம் மொழியையும் எழுதிவிடலாம் என்று சின்னட்குமுன் நிலைநாட்டினர். அம்முறை உலகவழக்கில் ஊக்கம்பெறுது போயிற்று. அதனை உயிர்ப்பித்துப் பரவச்செய்தல் தமிழ்க்கல்வி நிலையங்களின் முதற்கடமையாம். போலீஸ் இலாக்காவில் உயர்பதவி தாங்கி இப்பொழுது ஓய்வுதல் பெற்றிருக்கும் திருவாளர். M. S. இராமசாமி ஐயர் அவர்கள் தமிழ் மொழியோடும் தமிழ்நூற் கருத்துக்களோடும் ஐரோப்பிய மொழிகட்கு உள்ள தொடர்பினைப் பல்லாண்டுகளாக ஆராய்ந்து கண்டிருக்கும் முடிபுகளைச் சோதித்துப் பயனுள்ளவற்றைத் தொகுத்துப் போற்றுதற்குரியவர்கள் யாவரென்று விளங்கவில்லை. அவ்வேலை விரைவில் தொடங்கப்பெற வேண்டும். சென்ற ஐம்பதாண்டுகளாக இந்நாட்டு இதிகாசங்களையும், மேலைநாட்டு இதிகாசங்களையும் ஒப்பிட்டுக் கற்று இந்து-ஐரோப்பியரின் (Indo-European) தோற்ற மூலத்தைப்பற்றி

விரிவாக ஆராய்ந்து எழுதிய பெருநூலொன்று சின்னாட்குமுன் வெளி வந்தது. அதன் ஆசிரியர் தாசில்தாராயிருந்து விடுதி பெற்றிருக்குந் திருநெல்வேலித் திருவாளர் சொக்கலிங்கம் பிள்ளை என்பார். அவர் இன்னும் சில பெரும் புத்தகங்கள் வெளியிடுதற்கு வேண்டும் கருத்துக் குறிப்புகளைத் தாம் தொகுத்து வைத்திருப்பதாகச் சொல்லுகின்றனர். அவற்றை அச்சூர்தி ஏற்றுதற்குப் பொருள் முட்டுப்பாடு தடை செய்வது என்கின்றனர்.

இவ்வகையான முயற்சிகளெல்லாம் செல்வர்கள் ஆதரவு பெற்ற பெருங் கல்விநிலையங்களிலேதான் நிலையாக நடைபெற்று வளர்ந்தோங்கு வதற்குரியன. இந்நாளில் தமிழின் ஆக்கத்திற்காக வமைந்துள்ள பெரு நிலையம் அண்ணாமலைப் பல்கலைக்கழக மொன்றே யாகும். உயர்தரத் தமிழ்க்கல்வி பயிற்றுதலையும் தமிழ்நூல் ஆராய்ச்சியை ஊக்குவதையும் அதுமேற்கொண்டிருப்பது யாவரும் அறிந்த செய்தியாம். தமிழ்ப் புலவர்கள் ஆசிரியப் பயிற்சி பெறுதற்கும் அதன்கண்ணேதான் இட மமைந்துள்ளது. தமிழ்நூல் வளர்ச்சியும் ஆராய்ச்சியும் விரிவாக இனி தோங்கி என்றும் நின்று நிலைபெறுதற்குப் பல செல்வர்கள் உதவிபுரிய முன்வருதல் வேண்டும். தமிழ்நாட்டிலுள்ள அறநிலையங்களும் ஆதீ னங்களும் தமிழ்த் தொண்டினை விரிவாகவும் உறுதியாகவும் மேற் கொள்ளுதல் வேண்டும். அத்தொண்டில் திருப்பனந்தாள் மடத்துத் தலைவராவர்கள் ஈடுபட்டிருப்பது மிகவும் பாராட்டத்தக்கது.

தமிழ் மொழியிலிருந்த எண்ணிறந்த நூல்கள் முற்காலத்தில் பெரும்பான்மை அழிவுற்றமை நினைவில் வைக்கவேண்டிய உண்மை களுள் ஒன்றாகும். தற்காலத்திலும் பலநூல்கள் அழிந்துகொண்டிருக் கின்றன. நூற்றேர்ச்சியுடையவர்கள் பெறலரும் தமிழ் நுண் கருத்துக் களை உலகிற்குப் புலப்படுத்தாது மறைத்துவிடுகின்றனர். இது தமி ழர்க்கு ஓர் பெருங் குறையாகும். இக்குறை மேன்மேலும் நிகழாம லிருத்தற்குத் தமிழ்நூல் பேணுதலும் அவற்றின் பொருளை யாவர்க்கும் விளக்குதலும் உயர்தரத் தமிழ்க் கல்வியைப் பலர்க்கும் பயிற்றுதலும் தமிழ்க் கல்வியில் இனிமை பிறப்பித்தலும் இன்றியமையாதனவாம். உயர்தரத் தமிழ்க்கல்வி கற்பதால் ஊதியம் யாதுமில்லை யென்பர் சிலர். செலவின்றி ஒரு கல்விச்சாலையில் தற்கால முறையில் பல மாணவர் களோடு ஒருங்குசேர்ந்து கல்விகற்பவர்க்கு ஒழுங்கான பழக்க வழக்கங்

களும் தற்கால ஆராய்ச்சி முறைகளும் கைவருதற்குரியன. கலாசாலையினின்று வெளிப்போந்தபின் தமிழ்நாட்டின் பேரூர்களிலும், சிற்றூர்களிலும் பொது நன்மக்களுக்கு விழுமிய கருத்துக்களை அறிவுறுத்தித் தமிழ் விளக்கத்தைப் பாதுகாக்கும் தலைவராய் நிலவுந்தகுதி கற்ற தமிழர்க்கே உரியதாகும். கற்றவரெல்லார்க்கும் ஊதியவேலை கிடைக்காமற் போனாலும் அவர்களுள் முயற்சியாளர்கள் தங்கள் முயற்சியின் கூலியைப் பெறுவது திண்ணம். செல்வர்களும், பொதுநன்மக்களும் அவர்களைப் பேணுதல் வேண்டும். கற்றூர் எழுதிய நூல்களைப் பிறர் வாங்கிப்படிக்கும் பழக்கமுடையரானால் அதுவே தக்க பேணுதல் முறையாம். ஒன்றும் கிடையாமற்போனாலும் கல்லாமற் பயனில் வாழ்க்கை நடத்துவதினும் கற்றுத்தேர்ந்து இலக்கிய இன்பத்தையும், விழுமிய நூல்தரும் மனவமைதியையும், கடவுட் பற்றையும் நுகர்ந்து வாழ்தல் பயனுடையதேயாகும். கற்றாரே அறிவு வளர்க்கும் வாழ்க்கையைக் கடைப்பிடிப்பர். அறிவு சான்ற நூல்களை வாங்கி வாசிப்பர். நூல் கற்பாரிலராயின் நூல்களை வெளியிடுவதாற் போந்த பயன் யாதுமில்லை. அது உண்பாரிலாத விடத்து நல்ல உணவுவகைகளைச் சமைத்து வைப்பது போலாகும். நூற் பலவற்றையும் ஆராய்ந்து பலநூல்கள் எழுதி நூல் நிலையங்கள் எங்கும் நிரப்பிவைத்தாலும், அவற்றைக் கற்பாரிலாத போது அவை நாளடைவில் பூச்சிக்கும், புழுவுக்கும் இரையாகிக் கெட்டொழியும். சிறந்த கல்வியில்லாத பொதுமக்கள் உயர்ந்த நூல்களைக்கல்லாமற் செய்தித் தாள்களையும் பயனில் சிறுநூல்களையும் கற்றொழிவர். தக்க கல்விமான்கள் நல்ல நூல்களைக் கற்றுப் போற்றுவர். இந்நாட்டிலே செல்வர்களின் மக்கள் பெரும்பாலும் ஆங்கிலங் கற்பர், அல்லது வீண்காலம் போக்குவர். அவர்கள் உயர்ந்த தமிழ் நூல்களைக் கற்க ஆர்வமும், ஆற்றலு மில்லாதவர். தமிழ் கற்க விரும்பும் எளிய மாணவர்களுக்கு வறுமை அவர்கள் கல்விவளர்ச்சிக்குப் பெருந்தடையாக விருக்கின்றது. ஆதலால் தமிழ் நூல்கள் அழியாது நிலைபெறுவதை விரும்புகின்றவர்கள் நற்றமிழ்க் கல்வி பயில்வாரையும், பயின்றாரையும் பேணுதல் வேண்டும். அது தமிழ் வளர்ச்சிக்கு இன்றியமையாத பெருந் துணை புரிவதாகும்.

தமிழிலே பலகலைகளையுங் கற்பார்க்கு அவ்வவற்றிற் குரியவசதிகள் செய்யப்படவேண்டும். இலக்கணம், இலக்கியம், சமயநூல், மருத்துவம், சோதிடம், மந்திரநூல், ஓவியம், சிற்பம், இசை, நாடகம்

முதலிய பல துறைகளிலும் கல்வி பயிற்றுதற்கும் தேர்தல்கள் நடத்துவதற்கும் தமிழ்ச் செல்வர்கள் வளமாகப் பொன்னுதவுதல் வேண்டும். இசைக்கலையைத் தமிழிலேயே பயிற்றுதற்கு வேண்டப்படும் பொருளுதவி மாட்சிமைதங்கிய செட்டிநாட்டரசர் அவர்களால் நன்கு அளிக்கப்பட்டுள்ளது. மாசற்ற தமிழில் இசைக்கலையின் பல பகுதிகளுக்குமுரிய பாடல்கள் இயற்றுபவர்களுக்கு அதன் வருவாய் பெரும் பான்மையும் செல்லுதற்குரியது. பிற கலைகளுக்கும் இத்தகைய பேருதவியை யளிப்பதற்குப் பிற செல்வர்கள் முன்வரவேண்டும். இறைவன் திருக்கோயில்களுக்கும் திருவிழாக்களுக்கும் எராளமான பொருளுதவி புரிவோர் தமிழ்க் கலைக்கழகங்களே இறைவனது அறிவுக் கோயில்களாகக் கருதுதல் வேண்டும்.

இனித் தமிழ் ஆராய்ச்சியின் பகுதிகளே உற்று நோக்குவோம். தமிழ்க்கல்வி விசையில் பரவாமைக்குக் காரணம் உயர்ந்த நூல்களின் பொருளும், நயமும் தெள்ளிதின் விளக்கப்படாமையே யாகும். சங்க நூல்களிலுள்ள சொற்களின் நுண் பொருள்களே நன்கு தெரியவேண்டுமாயின் இப்பொழுதுள்ள அகராதிகளின் துணை போதியதன்று. ஒவ்வொரு சொல்லின் பொருளையும் ஆழ்ந்த நினைவுடன் ஆய்ந்து தெளிதல் வேண்டும். பண்டை இலக்கண வமைப்புக்களே இலக்கணம் நன்கு கற்றவர்களே தெளிவுபடுத்த முடியும். பதிற்றுப்பத்து, அகநானூறு முதலியவற்றிற்குத் தெளிவான உரைகள் காணுதல் வேண்டும். எல்லாத்தொகை நூல்களுக்குமே செவ்விய உரைகள் எளிய நடையில் எழுதப்படுதல் வேண்டும். வழக்கின் வீழ்ந்த சொற்களின் கருத்துக்களைப் பல நூல்களே ஆராய்தலால் திட்பமாக வுணர்தல் கூடும். வெவ்வேறு தொழிலாளர்கள் வழங்கிய குறிப்புச் சொற்களின் திட்பப் பொருளை அவ்வத் தொழிலாளர்பாற் சென்று உசாவியறிதல் வேண்டும். தமிழ்நாட்டில் சில இடங்களில் மாத்திரம் வழக்கிற் பயிலுஞ் சொற்களுக்கு அவ்வவ் விடங்களிற் சென்று பொருள் தேர்தல் வேண்டும். பல்வகைச் செடிகள், கொடிகள், மரங்கள் இன்னின்னவென்பதை அவையுள்ள விடங்களிற் சென்று கேட்டுச் சிந்தித்துத் தெளிதல் வேண்டும். சில சொற்களின் பொருளைத் தெளிவதற்குக் கலைகளின் அறிவு இன்றியமை யாததாகும். வானநூல், விலங்குநூல், மணிநூல், சமயநூல், மருத்துவநூல் முதலியவற்றின் தொடர்பு சில காப்பியங்களிற் கலந்துள்ளது.

சங்கநூற் பொருளைத் தெளிவுபடுத்தும் பெருமுயற்சி ஒருபுற மிருப்ப, சமய நூல், மருத்துவ நூல் முதலியவைகளிலும் உண்மைக் கருத்தைத் திட்பமாகக் காண்டல் கடுமையான வேலையாக விருக் கின்றது. சித்த மருத்துவ நூலின் மெய்ப்பொருளை யறியாது பலர் தவறான இரசவாதத்திலிறங்கிப் பன்னாள் முயற்சியில் பணத்தை யிழந் தனர். அந்நூலுக்குரிய ஏடுகளைத் தூய்மைப்படுத்திப் பிழையற்ற பாடங்களை வெளியிடுவது பெரியதொரு முயற்சியாகும். பின் அவற் றின் திறவுகோலைக் கண்டுபிடிக்கவேண்டும். அம்முயற்சி சித்தி பெறு மாயின் பண்டைத் தமிழரின் மருத்துவக் கருத்துக்கள் உலகிற்குப் பெரும் பயனளிப்பனவாகும். கீழான நிலக்கனிகளைப் பொன்னாக்குங் கலையினுண்மையை மேலை நாட்டார் ஒப்புக்கொண்டுள்ளனர். அச் செயலைச் சுருங்கிய செலவில் செய்து முடிப்பதற்குச் சித்த நூலறிவு பெரிதும் பயன்படும். தீரா நோய்கள் பலவற்றிற்குச் சித்த மருத்து வத்தில் தீர்க்கு மருந்துகளுள்ளன. அம்மருந்துகளைக் குற்றமற்ற முறையிலாக்கும் வகைகளைப் பலர் அறிவதில்லை. அவற்றைப்பற்றிய தெள்ளிய நூல்கள் தக்க ஆராய்ச்சியின் பயனாக எழுதப்படல் வேண்டும். அது மருத்துவக் கலை பயிற்றுவதற்கு இன்றியமையாத முயற்சியாகும். சித்த மருத்துவ முறையைப் பிற மருத்துவ முறைகளோடொப்பிட்டு நூல்களெழுதப்படல் வேண்டும். சிற்றூர்களில் சில நாட்டு மருத்துவ ரிடம் குறிப்பிட்ட நோய்களுக்கு இணையற்ற மருந்துகள் உள்ளன. அவர்கள் எளிதாக அவற்றைச் செய்யும் முறையை உலகிற்கு வெளிப் படுத்துவதில்லை. அத்தகைய மறைப்பினால் பல அருமையான மருத் துவ முறைகளும் மருந்துகளும் அழிந்தொழிந்தன. அன்னோர்களுக்கு அறிவுரைகள் இனிதாகப் பகர்ந்து அம்முறைகளையும் மருந்துகளையும் பாதுகாத்தல் பெரு நன்மை யாகும்.

மருத்துவக் கலைக்கும் பிற கலைக்குமுரிய ஏடுகளை நாடெங்கும் தேடிச் சேர்த்துத் திருத்தமாக எழுதிவைத்து வெளியிடுதல் பண்டைத் தமிழர்களின் அறிவுக் களஞ்சியங்களை அழியாமற் போற்றுவதாகும். தற்காலக் கல்வியில் வரலாற்றாராய்ச்சி முதன்மையானவைகளுள் ஒன்று. தமிழிலக்கிய வரலாறு முதலியன செவ்விய முறையிலினித் தான் அமையப்பெறல் வேண்டும். தமிழிலக்கிய வரலாறு திரு. பூரணலிங்கம் பிள்ளை முதலியோர்களால் எழுதப்பட்டிருப்பினும் ஆங் கிலத்தி லமைந்திருப்பதுபோல விரிந்த முறையில் இன்னும் எழுதப்

படவில்லை. தமிழ் மொழி வரலாறு காலஞ்சென்ற திரு. வி. கோ. சூரியநாராயண சாஸ்திரியார் முதலியவர்களால் இயற்றப்பட்டிருப்பினும் எல்லாப் பகுதிகளையும் வகுத்து விரித்து இயற்றப்படும் விரிந்த நூல் இனித்தான் எழுதப்படல் வேண்டும். மொழிநூற் கொள்கைகள் மிகச் சுருக்கமாகவே தமிழில் வெளிவந்துள்ளன. டாக்டர் கால்டுவெல் பாதிரியாரின் திராவிட மொழி யொப்பீட்டிலக்கணம் நெடுநாட்கு முன் இயற்றப்பட்டமையால் அதற்குப்பின் னிகழ்ந்துள்ள ஆராய்ச்சி யின் சார்பாக அது திருத்தி யெழுதப்படல் வேண்டும். இலக்கிய வாராய்ச்சி செய்வோர் இலக்கியத்தினெவ்வொரு பகுதிகளுஞ் சரித் திரம் வகுக்கவேண்டும். கோவை, அந்தாதி, கலம்பகம், உலா, பரணி, பிள்ளைத்தமிழ் முதலிய சிறு காப்பிய வகைகளுக்குத் தனித்தனி வர லாறு எழுதப்படல் வேண்டும். சிலப்பதிகாரம், மணிமேகலை, பெருங் கதை, சிந்தாமணி, பெரிய புராணம், கந்த புராணம், கம்ப ராமாயணம், பாரதம், காஞ்சிப் புராணம், தணிகைப் புராணம், திருவிளையாடற் புராணம் முதலிய பெருங் காப்பியங்களுக்கு ஆங்கில முறையில் வெவ் வேறு ஆராய்ச்சி நூல்கள் வெளிவரவேண்டும்.

ஆசிரியர் தொல்காப்பியனர் காலத்தில் உரை நடை நூல்கள் நான்கு வகைகள் இருந்தன. அவை பாட்டிடை வைத்த குறிப்பு, பாட்டுக் கலவாத வுரை, பொருளொடு புணராப் பொய்ம்மொழிக் கதை, பொருளொடு புணர்ந்த நகைமொழி என்பனவாகும். அவற்றினாராய்ச்சி யும், நாடக நூல்களினாராய்ச்சியும், நாவல்களென்னும் நெடுங்கதை யாராய்ச்சியும், சிறு கதை, வாழ்க்கை வரலாறு, கட்டுரை முதலிய வற்றின் வரலாற்றாராய்ச்சியும் தனித்தனி நிகழ்த்தப்பெற்ற நூல்கள் இயற்றப்படுதற்குரியன. பிற மொழிகளிலுள்ள சிறந்த இலக்கியங்கள் தமிழில் மொழிபெயர்க்கப் படுதற்குரியன. தமிழிலுள்ள கவின் காப்பியங்கள் ஆங்கிலத்தில் வெளிவருதல் வேண்டும். நாவல், நாடகம் முதலியவற்றிற்கு முன் மாதிரிகள் தமிழறிஞர்களால் பெருக்கமாக இயற்றப்படல் வேண்டும். மொழி யாராய்ச்சியில் தமிழுக்கும், தமிழோ டொத்தமொழிகளுக்குமுள்ள சொற்பொருட்டொடர்புகள் இலக்கணத் தொடர்புகள் முதலியவற்றை விளக்கும் பேரகராதிகள், திசைச் சொல் லகராதிகள், உலகவழக்கு மொழி யகராதிகள், ஒலியியல் நூல்கள், ஒலியியல் விளக்குங் கருவிகள் முதலியன பெருங் கல்வி நிலையங்கள் வாயிலாகத் தோன்றி வளரவேண்டும்.

அறிவியல் நூல்களை ஆங்கிலம் முதலியவைகளினின்று தமிழில் மொழி பெயர்த்து அமைப்பதற்கு ஒவ்வொரு அறிவியற் கலைக்கும், கலைவல்லா ரொருவரும், தமிழ் வல்லா ரொருவரும் ஒத்துழைக்கும்படி ஏற்பாடு செய்யவேண்டும். இம்முயற்சியில் ஊசுமானிய பல்கலைக் கழகத்தார் உருதுமொழிக்கு ஆக்கஞ் செய்வதில் சித்தி பெற்றுள்ளனர். நெடுநாட்கு முன்னமே இலங்கையில் சில அறிஞர்கள் ஆங்கில மருத்துவ நூல்களைத் தமிழிற் செவ்விதின் மொழி பெயர்த்துள்ளார்கள். சின்னாட்குமுன் சென்னை மாகாணத் தமிழர் சங்கம் அறிவுக் கலைகளை மொழி பெயர்த்தற்குப் பயன்படும் கலைச் சொற்கோவையொன்று பல அறிஞர்களின் ஒத்துழைப்பின் பயனாக வெளியிட்டுள்ளனர். தமிழ் மொழியியல்பிற்கும் தற்காலப் பாங்கிற்கும் ஏற்றவாறு சொற்கள் அதன்கண் அமைக்கப்பட்டுள்ளன. அரிய கருத்துக்கேற்ற சொற்கள் தமிழிலேயே அமைத்தல் அல்லது ஆங்கிலத்தினின்று நேராகத் தழுவி வழங்குதல் என்னும் இரண்டிலொன்று செய்யத்தக்கது. அம்முறைகளை விடுத்து வடசொற்களினடியாகத் தமிழுக்கு அறிவியல் மொழிகளைப் புதிது புதிதாக வமைத்தல் தமிழர்க்குச் சொற்பொருள் விளங்காமைக்கும், வடமொழிக் கலப்பு மிகையால் தமிழைச் சீர்குலைத்தற்கும் இடந்தரும். மேலும் தமிழின் சொல்லாக்க வளர்ச்சியை அது திண்ணமாகத் தடைப்படுத்தும். ஆதலால் அறிவியற் சொற்களை வடமொழி வாயிலாகத் தமிழிலமைக்கும் முயற்சியைத் தமிழ் வாணர்கள் கைக்கொள்ளாது அறவே விடுக்கற்பாலர்.

தமிழில் தக்க பயிற்சி யில்லாதவர்களால் வெளியிடப்படும் நூல்களைத் திருத்தியமைப்பதற்கும், திருத்தமுறுதற் கேலாதவற்றைக் கண்டித் தொதுக்குவதற்கும் பல்கலைக் கழகத்தாரால் ஒரு தமிழறிஞர் குழு அமைக்கப்படுதல் வேண்டும். அவர்கள் வாயிலாகப் பொது நன்மக்கள் தக்கநிந்நூல் தகாதநிந்நூல் என்று தெரிந்துகொள்ளுதற்குரிய வழிகள் வகுக்கப்படுதல் வேண்டும்.

தமிழ் நாடு மிகவும் தொன்மை வாய்ந்ததாயும், நாகரிகம் படைத்த பிற பண்டை நாடுகளுடன் பழமையான தொடர்புடையதாகவும் இருத்தலின் செவ்விதினமைக்கப்பெறுந் தமிழ் நாட்டு வரலாறானது இந்திய சரித்திரத்தையும், உலக சரித்திரத்தையும் உருப்படுத்துதற்குச் சிறந்த துணைபுரியும். நமது இந்திய நாட்டின் வடபாகத்தில் புதிதாக அகழ்ந்து

கண்ட ஹாரப்பா, மொஹொஞ்சோதாரோ என்னும் நகரங்களின் தொல் பொருள்களையும், தொல்லெழுத்துக்களையும் தெளிவுபடுத்துதற்குத் தமிழ் நாகரிக வரலாற்று ஆராய்ச்சி பெரிதுந் துணை செய்யும். அங்குள்ள சமயக் குறிகள், எழுத்துக்கள் முதலிய தமிழ்ச் சார்புடையனவென்று ஹீராஸ் பாதிரியார் முதலிய அறிஞர்கள் அறுதியிட்டுக் கூறினமை தெளிக. நாகரிக வரலாற்றினை ஆராய்வோர் இந் நாட்டிலுள்ள ஒவ்வொரு சமுதாயத்தின் பழக்க வழக்கங்களையும், குடும்பச் சட்ட திட்டங்களையும் ஆராய்ந்து நூல்கள் இயற்றவேண்டும். உலகிற்குப் பயன்படும் நூல்கள் தமிழிலும், ஆங்கிலத்திலும் எழுதப் படல் வேண்டும். தமிழர் கோயில்களிலுள்ள கட்டிட அமைப்பு நயங்கள், கற்சிற்ப நயங்கள், ஓவிய நயங்கள் முதலியன நூல்கள் வாயிலாக உலகிற்குப் புலனுதல் வேண்டும். இசைக் கலைபோலக் கூத்துக் கலையும் புத்துயிர் பெற்று வளர்ச்சி யெய்துதற்குரியது.

தமிழ் நாட்டில் வழங்குஞ் சைவ, வைணவ சித்தாந்த சமயங்கள் பெரும்பான்மை பண்டைத் தமிழர் சமயக் கருத்துக்களையே அடிப்படையாகக் கொண்டுள்ளன. அவற்றைப் பற்றிய வாராய்ச்சி தற்கால மக்களின் சமய வாழ்க்கைக்கு இன்றியமையாததாகும். தமிழ் நாட்டுச் சமயப்பெரியார், மொழிப்பெரியார் என்போர் வாழ்ந்த இடங்களையும் நினைவுக் குறிகளையும் பேணிப் பாதுகாத்தல் தமிழர் உள்ளக் கிளர்ச்சிக்குத் தக்க தூண்டுகோலாகும்.

தமிழ்ச்சொற் பொழிவாளர்களும், நூல் நிலையங்களும் தமிழ் நாட்டிலுள்ள எல்லாவூர்களிலுங் காணப்படுதல் வேண்டும். அது தமிழின் நிலை பேற்றிற்கு இன்றியமையாததாகும். கோயில்கள் முதலிய பொது நிலையங்களெங்கும் நூற் கோவை அமைக்கப்பெற்றுப் பொது நன்மக்களுக்குப் பயன்பட்டால் இலவசக்கல்வி யாவர்க்கும் கிட்டுவதாகும்.

நம் செந்தமிழ் மொழியின் வளர்ச்சியும், ஆராய்ச்சியும் தமிழ்ச் செல்வர்களின் பெருந்துணைகொண்டு நிலைபெறுதற்குரியன. அண்ணாமலைப் பல்கலைக் கழகம் நிறுவிய பெரியார் பெரும்பொருள் செலவு செய்து தமிழ் உயர்தரக் கல்லூரி, தமிழ் ஆராய்ச்சிக்கழகம், தமிழ்

நூல் நிலையம், தமிழ் இசைக்கலாசாலை என்பவற்றை நிலைநாட்டி வளர்த்து வருகின்றார்கள். தேவாரக் கலை வளர்ச்சிக்காகத் திருப்பனந் தாள் மடத்துத் தலைவர் தக்க நிதித்தொகை வழங்கியிருக்கின்றார். இவர்களைப் பின்பற்றிப் பிற தமிழ்ச் செல்வர்களும், பிறமடாதிபதி களும் வளமுறப் பொன்னுதவுவார்களாயின் தமிழ்க் கலைகள் வேரூன் றித் தழைத்தோங்கி உலகெங்கும் தமிழொளி பரப்புந்தகையன வாகும். தமிழன்னையினிணையற்ற தனிப்பெருங் கோயிலாக இப்பல் கலைக் கழகம் நிலைபெற்றோங்கும். அந் நாள் விரைவில் வருக வென்று எல்லாம் வல்ல இறைவன் திருவருளை வழுத்துவோமாக.

டாக்டர் ராஜா ஸர் அண்ணமலைச் செட்டியார் அவர்கள் மீது இயற்றிய

வாழ்த்துப்பா.

K. S. Pillai, M.A., M.L.

திருவளர் தில்லைப் பெருமுதல் வன்தளி
அருமைத் திருப்பணிக் காயிர ஆயிரம்
பொற்குவை நல்கிப் பொருவில் கோயில்
அற்புதக் கோபுரம் அணிபெற அமைத்தே
ஆவயிற் பூசனை புரியு மந்தணர்க்
கீவகை நாடொறு மிருபொழு தன்னம்
அட்டில் படைத்த மட்டில் செல்வச்
செட்டிற் சிறந்த சீர்மிகு பெருங்குடி
ஓங்கும் புகழ்பெற வுதித்த வண்ணல்
பாங்குறு சிதம்பரப் பதிநீர் வேட்கை
தணியத் தீம்புனல் தகுமுறை யுதவிப்
பணிமிகு நகராள் பதவி தாங்கிக்
கலையுயர் பள்ளி கண்டா ரிளவல்
தலைசிறந் தன்பர்க் கருளுந் தகைமை
அங்கயற் கண்ணி அருட்பேர் பூண்ட
சங்கத் தமிழ்க்கல் லூரிச் சார்பாய்
வடமொழிச் சாலை வண்பண் டிதர்பயில்
இடங்களோ நிறுவி எழிலார் பதியயல்
அண்ணா மலைநகர் அழகின் அமைத்தே
கண்ணார் கலைவகை கனிணப் பெற்ற
தமிழ்த்தாய் வீறுறுந் தனிப்பெரு மாடம்
இமிழ்திரை யுலகில் இஃதொன் றேயென
நாட்டிய சீரோன் நன்மா ணவர்பலர்
காட்டுந் திறமை கதிர்ப்பக் காணம்
அலைகடந் தயற்கலை நாடுவார்க் கருநிதி
புலவர் பாநயம் போற்றும் பொன்வளம்
பல்கலைக் கழகம் பலபா ராட்டும்
பல்வகைப் பண்ணை வெல்லுநர் பரிசுகள்

கூடல் சிரபுரம் குலவிய சென்னை
ஆடல் டில்லி அணித்தாம் டோர்டுன்
காழகப் பதிபல கதித்துள கலியிடம்
வாழ வளமுறு நன்கொடை வழங்கினேன்
தென்மறை வடமறை நூல்பயில் திருத்தலம்
மன்னி யோங்க மாண்பொருள் அளித்தோன்;
பெண்டிர் நலம்பெறப் பிள்ளைகள் சிறுறக்
கண்டபன் னிலையம் கவினுற வுதவினேன்;
செஞ்சிலுக் கழகம் கிறித்துவ இளைஞர்
அஞ்சிறைச் சங்கம் அணிதிலை மண்டபம்
இன்னோ ரன்ன எண்ணில் தன்மம்
நன்கு நிலைபெற நற்பொருள் நல்கினேன்;
தில்லைக் கோவலன் திகழ்திருக் கோயில்
மல்லல் சிறக்க மாளிகை வகுத்தோன்;
இருபெரும் போரிலும் எம்பெரு மன்னர்க்
கரும்பெறல் நிதியிற் தார்வந் திளைத்தோன்
தமிழிசை யெங்குந் தலைமை யெய்த
அமிழ்தெனப் பதினா யிரம்பொன் னளித்தோன்
கோடியின் மேலாய்க் குவிபொன் பல்லறம்
காடித் தந்த நல்லரு ளாளன்
திருவுந் தெளிவு மொருங்குடை யொருவன்
பரிவும் பண்பும் பாடறிந் தொழுகலும்
அறிவும் ஆண்மையும் ஆள்வினை யுடைமையும்
செறிவும் பிறங்கிய செம்மல் யாரும்
நண்ணும் புகழ்சேர் அண்ணா மலைப்பெயர்க்
கண்ணா மெங்கள் கலைநல வேந்தன்
இணையில் வண்மை யென்று மோங்க
அணையுறு மறுப தாண்டின் மேலாய்ப்
பல்லாண் டாயுள் பரன்பாற் காதல்
மல்லா ரினநல மாண்பார் மனநலம்
அன்னை செந்தமிழ் அருள்நோக் கவைபிற
மன்னிய வெல்லா மணந்து வாழ
எல்லாம் வல்ல இறைவேண் டுதுமே.

"தோன்றிற் புகழொடு தோன்றுக வஃதிலார்
தோன்றலிற் றோன்றாமை நன்று."

Mahamahopadhyaya Dakshinadya Kalanidhi
Dr. V. Swaminatha Aiyar.

முற்காலத்தில் நமது நாட்டில் இருந்த அரசர்களும் சிற்றரசர் களும் தேவாலயங்களை நூதனமாகக் கட்டியும், பழுதுபட்ட பழைய ஆலயங்களைப் புதுப்பித்தும், அவற்றை ஒழுங்காகப் பரிபாலனம் பண்ண வேண்டியதற்கு உரிய ஏற்பாடுகளைச் செய்தும், ஆறுகளையும் குளங்களை யும் வெட்டியும், பலவகையான அறச்சாலைகளை யமைத்தும், வித்தியா பரிபாலனம் செய்தும், புராதனக் கலைகளை வளர்த்தும் தேச மக்களுக்கு மகோபகாரங்களைச் செய்து அழியாப் புகழ்பெற்று விளங்கினார்க ளென்பது சிலாசாஸனங்களாலும், பல நூல்களாலும் தெரியவரும். கால வேறுபாட்டால் அவர்களுடைய நிலைமை குறையவே மேலே குறிப்பிட்ட பலவகைத் தருமங்கள் முதலியன ஆதரிப்பாரின்றி நாளடைவில் குறைந்துபோயின.

இங்கிலைமையில் சென்ற ஒரு நூற்றாண்டுக்கு மேலாக நாட்டுக் கோட்டைச் செட்டிமார்களென்னும் தன வைசியர்கள் "திரைகட லோடியும் திரவியந்தேடு", "முயற்சி திருவினையாக்கும்" என்னும் முதுமொழிகளுக்கு ஏற்ப அயல் நாடுகளிலும் இந்நாட்டிலும் பல இடங் களிலிருந்து பலவகையான வியாபாரங்கள் செய்து பெரும் பொரு ளீட்டித் தங்களுக்குக் கிடைக்கும் லாபத்தில் ஒரு பகுதியைத் தர்ம மகமையென்று ஒதுக்கிவைத்து அந்த மகமையைக்கொண்டு பல வகை யான தர்மங்களைச் செய்து வந்திருக்கிறார்கள். அவர்களுடைய கணக்குகளின் ஆரம்பத்தில் ஏதேனும் ஒரு ஸ்தலத்து மூர்த்தியின் பெயரால் ஒரு தொகை வரவு வைக்கப் பெற்றிருக்கும். தெய்வத்தையே முதலாகக் கொண்டு நடத்தும் தொழில் விருத்தியுறுவதற்கு என்ன தடை? இறைக்க இறைக்க வற்றாத நல்ல நீர்க் கேணியைப்போல அவர்களுடைய செல்வமும் நல்ல துறைகளில் செலவிடச் செலவிட்

விருத்தியுற்று வந்திருக்கிறது. சிவாலயத் திருப்பணி, வேதபாடசாலை, ஆகம பாடசாலை, தேவார பாடசாலை, சுந்தவனம், பசு மடம், அறுபத்துமூவர் குருபூஜை மடம், கல்விச்சாலை, அன்னசத்திரம் ஆகிய இவைகள் தனவைசியர்கள் முக்கியமாக மேற்கொண்ட தருமங்கள். இவர்களுள், காளுடுகாத்தானில் உள்ள தனவைசியர்களில் ஒரு பரம்பரையினர் சிவஸ்தலங்களுள் சிறந்ததாக விளங்கும் சிதம்பர ஸ்தலத்தின் திருப்பணியையும், திருவாணைக்காவின் திருப்பணியையும் மேற்கொண்டு எத்தனையோ லக்ஷம் ரூபாய்கள் செலவிட்டு நிறைவேற்றி யுள்ளார்கள். இத்தகைய சிறந்த தானதரும பரம்பரையில் உதித்த வர்களே நமது கௌரவம் பொருந்திய டாக்டர் ராஜா ஸர் மு. அண்ணா மலைச் செட்டியாரவர்கள்.

இவர்களே ஏறக்குறைய இருபத்தைந்து வருஷங்களுக்கு மேலாக நான் அறிந்திருக்கிறேன். 1920ஆம் ஆண்டு முதல் இவர்களோடு நெருங்கிப் பழகியிருக்கிறேன். இவர்கள்பால் எவ்வளவோ சிறந்த குணங்கள் காணப்படினும் காலத்தை வீண் போக்காமை, காரியத்திலே கண்ணுயிருத்தல், தாமறிதல், யாரிடமும் சுலபமாகவும் இன்சொலோ டும் பழகுதல், யோசித்து நிதானமாகப் பேசுதல், எண்ணியவற்றை எண்ணியபடியே நிறைவேற்றுதல், சோம்பலின்மை, நிர்வாகத் திறமை என்பவை இவர்களிடமுள்ள சிறப்பியல்புகள். சிறிது நேரம் சம்பா ஷித்தாலும் உபயோகமான பல அரிய விஷயங்களே நாம் இவர்களிட மிருந்து தெரிந்து கொள்ளலாம்.

தம்முடைய முன்னோர்கள் தருமஞ் செய்து வந்த சிதம்பர ஸ்தலத்திலேயே இவர்கள் ஓர் ஆங்கில காலேஜையும் ஸம்ஸ்கிருத காலே ஜையும், தமிழ்க் காலேஜையும், போதனு பயிற்சிக் காலேஜையும் ஏற் படுத்தி நடத்தி வந்த போது தான் இவர்களுடைய தாராளமான சிந்தையையும், கல்வி யபிவிருத்தியிலுள்ள தளராத ஊக்கத்தையும் நான் நன்றாகக் கண்டு கொண்டேன். அன்றி அவ்வப்போது வித்து வான்களே ஆதரித்தலையும், ஏழை மக்களுக்கு இயன்ற வளவு உதவி செய்வதையும், பொதுவான தர்மகாரியங்களில் முன்வந்து மிக்க ஈடு பாடு காட்டி உபசரித்தலையும், பல கல்வி ஸ்தாபனங்களுக்கும், வைத் திய சாலைகளுக்கும் தாராளமாகப் பொருளுதவி செய்தலையும் நான் பலமுறை கவனித்துள்ளேன். இவர்களுடைய சொந்த ஊரில் ஓர் உயர்ந்த மருத்துவச் சாலையை அளவற்ற பொருட் செலவில் அமைத்

துச் சுற்றுப் பக்கங்களில் பல மைல் தூரத்திலுள்ள ஜனங்களுக்கும் பயன்படும்படி விசேஷமான அனுகூலங்களைச் செய்திருக்கிறார்கள்.

இவர்களுடைய உயர்ந்த பரோபகார சிந்தையையும் இவர்கள் செய்துள்ள ஒப்புயர்வற்ற வித்தியாதானத்தையும் நமது காருண்ய அரசாங்கத்தாரும், சென்னைச் சர்வகலாசாலையாரும் நன்கு மதித்துப் பாராட்டி இருப்பது யாவருக்கும் தெரிந்ததே.

இவர்கள் செய்துள்ள பேரறங்களுள் தலைசிறந்து விளங்குவது அண்ணுமலை ஸர்வகலாசாலை. ஸர்வகலாசாலை யென்றால் என்ன என்ன அமைந்திருக்க வேண்டுமோ அவ்வளவும் இதில் அமைந்திருப்பதைக் காணலாம். சங்கீதம் முதலிய பல கலைகளும் விருத்தியாவதற்கு வேண்டிய வசதிகள் இதில் உள்ளன. கோடிக்கணக்கான பொருளைச் செலவிட்டுப் பலர் ஒன்றுகூடியும் நிறைவேற்றுதற்கு அசாத்தியமான தென்று நினைக்கத்தக்க ஒருசர்வகலாசாலையைத் தனியேநின்று நிறுவிய தனிப்பெருமை இவர்களுக்கே யுரியது. இவ்வொன்றே உலகுள்ளளவும் இவர்களுடைய புகழ் அழியாமல் நிலைத்திருப்பதற்குக் காரணமாகும். இவர்களுடைய பெருமைகளைப்பற்றி இன்னும் எவ்வளவு சொன்னலும் பற்றுது.

தனவைசியர்களுக்கு ஓர் உதாரண புருஷர்களாக விளங்கும் இவர்களுடைய அறுபதாம் ஆண்டுவிழா அடுத்தமாதம் கொண்டாடப் பெறுமென்பது தெரிந்து சந்தோஷமடைகின்றேன். இவர்கள் அரோகதிட காத்திரத்துடன் இன்னும் பல்லாண்டு பல்லாண்டிருந்து விளங்கும்படி செய்வித்தருளும் வண்ணம் ஸ்ரீ நடராஜ மூர்த்தியைப் பிரார்த்திக்கின்றேன்.

சிவமயம்.

அண்ணமலைப் பல்கலைக்கழகம் நிறுவிய பெருங்கொடை வள்ளலாரும்
செட்டிநாட்டரசருமாகிய உயர் சைவத் திருவாளர்

(ராஜா. சர்.) Raja. Sir. அண்ணமலைச் செட்டியார் அவர்களின்
அறுபதாம் ஆண்டு நிறைவுவிழாக்காலையில் உவந்தளித்தது

ஆறுசீர்க்கழி நெடிலடி யாசிரிய விருத்தம்.

ஆசிரியர் : அ. வரதநஞ்சைய பிள்ளை, தோரமங்கலம்.

திணை :—பாடாண் துறை :—பாடாண் பாட்டு.

பூமாது மிகமகிழ்ந்து தன்னின்மிக்க
மகன்மனையாய்ப் புவனம்போற்றும்
நாமாது தனைத்தழுவி இவண்வாழ்தல்
வியப்பென்றே நாவலோர் சொற்
பாமாது புகழ்பெருக்குஞ் செட்டிநாட்
டினுக்கரசாம் பண்பு பூண்ட
பூமாதுங் கக்கருணை யுருவ
அண்ணமலை நாமப்புனிதா வாழ்க. 1

முதிர்சுவைத்தண் டமிழைமுனம் தோற்றி
வளர்த்திய அருமை முன்னியன்பாற்
றுதிபுரியுந் தனதனுக் கண்ணமலைப்
பேரீந்து புதுத் தோற்றத்தாலே
விதவிதமாய்ப்பல வன்னக் கலையணிந்து
தமிழ்க்கன்னி விளங்கச் செய்கென்
றுதவவர னீங்குவந்து புரிகின்றுயென்
பதலா லுரைத்தலென்னே. 2

மாணிக்கங் குதிரைவீர விறகுமுத
லனவிற்றான் மகனும் செட்டி
காணிக்கை யடியரிடம் ஆயுடல்
பொருண்மூன்றுங் கைக்கொண் டப்பாற்
பேணிக்கேவல மாமொன் றீவானுன்
னன்புமிகும் பெருமா னென்போர்
நாணக்கை நிறைபொன்னுந் தந்துகுறை
தீர்க்கவல்ல நம்பி வாழ்க. 3

ஆய்மொழிகள் பல விருந்தென்
தாய்மொழிபோல் நலந்தருமோ அவ்வங்நாட்டுத்
தாய்மொழியை மிகவளர்த்தோர் புகழ்மேவு
பெருஞ்செல்வந் தருக்கி வாழ்வார்
வாய்மொழியோ வுண்மையிது கண்கூடே
யென வறிந்த மாண்பினனே
நீமொழிகட் கடங்காத புகழ்வளரத்
தமிழ் வளர்ப்பாய் நீடுவாழ்க. 4

கலைதந்தார் தாய்மொழிக்கு மலையேறிக்
கண்டநிலந் தந்தார் பாட்டின்
நிலையறிபொன் பதினாறயிரஞ் சொரிந்தார்
நெருப்பின் மலர்நீள் பூத்தந்தார்
புலவர்கட்கு க்களிறு பரித்தேர்நல்
கினர்முந்தைப் பூவின் வேந்தர்
கலைதந்து தமிழ்க்கன்னி மானங்காத்திடு
நீயே கனம் பெற்றயால். 5

தொகுப்பர் பொருண் மிகக்குவியக்
கண்டுவப்பர் துய்த்தறியார் தொடவேமாட்டார்
வகுப்பவரின் விலைமகளிர் கள்வர்
குடிவகை முதலாம் வழியிற்சேர
வுகுப்பர் சிவபுண்ணிய நற்றரும
நெறிக் கெனிலொளிப்பர் உலகார்தோ
மிகுப்பவரும் புகழ்நினைப் போற்பெருங்
கடமையாற்றவல்ல வீரர் யாரே !. 6

எங்குமிசை பரப்பியநற் றமிழ்ப்புலவர்
தமைப் புரக்கு மீதொன்றேயோ
பொங்குசுவைப் பன்மொழி வல்லோர்
தோன்றப் படைத்துனது புகழ்போன் மல்கித்
தங்கமற்றுந் தனித்தமிழ்ப் பண்ணிசை
வளர்க்கவிரும்பி வைத்த தனத்திலேயோர்
பங்களித்தநினை யுமைக்கோர் பங்க
ளித்தோன்காக் கவென்று பரவுவோமே. 7

நற்றமிழ்நா டேனைப்பன் மொழியினர்க்கு
மிடந்தந்த நலந்தேர்ந் தேயோ
வந்துபுகுந் தோங்கியஆங் கிலமு
மின்றியமையாத மாண்பு கண்டோ
முந்தையோவிய மிசைகைத், தொழில்விவசா
யம்போல்வ முதன்மைத் தென்றே
எந்தைநீ பல்கலைப்பேர்க் கழக
நிறீஇப்பெறற்கரிய இசை பெற்றுயால். 8

காலந்தேர்ந் துயர்ந்தநல்ல கடனுற்று
மதிநுட்பக் கருத்தை யேயோ
சீலமுடன் சிவபெருமா னடிக்கெனவே
மனங்கொடுத்த செயலைத் தானே
பாலடைந்தேற் றவர்கொடைக்கை வள்ளலாம்
படி வழங்கும் பண்பையேயோ
சாலவுயர்ந்தது வெதுவென்*, தெளியனேன்
விதந்தெடுத்துச் சாற்று கேனே. 9

திகழ்செட்டி நாட்டரசே! யரசியலார்
பெரும்பட்டந் தெரிந்து நல்கி
மிகுழ்முல்லைத் தார்மார்பா! அறிஞர்தங்
கண்மணியேபூ மானே மேலாந்

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*எளிமை = உயர்ந்த பல நற்குணங்களை யுடைமையின் தக்கவாறு அவற்றைப் பாராட்டற்கியலாமை.

தகைமையினற் பிறர்க்கெனவாழ் தனைவெரி,
யக்குலத்தார் தவமே! பண்ணுள்
இகபரத்து நலம் பெருகப்பரம
னருளால் வாழ்கென்றேத்து வோமே. 10

வாழ்க நின்றனுண்மீனே! வாழ்க
நின்றன்பேரருள் நின்மரபும் வாழ்க
வாழ்கநின தரியவண்மை வாழ்க நின
தாள்கள் என்றும் வாழ்க நாட்டும்
சூழ்புகழ் மேன்மேலோங்கி வாழ்நாட்க
ளின்பமொடு துலங்க மைந்தர்
வாழ்கமனை மூதற்சுற்றம் வாழ்க
வென்று கைம்மாறு வருக்கின்றேமே. 11

செட்டிநாட்டரசர் ராஜா ஸர் அண்ணமலைச் செட்டியார்
அவர்களின் அறுபதாம் ஆண்டு நிறைவுவிழாவில்
அண்ணமலைப் பல்கலைக் கழகத் தமிழாசிரியர்
E. S. வரதராஜய்யர் B. A. இயற்றியது.

மங்கல வாழ்த்து.

1. பூமன்னர் போற்றும் புகழான் புலவர் புரவலனும்
காமன் வியக்குங் கொடையான் வணிகர்தங் காவலனும்
வாமன் சுகுணன் வரோதயன் பேரருள் வாரியுயர்
பாமன்னர் பாடிடும் பண்பனண் ணுமலைப் பார்த்திபனே.

2. செய்தார் அறம்பல சேயிழை பாகன் திருத்தளிக்கட்
பெய்தார் வணிகர் பெரும்பொரு ளேனும் பெரும நின்போல்
வெய்தா மடமை வறுமை யிவற்றை விலக்கினரார்
மொய்தா ரணிபுகழ் அண்ணு மலைப்பெயர் முன்னவனே.

3. நற்பா லுயிரொடுப் புக்கேழ் பிறப்பும் நலமுதவிப்
பொற்பா ரறிவைப் புகட்டிடுங் கல்வி புனிதமென்றே
அற்பா னிதிகொண் டருங்கலைக் கூடம் அமைத்தளித்தே
இப்பார் புகழ விருந்தாணண் ணுமலை யேந்தல் நன்றே.

4. உற்றார்க் கருள்வோ னுழைபயோர் கோகண் உயர்தமிழ்நூல்
கற்றார்க் குதவுங் கனமுகில் பாவலர் காவலனும்
நற்றார் நிருபரும் நாடும் அறிவன் நயனுடையான்
வற்றுத் திருவின் அரசனண் ணுமலை வாழியவே.

5. பெற்றுப் பெரும்பொருள் அப்பொருள் தன்னைப் பெருமைபெற
வற்றுத கல்வி வளர்ப்பா னுதவும் வாகுணனே
கற்றார் புகழ்பெறுங் காவல ராவல கைவண்மையாற்
பொற்றரு வேங்கப் புறங்கொளண் ணுமலைப் புண்ணியனே.

6. கண்ணு மெனப்புக லெண்ணே டெழுத்துங் கவின்செறியப்
பண்ணு ரிசையும் வளர்ப்பான் விரும்பிப் பருநிதியம்
விண்ணூர் தருமெழில் தேனுவைப் போல மிகப்பொழியும்
அண்ணலண் ணுமலைப் பேரரசே யுயர் அற்புதனே.

7. தேனூர் செழுந்தமி ழாரிய மாதிய செம்மொழியும்
ஆனுப் பெருமை யிசையும் வளர வவாவிமட
மானுரு மாடவர் தாமும் பயில மகிழ்ந்தளித்தான்
கானு ரலங்கலண் ணுமலை நூற்கழ கத்திணையே.

8. அறத்தா றிதுவென் றுலகோர் அறிந்திட வார்ந்த அன்பின்
றிறத்தாற் கலைகள் வளரப் பொருள்தெரிந் தீந்தனமா
னிறத்தாள் விழையும் நிதியணண் ணுமலை நேர்மையனே
பெறத்தா னரிய பெரும்பேறு பெற்றுப் பிறங்குகவே.

9. உற்ற னறிவ தறிந்துயர் மக்களை யொண்ணிதியம்
பெற்ற னறம்பல பேணினின் ருன்கலைப் பேற்றினுயர்
கற்றார்க் குதவும் ஒருவன் பெரியன் கலைமகிபன்
நற்ற ணிபுகழ் அண்ணு மலைப்பெயர் நற்றவனே.

10. சீரம் பலவன் நடமார் திருத்தில்லைச் செம்பதியிற்
பேரன் பொடுநின் பெயரா னமைந்த பெருங்கழகம்
பாரம் புலிகதிர் போலென்று நின்று பயன்றரவே
நாரம் பயில்சடை வானவன் பேரருள் நாடுவனே.

11. எப்பா லவரும் விரும்பும் பெரும்புக ழேற்றுலகில்
முப்பா னிரட்டி யகவை முடித்தனை மொய்யறங்கள்
தப்பா துஞற்றினை அண்ணுமலைப் பெயர்த் தண்ணளியோய்
ஒப்பா ருனையெவர் வாழிபல் லூழி உளஞ்சிறக்கவே.

திருவாளர் ராஜா ஸர் அண்ணமலைச் செட்டியார் அவர்களின்

அறுபதாம் ஆட்டைத் திருமண

உயிர்வர்க்கக் குறிலெழுத்தைம்பா.

[நெல்லை சபாரஞ்சித பரமானந்த கவியும், கோவூர்த் தேவாரப்

பாடசாலை ஆசிரியரும் ஆகிய

[த. ஆ. வேங்கடாசலப் பிள்ளை இயற்றியது.]

பன்னிருசீர்க் கழிநெடிலடி ஆசிரிய விருத்தம்.

அங்கையெனுந் திரைகளினற் கரைமருங்கி
லுயர்மணிகள் அள்ளிக் கொட்டும்
ஆழமுடைக் கடல்புடைசூழ் பேருலகிற்
றமிழ்வளரிவ் வவிர்தென் னாட்டில்
மங்கையொரு பங்குடையோன் றண்ணருளாற்
சிறந்ததன வணிகச் செல்வ
மணிவிளக்காய்த் தோன்றிநறுந் தமிழுடனங்
கிலங்கற்று மணக்கத் தேறிப்
பொங்குதவச் சைவநெறி பிறழாமற்
றிடமலிந்த புலமை கொண்டு
போற்றுமர சாங்கத்தா ராலுமதிக்
கப்பெற்றே புகழ்மிக் கோனுய்
எங்குமெவர்க் கும்மெதிலுஞ் சிறந்துள்ளாய்
நின்பெருமை இயம்பற் பாற்றோ
எழின்மிகுந்த ராஜாஸர் அண்ணு மலைப்
பெரியோய் இனிது வாழ்க.

இடதுமலர்த் தாடேக்கித் திருநடனம்
புரியுமெம திறப்பி லண்ணல்
இலங்குசிதம் பரத்தருகில் அருட்டிருவேட்
களத்திலுன்றன் எழிலுமத்தால்
திடமுறஓர் நன்னகர முண்டாக்கி
அதில்யுநிவர் சிட்டி யென்னும்
சிறந்துளபற் கலைக்கழகம் நிலையிட்டு
மாணவர்க்குத் தென்சொ லோடு
வடமொழியு மாங்கிலமும் சங்கீதப்
பெருங்கலையு மற்றும் யாவும்
வழுவறவே உணர்த்திடவைத் தனிமேலும்
இவ்வறத்தின் வளர்ச்சி மல்க
உடனலத்திற் காகஅங்கோர் வைத்தியசா
லையுநிறுவி உவகை பூத்தாய்
உலகுபுகழ் ராஜாஸர் அண்ணும
லைப்பெரியோய் ஓங்கி வாழ்க.

உய்வருளுஞ் சிதம்பரத்திற் றேவாரத்
திருமுறைக ளுணர்த்து தற்கோர்
உயர்பாட சாலையமைத் தங்குள்ளார்க்
கூணுடைகள் உதவுஞ் சீரும்
தெய்வகுரு பூசைக்குத் தனிமடமொன்
றமைத்திட்ட சிறந்த மாண்பும்
திகழுமன சத்திரங்கள் பிறவிடத்தும்
நிறுவியுள திடத்த அன்பும்
மெய்வருந்தி யீட்டியுள பொருள்களோகல்
வழிகட்கே வேண்டு மட்டும்
மிகவழங்கி யறம்பேணும் வள்ளண்மைப்
பெருங்குணமு மிகவே பெற்றாய்
சைவஉனை மூவுலகுங் கொண்டாடும்
இதிற்சிறிதுந் தடையே யில்லை
தகைமைநிறை ராஜாஸர் அண்ணும
லைப்பெரியோய் சததம் வாழ்க.

என்றுமுள கல்வியறி வொழுக்கமிறை
பதிபத்தி யின்சொல் கூறல்
எவ்வுயிர்க்கு மிரங்கிடுதல் பொதுநோக்கங்
குறிப்புணர்தல் ஈகை சாந்தம்
வென்றிதவம் நிறைவடக்கம் வாய்மைதிடம்
பண்புடைமை விருப்ப மின்மை
வெகுளாமை மடியின்மை நடுவுநிலை
திறம்பாமை வெருட்சி யின்மை
நன்றிமற வாமைஊழ் அவைத்துணிவு
சொல்வன்மை நல்லோர் நேசம்
நட்புபுகழ் முதலெல்லா வளங்களிலுந்
தலைசிறந்தே நாட்டின் போக்கும்
சென்றுபலவிடத்தும்நீ தேர்ந்துள்ளாய்
நினக்கொப்பார் செகத்தி லில்லை
திருவளரும் ராஜாஸர் அண்ணுமை
லைப்பெரியோய் சிறந்து வாழ்க.

ஒருமணத்தைத் தடுத்துமுன முலகுய்யக்
கயிலையினி லுரைத்த வாறே
உயர்நாவ லூர்வளரும் வன்றொண்டப்
பெருந்தகையார்க் குவகை தோன்ற
இருமணத்தைச் செய்துவைத்திங் கன்னவரை
யாட்கொண்ட எந்தை நோக்கால்
இலகுறுமுன் அறுபதாமாட் டைப்பருவம்
நிறைந்துபெயர்ந் திடுதலால் அத்
திருமணத்தை இவ்விசுவிற் புரட்டாசி
பனிரண்டிற் சிறக்கும் வண்ணம்
செகத்தினுளார் கடத்திவைக்கும் செய்திதெரிந்
தியாமிதனைத் தெரிக்க லுற்றேம்
பெருமணத்தைக் கண்டவர்கேட் டவரெவர்க்கும்
உண்மகிழ்ச்சி பிறக்க நாளும்
பெட்புமிகும் ராஜாஸர் அண்ணுமை
லைப்பெரியோய் பெரிதும் வாழ்க.

வாகைத்திணை

[நாவலர் ந. மு. வேங்கடசாமி நாட்டார், பிரின்சிபால்,
கரந்தைப் புலவர் கல்லூரி.]

மக்கள் அடையவேண்டும் உறுதிப் பொருள்களை அகப் பொருள் எனவும், புறப் பொருள் எனவும் பாகுபடுத்துரைப்பது தமிழ் நூன் முறை. இவை அறம், பொருள், இன்பம், வீடு என விரித்துரைக் கவும்படும். அகம் என்பதில் இன்பமும், புறம் என்பதில் அறம் பொருள்களும் அடங்கும். வீடு என்பது அகம் புறம் இரண்டினும் அடக்கிக் கூறப்படும். அகப்பொருள், புறப்பொருள் பற்றிய ஒழுக லாறு முறையே அகத்திணை, புறத்திணை எனப்படும். குறிஞ்சி, பாலை, முல்லை, மருதம், நெய்தல், கைக்கிளை, பெருந்திணை என அகத்திணை ஏழு வகைப்படும். வெட்சி, வஞ்சி, உழிஞை, தும்பை, வாகை, காஞ்சி, பாடாண் எனப் புறத்திணை ஏழு வகைப்படும். குறிஞ்சி, பாலை முதலிய அகத்திணைகள் இல்லறத்திற்குரிய தலைவன் தலைவியரின் கூட்டம், பிரிவு முதலியவற்றையும், வெட்சி, வஞ்சி முதலிய புறத் திணைகள் அறம் பொருள் கருதிய அரசர் முதலாயினரின் நிரை கோள், பகைமேற் செலவு முதலியவற்றையும் குறிக்கும்.

மக்கள் புறத்திலே பொருளீட்டுதலும், அறம் புரிதலுமாகிய செய்கையெல்லாம் அகத்தில் இன்பந் துய்க்குஞ் செயலோடு தொடர்ந் திய தொடர்பும் ஒற்றுமையும் உடையனவே. அதனாற்றான், ஆசிரி யர் **தொல்காப்பியனார்.**

"வெட்சி தானே குறிஞ்சியது புறனே"

என்றிவ்வாறுகப் புறத்திணை ஏழினையும் ஒவ்வோரகத்திணையோடும் சார்த்தியுரைப்பாராயினர். ஆயின், அவற்றிற்குள்ள இயைபுகள் இப்பொழுதுள்ள உரைகளினால் முற்றும் தெளிவாக அறியக்கூட வில்லை.

புறத்திணைகளில் முன்னுள்ள வெட்சி, வஞ்சி, உழிஞை, தும்பை என்ற நான்கும் போர்ச் செய்திகளாகலின் மறத்திறன் உடையன. அடுத்துள்ள வாகை மறம், அறம் என்னும் இருதிறனு முடையது.

"தாவில் கொள்கைத் தத்தங் கூற்றைப்
பாகுபட மிகுதிப் படுத்தலென்ப"

என்பது வாகைத் திணையின் இலக்கணம். இதன் பொருள் கேடில் லாத கோட் பாட்டினையுடைய தத்தமக்குள்ள இயல்பை வேறுபட மிகுதிப்படுத்தல் என்பதாம். எனவே, குலம், நிலை, தொழில் முதலிய வற்றால் வேறுபாடுடைய மக்கள் யாவரும் தத்தமக்குரிய பகுதிகளைத் தம் அறிவு ஆண்மை முதலியவற்றால் மேம்படுத்துதல் வாகையாம் என்க. இயல்பல்லாதவற்றை மேற்கொண்டு அவற்றின் மேம்படுதல் வாகையாகாதென்பது "தாவில் கொள்கை" என்பதனாற் பெறப் படும். நச்சினார்க்கினியர், இதற்கு, 'வலியும் வருத்தமுமின்றி இயல் பாகிய ஒழுக்கத்தால்' என்று பொருள் கூறி, 'தாவில் கொள்கை யெனவே இரணியனைப்போல வலியானும் வருத்தத்தானும் கூறுவித் தற் கோடல் வாகையன்றாயிற்று' என்றுரைப்பர்.

இதனைப் பாலைத்திணையின் புறம் என்பர். ஓதல், காவல் பொருளீட்டல் முதலியன குறித்துத் தலைவன் தலைவியைப் பிரிந்து செல்லுதலாகிய பாலை அறம் பொருளின்பங்கட்கு ஏதுவாயினற்போல வாகையும் ஆதலானும், பிறவாற்றானும் அவ்விரண்டும் ஒற்றுமை யுடையனவாம். இனி, 'தத்தம் கூறு' என்பதை விரித்து வாகைத் திணையைப் பாகுபடுத்துரைக்கும்தொல்காப்பியச் சூத்திரம்,

"அறுவகைப்பட்ட பார்ப்பனப் பக்கமும்
ஐவகை மரபின் அரசர் பக்கமும்
இருமூன்று மரபின் ஏனோர் பக்கமும்
மறுவில் செய்தி மூவகைக் காலமும்
நெறியின் ஆற்றிய அறிவன் றேயமும்
நாலிரு வழக்கிற் றுபதப் பக்கமும்
பாலறி மரபிற் பொருநர் கண்ணும்
அணிநிலை வகையோ டாங்கெழு வகையில்
தொகைநிலை பெற்ற தென்மனார் புலவர்"

என்பது. ஆசிரியர், வகையறுத்தியாக்கப் பெற்ற ஒழுக்கமுடைய பார்ப்பனர் முதலிய நாற்குடியினரை முதற்கண் நிறுவி, ஓர் குடிக் குரியரல்லாத அறிவர், தாபதர் என்போரையும், சொல், பாட்டு, கூத்து முதலியவற்றாற் பொருது வென்றி கொள்ளும் பொருநரையும் பின்னர்க் கூறி, அன்னர் ஒழுக்கம் நிலைக்களமாக வாகை பிறக்கும் என்பது தோன்ற வைத்துள்ளமை காண்க.

"கூதிர் வேனில்" என்னும் அடுத்த சூத்திரத்தில், வாகைத் திணையின் துறைகள் மறத்தின் பகுதியாக ஒன்பதும், அறத்தின் பகுதியாக ஒன்பதும் கூறப்பட்டுள்ளன. இத்துறைகள் முற்கூறப் பட்ட பார்ப்பனர் முதலியோர், கூறப்படாத திணை மக்கள், பாணர் முதலிய ஏனைப் பழங் குடிமக்கள் ஆகிய யாவர்க்கும் பொதுவுரிமை யுடையனவே. வென்றி கருதிப் பாசறைக்கட் சென்றிருத்தலும், வென்றுகளம் வேட்டலும், வெற்றிக் களிப்பால் தேர்முன் குரவை யாடுதலும், பெரும் பகையைத் தடுத்து நிற்றலும், உயிர்ப்பலி கொடுத் தலும் முதலாயின மறத்தின் பாற்படுவன. போர் வென்றியை வாகை என்றலும், அதற்கு வாகைமாலை சூடுதலுண்டென்றலும் பிற்றை நாளிலக்கியங்களிற் பரக்கக் காணப்படும். வென்ற வீரரே யன்றி அவரது படைக்கலமும் வாகைமிலைதல் கூறப்படும்.

"நீடிய அரக்கர் சேனை நீறுபட்டழிய வாகை
சூடிய சிலையிராமன்"

என்றார் கம்பர்.

"வெற்றி வாகையே சுமக்கும் வேலை வணங்குவ தெமக்கு வேலை" என முருகக் கடவுளின் வேற்படைக்கு வணக்கங் கூறினர் ஓர் கவிஞர்.

இனி, அறத்தின் பகுதியாகக் கூறிய துறைகள் ஒவ்வொன்றும் வாழ்க்கையின் குறிக்கோளாகும் விழுப்பமுடையனவாகலின், ஒவ் வொருவரும் கருத்தில் இருத்தற்பாலன. மேலைச் சூத்திரத்தோதிய 'பார்ப்பனப் பக்கம்' முதலியவற்றை முதற்கண் ஆராய்ந்து, பின் இவற்றை விளக்கி முடிப்பாம்.

பார்ப்பனப் பக்கமாவது பார்ப்பனரியல். அரசர் பக்கமாவது அரசரியல். ஏனோர் பக்கமாவது வணிகரியலும், வேளாளரியலும் அறுவகை, ஐவகை, இருமூன்று என்பன அவர்கட்கு விதித்துள்ள தொழில்கள். ஆசிரியர் வழக்கும் செய்யுளும் ஆராய்ந்து நூலியற்றி னராகலானும், சில்வகை யெழுத்தின் செய்புட்டாகிய சூத்திர யாப்பில் இயற்றப்படும் நூலின் (இலக்கணத்தின்) கண் யாவற்றையும் எஞ்சாது கிளந்துரைத்தல் பொருந்தாமையானும், அறுவகை முதலியவற்றின் பெயர்களே இலக்கியம் நோக்கி அறிந்து கொள்ளுமாறு விடுத்தார். பார்ப்பனர் அந்தணரெனவும் படுவர். அவர்க்குரிய தொழில்கள்; ஓதல், ஓதுவித்தல், வேட்டல், வேட்பித்தல், ஈதல், ஏற்றல் என்னும் ஆறுமாம்;

"ஓதல் வேட்டல் அவைபிறர்ச் செய்தல்
ஈதல் ஏற்றலென் ருறுபுரிந் தொழுகும்
அறம் புரி யந்தணர்"

(பதிற்றுப்பத்து-24)

என இலக்கியத்துள் அவைபெறப் படுதல் காண்க. அவன் அவற்றுள் ஒரோ வொன்றைச் செய்தமையும் செய்யுட்களா லறியப்படும். அங் ஙனமே அரசர், வணிகர், வேளாளர் என்பார்க் குரியனவும் அறியப் படும். அரசர்க்குரிய தொழில்கள் ஓதல், வேட்டல், ஈதல், காத்தல், தண்டஞ்செய்தல் என்னும் ஐந்துமாம். வணிகர்க்குரியன ஓதல், வேட்டல், ஈதல், உழவு, பசுக் காத்தல், வாணிகம் என்னும் ஆறுமாம்;

"உழுது பயன்கொண் டொலிநிரை யோம்பிப்
பழுதிலாப் பண்டம் பகர்ந்து — முழுதுணர
ஓதி யழல்வழிபட் டோம்பாத வீகையான்
ஆதி வணிகர்க் கரசு"

(பு. வெ. மாலை)

என்பது காண்க. வேளாளர்க்குரியன உழவு, ஏனைத்தொழில், விருந் தோம்பல், பகடுபுறந்தரல், வேட்டல், ஓதல் என்னும் ஆறுமாம் என்பர் இளம்பூரணர். விருந்தோம்பல் என்பது ஈகையில் அடங்கும். இவ்வாற்றுல் ஓதுவித்தல், வேட்பித்தல், ஏற்றல் என்னும் மூன்றும் பார்ப்பனர்க்கும், காத்தல் தண்டஞ்செய்தல் என்னும் இரண்டும் அரசர்க்கும், நிரையோம்பல், வாணிகம் என்னும் இரண்டும் வணிகர்க் கும், பகடுபுறந்தரல், உழவு, உழவொழிந்த தொழில் என்னும் மூன்றும் வேளாளர்க்கும் சிறப்புரிமை யுடையன என்பதும், ஓதல், வேட்டல், ஈதல் என்னும் மூன்றும் நாற்பாலார்க்கும் பொதுவாவன என்பதும் பெற்றும். உழவு வணிகர்க்கு மூளதேனும் வேளாளர்க்கு, உழவும், வணிகர்க்கு வாணிகமும் சிறந்தன வென்பது மரபியலானறியப்படும். இவை யாவும் மரபியலிற் கூறற்பாலவேனும், இவைபற்றி வாகை நிகழ் தலின் ஈண்டுக்கூறி, இவற்றுளடங்காத சிலவற்றை மரபியலிற் கூறினு மென்க. ஈண்டு 'இருமூன்று மரபின் ஏனோர்' என வணிகரையும் வேளாளரையும் ஒருங்கியைத்துக் கூறியது அவ்விருவர்க்கும் வேற்றுமை சிறிதாகலின் என்க. எனவே ஆரிய வருணங்களுள் நான்காம் வருணத் திற்கும் தமிழ வேளாண்குடிக்கும் யாதும் இயைபின்றென்பது பெற் றும்.

இனி, பொதுத்தொழில்களான மூன்றனுள் வேட்டல் யாவர்க்கும் ஒரு பெற்றியதன்றித் திரிபுடையதாகும். காலதேயம் பற்றி மாறுந் தன்மையதுமாம். ஏனையிரண்டுமே யாவரும் எஞ்ஞான்றும் கடனுகக் கொள்ளற்பாலவை. மக்களியற்றும் வினைகளுள் இவ்விரண்டும்போற் சிறந்தன வேறில்லை. பலணந்திமுனிவர் தமது நன்னூற்கண் "ஓதல் ஈதல் ஆதிப்பல்வினை" என இவ்விரண்டையும் விளந்தோதி, ஏனைய வற்றை 'ஆதி' என்பதனுள் அடக்கினமை இவற்றின் சிறப்பை உளங் கொண்டே யாதல்வேண்டும். இவற்றுள்ளும் ஈகையானது புகழுக்குச் சிறந்த காரணமென்பது, வள்ளுவனுர் ஈகையின்பின் புகழைவைத்து, 'ஈதல் இசைபட வாழ்தல்', 'ஈவார்மேல் நிற்கும் புகழ்' எனக் கிளந் தோதுதலானும், தொல்காப்பியனுர் வாகையின் துறைகூறுமிடத்து 'இடையில் வண்புகழ்க் கொடைமை' என்றுரைத்தலானும் இனி தறியப்படும். மற்றும், வண்மையென்பது சிறந்த வீரராயினுர்க் குரியதாதலைப் புறப்பாட்டுக்கள் முதலியவற்றுலறியலாகும்.

"ஆஅவீகை யடுபோ ரண்ணல்"
"பேகன், கொடைமடம் படுத லல்லது
படைமடம் படான் பிறர் படைமயக் குறினே"

எனவருதல் காண்க.

இனி, அறிவன் என்பதற்கு நச்சினுர்க்கினியர் முழுதுணர்வுடை யோன் எனக்கூறி, அறிவர்க்குக் காட்டாக அகத்தியனுர் முதலி யோரைக் குறித்தமையே பொருத்தமாகும். இளம்பூரணர் கணிவன் (சோதிடன்) எனக் கூறியது பொருந்துவதன்று. வெண்பாமாலை யுடையாரும் அறிவன் வாகை என்பதற்கு முக்காலமும் உணரும் பெரி யாரியல்பு என்றே கூறி, கணிவனைக் குறித்துக் கணிவன் முல்லை என வேறு துறைகூறிப் போந்தார். நாலிருவழக்கிற்றுபதப் பக்கம் என்பது தவஞ்செய்வார்க்குரிய எண்வகை யியல்பு ;

"நீர்பலகால் மூழ்கி நிலத்தசைஇத் தோலுடீஇச்
சேர்சடை தாழச் சுடரோம்பி—ஊரடையார்
கானகத்த கொண்டு கடவுள் விருந்தோம்பல்
வானகத் துய்க்கும் வழி" (பு. வெ. மாலை)

என்பது அவ்வெட்டனையும் உணர்த்தும். ஆசிரியர் நச்சினுர்க்கினியர் சிறிது வேறுபட உரைத்துள்ளதனை அவ்வுரை நோக்கி அறிக. பாலறி

மாபிற் பொருநர் என்பார் சொற்போர், இசைப்போர் முதலியவற்றில் வென்றி யெய்துவோராவர்.

இனி, அறத்தின் பகுதியாகக் கூறிய துறை ஒன்பதனையும் நோக்குதும்:

1. "பக்கட்டினனு மாவினனும், துகட்டபு சிறப்பிற் சான்றோர் பக்கம்"—இளம்பூரணர் ஆவினனும் எனப் பிரித்து, இது, பகடு புறந் தரும் வேளாளரையும், நிரையோம்பும் வணிகரையும் குறிக்குமெனக் கொண்டார். நச்சினார்க்கினியர் மாவினனும் எனப் பிரித்து, உழவுஞ் சாமையும், பகையஞ்சாமையுமாகிய வெற்றியைக் குறிக்குமென்றனர்.

2. "கட்டில் நீத்தபால்"—இதற்கு அரசன் அரசவுரிமையைக் கைவிட்ட பகுதி என்றுரைத்து, அரசு துறந்த வென்றிக்குப் பரதனையும், பார்த்தனையும் காட்டினார் நச்சினார்க்கினியர். இளம்பூரணர் 'கடிமனை நீத்தபால்' எனப் பாடங்கொண்டு, பிறர்மனை நயவாமையெனப் பொருள் கொண்டார். இது 'கட்டமை யொழுக்கம்' என மேல் வருவதனுள் அடங்குதலின் 'கட்டில் நீத்த' என்பது பொருத்தமாகத் தோன்றுகிறது.

3. "எட்டு வகை நுதலிய அவையம்"—இஃது அவைக்கண் இருக்கும் சான்றோரியல்பு கூறுகின்றது. புறப்பொருள் வெண்பா மாலை அவைய முல்லை, சால்பு முல்லை என இரு துறை கொண்டு, முன்னதற்கு "நவைநீங்க நடுவு கூறும், அவை மாந்தர் இயல்பு" என்றும், பின்னதற்கு, "சான்றோர்தம் சால்பு" என்றும் கூறுகின்றது. இவ் விரண்டும் 'எட்டு வகை நுதலிய அவையம்' என்பதில் அடங்கும். எண்வகைக் குணத்தினையும் உருவகஞ் செய்து சான்றோரியல்பு கூறும் பின்வரும் அழகிய ஆசிரிய மாலைச் செய்யுள் அறிந்து இன்புறற்பாலது:

"குடிப்பிறப் புடுத்துப் பனுவல் சூடி
விழுப்பே ரொழுக்கம் பூண்டு காமுற
வாய்மைவாய் மடுத்து மாந்திக் தூய்மையிற்
காதலின் பத்துட் டங்கித் தீதறு
நடுவுநிலை நெடுநகர் வைகி வைகலும்
அழுக்கா றின்மை அவாஅ வின்மையென்
றிருபெரு நிதியமும் ஒருதா நீட்டும்
தோலா நாவின் மேலோர் பேரவை

உடனமர் இருக்கை யொருநாட் பெறுமெனிற்
பெறுகதில் அம்ம யாமே வரன்முறைத்
தோன்றுவழித் தோன்றுவழிப் புலவுப் பொதிந்து
நின்றுழி நின்றுழி ஞாங்கர் நில்லாது
நிலையழி யாக்கை வாய்ப்ப இம்
மலர்தலை யுலகத்துக் கொட்கும் பிறப்பே".

4. "கட்டமை ஒழுக்கத்துக் கண்ணுமை"—உண்மை நூல் களாற் கட்டப்பட்ட ஒழுக்கத்தோடு பொருந்திய காட்சி என்றபடி. வள்ளுவனார் இல்லற வியலிற் கூறிய அடக்கமுடைமை, ஒழுக்க முடைமை, பிறன்மனை நயவாமை, அழுக்காறாமை, வெஃகாமை, தீவினை யச்சம் முதலியன இதன்கண் அடங்கும்.

5. "இடையில் வண்புகழ்க் கொடைமை"—இடையீடில்லாத வண்புகழைப் பயக்கும் கொடைத்தன்மை என்றபடி. 'உலக முழுதும் பிறர் புகழ் வாராமைத் தன்புகழ் பரத்தலின் இடையில் என்றார்' எனவும், 'இக் கொடைப் புகழுடையான் மூப்புப் பிணி சாக்காட்டுக்கு அஞ்சாமையின் அது வாகையாம்' எனவும் நச்சினார்க்கினியர் உரைத் தலை உளங்கொளற்பாலன.

6. "பிழைத்தோர்த் தாங்குங் காவல்"—தம்மைப் பிழைத் தோரைப் பொறுக்கும் பாதுகாப்பு என்றவாறு. பிழை செய்தோர்க்கு இம்மையும் மறுமையும் ஏதம் வராமற் காத்தலின் இஃது ஏனையோரின் வெற்றியாயிற்று என்பர். கொடையும், பொறையும் இல்லறமாயினும் சிறப்பு நோக்கி வேறு கூறினர்.

7. "பொருளொடு புணர்ந்த பக்கம்" மெய்ம்மையுடன் கூடிய இயல்பு; ஆவது மெய்யுணர்வு. இதற்கு அரசர்க்குரிய ஆறங்கங்களை யும் புதல்வர்ப் பேற்றையும் பொருளாகக் கொள்வது பொருத்த முடைத்தன்று.

8. "அருளொடு புணர்ந்த அகற்சி" அருளுடைமையோடு பொருந்திய துறவறம் என்றபடி. 'அருளொடு புணர்தலாவது ஒரு யிர்க்கு இடர் வந்துழித் தன்னுயிரைக் கொடுத்துக் காத்தலும், அதன் வருத்தம் தனதாக வருந்துதலும், பொய்யாமை கள்ளாமை முதலியன வுமாம்' என்றார் நச்சினார்க்கினியர்.

9. "காமம் மீத்தபால்"—எப்பொருள்களினும் பற்றற்ற பகுதி.

இறுதிக்கட் கூறிய மூன்றும் திருக்குறளினுள்ள மெய்யுணர்வு, துறவு, அவாவறுத்தல் என்னும் அதிகாரங்களின் பொருண்மை யுடையன. இங்ஙனம் தொல்காப்பியர் கருத்தும் வள்ளுவர் கருத்தும் ஒருமையுறும் இடங்கள் பல.

இதுகாறும், வாகையாவது மாந்தர் தத்தம் இயல்பினை மிகுதிப் படுத்தலாம் என்பதும், அது மறம் அறம் என இருதிறப்படும் என் பதும், அவற்றின் பகுதிகள் இவை யென்பதும் ஒருவாறு உரைக்கப் பெற்றன. அறத்தின் பகுதியாயவற்றுள் **கொடை வெள்ளி** ஒன்றெனக் கண்டாம். தமிழ் நாட்டிலே இஞ்ஞான்று இடையில் வண்புகழ்க் கொடைமையால் வாகை சூடியவர் அண்ணாமலைப் பல்கலைக் கழகத்தை நிறுவியோராகிய ராஜா சர். அண்ணாமலைச் செட்டியாரவர்களே யாவர். அவர் குடும்பத்தினரும் அவரும் இயற்றிய பிறவறங்களும் உலப்பில் லனவே. எனினும் கல்வியின் பொருட்டு அவர் அளித்த இக்கொடை யாவற்றினும் விஞ்சிய தொன்றுய் **வாகைக்குரியதாயிற்று. வாணிக வாகைக்கு** உதாரணமாகக் காட்டப் பெற்றுள்ளதோர் செய்யுள் ஈண் டைக்கு மிகவும் இயைபுடையது. அஃது,

"ஈட்டிய தெல்லாம் இதன் பொருட் டென்பதே
காட்டிய கைவண்மை காட்டினர்—வேட்டொறும்
காமருதார்ச் சென்னி கடல்சூழ் **புகார் வணிகர்**
தாமரையும் சங்கும் போல் தந்து"

என்பது. தாமரை - பதுமநிதி. சங்கு - சங்கநிதி. அண்ணாமலை வள்ளலின் அறுபதாம் ஆண்டு நிறைவெய்துதல் கண்டு அனைவரும் களிகூர்வர்; கொண்டாடுவர்; வாழ்த் தெடுப்பர். யாமும் அவரது நெடிய நல்வாழ்வு கருதி, திருச்சிற்றம்பல முடையார் திருக்கையா லெழுதிய திருப்பாட்டினைச் சிந்தித்து வாழ்த்துகின்றேம்.

"காரணி கற்பகம் கற்றவர் நற்றுணை பாண ரொக்கல்
சீரணி சிந்தாமணி அணிதில்லைச் சிவனடிக்குத்
தாரணி கொன்றையன் தக்கோர்தம் சங்கநிதி விதிசேர்
ஊரணி உற்றவர்க் கூரன்மற்றியாவர்க்கும் ஊதியமே"

ந. மு. வேங்கடசாமி நாட்டார்.

"மாக்ஸ்வெல்"

ஆர். கே. விசுவநாதன். எம். ஏ. பௌதிக நூலாசிரியர்

சென்ற நூற்றாண்டில் கணித முறையில் விஞ்ஞான ஆராய்ச்சி நடத்தியவர்களுள் தலைசிறந்து விளங்கிய இவர், ஸ்காட்லண்டு தேசத்தில், எடின்பரோ நகரில், 1831-ஆம் ஆண்டு ஜூன் மாதம் 13-ஆம் தேதி பிறந்தார். இவரது முன்னோர்கள் பல துறைகளில் பிரசித்தி பெற்றவர்களென்றும், அதன் பொருட்டு இவர் குடும்பம் நன்கு மதிக்கப்பட்டு வந்ததென்றும் கூறப்படுகிறது. பிறப்பினால் ஸ்காட்லண்டு தேசத்துக்குச் சொந்தமானபோதிலும் இவரது அறிவால் உலகத்தார் அனைவருக்கும் இவர் சொந்தமானவர் என்று "மாக்ஸ் பிளாங்க்" என்ற மற்றொரு விஞ்ஞானி கூறுகிறார். ஆறுவது வயதிலேயே இவரிடம் இருந்த கூர்ந்து கவனிக்கும் தன்மையைக் கண்டு அனைவரும் வியந்தார்கள். இளம் வயதிலேயே தாயாரை இழந்து விட்டதால் இவரது தந்தையாரே இவரை வளர்க்கும் விஷயத்தில் அதிகம் பங்கு எடுக்குமாறு நேரிட்டது. இவருக்குப் பாடங் கற்பிக்கும்படி இவரது தந்தை ஒரு உபாத்தியாயரை நியமித்தார். இவரது திறமை அறியாமல் பழைய முறையில் பாடங் கற்பிக்கத் தொடங்கினார். சிறிதும் சிரத்தை காட்டாமல் இருந்ததால் இவரைத் துன்புறுத்தினார். கடைசியில் இவருக்குப் புத்தி மந்தம் என்று கைவிட்டார். பின்னர் எடின்பரோவிலுள்ள பள்ளிக்கூடத்தில் சேர்க்கப்பட்டார். இவரது உடையைக் கண்டு மற்ற பையன்கள் கேலி செய்தார்கள். மற்றவர்களுடன் சகஜமாகப் பழகாததினால் இவர் துன்பத்திற்கு ஆளானார். இதன் பயனாக இவரது கூச்சம் மேன் மேலும் விருத்தி அடைந்தது. கணிதத்தில் இவருக்கு இருந்த சாதுர்யத்தைக் கண்டு இவரது உபாத்தியாயர்கள் மெச்சினார்கள். இதை அறிந்து இவரது தகப்பனார் அவ்வூரிலுள்ள ராயல் ஸொஸைடியில் கூடந்த கூட்டங்களுக்கு அழைத்துச் செல்லுவார். இவர் அக் கூட்டங்கள் ஒன்றில் ஒரு வியாசம் எழுதி வாசித்தார். அப்பொழுது இவருக்கு வயது பதினேந்து. அங்கத்தினர்கள் அனைவரும் இவரது

புத்தி கூர்மையை வியந்தார்கள். மேற்படிப்புக்கு கேம்பிரிட்ஜ் கலா சாலைக்கு அனுப்பப்பட்டார். அங்கு இவரது யோக்கியதையை மற்ற மாணவர்களும் ஆசிரியர்களும் உணர்ந்தார்கள். பிற்காலத்தில் பிரசித்தி பெற விருந்த மாணவர்களுடன் பழக்கமும், நட்பும் ஏற் பட்டது. அவர்களுடைய நன்மதிப்பைப் பெற்றார். 'ராங்களர்' பரீக்ஷையில் இரண்டாவதாகத் தேறினார். படிப்பு முடிந்தவுடன் கேம்பிரிட்ஜிலேயே சிலகாலம் தங்கிக் கணித ஆராய்ச்சிகள் நடத்தி வந்தார். இக்காலத்தில் இவரது தகப்பனாரை இழக்க நேரிட்டது. 1856-ஆம் ஆண்டில் "போர்ப்ஸ்" என்ற ஆசிரியரின் தூண்டுதலின் பேரில் அபெர்டீனிலுள்ள கல்லூரியில் உபாத்தியாயராக அமர்ந்தார். இங்கு மூன்று ஆண்டுகள் தங்கி இருந்தார். கல்லூரித் தலைமை ஆசிரியரின் பெண்ணை மணம் செய்துகொண்டார். பின்னர் லண்டன் சர்வகலாசாலையில் ஆசிரியராக நியமிக்கப்பட்டார். இவரது ஆராய்ச்சி கள் பெரும்பாலும் இக்காலத்திலேயே நடைபெற்றன. நிற்க, ஏழை மக்களுக்கென்று பிரசங்கங்கள் நடத்தி அவர்களுக்கு அறிவைப் புகட்டி வந்தார். ஐந்து ஆண்டுகளே இங்கு வேலை பார்த்தார். நோயின் பொருட்டு வேலையிலிருந்து விலகிக் கொள்ளுமாறு நேரிட் டது. சில ஆண்டுகள் கழித்துக் கேம்பிரிட்ஜில் பிரசித்தி பெற்ற காவண்டிஷ் ஆராய்ச்சி சாலை ஏற்பட்டவுடன் அதற்கு முதல் தலைவ ராக நியமிக்கப்பட்டார். இப்புதிய ஆராய்ச்சி சாலையை மிகுந்த ஊக்கத்துடன் நடத்தி வந்தார். மறுமுறை நோய் கண்டு நாற்பத் தொன்பதாம் வயதிலேயே இறந்தார்.

இவரது ஆராய்ச்சிகளின் மதிப்பைச் சுருக்கமாகக் கூறுமிடத்து, இவரது மின்சார ஆராய்ச்சியின் விளைவாக ஒளி மின்காந்தத் தத்துவ மும் ஐன்ஸ்டைன் தத்துவமும் பிறந்தனவென்றும், இவரது பொருள் களின் மூலக சித்தாந்தத்திலிருந்து மாக்ஸ் பிளாங்கின் பிந்துவாதம் பிறந்ததென்றும், காவண்டிஷ் ஆராய்ச்சி சாலையின் முதல் தலைவராக இருந்ததின் காரணமாக அணு அமைப்பின் விசேஷங்கள் பின்னிட்டுச் சுலபமாக அறிய நேரிட்டது என்றும் கூறுவது மிகையாகாது. மற்ற பிரசித்திபெற்ற விஞ்ஞானிகளுக்கும் இவருக்கும் ஒரு வித்தியாசம் உண்டு. இவர் கண்டுபிடித்தவை யாவும் பரிசோதனையின் வாயிலாக அல்லாமல் கணித முறையாலேயே அறியப்பட்டதாதலின் இவரது அபார புத்தி நுட்பத்தை அவை நன்கு எடுத்துக் காட்டுகின்றன.

முக்கியமாக, இயக்கத்திற்கும் வெப்பத்திற்குமுண்டான தொடர்பையும், அதுபோலவே மின்சாரத்திற்கும் ஒளிக்கும் உண்டான தொடர்பையும் பற்றி இவர் கண்ட முடிவுகளே இவருக்கு என்று மழியாப் புகழைக் கொடுத்தன. சுருக்கமாக அவை இரண்டையும் இங்கு கவனிப்போம்.

அபெர்டீனில் இருக்கும்பொழுது சனிக்கோளின் வளையங்களைப் பற்றிய ஆராய்ச்சிகள் நடத்திவந்தார். அவற்றினின்று பொருள்களின் மூலக வாதத்தில் இவரது கவனம் சென்றது. அவ்வாதத்தை நன்றாகத் திருத்தி அமைத்து அதன் உதவிகொண்டு பொருள்களின் பௌதிக வியல் குணங்கள் எல்லாவற்றுக்கும் காரணங்கள் காட்டினார். முதலில் இவ்வாதம் வாயுக்களின் பண்புகளே அறியவே கையாளப் பட்டது. மூலகங்களின் இயக்கத்திலேயே வாயுக்களின் வியாபிக்கும் தன்மை, இறுக்கம் முதலிய குணங்களுக்குக் காரணம் அறியப் பட்டது. வாயுவின் சூட்டிற்கும் மூலகங்களின் கதிக்கும் உள்ள இணைவை மாக்ஸ்வெல் கண்டு காட்டினார். மூலகங்கள் எண்ணற்றதாயிருந்தபோதிலும் அவைகளின் சராசரி கதியை கணக்கியலால் அறிய முடிவதைக் காட்டினார். உதாரணமாக நீரக மூலகத்தின் சராசரி கதி சாதாரணச் சூட்டிலும், பவன இறுக்கத்திலும், செகண்டிற்கு 1,838 மீட்டர் எனக் கண்டார். சூடு உயர மூலகங்களின் கதி அதிகரிக்கின்றதென்றும், சூடு குறையக் கதி குறைகின்றதென்றும் எடுத்துக் காட்டினார். தனியியல் அளவில் பூஜ்ஜிய டிகிரீ சூட்டில் மூலகங்கள் எல்லாம் இயக்கத்தை முற்றிலும் இழந்து, அசைவற்ற நிலையிலிருக்கவேண்டுமெனக் கண்டார். இவ்வாறுகப் பொருள்களின் குணங்கள் அனைத்தும், முக்கியமாக வாயுப்பொருள்களைப் பற்றியவை வெகுவாக அறியப்பட்டன. இவற்றின் பயனாக "மாக்ஸ்வெல்" இவ்வாதத்தின் தந்தையெனக் கருதப்பட்டு வருகின்றார்.

மூலக இயக்க வாதத்தை நிறுவிய பெருமையில் "கிளாஸியஸ்", "போல்ட்ஸ்மான்" என்ற இரு விஞ்ஞானிகளும் சிறிது பங்கு எடுத்துக் கொண்டார்கள். ஆனால் மின்சாரத்துக்கும் ஒளிக்கும் உள்ள தொடர்பை எடுத்துக் காட்டிய விஷயத்தில் இவரது புகழ் தனியே சிறந்து விளங்கிற்று. இவரது ஒளி—மின்காந்த சித்தாந்தத்துக்கு முன் விஞ்ஞானிகளினிடையே இருந்த ஒளியின் இயல்பைப்

பற்றிய அறிவை இப்பொழுது சிறிது கவனிப்போம். "நியூட்டன்" காலம்வரை ஒளி என்பது பிரகாசமான பொருளிலிருந்து வெளிவரும் சிறு துகள்களினால் ஏற்பட்ட உணர்ச்சியே என்று நினைத்து வந்தார் கள். ஆகவே, ஒளிக்கிரணங்கள் இத்துகள்களின் பாதைகள் என்று கருதப்பட்டன. ஆனால் "யங்க்" "ஹைஜின்ஸ்" முதலிய விஞ்ஞானி களால் ஒளிக்கிரணங்களெல்லாம் அலைகளின் இயல்பைக் கொண்டிருக்க வேண்டுமென்று ஆராய்ச்சிகளிலிருந்து ஊகிக்கப்பட்டது. எனவே ஒளிக்கிரணங்கள் எண்ணற்ற துகள்களின் பாதைகள் என்ற சித்தாந் தம் கைவிடப்பட்டு, அவைகள் ஒலியைப் போலவே அலைகளாகப் பரவவேண்டும் என்ற கொள்கை கையாளப்பட்டது. அலை இயக்கத் துக்குச் சில விசேஷ இயல்புகள் உண்டு. அலைகள் பாழிடத்தில் செல்லாது. அவை பரவப் பதார்த்தயானம் ஒன்றிருந்தாக வேண்டும். அலைகள் செல்லுங்கால் யானத்தின் துகள்களெல்லாம் தமது சமநிலை களினின்று விலகி ஆடிக் கொண்டிருக்கும். ஒவ்வொரு துகளும் ஒரு செகண்டிலே இயற்றும் துடிப்புகளின் எண்ணிக்கை அந்த அலையின் அடுக்கம் எனப்படும். தண்ணீர்ப் பரப்பின்மீது இலேசான பொருள் ஒன்றை மிதக்க விட்டால், அதனடியில் அலைகள் செல்லும்போது அப் பொருள் மேலுங்கீழுமாக ஆடுவதிலிருந்து மேற்கூறியதை உணரலாம். நிற்க, அலை இயக்கத்தில் இரண்டு வகை உண்டு. ஒவ்வொன்றிலும் யானத்தின் ஒவ்வொரு துகளும் தன்னிருப்பிடத்திற்கு இருபுறமும் சிறிது தூரம் சென்று, மீண்டு வந்து, துடித்துக் கொண்டிருக்கும். இத்துடிப்புகள் அலைகள் செல்லும் திசைக்குக் குறுக்காக நிகழ்ந்தால் குறுக்கலைகள் என்றும், அலைகள் செல்லும் திசையிலேயே நிகழ்ந்தால் நெட்டலைகள் என்றும் கூறப்படும். இவற்றிலிருந்து ஒளி அலைகள் எவ்வாறானது என்ற கேள்வி பிறந்தது. சூரியனிடமிருந்து நம்மை அடையும் ஒளிக்கிரணங்களெல்லாம் இடையே ஒரு யானத்தின் மூல மாகவே வந்திருக்க வேண்டுமென்றும், இந்த யானம் பதார்த்த இயல்பு கொண்டிருக்க வேண்டுமென்றும் முதலில் ஊகிக்கப்பட்டது. இந்த யானத்தைத் தான் விசும்பு என்று நாம் கூறுவது. எவ்வாறு பூமியி லிருந்து சூரியன்வரை ஒரு பதார்த்த யானம் வியாபித்து இருக்கக் கூடும் என்று முதலில் திகைத்தார்கள். "யங்க்", "ஹைஜின்ஸ்" இவர்கள் காட்டிய பரிசோதனைகளினால் அனுபவத்திற்கு மூணுக்க இருந்தபோதிலும் விசும்பு பதார்த்த யானத்தின் தன்மையையே கொண் டிருக்கிறது என்று மேற்கொள்ளப்பட்டது. அலைகளில் இரண்டு வகை

உண்டு என்று பார்த்தோம். திட பதார்த்தத்தில் இரண்டு வகை அலை களும் பரவக்கூடும். ஆனல் வாயுக்களில் நெட்டலைகள் மட்டுமே பரவக் கூடும். காற்றில் ஒலி அலைகள் இரண்டாவது வகையைச் சேர்ந்தவை. எங்கும் வியாபித்திருப்பதால் விசும்பு வாயுத் தன்மையைப் பெற் றிருக்க வேண்டுமென்றும், ஆகையால் ஒளி அலைகள் நெட்டலைகளாகவே பரவ வேண்டுமென்றும் கருதப்பட்டது. சில ஆண்டுகளுக்குப் பின் னர் சில சோதனைகளின் பயனக ஒளி அலைகள் குறுக்கலைகளாகத் தானிருக்க வேண்டுமென்று ஏற்பட்டது. எனவே, விசும்பு திட பதார்த்தமாக இருக்கவேண்டுமென்று ஆயிற்று. இச்சங்கடத்தை நிவர்த்தி செய்ய முடியாமல் விஞ்ஞானிகள் திகைத்தார்கள். இதை "மாக்ஸ்வெல்" நிவர்த்தி செய்தார். இவர் மின்சார சம்பந்தமாக ஆராய்ச்சிகள் நடத்தி வந்தபொழுது "பாரடே" என்பவர் கண்டு பிடித்த ஊட்ட அருவிகளைப் பின்னும் பரிசோதித்தார். இரண்டு கம்பிச் சுருள்களை எடுத்து, ஒன்றை மற்றொன்றினுள் வைத்து, ஒன் றில் ஒரு மின்னருவியை ஓடச்செய்து, அதைத் திடீரென்று நிறுத் தினல் மற்றொரு சுருளில் ஒரு மின்னருவி தூண்டப்படுவதே "பாரடே"யின் ஆராய்ச்சியாகும். இம்மாதிரி தூண்டப்பட்ட அருவிகள் கம்பிச் சுருள்போன்ற முடிவுற்ற மண்டலங்களன்னியில் வெற்றிடத்திலும் ஏற்படக்கூடும் என்று "மாக்ஸ்வெல்" கண்டார். மின்னருவியும், காந்தப்புலமும் ஒன்றுக்கொன்று எப்பொழுதும் லம்பமாகவே இருக்குமாதலால், அவை கிரமப்படி ஏற்பட்டு மாறு மிடங்களிலிருந்து பின்காந்த அலைகள் பரவிச் செல்லும் என்று கண்டார். மேலும் அலைகள் பரவும் திசைக்கு பின்புலம், காந்தப்புலம் இரண்டும் லம்பமாகவே இருக்கின்றதை உணர்ந்து காட்டினர். ஆகையினல் இம் மின்காந்த அலைகள் குறுக்கலைகள் என்பது தெளி வாகிறது. மேலும் கணக்கியலால் இவ்வலைகளின் கதி, ஒளி அலைகளின் கதியின் மதிப்பைப் பெற்றிருக்க வேண்டுமென்று காண்பித்தார். எனவே ஒளி அலைகள் மின்காந்த அலைகளாகத்தானிருக்க வேண்டு மென்று எடுத்துக் கூறினர். நூதனமாக விருந்த இக்கருத்தை விஞ் ஞானிகள் ஒப்புக்கொள்ளவில்லை. இவர் இறந்த பிறகுதான் இம் மின்காந்த அலைகள் பரிசோதனையினல் நிரூபிக்கப்பட்டு இவருடைய பெருமை உணரப்பட்டது. ஜெர்மனியில் "ஹெம் ஹோல்ட்ஸ்" என்ற விஞ்ஞானிக்குத் துணை ஆசிரியராக விருந்த "ஹெர்ட்ஸ்" என்பவர் இதை நிரூபித்தார். இம் மின்காந்த அலைகளை உற்பத்தி

செய்து காட்டி, அவை ஒளி அலைகளின் கதியையே பெற்றிருக்கின்றன் தென்றும், ஒளி அலைகளைப் போலவே பொருள்களின் மீது மோதும் போது பிரதிபலனம், கோட்டம் முதலியவற்றை அடைகின்ற தென்றும் காட்டினர். எனவே "மாக்ஸ்வெல்" சித்தாந்தம் அனைவராலும் ஒப்புக்கொள்ளப்பட்டது. விஞ்ஞானத்திற்கு இவர் செய்த பேருதவியைப் போற்றினர்கள். அதன் பயனைத் தற்காலம் இவ்வுலகோக் கொண்டு அயல்நாடுகளுக்குச் சமாசாரம், சங்கீதம் முதலியவற்றை அனுப்பக்கூடுமாதலால் நம்முடைய வாழ்க்கையில் ஏற்பட்ட மாறுதல்களை நினைக்குங்கால், "மாக்ஸ்வெல்" பெரியாருக்கு நாம் என்றும் கடமைப்பட்டிருக்கிறோம் என்று சொல்வது மிகையாகாது.

॥ श्रीरस्तु ॥

FELICITATION ON THE OCCASION OF

SHASHTYABDAPURTHI OF

Raja Sir. Annamalai Chettiar, Kt.L.L.D.

By

Gayanapatu, Kirthanapatu, Abhinava Saraswathi, Kirthana-Saraswathi, Sangitha Samskritha Vidyaratna,

C. SARASWATHI BAI,

चेट्टिनाडधिप-

श्री अण्णामलैनृपगुणस्तवः ॥

राजानो धृतशस्त्रचापविशिखा युद्धे विधूतारयो
विक्रान्ताः कृतदण्डशिक्षितजनाः सन्त्यन्यतो विश्रुताः ।
राट्त्वण्णामल एव यस्य विपुला विद्यादिदानाहिता
कीर्तिः शत्रुपदं मुमोष ऋजुता दण्डं निरर्थं व्यधात् ॥ १ ॥

अण्णामलेन्द्र ! भवताद्य चिरेण धन्याः
पूर्वे भवत्कुलभवा विमला वदान्याः ।

सङ्कल्पभूतमखिलं भवतैव येषां
निर्वर्तितं धृतियुतेन जनोपकारि ॥ २ ॥

यद्यत्कृतं भवदनर्घकुले प्रसूतैः
पूर्वैर्हि दीनजनताश्रमभारहारि ।
तत्सर्वमद्य भवतः सकलेष्टदायि-
विद्यालयस्य नियमादभवत् सुपूर्णम् ॥ ३ ॥

जानीमहे सुकृतिनो बहुवित्तजात-
विश्राणनाकलितदेववरालयांस्तान् ।
वाग्देवताविहृतिभूमिविधानदक्षो
नान्यः परं श्रुतिगतो भवता सदृक्षः ॥ ४ ॥

आयोजिता वणिगधीश ! दशाधिनाथाः
भावत्कजन्मसुदिने सुकृतैः शुभाढ्याः ।
यत्तेऽपि तावकमुकर्मयशोविशुद्धाः
" सौम्याः शुभाः " इति नुतिं स्तुतिभिर्लभन्ते ॥ ५ ॥

प्रत्येमि ते ग्रहवरा भवतां कृतज्ञाः
स्वस्वासु जातकदशासु विहृत्य पूर्णम् ।
शान्तिं सुखं च दृढतामपि दीर्घमायुः
सन्तोषयेयुरमुतोऽपि सदा प्रसन्नाः ॥ ६ ॥

देयाच्चिरं त्रिविधगीतकलाधिपस्ते
सौवर्णचिन्मयसभानटनाधिराजः ।
अद्योद्धृतद्रविडवाङ्मयगीतविद्या-
सम्पोषकाय भवते विमलां सुकीर्तिम् ॥ ७ ॥

साग्रेण वर्षशतकेन समैः समूह्याः
षष्ट्यां समासु भवता कलिता हि धर्माः ।
तेषामनर्घममितं फलमश्नुवानः
जेजीयतां सुकुशलो विहितापदानः ॥ ८ ॥

आ शैशवाद्भवदमन्दकृपालताढ्य-
मन्दारशीतलतटे कलिताश्रया ते ।
या गानकीर्तनसमर्थसरस्वतीबाय्
सा प्रार्थयत्यखिलशं गिरिशं चिरायुः ॥ ९ ॥

इति शम् ।

॥ श्रीरस्तु ॥

'अण्णामलैविश्वविद्यालय' प्रतिष्ठापकानां डाक्टर् राजा सर् अण्णामलै श्रेष्ठिमहाशयानां षष्टिवर्षदिनोत्सवे वितीर्णा प्रशस्तिपत्रिका ॥

BY

SANSKRIT DEPARTMENT

(Annamalai University)

आसन्पूर्वं चोलदेशे नरेन्द्राः शम्भोश्शौरेश्चालयान्निर्मिमाणाः ।
आम्नायानामङ्गविद्यायुतानामभ्यासार्थं पाठशाला विशालाः ॥ १ ॥

अथ नृपतिषु संज्ञामात्रशेषेषु जीर्यत्स्वमरपरिबृढानां सद्मसूच्चावचेषु ।
जलधिदुहितृरङ्गस्थानभूतात्मदेहा अधिगतमतिसारा **नागरश्रेष्ठि**वर्याः ॥ २ ॥

धर्मं प्रशस्तमिह सङ्कलयन्त एते स्वोपार्जितार्थनिचयान्नियतांशमेकम् ।
धर्माभिवर्धनविधौ विनियोजयन्तः प्रापुर्यशोऽधिमहि धिक्कृतपूर्वराजाः ॥ ३ ॥

जातस्तेषामन्ववाये यशस्वी **रामस्वामिश्रेष्ठि**वर्यो वदान्यः ।
आङ्ग्लीं भाषां काङ्क्षतां माणवानां विद्याशालां स्थापयामास हृद्याम् ॥४॥

भ्रात्रा तस्य कनीयसा निजयशोव्यालीढविश्वंभरे-
णार्वाचीनचिरन्तनाध्वसु समं नैपुण्यमासेदुषा ।
'राजा', 'सर्' बिरुदोल्लसद्विबुधराजाण्णामलैश्रेष्ठिना
विद्यावृद्धिविधौ व्यपेतसदृशा विद्वद्विहारास्पदम् ॥ ५ ॥

श्रीमीनाक्षीनामाङ्कितविद्यावसतिरत्र निरमायि ।
सार्धं **द्राविडवाणी**गैर्वाण्यध्यापनाद्**शाला**भिः ॥ ६ ॥

प्रत्नासु रीतिषु गुणा न न सन्ति तद्ध-
न्नूत्नास्वतस्त इतरेतरसंक्रमार्हाः ।
इत्याकलय्य धिषणोपमधीरिहामूः
सर्वाश्चकार मिलिता उचितज्ञ एषः ॥ ७ ॥

आरात्सभापतिपदाम्बुरुहाद्गृहीत-
भाष्यप्रवक्तृफणिराजमहार्घभूषात् ।
विद्यानिवेशनमिहैवमिवाधिकर्त्रा
वैदुष्यसारनिकषैकदृशाभ्यमानि ॥ ८ ॥

तद्यशःपोतरूपोऽयं **विश्वविद्यालयो** भुवि ।
जीयाद्**ण्णामलै**श्रेष्ठिधुरीणेन शतं समाः ॥ ९ ॥

जयति शुभतमानां जन्मभूमिर्गुणानां
पर इव परिपाकः पुष्कलानां कलानाम् ।
सुरतरुरिव भौमस्संश्रितानां जनानां
बुधजनबहुमान्योऽ**ण्णामलै**श्रेष्ठिवर्यः ॥ १० ॥

त्यागाय श्रीरर्जनायैव विद्या
सर्वं स्यायुः पुण्यकार्यार्थमेव ।
इत्थं बुद्धिः सर्वथा ते गुणाब्धे !
जाता तस्माद्धन्य एकस्त्वमेव ॥ ११ ॥

यस्योत्प्रेक्षा प्रगुणधिषणैरप्यनिर्णीतसीमा
दृष्टान्तो यः सुहृदुपकृतेरर्हतां चार्हणानाम् ।
पर्यायोक्तं भुवि धनपतेः सद्गुणानां समाधिः
विद्योद्धारे धृतपरिकरः सारसंसृष्टिदृष्टिः ॥ १२ ॥

श्रीमत्त्वं धीमत्त्वं वदान्यता सौमनस्यगाम्भीर्ये ।
प्रियभाषितेति विरलाः समवायन् त्वयि गुणाश्चित्रम् ॥ १३ ॥

श्रीमन्नेधि समाः शतमस्मान्शाधि प्रकाश्य सौजन्यम् ।
विद्यावीरुदुपघ्नान् निघ्नान् रचयन्नुपस्कारैः ॥ १४ ॥

गीर्वाणवाणीपरिषद्दत्तेयं **सूक्तिमञ्जरी** ।
प्रमोदाद्गृह्यतां **राजन्! षष्टिवर्षदिनोत्सवे** ॥ १५ ॥

॥ श्री चित्सभेशाय नमः ॥

श्रीमतां विश्वविद्यालयप्रतिष्ठापनादिसद्धर्माचरणतत्पराणामखिललोकाभिनन्दनीयगुणगणविभूषितानां **राजा, सर्, डाक्टर्,** इत्यादि बिरुदविराजितानां नागरश्रेष्ठिकुलावतंसायमानाना**मण्णामलैश्रेष्ठि**महाशयानां षष्टितमाब्दपूर्तिमहोत्सवसमये सबहुमानं सामोदञ्च समर्पितानि मङ्गळाशंसनरूपाणि पद्योपहारकुसुमानि ।

BY

Pandit S. RAMASUBBA SASTRI

सत्कार्येष्वखिलेषु यस्य परमा प्रीतिस्समुद्भासते
वित्तानां निचयः परोपकृतये भोगाय नैवात्मनः ।
मान्यो यश्च सुधीवरैर्बुधवरो **राजे**ति विख्यातवान्
सोऽयं राजतु सान्वयश्चिरतरं भूमौ महाधार्मिकः ॥ १ ॥

भूमौ सन्ति सहस्रशः प्रभुवराः नैते परेषां कृते
स्वल्पं वित्तमपि प्रदाय जनुषः साफल्यमातन्वते ।
अस्माकं प्रभुवर्य एष महितो **राजा सरण्णामलै**
श्रेष्ठी वित्तचयं जनोपकृतये दत्वातिसंशोभते ॥ २ ॥

ऐश्वर्येण न सङ्गतं क्वचिदपि ज्ञानं धरण्यामि-
हेत्येवं भाषणमर्थहीनवचनं कुर्वाण एषोऽधुना ।

राजा सर् बिरुदोज्वलः परिबृढो धीमान्महीमण्डले ।
श्रेष्ठी सर्वकलालयं निरुपमं निर्माय बाभात्यहो ॥ ३ ॥

राजा सर्वकलालयाख्यतनयां भूषाविशेषोषमैः
विद्वद्भिः परिभूष्य सर्वजगतामीशाय भर्त्रे मुदा ।
दत्वा लोकमहोपकारमकरोद्धन्यस्य तस्याधुना
षष्टयब्दोत्सवमादराद्वयममी सामोदमाशास्महे ॥ ४ ॥

राजेति विख्यातवतो वदान्यभूषायमाणस्य महाशयस्य ।
षष्टयब्दपूर्त्याख्यमहोत्सवोऽयं सूते परां प्रीतिमुपाश्रितानाम् ॥ ५ ॥

भक्तस्य **चाण्णामल**नामधेयमाबिभ्रतः श्रेष्ठिवरस्य शम्भुः ।
श्रेयोऽनिशं शाश्वतमादधातु जीयाच्चिरं सान्वय एष **राजा** ॥ ६ ॥

जयतु जयतु **राजा** धार्मिकाग्रेसरोऽयं
जयतु जयतु **विद्यामन्दिरं** तत्प्रतिष्ठम् ।
जयतु जयतु **षष्ठो जार्ज्** महासार्वभौमः ।
जयतु जयतु **देशो भारता**भिख्य एषः ॥ ७ ॥

शुभम्

॥ श्रीः ॥

अण्णामलै विश्वविद्यालयप्रतिष्ठापकानां डाक्टर् राजा सर् अण्णामलै श्रेष्ठिमहाशयानां षष्टितमे जन्मदिनोत्सवे समर्पिता मङ्गळाशंसनपत्रिका

BY

V. K. SESHADRIACHARYA, Siromani & Vidvan.

मान्यत्वं प्रभुता च यत्र मिलिते तत्र स्मयस्सन्ततं
तेनाध्मातमनास्समीक्षितुमपि स्वोज्जीविनो नेहते ।
ईदृक्षापुरुषादृताध्वनि पुनर्वैदेशिको राजसे
'वर्धन्तीं' भवते शुभां प्रतिसमं दद्याद्धरिस्सौख्यदः ॥ १ ॥

दाक्षिण्याम्बुनिधिर्दयाशिशिरितस्वान्तः क्षमाशेवधिः
स्वीयास्तोकवदान्यतागुणयशःस्फीताखिलाशामुखः ।
त्वं प्राप्येत उपर्युपर्यपि यशो जीवेस्समाश्शाश्वती-
रित्येवं किल सङ्गताः प्रतिकलं सम्प्रार्थयामो हरिम् ॥ २ ॥

यः सूनुर्भजते निजैर्गुणगणैर्मान्यैस्सुसम्मान्यतां
तेनैवोपकृतं महत्स्वपितुरित्यूचुः पुरा सूरयः ।

कुर्वन् तद्वचनं भवानवितथं संश्लाघ्यमानो बुधैः
जीयादित्यनुबद्धसम्पुटकरैस्ससम्प्रार्थ्यते श्रीनिधिः ॥ ३ ॥

किं भाग्यं व्यदधादमुष्य जनको जन्मन्यतीतेऽप्यहो
एवं तावकहृद्यकर्मनिवहैर्लोकेन विस्मीयते ।
युक्तस्त्वं सहधर्मिणीतनुभवै **राजा सर् अण्णामलै**
श्रेष्ठिन् एधि समाश्शतं भवतु चैतादृङ्महस्ते मुहुः ॥ ४ ॥

॥ श्रीः ॥

डाक्टर् राजा सर् अण्णामलैश्रेष्ठिवर्याणां विश्वविद्यालयप्रतिष्ठापकानां
षष्ट्यब्दोत्सवे पण्डितश्रीनिवासाचार्येण सादरं समर्पितेयं
पद्यकुसुमावलिः

BY

Pandit K. SRINIVASACHARI

अण्णामलैश्रेष्ठिवरस्स जीयादाचन्द्रतारं भुवि सान्ववायः ।
विद्याभिवृद्धौ चिरदीक्षितं यमाहुर्बुधा भारतभाग्यराशिम् ॥ १ ॥

सुरतरुरिव भौमश्लाघनीयो बुधानां
वितरति बहुशाखं कांक्षितं श्रेष्ठिवर्यः ।
विमलतरचरित्रस्सद्गुणाम्भोनिधिर्य-
स्स जयतु निजधर्मं पालयन् दीर्घकालम् ॥ २ ॥

वित्तस्य धर्माचरणं प्रयोजनं न भोग इत्येव मनीषया बुधः ।
सर्वं धनं धर्मपथे मुदान्वितः प्रकाशतेऽयं विनियुज्य निर्भरः ॥ ३ ॥

अण्णामलै श्रेष्ठिकुलप्रदीपो विभाति विख्यातविशुद्धकीर्तिः ।
यदीयविद्यालय एष लोके विज्ञानराशिं बहु विस्तृणीते ॥ ४ ॥

यं वै भवान् पालयते स्वधर्मं स वै भवन्तं भुवि माननीयम् ।
पुष्णाति सम्यग्विदुषां वरेण्यमित्थं वयं निश्चिनुमो वदान्य ! ॥ ५ ॥

लोके हि सर्वे प्रथिताः पुमर्था ज्ञानैकसाध्या इति मन्यमानः ।
निर्माय विज्ञानविवृद्धिहेतुं विद्यालयं श्रेष्ठिवरश्चकास्ति ॥ ६ ॥

आ सेतोर्लोकविख्यातादा च गौरीपितुर्गिरेः ।
ख्यातो **विद्यालयो** यस्य जीयात्स शरदां शतम् ॥ ७ ॥

राजा सर् बिरुदाङ्कितो विजयते श्रीमान् सुशीलस्सुधीः
प्रख्यातो निजसच्चरित्रनिवहेनौदार्यवारांनिधिः ।
विद्यामन्दिरमद्भुतं भुवि यशोविद्योतिताशामुखं
निर्माय प्रभुरद्य भारतभुवो भूषायते धार्मिकः ॥ ८ ॥

कामक्रोधविवर्जितो भुवि लसत्यण्णामलैश्रेष्ठिराट्
सत्त्वस्थैरभिनन्दनीयसरणिस्सौजन्यभूमिः प्रभुः ।
षष्ट्यब्दोत्सव एष तस्य चलति प्रज्ञानिधेरद्भुतः
श्रीमानद्य तनोतु भाग्यमतुलं प्रख्यातभूमा हरिः ॥ ९ ॥

षष्टयब्दपूर्तेर्महितोत्सवोऽयमुपस्थितश्श्रेष्ठिवरस्य तस्य ।
गोविन्दराजश्रिश्रितपारिजातश्रिया समं मङ्गळमातनोतु ॥ १० ॥

॥ श्रीः ॥

॥ संस्कृतविद्या राजानश्च ॥

॥ पण्डितराजः वे. सुब्रह्मण्यशास्त्री ॥

भाषान्तरविलक्षणैः प्रकृतिप्रत्ययादिसंस्करणैः संस्कृतत्वादियं वाणी संस्कृतव्यपदेशं भजते । आचार्यदण्डो प्राह—'संस्कृतं नाम दैवी वागन्वाख्याता महर्षिभिः' । इति । देवैर्व्यवह्रियमाणा देवभाषेत्यभिधीयते । देवानुद्दिश्य क्रियमाणं कर्म अनया भाषया निर्वर्त्यते इत्यतोऽप्येनां देववाणीमामनन्ति । यद्वा देवानामार्याणां श्रेष्ठानां भाषा देवभाषा । अथवा सर्वत्र दीव्यन्ती भाषा देवभाषा । भाषापरिगणने त्वियं प्रथमं स्थानमारोहति । तथा हि । सर्वो हि लोकः उदरपूरणे व्याप्तः तदर्थं अथवा विनैव हेतुं धनं कांक्षमाणः तत्संपादने कृतप्रयत्नो दृश्यते । भुञ्जानं सुखिनमात्मानं कृतकृत्यं मन्यते । न चिन्तयति कोऽहं कथं जातः कुत्र वा गमिष्यामीति । एवं विवेचनविधुराः पश्वादिसमानयोगक्षेमाः । यथाहुः भगवत्पादाः—'खादते मोदते नित्यं शुनकः सूकरः खरः । तेषामेषां विशेषः को वृत्तिर्येषान्तु तैः समा ॥' इति । ईदृशान्प्रमेयानेव प्रतिपादयति संस्कृतग्रन्थराशिर्वेदप्रमुखः । श्रूयते हि बृहदारण्यकोपनिषदि—जनकं याज्ञवल्क्यः पृच्छति इतो विमुच्यमानः क्व गमिष्यसीति, जनको ब्रूते नाहं तद्भगवन्वेद यत्र गमिष्यामीति । याज्ञवल्क्यः पुनराह—अथ वै तेऽहं तद्वक्ष्यामि यत्र गमिष्यसि इति । अध्यात्मविचारेण हि मनुष्यः मनुष्यो भवति । नह्ययं विचारः वेदेषु तदुपबृंहणेषु तत्तात्पर्यनिर्णायकेषु तदुपोद्बलकयुक्तिनिकरप्रतिपादकेषु च संस्कृतग्रन्थेष्विव अन्यभाषामयग्रन्थेषु विततो वर्तते । अभिनिवेशविरहिणाञ्चात्र न बहु वक्तव्यमस्ति । न केवलमध्यात्मविचार

एव विततः अपि तु यो यः पुरुषेणार्थ्यते पुरुषार्थः चतुर्विधः तस्य सर्वस्याप्युपायः विस्तरेण प्रत्यपादि । न तदस्ति पुरुषाभिलषितसाधनं यन्न प्रतिपादितं वेदादिषु संस्कृतग्रन्थेषु ।

अत एव पाश्चात्यदेशीयेभ्यः भारतदेशे राजकीयाधिकारिपदे नियुक्तेभ्यः ततः भारतदेशं प्रति प्रस्थितेभ्यः तद्देशीयगीर्वाणवाणीप्रवीणैः माक्स्मुल्लमहाशयैः इत्थमुपादिश्यत । संस्कृतेनैव भारतदेशस्य महनीयता, राजकार्यव्यापृतैरपि भवद्भिः संस्कृतभाषा अभ्यसनीया, तत्परिचय एव भारतदेशवासस्य मुख्यं प्रयोजनमिति । केवलं कथाप्रतिपादका ग्रन्थाः सकृत्पठिता एवानन्दं जनयन्ति । द्वितीयवारं पठितास्तूद्वेजयन्ति । नैवं भारतरामायणेतिहासकाव्यानि । पुनः पुनः पर्यालोच्यमानानि विजातीयमाह्लादं जनयन्तीत्यनुभवसिद्धं सहृदयानाम् । कश्चन वैदेशिकः पञ्चदशवत्सरेभ्यः पूर्वं पठितं नलोपाख्यानमद्य परामृश्यमानमभिनवार्थबोधनेनानन्दतुन्दिलयति मामिति लिखति । भाषाशास्त्रस्यात्यन्तमुपकरोतीयं संस्कृतभाषेति सा महनीयेति तच्छास्त्रविशारदः ग्राह । पाश्चात्यभक्तेष्वास्माकीनेषु तदुक्तिरेव परमं प्रामाण्यं भजते इति तदुक्तिराद्रियते । यक्षानुरूपो बलिरिति हि न्यायविदः । अपि च संस्कृतविद्या विनयं ददाति आचार्ये देवे च भक्तिं जनयति। अस्मद्देशकलालयेषु असकृत् कलाशालास्तम्भनरोगः विद्यार्थिनो बाधते । अविनीतिमूलकश्चायं रोगः तद्विरोधिसंस्कृतविद्यावद्भ्यो बिभेति । किं बहुना उपसर्जनतया संस्कृतमधीयाना अपि विद्यार्थिनः न तेन रुग्णाः भवन्ति । विद्या ददाति विनयमिति लक्षणलक्षिता संस्कृतविद्यैव नान्येत्यपि निर्धारयितुं पार्यते । तदेवं समालोचितं किञ्चिदिव संस्कृतविद्याविषये ।

अथ राज्ञां संस्कृतविद्यासंबन्धः प्रस्तूयते । अपूर्वा विद्याः राजस्वेव निगूहिता आसन् । तथाहि—छान्दोग्योपनिषदि श्रूयते—श्वेतकेतुरारुणेयः

पाञ्चालराजसभामेयाय, तत्र राज्ञा प्रवाहणेन जैवलिना अपि भवान् पित्रानुशिष्टः इति पृष्टः श्वेतकेतुः अनुशिष्टोऽस्मीति अब्रवीत् । ततः राजा तं पप्रच्छ पञ्च प्रश्नान् (१) वेत्थ यदितोऽधि प्रजाः प्रयन्तीति (२) वेत्थ यथा पुनरावर्तन्ते इति (३) वेत्थ पथोर्देवयानस्य पितृयाणस्य च व्यावर्तना इति (४) वेत्थ यथासौ लोको न संपूर्यते इति (५) वेत्थ यथा पञ्चम्यामाहुतावापः पुरुषवचसो भवन्ति इति । नैकोऽपि प्रश्नः समाहितस्तेन । ततः क्लिन्नचेताः श्वेतकेतुः स्वपितृसमीपं गतः नाहं भवता सम्यगनुशिष्टः यतः मां राजन्यबन्धुः पञ्च प्रश्नानप्राक्षीत् नैकस्याप्युत्तरमवेदिषमित्यवादीत् । ततश्च पिता मयाप्ययमर्थो न विदितः इत्यभिधाय पुत्रेण सह तं वेदितुं राजनिकटं प्राप । तं ह चिरं वसेत्याज्ञापयाञ्चकार । ततः यथेयं न प्राक् त्वत्तः पुरा विद्या ब्राह्मणान्गच्छति । तस्मात् सर्वेषु लोकेषु क्षत्रस्यैव प्रशासनमभूदित्युक्त्वा तां विद्यामुपदिदेश इति । तां पञ्चाग्निविद्यामामनन्ति औपनिषदाः ।

अन्यो राजा तत्त्वविचारकुतूहली विदेहाधिपः तत्त्वदर्शिनां मेलनं कारयित्वा तेषां संवादश्रवणेन कस्तेषु प्रशस्तो विद्वानिति ज्ञात्वा तत्सकाशात्तत्त्वं विदित्वा तस्मै गुरवे राज्यं ददौ आत्मानञ्च दासभावमनयत् । श्रूयते हि-बृहदारण्यकोपनिषदि–' जनको ह वैदेहो बहुदक्षिणेन यज्ञेनेजे । तत्र कुरुपञ्चालानां ब्राह्मणा अभिसमेता बभूवुः । तस्य ह जनकस्य वैदेहस्य विजिज्ञासा बभूव कःस्विदेषां ब्राह्मणानामनूचानतमः इति । स ह गवां सहस्रमवरुरोध दश दश पादा एकैकस्याः शृङ्गयोरावद्धाः बभूवुः । तान्होवाच ब्राह्मणा भगवन्तः यो वो ब्रह्मिष्ठः स एता गा उदजतामिति ।' ततो याज्ञवल्क्यः स्वशिष्यं ता गाः स्वाश्रमं नेतुमाज्ञापयामास । सर्वेऽपि विद्वांसः तं तं प्रमेयं पप्रच्छुः । सर्वेऽपि प्रश्नाः समाहिता याज्ञवल्क्येन । ततो राजा याज्ञवल्क्यमुपसद्य विचारसरण्या न केवलं श्रद्धया तस्मात्तत्त्वं विजज्ञौ । अन्ते इदं श्रूयते—' एष ब्रह्मलोकः सम्राडेनं प्रापितोऽसीति होवाच याज्ञवल्क्यः ।

सोऽहं भगवते विदेहान्ददामि माञ्चापि सह दास्यायेति'। अन्यो ब्रह्मिष्ठः काशिराजः अजातशत्रुः तत्त्वविचारकुतूहली जनकायासूयतीव समुपलभ्यते बृहदारण्यके दृप्तबालाकिर्हानूचानो गार्ग्य आस। स होवाचाजातशत्रुं काश्यं ब्रह्म ते ब्रवाणीति। स होवाचाजातशत्रुः सहस्रमेतस्यां वाचि दद्मः जनको जनकः इति जना धावन्ति' इति। ततः अन्ते गार्ग्योक्तं न ब्रह्मेति प्रतिपाद्य राजा गार्ग्यमुपदिदेश ब्रह्मेति ततः प्रतीमः। एवं ब्रह्मिष्ठाः विचारकुशलाः राजानः आसन्। अत एव राजविद्या राजगुह्यमिति गीतापि संगच्छते।

ततश्चार्वाचीना राजानः प्रबन्धार आसन् भोजहर्षप्रभृतयः। अन्ये च संस्कृतविद्याभिवर्धने बद्धश्रद्धा अभूवन्। प्रायेण काव्यस्य वा शास्त्रग्रन्थस्य वा प्रणेतारः तं तं राजानमाश्रिताः तदभिसन्ध्यनुसारेण निबन्धानकार्षुरिति तद्ग्रन्थेभ्यः स्पष्टं प्रतीमः। किं बहुना—मौहम्मदीया अपि राजानः केचन कृतसंस्कृतपरिचया इत्यैतिहासिका वदन्ति। तैर्विशेषतः पोषिताः जगन्नाथप्रभृतयो विद्वांसः ग्रन्थरत्नानि विरचयामासुः। यदाह जगन्नाथः-'दिल्लीवल्लभपाणिपल्लवतले नीतं नवीनं वयः'। इति। तादृशप्रबन्धप्रणेतृरहितेऽप्यस्मिन्पाश्चात्यशासनकाले पुरातनग्रन्थाः क्वचित् क्वचित्पाठ्यन्ते। पाश्चात्यसरणिमनुसृत्य तत्तद्ग्रन्थान् ग्रन्थकारांश्चाधिकृत्य विमृशन्तः तेषु तेषु राजकीयस्थानेषु नियमिताः संस्कृतविद्यां पालयन्ति। अरसिकाः कतिपये अनभिज्ञाः निलिम्पवाणीस्वरूपस्य तामवजानन्ति। परन्तु द्रविडदेशाधीशाः पूर्वे संस्कृताभिमानिनः मन्त्रब्राह्मणाध्येतॄणामेव दार्शनिकानां राजसभायां प्रवेशं कल्पयामासुः। दर्शनाध्यापकाः वेतनदानेन विद्यार्थिनश्चाशनादिदानेन पोषितास्तैः राजभिरिति स्पष्टं प्रतीयते। चोलनृपतेः राजराजस्य साहाय्यात् विद्वद्भिः नानार्थकोशः संपादितः। भारतादिपुराणार्थान् यथा सर्वे जना जानीयुः तथा चोलनृपतिभिर्नियमिताः विद्वांसः पुराणार्थान् प्रकटीचक्रुरिति च ऐतिहासिका विमर्शकाः राजकीयशिलाशासनप्रमाणपुरस्सरं निरूपयन्ति।

ईदृक्षेऽपि विषमे समये अशनावासादिदानेनोपकृतानां विद्यार्थिनां तत्तद्दर्शन-प्रवीणैः विद्वद्भिः सर्वदर्शनाध्यापनव्यवस्थापनया संस्कृतविद्यां परिपालयन्तः वदान्याग्रगण्याः एतत्सर्वकलालयप्रतिष्ठापका राजानः प्राचीनानेतद्देशाधीशान् कस्य वा न स्मारयन्ति । दृढं विश्वसिमि—सुरभारतीयं पुरातनं स्थानं किं वा ततोऽप्युन्नतं स्थानमधिरोक्ष्यति राजादरेणेति शिवम् ।

॥ श्रीः ॥

॥ धर्म भूतं ज्ञानम् ॥

V. K. SESHADRIACHARYA. Vidvan: Siromani.

श्रीविशिष्टाद्वैतसिद्धान्तनिष्ठैरभ्युपगतस्य प्रतितन्त्रभूतस्य धर्मभूतज्ञानस्यावश्यम्भावे प्रमाणानि युक्तयश्च प्रदर्श्यन्ते ।

'मिथो भेदं तत्त्वेष्वभिलपति भेदश्रुतिरथो
विशिष्टैक्यादैक्यश्रुतिरपि च सार्था भगवती ।
इमावर्थौ गोप्तुं निखिलजगदन्तर्यमयिता
निरीशो लक्ष्मीशश्रुतिभिरपराभिः प्रणिदधे ॥'

इति भेदाभेदश्रुतीनामबाधितमुख्यार्थवर्णनं घटकश्रुत्यनुसारेण यथा कृतमेभिः, एवमात्मनश्चेतनत्वं चैतन्यरूपत्वं च श्रुतिभिः कथितमविरोधेन समर्थितम् ।

कैश्चित् ज्ञातुस्स्वयंप्रकाशत्वेन चैतन्यरूपत्वप्रतिपादिकाश्श्रुतीरविगणय्य जडरूपस्यात्मन आगन्तुकज्ञानाश्रयत्वमात्रमङ्गीकृतम् ।

अन्यैश्च ज्ञानस्वरूपत्वमात्रमात्मनोऽभ्युपगम्य ज्ञानाश्रयत्ववादिनीनां श्रुतीनां यथाकथञ्चिन्नयनं कृतम् ।

विशिष्टाद्वैतिभिस्तु 'विज्ञानं यज्ञं तनुते' 'अत्रायं पुरुषस्स्वयंज्योतिर्भवति' इत्यादिभिः श्रुतिभिर्यथा ज्ञानस्वरूपत्वमात्मनः, एवं 'न विज्ञातुर्विज्ञातेर्विपरिलोपो विद्यते' 'अनुच्छित्तिधर्मा' इत्येवमादिभिर्ज्ञानाश्रयत्वमप्यभ्युपगतम् ।

कथमनयोर्धर्मत्वधर्मित्वयोर्मिथोविरुद्धयोरेकत्र सम्भव इति चेत्— तथाऽनभ्युपगमात्; धर्मिभूतं ज्ञानमन्यत्, धर्मभूतञ्चान्यदित्यभ्युपगमेनाविरोधात्।

अहमर्थभूतः प्रत्यक्छब्दवाच्यस्स्वयंप्रकाशत्वेन ज्ञानशब्दाभिलप्य आत्मा ज्ञानाश्रयत्वेन धर्मिभूतज्ञानमिति व्यवह्रियते। 'अञ्चु गतिपूजनयोः' इति गत्यर्थकानां बुद्ध्यर्थकत्वेन प्रतीपमञ्चति (यथा घटादयस्स्वभिन्नेन ज्ञानेन भासन्ते, न तथाऽयमात्मा; किन्तु तद्विपरीतं स्वात्मकज्ञानेनैव भासते) इति व्युत्पत्त्या स्वस्मै स्वयं भासमानत्वेन प्रत्यक्छब्दाभिधेयो भवति। स्वस्मै स्वयं भासमानत्वञ्च स्वप्रकाशसाध्यस्वकर्तृकव्यवहारादिप्रयोजनभाक्त्वं। अस्य प्रकाशश्च 'अहं' इति। अस्याञ्च प्रतीतौ प्रत्यक्त्वमनुकूलत्वमेकत्वञ्च विषयीक्रियन्ते। अहमिति स्फुरणञ्च स्वापादिषु सर्वासु दशास्वनुवर्तते। 'सुखमहमस्वाप्सं' इति प्रतीतिस्स्वापसमकालिकं सुखमवगाहते; यथा 'मन्दमगच्छं' 'मधुरमगायं' इति प्रतीती गमनगानसमकालिके एव मान्द्यमाधुर्ये अवगाहेते। सुप्तोत्थितस्य पुरुषस्य 'सुषुप्तौ मामप्यहं न ज्ञातवान्' इति परामर्शश्च तदानीमहमर्थस्यात्मनोऽविशदस्फुरणादेव। तथा चोक्तं—

'ज्ञातृत्वं ज्ञानरूपत्वं द्वयं श्रुत्यैव गम्यते।
स्वरूपं ज्ञायते सुप्तौ वैशिष्ट्यन्तु न बुद्ध्यते'॥

इति। जागरदशायां यथा ब्राह्मणत्वादिबाह्यधर्मविशिष्टतया सुखित्वाद्यान्तरधर्मविशिष्टतया च सकलेतरव्यावृत्ततया प्रतिभासो भवति, तथा सुषुप्तिदशायामेतादृशानेकविशेषणविशिष्टतया इतरव्यावृत्ततया च स्फुटप्रतिभासो न भवति। 'सविशेषणे हि विधिनिषेधौ विशेषणमुपसङ्क्रामतः सति विशेष्ये बाधे' इति न्यायेनाहमर्थप्रकाशनिषेधस्याशक्यत्वे प्रकारीभूतवर्णाश्रमादिवैशिष्ट्यप्रकाश एव निषिध्यत इति वक्तव्यम्। अत एव श्रुतिरपि 'नाह खल्वयमेवं सम्प्रत्यात्मानं जानात्ययमह

मस्मि' इति; न तु 'अहमिति न जानामि' इति श्रुतिरुपलभ्यते। तथाच सुषुप्ता-वात्माज्ञानवचसामाकारान्तरवैशिष्ट्याज्ञानपरत्वेनोपपत्त्या तदानीमप्यहमर्थावभासो-ऽप्रतिहतः।

प्रातश्चत्वरं दृष्टवान् पुरुषोऽन्येन प्रातश्चत्वरे गजदर्शनं पृष्टः, प्रातश्चत्वरे गजादर्शनेन तस्य, प्रतियोग्यस्मरणेन तदभावस्य चाप्रत्यक्षेऽपि योग्याननुस्मरण-रूपलिङ्गेन चत्वरे गजाभावं वदति। तस्य च प्रातश्चत्वरानुभवाभावे तत्र गजा-भावस्य वक्तुमशक्यत्वाद्यथा चत्वरानुभवोऽभ्युपेयते, एवं सुषुप्तावहमर्थाप्रकाशे तत्र तदानीं ज्ञानाभावो वक्तुं न शक्यते। तस्मादहमर्थस्यात्मनस्स्वयंप्रकाशत्वेन ज्ञान-त्वम्। आहुश्च—

'श्रुतिप्रत्यक्षसंसिद्धे ज्ञातृत्वे ज्ञानताश्रुतिः।
नेया तद्गुणसारत्वात्स्वप्रकाशतयापि वा'॥ इति।

यथा दीपस्स्वयं प्रकाशते, स्वप्रभया चान्यान् प्रकाशयति, तथा आत्मा स्वयं प्रकाशते, स्वप्रभाभूतेन धर्मभूतज्ञानेनान्यानपि प्रकाशयति। प्रभाश्रयस्य दीपस्यौज्ज्वल्यं प्रात्यक्षिकं, एवं ज्ञातुरपि। प्रकाशस्वभावो दीपो यथा स्वधर्म-भूतप्रभानपेक्षप्रकाशः, तथा ज्ञातापि स्वधर्मभूतज्ञानानपेक्षप्रकाशः। यथा च दीपः विषयप्रकाशनक्षमोऽपि स्वरूपस्य क्वाचित्कतया दूरस्थविषयसम्बन्धाभावात् स्वरू-पेण विषयान्न प्रकाशयति, किन्तु विषयसम्बन्धिन्या स्वपरिकरभूतया प्रभया, एवं ज्ञाताप्यतिसूक्ष्मस्वरूपतया क्वाचित्कस्स्वधर्मभूतज्ञानद्वारा दूरस्थानपि विषयान् प्रकाशयति।

एवं दीपस्थानीयस्यात्मनः प्रभास्थानीयं ज्ञानविशेषं नित्यधर्मत्वेन प्रतिपाद-यन्ति श्रुतयः 'न विज्ञातुः' इत्यादिना। 'स चानन्त्याय कल्पते' इति च धर्म-

भूतज्ञानद्वारैव । 'अनृतेन हि प्रत्यूढाः' अनादिमायया सुप्तः' इत्यादिभिर्जीव-प्रकाशतिरोधानेऽभिहिते स्वप्रकाशस्य जीवस्य स्वरूपतिरोधानानुपपत्त्या धर्मभूत-ज्ञानतिरोधानमेवेह प्रतिपाद्यत इत्यवसेयम् । 'सर्वं ह पश्यः पश्यति' 'स्वेन रूपेणा भिनिष्पद्यते' इत्यादिभिश्च बद्धदशायां तिरोहितज्ञानस्य जीवस्य मुक्तिदशायां तिरो-धाननिवृत्त्या स्वाभाविकरूपेणावस्थानं सर्ववस्तुसाक्षात्कारादि चाभिधीयते । अस्य धर्मभूतज्ञानस्य तिरोधानतन्निवृत्ती सङ्कोचविकासावेव । अहेः कुण्डलभावऋ-जुभाववदस्यापि सङ्कोचविकासावुपपद्येते । स्मृतिरपि ।

'यथा न क्रियते ज्योत्स्ना मलप्रक्षाळनान्मणेः ।
दोषप्रहाणान्न ज्ञानमात्मनः क्रियते तथा ॥

यथोदपानकरणात्क्रियते न जलाम्बरं ।
सदेव नीयते व्यक्तिमसतस्सम्भवः कुतः ॥

तथा हेयगुणध्वंसादवबोधादयो गुणाः ।
प्रकाश्यन्ते न जन्यन्ते नित्या एवात्मनो हि ते' ॥ इति ।

'पुंस्त्वादिमत्त्वस्य सतोऽभिव्यक्तियोगात्' इति ज्ञानस्य सुषुप्त्यादिदशाया-मपि विद्यमानस्य जागर्यादिष्वभिव्यक्तिरेव, न तूत्पत्तिरिति स्वरूपानुबन्धिधर्मत्वमस्य **सूत्रकारेणापि** प्रत्यपादि । अतश्च—किमिदं धर्मभूतज्ञानं सावयवं ? उत निरवयवं । आद्ये विभुत्वहानिः । द्वितीये सङ्कोचविकासानुपपत्तिः ; निरवयवस्य तदसम्भवा-दित्यादीनामाक्षेपाणामनवकाशः । 'न विज्ञातुः' इत्यादिभिर्ज्ञातुरविनाशित्वादेव तद्धर्मज्ञानस्याप्यविनाशित्वं वदन्ति श्रुतयः । श्रुत्येकसमधिगम्येऽर्थे यथाश्रुत्येव प्रतिपत्तव्यत्वात् । 'न हि वचनविरोधे न्यायः प्रवर्तते ।

सङ्कोचविकासरूपावस्थाभेदमादाय ज्ञानमुत्पन्नं नष्टमित्यादिप्रतीतिव्यवहारौ । यावत्करणसम्बन्धं ज्ञानस्य प्रकाशः । तन्निवृत्तौ च तन्निवृत्तिः । यथा प्रकाश्यानां

चिरकालस्थायित्वेऽप्यालोकाद्यपेक्षः प्रकाशः कादाचित्कः, न तावता तेषां प्रकाश-कालमात्रस्थायित्वं ; एवं प्रकाशस्यापि नित्यस्य करणसम्प्रयोगनिबन्धनौ सङ्कोच-विकासौ , न च तावता तस्यानित्यत्वम् । तथा चाहुः—

'यथा न क्रियते ज्योत्स्नेत्यादिवाक्यानुसारतः ।
ज्ञानं नित्यमवस्थाभिरुत्पत्त्यादिस्तु कथ्यते' ॥ इति ।

सदातनस्याप्यस्य दृतेः पादादुदकस्येवेन्द्रियद्वारैव प्रसरणम् । तथा प्रसरणभेदनिबन्धनश्च चाक्षुषत्वादिविभागः प्रत्यक्षत्वानुमितित्वादिविभागश्च ।

धर्मधर्मिणोरुभयोर्ज्ञानत्वाविशेषे को भेदस्तयोरिति चेत्—धर्मिभूतज्ञानं स्वस्वाप्रथक्सिद्ध विशेषणभूतप्रत्यक्त्वानुकूलत्वैकत्वमात्रविषयकम् । अस्य कदापि न सङ्कोचः । सदा स्वस्मै स्वयंप्रकाशम् । धर्मभूतज्ञानं बद्धदशायां कर्मानुगु-ण्येन सङ्कोचविकासशालि, तत्रापि सुषुप्तिदशायां सर्वथा विषयसम्बन्धाभावा-दत्यन्तसङ्कोचशालि । विषयप्रकाशनवेळायां स्वाश्रयाय स्वयम्प्रकाशम् ; स्वेतर-विषयप्रकाशकञ्च ।

धर्मधर्मिणोरुभयोरपि विषयप्रकाशकत्वरूपं ज्ञानत्वं स्वविषयकज्ञानान्तरा-पेक्षामन्तरा प्रकाशमानत्वरूपं स्वयम्प्रकाशत्वञ्च ।

धर्मधर्मिणोरुभयोस्स्वयम्प्रकाशत्वेऽपि ज्ञानान्तरवेद्यत्वमप्यक्षतम् । धर्मिण-स्स्वयम्प्रकाशत्वं प्रत्यक्त्वैकत्वानुकूलत्वमात्रविशिष्टविषयकतया ; धर्मस्य तत्त्वं ज्ञानत्वसुखत्वादिकतिपयधर्ममात्रविशिष्टविषयकतया । उभयोर्ज्ञानान्तरवेद्यत्वं नित्य-त्वादिविशिष्टविषयकतया ।

धर्मिणस्स्वस्वाप्रथक्सिद्धधर्ममात्रप्रकाशकत्वाद्धर्मभूतज्ञानद्वयानभ्युपगमाच्च कथं धर्मभूतज्ञानस्य ज्ञानान्तरवेद्यत्वमिति चेत्—धर्मभूतज्ञानस्य प्रसरणरूपावस्था-

भेदनिबन्धनो भेदव्यवहारः । व्यवह्रियते च प्रकृत्यवस्थद्रव्यान्महदवस्थस्य द्रव्यस्य भेदः ।

घटादीनां परावत्वं ; तच्च स्वव्यतिरिक्तमात्रजन्यव्यवहारानुगुण्यवत्त्वम् ?

तदिदं सर्वमभिप्रेत्योक्तमाचार्यैः—

' ज्ञातुर्ज्ञेरलोपं कथयति निगमस्स्मर्यते चैवमेषा
तस्मादेकत्वसिद्धौ प्रसरणभिदया तद्भिदैकत्र पुंसि ।
योग्याद्दष्टेरबाधान्न च भवति सुषुप्त्याद्यवस्थासु बाध-
स्तत्तद्वस्तुप्रकाशक्षणविरहवती न प्रकाशेत बुद्धिः ' ॥ इति ।

दुनिया के कार्यरंग में स्त्रीयों का पात्र

BY

Mrs. PADMASANI ARAVAMUTHACHARI

Rashtra Bhasha Visarad

मनुष्य एक विषय के मूल-तत्वको ढूँढ निकालना चाहें तो, वह कितना ही सच्चे अभिप्रायवाला ही क्यों न हो कभी कभी विघातक विचारों के वश हो कर गलत सिद्धान्तों में आजाता है। मानवसुधारणके युगारम्भ से आज तक अनेक महापुरुष अपने अपने मनके अभिप्राय भिन्न भिन्न तरह से विचार करके अनेकों विषयों के मूलतत्व को ढूँढ निकालने की कोशिश किये हैं। मानव कुटुम्ब के सुखशान्ति के रहस्य को खोलने के लिये अपने जीवन ही को अर्पण किये हुए अनेकों महर्षियों का जन्म हमारे भारत में हुआ है। इन महर्षियों के उच्च अभिप्रायों पर कोई अनुमान नहीं कर सकते। क्यों कि उनका चित्त स्वार्थरहित है। वैय्यक्तिक, आकस्मिक कारणों से कलुषित नहीं है। इनके आचार विचार विश्वसनीय है। फिरभी इन महर्षियों का विचार संपूर्ण निर्दोष है यह कहा नहीं जाता।

मनुस्मृति में एक तरफ यों लिखा गया है कि स्त्रीयां चंचला होती हैं। सुरूप, कुरूप, अच्छा, बुरा का ज्ञान उन्हें नहीं होता। इसी सिद्धान्त को आमोदित करते हुए बहुतों का मत यही है कि स्त्रीयां पुरुषके वास्ते बनाई हुई एक चीज हैं। उसे गृह कार्य, वंशाभिवृद्धि तथा सेवा इसके अलावा कोई स्वतन्त्रता नहीं देनी चाहिये। शास्त्र सिद्धान्तरीति से स्त्रीयों का कार्यभाग निश्चय

किया जाय तो उन्हें अस्वातन्त्र्य की बेडी ही ठीक समझी जायगी । "न स्त्री स्वातन्त्र्यमर्हति" का सिद्धान्त ऊपर कहे बात का उपसिद्धान्त (Corollary) ही है। ऐसे सिद्धान्तों को रखकर दुनियामें स्त्रीयों के कार्य-भाग के विषय में सोचना मेरी मतमें अनुचित जान पड़ती है । किसी सिद्धान्तों के आधार के बिना अपने स्वतन्त्र विचार से ही स्त्रीयों के कार्य-भाग के विषय में विचार करना ही इस लेख का उद्देश्य है ।

युगधर्म के नामसे बहुत से विचारशील पुरुष गलत मार्ग को पकडते हैं । पुराने आदमियों को ऋषिवाक्य प्रधान हो तो आजकल के व्यक्तियों को काल-धर्म का भ्रम (obsession of the time spirit)। स्वतन्त्र विचार करते समय पुराने सिद्धान्तों से भी बढ़कर यह कालानुसरण का भ्रम ही ज्यादा तक-लीफ देती है। इस धर्म का मत है कि सब तरह के कार्य-क्षेत्रों में स्त्रीयों को पुरुषों की तरह भाग लेने का अधिकार होना चाहिये। वे समझते है कि इसी तरह से ही स्त्री पुरुषों में समता है। यह तो समता की विपर्यास ही है। क्यों कि पुरुषों की भांती इन में शरीर सामर्थ्य व दृढ़ता नहीं है। पुरुषों के गुण और इनके गुण में तथा शरीर के अंगों में भी बहुत फरक है। पुरुषों का अनुकरण सब तरह से करना एक तरह से पागलपन ही है। इसमें स्त्रीयोंकी स्वाभिमान शून्यता तथा परप्रत्ययनेय बुद्धि ही स्पष्ट दीखता है। यह तो उनकी प्रगती का लक्षण नहीं। इस पागलपन को दूर करके बिचारशील आदमियों को चाहिये अपने विचार और बुद्धिको बढ़ाकर उचितानुचित की विमर्शा करना ।

रिवाज़ (रूढी) का दास्य पुराणमताभिमानियों तथा पर्याय से आधुनिक सुशिक्षितों में भी दीख पडता है । स्त्रीयां घरके कामकाजों को ही योग्य हैं उन्हें शिक्षा देने पर भी गृह शिक्षा अवश्य देनी चाहिये आदि विषय इस रिवाज में मिली हुई है। आजकल के समतावाद में तो स्त्री पुरुषों में एक ही तरह की

शिक्षा और एक ही तरह के कामधन्धे में दोनों भाग लेना यह सब प्रचार हो रहा है। लेकिन खूब सोचने पर भी यह विषय अनुचित ही जान पडता है। क्यों कि सब तरहसे पुरुष और स्त्रीयों में भेदभाव होने के कारण उनका कार्य-क्षेत्र तथा शिक्षा भिन्न २ ही होना चाहिये।

हर एक काम करने को मनुष्यकी बुद्धि ही सबसे बढ़ कर मुख्य साधन है। तर्कशास्त्र बुद्धि का काम निर्दोष चलने के लिये बना हुआ है। बुद्धि से, स्त्रीयों को यों रहना चाहिये, यों नहीं रहना चाहिये यह निर्णय करने के बदले, यों करना महिलाओं के उन्नती का उच्चपथ है कि, स्त्रीयों की रचना निसर्गदेवताने किस तरह किया है, व उसे कौन कौन सी शक्तियां दी हैं, उसके शरीर धर्म को किस प्रकार बनाई है, उसके जोव और मनोधर्म की रचना किस प्रकार की गयी है, इन विषयों के बारे में खूब विचार करके इस नैसर्गिक रचना तथा धर्म को भलाबुरा कहकर दोष नहीं देकर उनका पूर्ण रूपसे मिलाना ही है। स्त्री धर्म को जानना ही मुख्य निशान है। इस विषय में हमारा ज्ञान और विचार कभी कभी गलत भी हो सकती है। लेकिन वह गैर समझी हमेशा स्थिर नहीं रहेगा। बुद्धि-तर्क निसर्ग-नियम के अन्दर ही रहना चाहिये। निसर्ग नियमों को जानने के लिये किसी बौद्धिक सिद्धान्तों की जरूरत नहीं। इसीलिये इसको स्वतन्त्र विचार कहते है। आज ढूँढ निकाले हुए एक विषय कल गलत समझी जाय तो उसे छोड देने तक को मनुष्य स्वतन्त्र है। स्त्रीयों के कार्य भागको निसर्ग नियम और रचना ही मुख्यांश है।

निसर्ग निर्मित स्त्री रचना से, स्त्रीयों के कार्य भागों को दिखानेवाला धर्म या लक्षण यों है।

सारे जीववर्ग के इतिहास को देखें तो एक बात समझमें आती है। ऊँचे दर्जेके जीवराशी में और बनस्पतीयों में स्त्रीत्व-पुरुषत्व भिन्न भिन्न होते हैं।

वे बदल नहीं सकते (non-interchangeable) स्त्रीत्व से पुरुषत्व कम अथवा ज्यादा नहीं कहा जा सकता इस लिंग-विभिन्नता से स्त्रीयों पर मातृत्व की एक विशेष हक है, यह निश्चय होता है। इससे उनके दर्जेका प्रश्न नहीं खुलता। पुरुष के ऊपर सिर्फ पितृत्व के एक हक के अलावा और कुछ नहीं जान पडता। इस मातृत्व का विकसित स्वरूप और कार्य याने शिक्षण, संगोपन, वैद्यक, परिचर्या (nursing) बालकों के अध्यात्मिकज्ञान (child psychology) परिचय आदी।

इसी तरह से स्त्री-पुरुषों में भिन्न भिन्न दिखाये जाने वाला जीवशक्तिका गुण विभाग क्रमशः यों है :—

(अ) प्रेम,—कठोरन्याय प्रीती, (अ) सहजबुद्धि (intuition) तर्कबुद्धी, (reason) (इ) कोमलता—दृढ़ता व सामर्थ्य, (ई) भावनाप्रधानता—संयम आदी।

लिंग विभाग जैसा स्थिर और कभी न बदलनेवाला हुआ है, वैसा यह गुणद्वय में नहीं हुआ है। उतना ही नहीं यों विभक्त है इसे कोई मानते तक नहीं। मैं भी इसे पूर्ण विश्वास से नहीं कह सकती। इतना कहना अनुचित नहीं होगा कि एक दूसरे से (स्त्री-पुरुष) छोटा या बडा कभी नहीं हो सकता। पुरुष और स्त्रीयों का गुण भिन्न भिन्न होने पर भी दोनों आपस में पूरक, तथा पोषक हैं। तिसपर ये गुण द्वय एक ही व्यक्ति में पूर्णावस्था को पहुंचना संभव नहीं है। इन गुण द्वय के परस्पर मिलनसे माने, कठोर और मृदुत्व के परस्पर स्पर्श से जीवन विकास तथा शान्ती मिलती है। सब स्त्रीयों का गुण एक ही तरह से यों ही होता है यह कहना मुश्किल है। लेकिन कुछ उद्धेश्य से स्त्री-पुरुषों का गुण विभाग यों किया जा सकता है।

	स्त्री.	पुरुष.
१	प्रेम,	कठोर न्याय प्रेम,
२	सहज बुद्धी, (intuition),	तर्कबुद्धी (reason),
३	कोमलता व सहनशीलता,	दृढ़ता व सामर्थ्य,
४	भावना प्रधानता,	संयम,
५	नियत कालमें कामेच्छा, (periodicity of sex-desire)	कामेच्छाकी पुनः पुनरावर्तन, (frequency of sex-desire)
६	वंशरक्षण प्रवृत्ती. (Propensity for propagation and protection of species).	आत्मरक्षण प्रवृत्ती. (Propensity for self-preservation).

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इस लेख में पुरुषत्व के गुण वैशिष्ट्य के विचार को छोडकर स्त्रीयों की शक्ति और गुण के अनुसार उनका कर्तव्य कौनसा है यह निर्णय करना चाहिये। आजतक और आज कल भी स्त्रीयां अपने आर्थिक परावलम्बन के कारण केवल पुरुषों के इच्छानुसार चली हैं। स्वतन्त्रता रहने परभी अपने नैसर्गिक पूर्णावस्था के उन्नत पथ को छोडकर पुरुष के अन्धानुकरण से सब कार्य करी हैं। जितराष्ट्र जैसा विजयी राष्ट्रों का अनुकरण करता है, वैसे ही स्त्रियां भी करती हैं। स्वतन्त्रता मिलने परभी अनुकरण वृत्ति नहीं छुटती। इस अनुकरण वृत्ती को छोड कर, आत्म-ज्ञान से स्त्रीयां अपने अपने कार्यभाग को स्वतन्त्रता से पूर्ण करना चाहिये। यों स्वतन्त्रताके मार्ग पर जाने को कई आधुनिक विचार तथा सामाजिक व्यवस्थायें अनुकूल हैं। समतावाद और बढ़कर उसके तत्वों के अनुसार आर्थिक व राजकीय फेर नहीं होने से स्त्रीयों की परतन्त्रता दूर नहीं हो सकती। स्त्रीयों को स्वसंरक्षणमार्ग में भी कई नैसर्गिक

कमियों से रुकावट होती है । इसलिये स्त्रीपुरुष में समतावाद माने स्त्रीयों का समत्व व कार्य भाग किस प्रकार का होना चाहिये इसे निर्णय कर, उसी तरह के समत्व व स्वतन्त्रता को बढाने का प्रयत्न सब स्त्रीयों को करना चाहिये ।

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स्त्रीयों के जीवन में उपयुक्त कालके कर्तव्यों को यों दिखाया जा सकता है ।

ब्रह्मचर्यावस्था,—इस अवस्था में स्त्रीयों को सब तरह के नैसर्गिक गुणों की अभिवृद्धि ठीक होनी चाहिये । यह अवस्था प्रकृतिमान के अनुसार बाल्यसे १३–२० सालतक रहेगा । नैसर्गिक गुणों की अभिवृद्धी करते समय ऐहिक लाभनष्ट तथा पुरुषों के अनुकरणवृत्ती नहीं रहना चाहिये । स्त्रीयों की अभिवृद्धी, विशेषकर उनकी शारीरिक अभिवृद्धि बहुत शीघ्र हुआ करता है । इसलिये स्त्रीयों का शिक्षणक्रम पुरुषों से भिन्न रहना चाहिये ।

मातृत्व,—यह जीवन २०—५० साल तक रहता है । इसी अवस्था में स्त्रीत्व का पूर्ण विकास होता है तथा इसी अवस्था में स्त्री दुनिया के आदर्श पूर्ण कार्य में भाग ले सकती है । याने भावी जनांगकी मां वह होने के कारण अपने पुत्रको सद्गुणी तथा आदर्श पुरुष बनाने की पूर्ण शक्ति उस में ही है । मातृत्व में ही सृष्टि देवी ने अपना पूर्ण परिश्रम संचित किया है सृष्टिका सौंदर्य वहीं है । इस एक स्थान में स्त्री-पुरुषों से कुछ ऊँचे दर्जे की कही जा सकती है । क्यों कि मातृत्व में जो कोमलता व सहिष्णुता होती है, वह पुरुष जीवन में कभी नहीं हो सकता । स्त्रीयों के इन सहजगुणों से वे दुनिया के कार्यरंग में ऐसे एक पात्र हैं कि जिनके बिना पुरुष अकेले शान्ती और सुख नहीं प्राप्त कर सकते । समता याने पुरुष और स्त्रीयों में सम्मिलित शिक्षा, और हर एक

काम धन्धे में दोनों का भाग, यही समता नहीं । गृहकार्य, शिक्षा, दुनिया के कार्यों में अपने निसर्ग-निर्मित रचना के सुबिधानुसार, उचितरीतीसे, भाग लेकर मातृत्व की ऊँचे पद से दुनिया भर में फैली हुई अशान्ती को दूर कर संसार में अखण्ड शान्ती का स्थापन करना ही स्त्रीयों का मुख्य कार्य भाग है । मनुष्यकी कठोरता से दुनिया को बडी हानी होती है । आज के महायुद्धसे यह बात स्पष्ट होगी । 'यह बात अनुमान किया जा सकता है कि हिट्लर जैसे कठोर तथा निर्दय पुरुष को यदि विवाहित होकर सपत्नीक कुटुम्ब के आनन्द व स्त्री के प्रेम तथा कोमलता के प्राप्त करने का अवसर मिला होता तो उसका इतना पाषाण हृदय और कठोरता न होती होगी । यह घोर हत्यायें, दुनिया में यह अखण्ड अशान्ती, दीन अनाथों की यह हाहाकार, न मचता । हर एक स्त्री का कर्तव्य है कि दुनिया में शान्तिस्थापन करने के लिये अपने सन्तानों को भी शिक्षा देकर और स्वयं भी कार्य करना चाहिये ।

अनेक विद्वान् और महा पण्डितों के सुंदर व आदर्शपूर्ण लेखों के बीच में मेरी इस छोटी कृति को प्रकट करने की बडी कृपा किये हुए युनिवर्सिटी के अधिकारी वर्गको मेरी हार्दिक व कृतज्ञता पूर्ण वन्दनाएं है । मेरे लिये यह बडी गर्व तथा हर्ष की बात है कि मान्य राजा. सर. अण्णामलै चेट्टियार, आपके इस "षष्ट्यब्धपूर्ती" के महा समारम्भ के चिह्नरूप इस प्रती में मेरी इस लेख को प्रकट करने की सुअवसर मिली । ईश्वर से मेरी प्रार्थना है कि, सद्गुण पूर्ण, नीती और धर्म निरत, मान्य, राजा. सर. अण्णामलै चेट्टियार, आपको और आप के कुटुम्ब को ईश्वर दीर्घायु रखें तथा आपकी कीर्ती अचल रहने के लिये आपका विश्वविद्यालय दिनों-दिन अभिवृद्धी पावें ।

VERSES IN KANNADA IN HONOUR OF THE FOUNDER

ಕಂದ ॥ ಮನ್ನಣೆಗೆ ಪಾತ್ರಮಾಗಿ
ಪರ್ಣ್ಣಾಮಲೆ ಚೆಟ್ಟಿ ವಿಶ್ವ ವಿದ್ಯಾನಿಲಯಂ .
ಉನ್ನತಪದವೀಧರರಂ
ಸನ್ನುತಮಾಗರ್ಪಿಸುತ್ತೆ ಮೆರೆಯಲಿ ಸತತಂ ॥

ಕಂದ ॥ ಬಡವರ ವಿದ್ಯಾಭ್ಯಾಸಕೆ
ಸಡಗರದಿಂ ಧನಸಹಾಯಮುಂ ಗೈಯ್ಯುತೆ ತಾಂ ।
ಪೊಡವಿಯೊಳಶೇಷಕಲೆಗಳ
ಕಡಲಿಗೆ ಶ್ರೀ ಚೆಟ್ಟಿಯವರು ಚಂದಿರನಪ್ಪರ್ ॥

ಇಂದ್ರವಜ್ರಾ॥ಶ್ರೀಜಾನಿನಿಸ್ಸೀಮ ಕೃಪಾಕಟಾಕ್ಷ
ಸಂಜಾತಸರ್ವಾಧಿಕಭಾಗ್ಯಯುಕ್ತರ್ ।
ರಾಜದ್ಯಶೋರಾಶಿಯುತರ್ ಜಯಿಕ್ಕೆ
ರಾಜಾ ಸರ್ ಅಣ್ಣಾಮಲೆ ಚೆಟ್ಟಿಯಾರ್ಗಳ್ ॥

ಕಂದ ॥ ಧರೆಯೊಳ್ ಜ್ಞಾನದ ಬೆಳಕಿಂ
ತರುಣಜನರ್ ಬಾಳಿನ ಬಗೆಯರಿಯುತ್ತೀಗಳ್ ।
ಚಿರಮುಂ ನಾಡಿಗೆ ಯಶಮಂ
ದೊರಕಿಸಿ ಬಾಳುಗೆ ಸರಸ್ವತಿಯ ದಯೆಯಿಂದಂ ॥

ಶಾ॥ ವಿಕ್ರೀ॥ ಸಂಗೀತಾದಿಕಲಾಪ್ರಚಾರ ವಿಷಯಕ್ಕುದ್ದಾಮಯತ್ನಾನ್ವಿತರ್
ಗಂಗಾಧಾರಿಪದಾರವಿಂದಯುಗದೊಳ್ ಭೃಂಗಾಯಮಾಣಾಂತರರ್
ತುಂಗೋತ್ತುಂಗ ವಿಪತ್ಕರೀಂದ್ರರಿಗಿವರ್ ಶಾರ್ದೂಲವಿಕ್ರೀಡಿತರ್
ಮಾಂಗಲ್ಯಂ ಸುಖಸಂಪದಂ ಪಡೆದು ತಾಂ ಜೀವಿಕ್ಕೆ ಕಾಲಂ ಚಿರಂ ॥

ಶ್ರೀ ಅಣ್ಣಾಮಲೆಶೆಟ್ಟಿಯವರ ಷಷ್ಟ್ಯಬ್ದಪೂರ್ತಿಯ ಶುಭಾಶಂಸನೆಯ ಪದ್ಯಗಳು.

ತೆಂಕನಾಡಿನ ಕುಶಲಕಲೆಗಳ ಕಣ್-ಬಲೆ!
ಜೋಳಶಿಲ್ಪದ ಹಿರಿಯ ಗೋಪುರ ಮೆರೆವೆಡೆ!
ಶ್ರೀ ಚಿದಂಬರಲಿಂಗ ಬೆಳಗುವ ನಲ್-ಮನೆ!
ಭಕ್ತನಂದನರೊಲಿದು ನಿಂದಿಹ ಕಲ್-ಮನೆ!

ಇದುವೆ ನೋಡಣ್ಣಾಮಲೆ!
ಹದುಳವಾಗಿದೆ ಕಣ್ಣಿಗೆ. ೧

ಇಲ್ಲಿ ಹೊಳೆವುದು ಚೆಲುವ ಸರಸತಿಯೊಳ್ ಮನೆ;
ಎಲ್ಲ ಕಲೆಗಳ ನಲ್ಲಪಣ್ಗಳ ಸವಿಗೊನೆ;
ತಮಿಳ ನುಣ್ಬರದಿಂಪ ಚೆಲ್ಲುವ ಬಿಂದಿಗೆ;
ಮೆರೆಯುವಣ್ಣಾಮಲೆಯ ಕಲಿತದ ಜಾಣ್ಮನೆ;

ಆದುವೆ ಶೆಟ್ಟರ ಹೆಸರನು
ಮುದದಿ ಸಾರುವ ಭೇರಿಯು. ೨

ತಮಿಳು ಸೋದರರೊಲಿವ ನಾಡಿನ ಭಾಗ್ಯವೋ!
ತಮಿಳುಸಂಸ್ಕೃತಿ ನೆನೆದು ತಾಳದ ರೂಪವೋ!
ಗಾನದೇವತೆ ಬಯಸಿ ನಿಂದಿಹ ತಾಣವೋ!
ಮಾನ್ಯಶೆಟ್ಟರ ಕೀರ್ತಿತರುವಿನ ಬಳವಿಯೋ!

ನೋಡು ನೋಡಣ್ಣಾಮಲೆ,
ಕುಶಲವಿದ್ಯೆಯ ಸಿರಿನೆಲೆ. ೩

ಸ್ಥಾನಪತಿಯೆನಿಸಿದ್ದು ವಿದ್ಯಾನಿಲಯಕೆ
ಶ್ರೀನಿವಾಸಾಖ್ಯಗುರು, ಹರಸಿದನೆಂದರೆ—
ಮಾನವರ ಮಾನ್ಯತೆಗೆ ಪಕ್ಕಾಗದಿಹುದೇ?
ಈ ನಿಖಿಲ ವಿದ್ಯಾಲಯಂ ಬೆಳಗದಿಹುದೇ?

ತಮಿಳು.ನಾಡಿನ ಕನ್ನಡಿ
ತಮಿಳರೆಸಕದ ಮುನ್ನುಡಿ ೪

ಮಿಕ್ಕದಾನಕೆ ನಾಶವೆಂಬುದು ನಿಖರವು;
ಶಾಸ್ತ್ರದಾನಕೆ ನಾಶವೆಂಬುದೆ ಬಾರದು.
ಸುಮತಿಶೆಟ್ಟರು ತಮ್ಮ ಧನವನು ಕೊಟ್ಟರು;
ಎಣಿಸಿ ಗುಣಗಳ ಧನವನೆಣಿಸದೆ ಕೊಟ್ಟರು.

ಈ ಪರಿಯ ಕೊಡುಗೆಯನು ಹೊಗಳು;
ಅಂಜದಲೆ ಹೊಗಳು ಕವಿಯೆ. ೫

ಬಡವರಾಗಿಹ ತರುಣರೆನಿಬರೊ ಬಳೆದರು;
ಪಡೆದ ವಿದ್ಯದಿ ಘನತೆಗೇರ್ದರು — ಬಾಳ್ದರು.
ಬಡವರಾಸರೆಯೆನಿಪ ವಿದ್ಯೆಯ ಮನೆಯಿದು
ಮೃಡನ ಕರುಣೆಯ ಪಡೆದು ಗೆಲ್ಲಲಿ ನಿತ್ಯವು.

ಇದನು ಜನರಿಗೆ ಸಲ್ಲಿಸಿ
ಸೇವೆಗೈದರು ಸೆಟ್ಟರು ೬

ಆವರದಾನಕೆ ತಲೆಯ ತೂಗಿತು ದೇಶವು;
ಆವರ ಪೂರ್ವಜರೆಲ್ಲ ಕುಣಿದರು ಸಗ್ಗದಿ;
ಅವರ ಪೀಳಿಗೆ ಹೆಮ್ಮೆಗೊಂಡಿತು – ದಾನಕೆ;
ನೆರೆಯನಾಡಿನ ಜನರು ಕವಿತೆಯ ಬರೆದರು.

ಕೊಡುವ ಪರಿ, ಇಂತಲ್ಲವೇ–
ಪೊಡವಿ ಸಮವೇ ವಿದ್ಯಕೆ? ೭

ಹಾಡು ಹರಿಯಲಿ ಹೊನಲುಹೊನಲಲಿ ದೇಶದಿ ;
ಕೋಡಿವರಿಯಲಿ ಜನರ ಮೆಚ್ಚಿನ ನುಡಿಗಳು ;
ಹೊಗಳಲಣ್ಣಾ ಮಲೆಯ ಶೆಟ್ಟರ ಮತಿಯದು ;
ಮಿಗುವ ಬೆಳ್ಚಸವವರದಾಗಲಿ ನಿತ್ಯವು.

ಕಾಲವೆಷ್ಟಕು ಮಸುಳದೆ
ಕಾಂತಿಯೇರಲಿ ಕೀರ್ತಿಗೆ. ೮

ಬಾಳ ಬೆಳಸಲಿ, ಹೆಸರ ಹರಡಲಿ ದೇವರು ;
ಹಿತದೊಳಣ್ಣಾ ಮಲೆಯ ಶೆಟ್ಟರ ಪೊರೆಯಲಿ.
ಷಷ್ಟಿಪೂರ್ತಿಯ ದಿನವು ಸುಖಮಯವಾಗಲಿ ;
ಅವರ ಶಾಂತಿಗೆ ಕುಂದುಬರದಿರಲೆಂದಿಗು.

ಅವರ ನಡೆಯಾ ಗೆರೆಯನು
ಹಿಡಿದು ಲೋಕವು ನಡೆಯಲಿ. ೯

ಎ. ಕೆ. ಪುಟ್ಟರಾಮು.

ಧನ್ಯೆ ದಲ್ ಲಕ್ಷ್ಮಿ

ಸರಸತಿಯ ಬೀಣೆಗೊದಗಿಸೆ ತಂತಿಯಂ, ಧನ್ಯೆ
ದಲ್ ಲಕ್ಷ್ಮಿ. ಲೌಹನಿನದಮೆ ವೈಣರವಮಾಗಿ
ಪೊರಿವುದು ಚಿರಂತನದ ಸುರಗಾನದಿಂ, ತ್ಯಾಗಿ,
ನಿನ್ನ ಜಸಮಂ, ವಿಸ್ಮೃತಿಯ ಮೃತ್ಯುವಿಂ. ಮುನ್ನೆ,
ವಿಕ್ರಮಾರ್ಜುನ ವಿಜಯಮಂ ಬರೆದು, ಪಂಪಕವಿ
ಕೊರೆದನರಿಕೇಸರಿಯ ಪೆಸರಂ ಚಿರಂಬಾಳ್ವ
ಕೃತಿ ಶಿಲಾ ಶಾಸನದಿ. ಕಾವ್ಯವೋದುವ ಕೇಳ್ವ
ಕನ್ನಡಿಗರೆಲ್ಲರ ಕೃತಜ್ಞತೆಗೆ, ಚಂದ್ರ ರವಿ
ಪೊಳೆವನ್ನೆಗಂ, ಪಾತ್ರನಾಗಿರ್ಪನಾ ನೃಪತಿ,
ತನ್ನುಳಿದ ಕಜ್ಜಗಳ್ ತನ್ನ ರಾಜ್ಯಂಗೂಡಿ
ಪೇಳೆ ಪೆಸರಿಲ್ಲದಾಗಿರ್ಪೊಡಂ. ದಿವ್ಯ ಕೃತಿ,
ಹೇ ಧನಿಯೆ, ನಿನ್ನ ದಾನವನಮೃತಮಂ ಮಾಡಿ,
ನಿನ್ನಾತ್ಮಕಮೃತ ತೃಪ್ತಿಯನೀವುದಾವಗಮ್ :
ನಿನಗಕ್ಕೆ ಆ ಸೈಪಿನಾ ಶಾಂತಿಯಾ ಸೊಗಮ್.

ಕೆ. ವಿ. ಪುಟ್ಟಪ್ಪ.

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* ಅಣ್ಣಾಮಲೆ ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ದಾತೃವಿನ ಷಷ್ಟಿಪೂರ್ತಿಗಾಗಿ ಹೊರಡಲಿರುವ ಸ್ಮಾರಕ ಗ್ರಂಥಕ್ಕೆ.

ಮೆಟ್ಟುವ ನೆಲ ಕರ್ನಾಟಕ *

೧

ಎಲ್ಲಾದರು ಇರು; ಎಂತಾದರು ಇರು;
ಎಂದೆಂದಿಗು ನೀ ಕನ್ನಡವಾಗಿರು.
ಕನ್ನಡ ಗೋವಿನ ಓ ಮುದ್ದಿನ ಕರು,
ಕನ್ನಡತನವೊಂದಿರೆ ನೀನಮ್ಮಗೆ ಕಲ್ಪತರು!

೨

ನೀ ಮೆಟ್ಟುವ ನೆಲ — ಅದೆ ಕರ್ನಾಟಕ;
ನೀನೇರುವ ಮಲೆ — ಸಹ್ಯಾದ್ರಿ.
ನೀ ಮುಟ್ಟುವ ಮರ — ಶ್ರೀ ಗಂಧದ ಮರ;
ನೀ ಕುಡಿಯುವ ನೀರ್ — ಕಾವೇರಿ.

೩

ಪಂಪನನೋದುವ ನಿನ್ನಾ ನಾಲಗೆ
ಕನ್ನಡವೇ ಸತ್ಯ.
ಕುಮಾರವ್ಯಾಸನನಾಲಿಪ ಕಿವಿಯದು
ಕನ್ನಡವೇ ನಿತ್ಯ.
ಹರಿಹರ ರಾಘವರಿಗೆ ಎರಗುವ ಮನ,
ಹಾಳಾಗಿಹ ಹಂಪೆಗೆ ಕೊರಗುವ ಮನ,
ಪೆಂಪಿನ ಬನವಾಸಿಗೆ ಕರಗುವ ಮನ;—
ಬೆಳ್ಗೊಳ ಬೇಲೂರ್ಗಳ ನೆನೆಯುವ ಮನ,

ಜೋಗದ/ಜಲಪಾತದಿ ಧುಮುಕುವ ಮನ,
ಮಲೆನಾಡಿಗೆ ಹೊಂಪುಳವೋಗುವ ಮನ ;
ಕಾಜಾಣಕೆ ಗಿಳಿ ಕೋಗಿಲೆಯಿಂಪಿಗೆ,
ಮಲ್ಲಿಗೆ ಸಂಪಗೆ ಕೇದಗೆ ಸೊಂಪಿಗೆ,
ಮಾವಿನ ಹೊಂಗೆಯ ತಳಿರಿನ ತಂಪಿಗೆ
ರಸರೋಮಾಂಚನಗೊಳುವಾತನ ಮನ ;
ಎಲ್ಲಿದ್ದರೆ ಏನ್ ? ಎಂತಿದ್ದರೆ ಏನ್ ?
ಎಂದೆಂದಿಗು ತಾನ್

ಕನ್ನಡವೇ ಸತ್ಯ !
ಕನ್ನಡವೇ ನಿತ್ಯ !
ಅನ್ಯವೆನಲದೆ ಮಿಥ್ಯಾ !

ಕೆ. ವಿ. ಪುಟ್ಟಪ್ಪ.

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* ಅಣ್ಣಾಮಲೆ ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ದಾತೃವಿನ ಷಷ್ಟಿಪೂರ್ತಿಗಾಗಿ ಹೊರಡಲಿರುವ ಸ್ಮಾರಕ ಗ್ರಂಥಕ್ಕೆ.

SONG

By

Sir Umar Ali Shah, M.L.A.,

శ్రీరాజా సర్ అన్నామలయ్య చెటియార్ (చెటివార్)

షష్ట్యబ్దోత్సవాభినందన శ్లోకాః.

శ్లో॥ శ్రీరాజా సరన్నామలయ్య చెటియార్ సంస్తూయమానప్రభా
దివ్యానంతదిగంతదానవిశదా విద్యాలయ స్థాపితా
నానానేకకళాధురీణసుగుణాలంకార తేజోమయా
త్వచ్ఛక్తీ సముపాస్యతాం విజయతాం సర్వంసహాసంస్తుతా.

శ్లో॥ శ్రీరాజా సరన్నామలాయ చెట్టియార్ విఖ్యాతచారిత్రక
శ్రీకల్యాణకళాకలాప విలసత్సౌభాగ్యభాగ్యోదయా
ధర్మస్థాపితభక్తలోకనసతీ దానార్ణ వోదంచితా
త్వచ్ఛక్తీ సముపాస్యతాం విజయతాం సర్వంసహాసంస్తుతా.

శ్లో॥ జయతు జయతు రాజా సర్నామలాయ చెటియార్
కోటిద్రానార్ణవోద్తీర్ణా విద్వాన్ విశ్వకళాలయా.

శ్లో॥ భారత పుత్రచెటియార్ లక్ష్మీ ధారేయధీనిధి
షష్ట్యోత్సవవర్ధంతే జయతాం శతవత్సరే.

శ్లో॥ సారస్వతకళాలోకః లోకః ప్రాకృతవిశ్రుత
నానాకోవిద సంతుష్టః చెటియార్ దాననాహినీమ్.

అణ్ణామలై విశ్వవిద్యాలయము, అణ్ణామలైనగరము.

మ-రా-రా-శ్రీ. ది. ఆనరబిల్ డాక్టర్.

రాజాసర్. అణ్ణామలై శ్రేష్ఠిగారి

షష్టిపూర్తి మహోత్సవమందు సమర్పించిన

పంచరత్నములు

విద్వాన్ టి. అప్పన్న, B. O. L.

జంపన చంద్రశేఖరరావు, B.A. (Hon) B.Ed.

1

రాజశిరోమణి శ్రీనట
రాజ నగర్తార్క్-లాబ్ధి రాకేందుని, వి
భ్రాజితు, నన్నమలై విభు
తేజో విభవాయు రధికదీప్తు నొనర్చున్ ॥

2

శ్రీ కమలామణీ విమల
చిన్మృదులార్ద్ర వనస్థ దివ్యవి
ద్యా కమనీయు పుష్పమధు వానెడు
భృంగ కుమారుఁడౌ
శ్రీ కమనీయమూర్తియగు కృష్ణుఁడు
"షష్టిపూర్తి" యం
దీకరుణాలు, చెట్టివిభు కిచ్చు,
శతాయువు, సౌఖ్యసంపదల్ !

3

అమలిన "షష్టిపూర్తికి" ముఖాంబుజ
విస్రుత మందహాసముల్
విమల విదగ్ధ భావ మధుపేశల
బంధుర మాటఁగాంచఁ, గా
మ్యమను మాట నెంచని త్వదార్య
ప్రవృత్తికి మెచ్చి వాసవా
ద్యమరులు, నిత్య నూతన
వయఃపటిమంబు నొసంగిరేమొకో !

4

కలువ పిసాళి నిగ్గు తెలిగన్నుల
మన్ననలంద -- నీకునై
వలపుల జిమ్మి - క్రొందళుకు
బట్టలు దాలిచి, బొట్టుపెట్టి, మా
తెలుఁగు సరస్వతీ సతియె తెచ్చెను
తీయని కమ్మతేనియల్
చిలుకు లతాంత సంతతుల
చెల్మి గ్రహింపుము, చెట్టియార్యభూ !

5

వరగుణోజ్జ్వల వణిగ్వంశ వారాశికి
కల్పవృక్షముఁబోలె నిలిగినావు,
విశ్వవిఖ్యాతమౌ విద్యాలయమ్మును
పేర్మిమీఱఁగ నీవు పెట్టినావు,

సంగీత సాహిత్య సకల శాస్త్రంబుల
ధీమంతులగువారిఁ దెచ్చినావు,
రాష్ట్రపతియును — నాంధ్రాంగ్లాభ్యుదయుడైన
"శ్రీ రెడ్డినాయుని" నజేర్చినావు,

అర్థికుల కల్పవృక్ష ! దుగ్ధాబ్ధి కీర్తి !
సరస సాహిత్య సంగీత చక్రవర్తి !
సౌమ్యగుణమూర్తి ! నేఁడు నీషష్టిపూర్తి;
అందుకొను పద్యమాలను నధిక ప్రీతి.

ఆశీస్సుమములు.

1

సిరులును విద్యలుఁ జెలిమి
సేయమహోన్నతవైభవంబుచే
వరలుమనీషికింబిసిని
వారలచేతికి, దానఖర్జూర్ఫ
నెఱపినదాతకుఁ దమిళ
నేతకు నన్నమళాయసెట్టికి
ట్లఱువదియేండ్లయుత్సవము
లర్వదితొంబదికుట్మలించుచెఁ

2

ద్రావిడభూమినీకతన
ధన్యతఁగాంచె, సనంతరత్నశో
భావృతమైనభారతము
హావిషయంబుతనించె, చెట్టినా
ఱ్భావర ! నీకటాక్షమునఁ
బూచిసవిశ్వకళాలయంబుచేఁ
దావులుజిమ్ముచున్నదిచి
దంబరమంబరచుంబితప్రభఁ

3

మతిమంతుండగునగ్రసోదరుఁడుసరా
మస్వామ్యభిజ్ఞుండుదా
రతనాటించినసంస్థలెల్లసిరిమా
రంబొల్చినీవల్లఁబు
ష్పితమై, నీయకలంకధర్మతిరతిఁ
వేనోళ్లఁజాటించుఁబ్రో
న్నతకీర్తి ! పదివేలవర్షములుకా
ర్చల్నీకునీవారికిఁ

4

ప్రవహించెనొకకోటిపై చిలుకనీకేలఁ
గమనీయదానగంగాఝరంబు
పొదలె, నీకొజేతిసోషణంబునఁజేసి
కళలకునిండారుకండపుష్టి
విశ్రాంతినందెనీవిఖ్యాతిసుందరి
కన్యాకుమారికాగ్రంబునందు
భాసిల్లెనివల్లఁబశుపతీశునిపూజ
నటరాజునకునగ్ననాట్యశాల

పలుకనేటికినీయుప్పుపులుసుతినని
సంస్థగనరాదు భరతవర్షంబునందు
ధన్యుఁడవునీప్రదావిడ దానవీర !
అన్నమళనెట్టి ! నీకు బ్రహ్మాయురస్తు

5

ఢిల్లీలోనలకాశికానగరిలో
డేరాదునుప్రాంతమం
దల్లాసింహళభూమిలోనఁబరమా
యందొప్పనీదాతృతా
వల్లులోజిమ్మునువాసనాలహరివి
శ్వవ్యాప్తమైనీపయిన్
జల్లుగావృతషష్టిపూర్తులనజ
స్రంబుసహస్రంబులన్

జి. జాషువ.

ఆంధ్రపండితుఁడు, వినుకొండ.

॥ శ్రీరామచంద్రాయ నమః ॥

శ్రీరాజా. సర్. అన్నామలై చెట్టి ధర్మప్రశంస.

(శ్రీ కవిభూషణ-శతావధాని-దోమా. వేంకటస్వామి గుప్త గారు.)

శ్రీ శివకామినీనాథో ।
నటరాణ్మౌళి శ్చిదంబరావాసః ।
రాజా-సర్-అన్నామల ।
చెట్టి బుధేంద్రాయ దిశేతు శుభ మనిశమ్ ॥ 1 ॥

గీ॥ కనడుకదను వంశము కడు గణనఁ గొంచుఁ ।
జెలఁగి-యట స ర న్నామలై చెట్టి మేటి ।
ఒక శతాబ్దమ్ము క్రింద నయ్యురుకులము చి ।
దంబరముండి పూనెఁగర మ్లంబు సేయ ॥ 2 ॥

ఉ॥ శ్రీనటరాజభవ్యపద
సేవకులై - యల దేనళాన న ।
న్యూనవిభూతియుక్తముగ
నొప్పెడు గోపురముఖ్యముల్ కడున్ ।
మానితరీతిఁ దీర్చిరి స
మల్ తగ నర్థశతంబు మున్ను - సాం ।
పూనఁగఁ దేర్ల త్రోవలెడ
నొప్పఁగఁ జేసిరి ధర్మసత్త్రముల్ ॥ 3 ॥

శ్రీ॥ శ్రీ సరన్నామలక్ష్మీ పృథ్వీపతికి ।
నన్న యగు దివాణ బహదురు సన్నుత గల ।
రామసామిచెట్టి చిదంబరమును జేరి ।
మునిసిపల్-తాలుకా-సంఘములకు నేలి ।
ప్రజల కెంతయుననుకూలవర్తనం దగె ।
అతని పున్నెమే ఆ యూర నలరు నీటి ।
వసతియుం-దగు హైస్కూలు పరఁగుటయును ॥ 4 ॥

ఉ॥ అన్నయు-నన్నకుం దొలిటి
యాఢ్యులుఁ జన్న లసత్పథంబునన్ ।
మిన్నగఁ దాఁ చరించుటకు మిక్కిలి
నెమ్మదిఁ గోరినట్టి స ।
ప్రన్నమలై ప్రభుండు కడు
హర్షమెయిం దన పేర వైభవీ ।
ప్రోన్నతపీఠము న్నిలిపెఁ
బొల్పు చెలంగఁ చిదంబరస్థలిన్ ॥ 5 ॥

స్రగ్ధర ॥

శ్రీవిశాలాక్షీమహేశీ శ్రితశుభదయశ
శ్శ్రీసమాఖ్యాఢ్య విద్యా ।
రామశ్రేణిన్ గళాశాల-ద్రమిళసువచో
రాచితాగార మైరావ్ ।
ణీమాద్యద్గేహమున్ మానితగురుజననియమా
నిందితాభ్యాసధామం ।
బీ మైఁ జెల్వారు విద్యాగృహములఁ గొని ధీ
హృద్యఁ డన్నామలుండున్ ॥ 6 ॥

గీ॥ పరఁగ నన్నామలైయూనివర్సిటి యన ।
వైదుషీమహాపీఠంబు పర్వి-దాని ।
తాయి నన్నామలైనగర మనఁ గొల్వి ।
శ్రీచిదంబరదైవంబు కృపకుఁ బాత్ర ।
నయవిధంబుగఁ గొల్పె నన్నామలుండు ॥ 7 ॥

ఉ॥ చేతికి నెమ్ము లేనియటుఁ
జేసిన దానము లెన్ని యేనియున్ ।
భూతి చెలంగెడిన్ జనువు
పద్ధతి గల్గినవారికిన్ గలా ।
భూతికి నాయమీయఁగల
వారికి-భారతభూమి నాంగ్లభూ ।
మీతలమందు సాయము న
మేయముగాఁ దనరించె నీతఁడున్ ॥ 8 ॥

సీ॥ మధురకాలేజిని-మధుర యమెరికను
కాలేజి హాస్టలున్ గరుముఁబ్రోవ ।
పరఁగనెలాపూరఁ-దిరిచినాపలిఁ-బి. యస్.
నేషనల్ హైస్కూళ్ల పోషణకును ।
డెహ్రాడూన్ పురిని నిండును పబ్లికు సొసైటి
డిల్లి నిర్విను సొసైటిఁ దనరింప ।
డిల్లి నిర్విను స్కూలు టీకు రాజిలఁ జేయ
బ్రహ్మదేశంబున రంగునుపురి ।

గీ॥ మీలుమెనఁ-గాన్సెయంచను మొగిఁ గొలంబొ ।
పురిని-మదరాసురామకృష్ణరుచిరమఠ ।
మునకు ధర్మము గావించె బూనర ననఘుఁ ।
డయిన రాజు సత్యన్నామలయ్య సెట్టి ॥ 9 ॥

శా॥ తేవారంబులు-వేదశాస్త్రములు-న
ర్థి రాజిలం జేయఁ దా ।
నావేలుం డితఁ డేర్పరించి మఱిగా
నానూనవిద్యాఘన ।
ప్రావీణ్యంబు నెసంగఁ జేయుటకునై
వైశుభ్యపీఠంబునన్ ।
శ్రీవిన్యాసము నింపుగాఁ గొలిపెనీ
చెట్టిప్రభూత్తంసుఁడున్ ॥ 10 ॥

గీ॥ సృష్టి చేసిన యజుఁడు సృజించిన జగ ।
మును భరించి పాలింప నభ్భుతపుఁ గూర్మ ।
తఁ-ఁ గలి వేంక టేశుఁ డనఁ' బద్మాక్షుఁ డొప్పు ।
రీతిగాఁ గూర్మ వేంకటరెడ్డినాయఁ ।
డే మహాసంస్థను భరించి యేలు సొంపు ।
నిఁక స రన్నామలక్ష్మి కింపు హెచ్చు ॥ 11 ॥

క। రహి నన్నామల నగరిని ।
మహిళాపురి నీలగిరుల మహిళాసభలన్ ।
మహిమెచ్చుంగ: జికిత్సా ।
గృహము శిశుప్రులయను చెట్టి పృథ్విం గొల్పెన్ ॥ 12 ।

గీ॥ ఆం ప్తహితులు దాదుల సభను నలరఁ జెన్న ।
పురిని-కన్యా ధ్వదశీనీభూమకృతిని ।
ఇండియను రెఁడు క్రా సను హృద్యవిధిని ।
మఱిఁ చిదంబరపురమునఁ బురగృహమును ।

ఇంపు సొం పొందఁ జే యఁగ నెంతయేని ।
ధనము గుప్పించి యిచ్చె నీ దాతృమూళి ।
దిగ్దిగంతంబులం గీర్తి దీప్తి మిగుల ।
లలిని రాజ స రన్నామలయ్య చెట్టి ॥ 13 ॥

ఉ॥ దానములన్-బ్రజాభ్యుదయ
ధానవిధానములన్-బుధేంద్రస ।
న్మానములన్-రహిందగుమ
నంబుఁజెల్వె నలవ్ శేముషీ ।
శ్రీనిధి-రాజ-అన్నామల చెట్టి-సు
యోధుఁడు (సర్) నీతినిన్ సువి ।
ద్యానయపోషణాంచితవ
దాన్యుని గాంచుటఁ "దొంటి భోజునిం ।
గాఁము గాన" మన్న నుడి
కారము దూరము గాఁగ నేఁగెఁగిన్ ॥ 14 ॥

గీ॥ కోటి రూప్యము లాస్తి గల్గు ఘనుఁ డకుఁకు ।
కోటి రూప్యములకు మించు గొప్ప ధర్మ ।
ములు సలిపిన మహాదాత నెలమిఁ గాంచఁ ।
జెలఁగె శ్రీ స రన్నామల చెట్టిని-బళి ! ! ॥ 15 ॥

గీ॥ తన మహాదానములఁ జేసి "దక్షిణ భర ।
తావనీమహాదాత"నాఁ దగిన బిరుద ।
మందె నన్నామల శ్రేష్ఠి యాచరణము ।
లేక పేర్వొట్టుకొను కొంద ఱివలెఁ గాక ॥ 16

సీ॥ శివకామసుందరీసేవితుం డగు చిదం
బరనటరాజు కృపం దలిర్ప ।
పగిది లన్నామలై నగరిని దగు శ్రీ ప
శుపతి గౌరీశుండు శుభము లిడఁగ ।
పితృసేవిత కహూరు శితికంఠుఁ డగు పశు
పతి శంకరుండు సంపదల నొసఁగ ।
శ్రీ చిదంబరమునఁ జెలఁగు శ్రీ తిల్లై గో
విందరాజప్రభుం డంద మీయ ।

గీ॥ శ్రీకలిత కూర్మ వేంకటరెడ్డినాయ ।
కాది మహాసైన్యమిత్రత్తుల్ సహాయ మిడఁగ ॥
శ్రీమహితుఁడు రాజా స రన్నామలయ్య ।
చెట్టి యందచందంబులఁ జెందుఁగాత ॥ 17 ॥

క॥ శ్రీ వేంకటాధినేతుః (ద్వ్యర్థి-శ్రీ వేంకటే
శ్వరస్వామి అనియు-శ్రీవేంకటరెడ్డినా
యుఁడుగారు అనియు)
విహితో రాజా స రన్నామల చెట్టిః ।
జీయా త్సర్వత్ర సదా ।
సర్వశుభప్రకలితో యశోభరితః ॥ 18 ॥

ప్రణయ పరిణామము.

జాషన చంద్రశేఖరరావు, (B. A. Hons)., B. Ed.,

1

చం॥ విరియఁగఁ బారె నేత్రములు
వేకువ తీవలరాలు పూలగా,
జరుగవు ముంపువెన్కలకు,
చటురతీంద్రియ వస్తుచిత్రముల్
అరయుచు, బాహ్యవిశ్వ సముదంచిత
నంచిత రూపఖేలనల్
మరచెనో ! కాక — స్వాదురస
మంజుమరందము నానఁగోరెనో !

2

చం॥ కదలక — గద్గద స్వరము
కంఠమునన్ గనసీక — భావముల్
పదిలముగా హృదంతరముఁ
బాయగ నీక — విషాదవేదనల్
చెదరగనీక — మేనఁ జిరు చెమ్మట
ముత్తెము లొత్తనీక — కన్
గదలఁగ నీ: — బాష్పములు
కంటను రాల్చెడు "ప్రేమమూర్తి"

3

గీ॥ కంట నూరెడు జలముల ఁగానసీక
మృత్యు పథమున దృష్టి సారించి చూచి,
తనదు ప్రియురాలి హృదయ సంతాపమడప
ధైర్యమేవిధినో చెప్పఁదలఁచె విభుఁడు.

4

ఉ॥ "జీవిత మెప్పుడో జివికి — జీర్ణముకావలె;
దాని కింతగా
నీవిధిఁ గుందనేలనె సఖీ।
క్షణకాలము మందుమాకులన్
వైవక, ప్రేమగాధలనె పలుకుము,
జీవిత మంతనంత వేఁ
బోవు ప్రశాంత సీమలకుఁ,
బుష్పపథమ్ములఁ 'ప్రేమమూర్తి వై'

5

చం॥ మనము ప్రశాంతినిం బొందల మామక
యూవన ప్రేమగాధలే
వనరుహనేత్రి! తెల్పుమిఁక
ప్రాక్కృత కర్మము విస్మరించుచున్
గని విన ఁజాలనట్టి యొక గాథ
తమఃపథమందొ — వెన్నెలల్
తొణికెడి పూల దార్లనో —
యెదో — యెటకో — పడిపోదు—నింతియే.

6

ప్రేయసి। ఇంతకాలమును ప్రేమతో
నుంటిమి నీవు — నేను — ఈ
కాయము చీఁకటిన్ బడ సుఖస్మిత
కాంతులు మాయఁగాఁబడున్;
పోయెను జీవకాంతు లిఁక
ఁబోవగ నీకు త్వదాత్మనన్ను; రాఁ
బోయెఁ కాళరాత్రి ఁగనుమూసిన
నన్ గని కుందఁ బోకుమా!

7

దిశలెల్లన్ బొగమంచు దుప్పటులచే
సంధింపఁగా, సాంధ్యలన్
బశుపక్ష్యాదులు వోవు మార్గములు
విస్పష్టంబుగా లేనటుల్
మసఁల్ గ్రమ్మెను — జీకటుల్ బలసె —
నే మార్గంబున బోవుదున్ —
వశమున్ దప్పె మదీయ దేహమిఁక
నా భారంబు దైవంబెపో !

8

ఏవీ
నీ మృదు పాణి పల్లవము
లేవీ
సాంధ్య రోచిష్మతుల్ :—
గ్రీవాస్థాన మలంకరింపు — చరమాంగీ
కృత్రిపసూనావళుల్
గావాయవ్వి ? ప్రశాంతి రేఖలు —
తమోగర్భచ్ఛిదా దక్షముల్
రావే
కాలము చేరువయ్యె —
ఇటురా !
రమ్మా !
సుధాస్యందినీ !

9

లలిత కిశోరకంఠ తరళధ్వని
మించు విపంచి గొంతుతోఁ
గలఁగి విలాపముల్ సలుపఁగాఁ
దగునమ్మ ? గభీర ధీరతా
నిలయమ వీవు — మృత్యు వరణీయ
పవిత్ర ముహూర్తమిద్ది — క
న్నుల దడి వెట్టుకొన్నచో —
మనో మయూఖాంతి చలించిపోవదే !

10

కలువ పిసాళినీలిమలు కంటికొలంకుల
నిద్రవోయెనే !
మిల మిల లాడు తారలు నిమీలిత
లోచన పక్ష్మలాగ్రమం
దలముకొనంగ, నిశ్చల తమోంచల
రేఖలు దిద్దినావొకో !
పలుకవు — చేరరమ్మనవు —
బాష్పకణమ్ముల నాదు చిత్రమున్
మలచఁగ — దండగుచ్చఁగ —
సమాయకవోటఁ దలంచినావొకో !

11

హృదయ విపంచి తంతుల నిదేలన
గోటను మీటకుండగాఁ
జిద్రపలొనర్చి — పైవిసరి — శీర్ణము
జేసెదు బాష్పధారల ;

గదలఁగజాలఁ — గంఠగత కార్శ్య ము
హెచ్చఁగఁ జొచ్చెఁ — బ్రేయసీ
విడియ శశాంకు నొక్క-తటి వీక్షణ
సేయఁగ మోమునెత్తవే !

12

ఇఁకపయి వెన్నెలల్ బొదల నీయఁగఁ
బూర్ణిమరాదు ; చీఁకటుల్
వికవిక నవ్వుకోఁ — బగళులే నిశలైన
జగత్ శ్మశానమం
దొకఁడ, ననంతమోహ జగదుత్సవ
మూలములైన నీకు పె
ద్దకనులు — రెండు చుక్క-లయి
దానిని జూపఁగఁ, బోదు ప్రేయసీ !

13

అసదృశ తావకీన హృదయాంబర
మంచున బూల వీవనల్
విసరిన యట్లు — తెక్క-లను విచ్చుక
పారఁగనొంతు ; శృంఖలా
పసరిత పత్రవైభవము భావన
సేయఁగ, నీయెడంద నల్
దెసలను మబ్బులే — మెఱపు దివ్వెయుఁ
దోఁపకు త్రోవఁజూపఁగన్."

14

అనుచు ఁబ్రియురాలి దుఃఖాగ్ని నహనయింపఁ
దలచెనేకాని — తనగతిఁ దలపఁడాయె;
మృత్యుతేజఃప్రసారములు రేకు విరిసి
కటికి చీఁకటుల్ వ్యాపించినటులఁ దోచె.

15

"మాయము —
అంధకారము —
అమానుష పుష్టము —
మృత్యు దేవతాధ్యేయ కరావలంబిత మదేతర —
అల్లదె — మధ్య జారెఁ;
మాయ శరీరధారణము మాయునె ?
అయ్యయ్యొ ! లేవనెత్తుమా ...
ప్రేయసి ! లేవనెత్తుమిఁక
ప్రేమ దృగంచల చంచల చ్ఛవి !"

16

అనుచు సఖీవిలోకనము నారయు
చుండెనెకాని, ఆమెచే
తనపరివర్తనమ్ము — పరితాప దృష్టత్వము —
ప్రేమ దార్ఢ్యము —
మనమున ఁబర్వు సంక్షుభిత మార్గములఁ —
గనఁ జాలఁ డయ్యెనో !
కనులలో చంచలత్వము—ముఖంబున
జీవకళల్ నశించెఁబో !

17

పలుకుల ప్రేమ నిస్వనము బాహిర
వెట్టను; విశ్వపీథికా
విలసన రాగదృశ్యముల వీక్షణ
సేయను; ముందువెనుకలన్
జెలఁగెడు భావవైరముల చిక్కు-
సడల్పను; కాని—యేదియో
ప్రళయ మహోల్బణం బెడదఁ
బర్వను నుండుట ద్యోతకమ్మగున్.

18

అటులొక నిముసంబుగడచె—అంతనామె
సలలి తాంగంబు విభుని వక్షమునవ్రాలఁ
బ్రణయ వేదిక బలిజేసె ప్రాణములను;—
అపుడు—విశ్వమే కలతలో నటమటించె.

19

కనులను విప్పి నల్దిశలఁ
గన్గొనె నాతఁడు; ప్రేమనాదమే
వినఁబడె మృత్యు ఘోషముగ;
విశ్వవిపంచి గళమ్ము భిన్నమై
వినిచె లయాంత తాండవిత
భీకర భైరవ సింహనాదమై;
ప్రణయము భగ్నమానెడఁ
బ్రపంచ చరిత్రమె తారుమారదే ?

20

అమలిన శాంతి భాజన తదాననరేఖ,
అశక్త జీవలో
కమునకు మూన బోధ మొసఁగఁగని—
ఆతడు దీర్ఘసుప్తడే
హముపయి వ్రాలె—నంతనయ నాబ్జము
లాగక, పొంగివచ్చుఁ:
ఖము ది గమ్రింగి వైచుటకుఁగా—
ముకుళించెను మృత్యుసంధ్యలో.

21

సడలి పోవని చిరపరిష్వంగమంను
నిదురపోయెను వారిఁ గప్పినది తమము;
రాలి పోయెను రెండు తారకలు మింట;
చేతులెత్తి ఆశీర్వదించినది శాంతి ... ... ॥

ఓం

శాంతి శ్శాంతి శ్శాంతిః

മംഗളാഞ്ജലി

By KUTTAMATH

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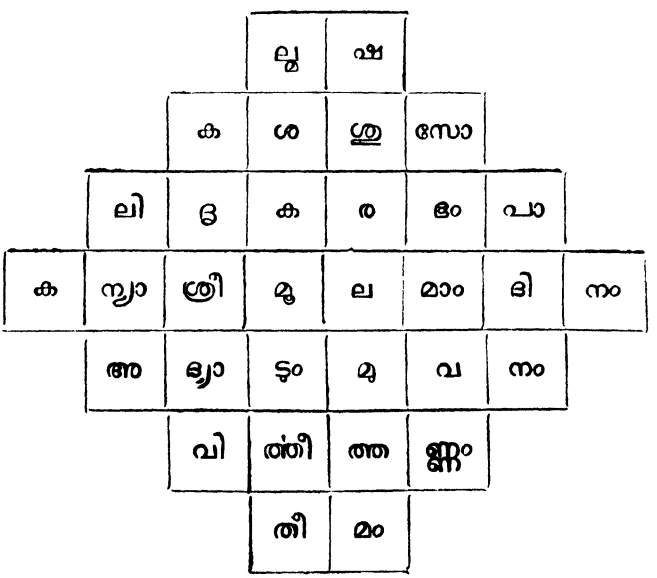
1. "രാജാ സേർ" ബിരുദപ്രകാശനിധിയാ-
മണ്ണാമലച്ചെട്ടിയാർ
പൂജാഹ്നം നിജ ഷഷ്ടിപൂർത്തിമഹമി-
ന്നാരോഹണം ചെയ്കയാൽ,
സാജാത്യ പ്രണയേന തൽകൃതകലാ-
ശാലാധിവാസാൽ, കരാം-
ഭോജാദ്ദിഷ്ടകഥം ഭാഷകഥകൾ പുളകം
ചേരുന്ന തൽ സ്മാരകം.

2. ആയുഃപത്മദളങ്ങളായിര, മവ-
ക്കിഷ്ടഷഷ്ടിപൂർത്യുത്സവം
ശ്രീയുണ്ടാക്കി,വരുന്ന സജ്ജനമീ
മാന്യൻ പ്രവേശിക്കവേ
ഈ യുഴത്തിലുമെത്രയും മഹിതമായ്
മംഗല്യമേകാൻ കൃപാ-
പീയൂഷം പൊഴിയേണമേ സുമധുരം
വാഗ്ദേവിയും ലക്ഷ്മിയും!

രഥബന്ധം

By C. N. A. RAMAYYA SASTRI, M.A., Trivandrum.

കലികല്മഷ സോപാനം
അന്ധാളശ്രുതം ദിനം
വിദ്യാ ശ്രീകരമാംവണ്ണം
തീർത്തിടും മൂലമുത്തമം.



തമിഴരും മലയാളികളും

By P. ANANTAN PILLAI, M.A., Trivandrum.

ഭാഗ്യസിദ്ധമായ ധനവിഭവം ഔചിത്യപൂർവ്വം വിനിയോഗിക്കുന്നതിൽ ബദ്ധശ്രദ്ധനും, അത്യുദാരനും, വദാന്യനും ആയ രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരുടെ ഷഷ്ട്യബ്ദപൂർത്തിപ്രമാണിച്ചു പ്രസിദ്ധപ്പെട്ടുത്തുന്ന ഈ "സുവർണ്ണോപഹാര"ത്തിൽ തൽഭാരവാഹികളുടെ അപേക്ഷപ്രകാരം ഈ ലേഖനമെഴുതുന്നതിന് എനിക്ക് അനല്പമായ സന്തോഷമുണ്ട്. ഒരു സ്വതന്ത്രസർവ്വകലാശാല സ്ഥാപിക്കുകയും അവിടെ തന്റെ ഭാഷാഭിമാനസ്തംഭമായി പരിലസിക്കുന്ന നാട്ടുഭാഷയിലെ ഉപരിപഠനപദ്ധതിയ്ക്ക് അത്യുൽകൃഷ്ടമായ സ്ഥാനം കല്പിക്കുകയും ചെയ്ത ആ വിശിഷ്ടമനോഗതി എത്രതന്നെ പുകഴ്ത്തിയാലും മതിയാകുന്നതല്ല. ആകയാൽ ഈ 'സുവർണ്ണോപഹാരം' ദ്വേധാ അത്ഭുതത്തായ ഒരു സ്മാരകമായി വർത്തിക്കുമെന്നുള്ളതിനു സംശയമില്ല.

തമിഴരും മലനാട്ടുകാരായ കേരളീയരും ക്രിസ്താബ്ദത്തിന്റെ ആരംഭകാലത്തു് വളരെ അടുത്ത പരുമാറിയിരുന്നവരാണു്. അകൽച്ചയുണ്ടായതു് ഇവർ മലയാളികളായിത്തീർന്നതിനുശേഷമാണെന്ന വിചാരിക്കേണ്ടിയിരിക്കുന്നു. കൂടുതൽ സൂക്ഷ്മമായി പരിശോധിക്കയാണെങ്കിൽ കൊല്ലവർഷാരംഭത്തിനുശേഷമേ 'മലയാളം' എന്നും 'മലയാളികം' എന്നും വ്യവഹരിക്കുവാൻ ഇടയായിട്ടുള്ളു എന്നാണു് എന്റെ അഭിപ്രായം. അതിനുമുമ്പു കേരളീയരെ മലയാളികം എന്നു പരാമർശിക്കുന്നതായ യാതൊരു രേഖയും കിട്ടീട്ടില്ല.

ചരിത്രാന്വേഷണംകൊണ്ടു് ഇതുവരെ ശരിയായ തെളിവു കാണ്മാൻ സാധിക്കാത്ത ആ അന്ധകാരമയമായ കാലത്തു്,—അതായതു് രാമായണകാലം എന്നു പൊതുവാണിക്കർ കണക്കാക്കീട്ടുള്ള കാലത്തിനുശേഷം, ഏതാണ്ടു ശതാബ്ദങ്ങൾക്കിടയ്ക്ക്—തമിഴകത്തെ മൂവരശുവാഴ്ച ഒരുവിധം ചരിത്രപ്രാധാന്യം അർഹിക്കുന്നതാണല്ലോ.

അന്നത്തെ 'ചേര'വും 'ചേരന്മാ'രും അധികകാലത്താമസം ക്രടാതെ 'കേരള'വും 'കേരളീയ'രും ആയിത്തീർന്നു. അതിനുത്തരവാദികൾ ആരുന്മാരാണെന്നുള്ളതിൽ പക്ഷാന്തരമില്ല. ഈ ചേരന്മാരുടെ ഭാഷ, മതം, സമുദായസ്ഥിതി, ഭരണപരിഷ്കാരം മുതലായവ ഏറിയക്രുറും തമിഴരെപ്പോലെതന്നെ ആയിരുന്നു എന്നു് അഭ്യൂഹിക്കാവുന്നതാണു്. പൈതൃകാരാധനത്തിനു പുറമെ ശൈവമതത്തിന്റെ ആദിരൂപവും അന്നു തമിഴകത്തു നടപ്പായിരുന്നു. ചേരന്മാർ ആദികാലത്തുതന്നെ നാഗാരാധനക്കാരായിരുന്നൊ എന്നു തീച്ചപറവാൻ നിവൃത്തിയില്ല. എന്തായാലും അന്നോ അതിനടുത്തകാലത്തോ നാഗാരാധന പ്രബലമായി അംഗീകരിച്ചിരുന്ന ഒരു മനുഷ്യവർഗ്ഗത്തെ നാമിവിടെ കാണുന്നുണ്ടെന്നു പറഞ്ഞൊതീരു.

ക്രിസ്തുവിനുമുമ്പുള്ള ആദിശതകങ്ങളിൽ കേരളത്തിലെ പർവ്വതപാർശ്വങ്ങളിൽ വേട്ടയാടി വസിച്ചിരുന്ന 'കുറവർ' എന്നു തമിഴപണ്ഡിതന്മാരും 'നാഗന്മാർ' എന്നു കേരളീയചരിത്രകാരന്മാരും അഭിപ്രായപ്പെടുന്നു അന്നത്തെ കേരളീയർ ആരുതന്നെ ആയിരുന്നാലും അവരെ അക്കാലത്തു് വടക്കുനിന്നു വന്ന ആര്യന്മാർ അഭിമുഖീകരിച്ചു എന്നുള്ളതിനു സംശയമില്ല. പ്രസ്തുത കേരളീയർ തമിഴിന്റെ പൂർവ്വരൂപത്തോടു് ഏതാണ്ടു സാമ്യമുള്ള ഒരു ഭാഷ സംസാരിച്ചിരുന്നു എന്നല്ലാതെ പാണ്ടിനാട്ടിൽ നടപ്പായിരുന്ന തമിഴായിരുന്നു അവരുടെ വ്യവഹാരഭാഷ എന്നു പറയാവുന്നതല്ല. ഈ സംഗതി സൂക്ഷ്മമായി പരിശോധിച്ചാൽ ദക്ഷിണ ഇൻഡ്യയിലെ ആദിമനിവാസികൾ ആശയവിനിമയംചെയ്ത ഒരു അപരിഷ്കൃതഭാഷയെങ്കിലും ഉണ്ടായിരുന്നു എന്നു സ്ഥാപിച്ചേ കഴിയൂ. ഇതിനു് 'മൂലദ്രാവിഡഭാഷ' എന്നു പല പണ്ഡിതന്മാരും നാമകരണം ചെയ്തിരിക്കുന്നതു കുറേക്കൂടി നിഷ്കൃഷ്ടമായ തെളിവു സിദ്ധിക്കുന്നതുവരെ സ്വീകരിക്കേണ്ടിയിരിക്കുന്നു. ആ ഭാഷയുടെ പൂർവ്വരൂപം ഇപ്പോൾ വല്ല മലയിലോ കാട്ടിലോ വല്ല മനുഷ്യവർഗ്ഗങ്ങളും സംസാരിക്കുന്നതായി കണ്ടുപിടിക്കുന്നു പക്ഷം കേരളചരിത്രത്തിലെന്നല്ല ദക്ഷിണേന്ത്യാചരിത്രത്തിലും അതൊരു അമൂല്യനിധിയായി കരുതാവുന്നതാണു്.

മൂവരശുനാട്ടുകാരും ചേര, പാണ്ഡ്യ, ചോളങ്ങളായിരുന്നു എന്നതിൽ പക്ഷാന്തരമില്ല. ചേരം തന്നെയാണ് കേരളമെന്നു പറഞ്ഞുവല്ലോ. തമിഴർക്ക് അന്നു മലയാളരാജ്യത്തേയ്ക്കു കടക്കുവാൻ രണ്ടു മൂന്നു മാർഗ്ഗങ്ങളേ ഉണ്ടായിരുന്നുള്ളൂ. വേഗവതീനദീതീരത്തുകൂടി പടിഞ്ഞാട്ടു സഞ്ചരിച്ചു് പഴനിമലയിലോ, കുറേക്കൂടി തെക്കോട്ടു നിങ്ങി സഹ്യപർവ്വതപങ്ക്തികളിലെ ഇടുക്കുകളിൽ കൂടിയോ വളരെ തെക്കു മാറി ആരുവാമൊഴിമാർഗ്ഗമായോ അവക്കിവിടെ വന്നുചേരാമായിരുന്നു. പഴനിപ്രദേശത്തുകൂടി കേരളത്തിലേയ്ക്കു കടന്നു എന്നു പറഞ്ഞാൽ ഈ രാജ്യത്തിന്റെ വിസ്തൃതിയെപ്പറ്റി അപ്പോഴപ്പോൾ ഭിന്നാഭിപ്രായങ്ങളുണ്ടായിരുന്ന സ്ഥിതിയ്ക്ക് ഏകദേശത്തിൽ നമുക്കു ഗ്രഹിക്കുവാൻ വിഷമമാണു്. എന്നാൽ മേല്പ് മലനാട് അഥവാ "കൊങ്ങു്" എന്നുപേരായ പ്രദേശം അന്നു ചേരരാജ്യത്തുൾപ്പെട്ടിരുന്നു എന്നു കഥ വിസ്മരിച്ചാണു് ചിലർ കേരളചരിത്രതത്വങ്ങൾ വെളിപ്പെടുത്തീട്ടുള്ളതു്. സേലം, കോയമ്പത്തൂർ എന്നു ഇപ്പോഴത്തെ രണ്ടു ജില്ലകളും ചേന്ന ഭൂഭാഗമായിരുന്നു "കൊങ്ങു്". കൊങ്ങൻ, കൊങ്ങർകോൻ എന്നൊക്കെ ചേരരാജാക്കന്മാർക്കു സ്ഥാനമുണ്ടായിരുന്നതു് വെറുതെ ആകയില്ലല്ലോ. കേരളീയചരിത്രകാരന്മാർ 'കൊങ്ങു്' തീരെ അവഗണിച്ചതുപോലെ തമിഴചരിത്രകാരന്മാർ കൊങ്ങിനു് ചേരസാമ്രാജ്യത്തിൽ ഒരു പ്രധാന സ്ഥാനം നൽകുകയും ചെയ്തു.

മലയാളികളുടെ ആദിചരിത്രം മനസ്സിലാക്കുന്നതിനു തമിഴ സാഹിത്യത്തെയാണു് അവലംബിക്കേണ്ടിവന്നിരിക്കുന്നതു് എന്നു ചിലർ വിലപിക്കുന്നതായി കണ്ടിട്ടുണ്ടു്. നമ്മുടെ ഭാഷയ്ക്കു് അന്നു മലയാളം എന്ന പേരില്ലായിരുന്നു എന്നു പറഞ്ഞുവല്ലോ. അതിനെ 'കൊടുന്തമിഴ്' എന്നു തമിഴ വൈയ്യാകരണന്മാർ വ്യവഹരിച്ചു കാണുന്നതു് തമിഴിന്റെ അപഭ്രംശങ്ങൾ ധാരാളം അതിൽ കലന്നിരുന്നതു നിമിത്തം ആയിരിക്കാം. ഈ വാദത്തിൽ ഇപ്പോൾ പ്രവേശിക്കണം എന്നു വിചാരിക്കുന്നില്ല. കൊടുന്തമിഴിൽ കൃതികൾ കാണുന്നില്ലെന്നു കേരളപാണിനിപോലും സമ്മതിച്ചിട്ടുണ്ടു്. ഏഴെട്ടു ശതാബ്ദങ്ങളിലായി ഒരു ഭാഷയ്ക്കു് ചുരുങ്ങിയതോതിലെങ്കിലും ഒരു സാഹിത്യമുണ്ടാ

യില്ലെന്നു പറയുന്നതു യുക്തിക്കു ചേരുന്നതല്ല. എന്തെന്നാൽ പരിഷ്കാരസാരഭൂതമായ സാഹചര്യവും പരിതസ്ഥിതിയും ഉണ്ടായിരുന്ന സ്ഥിതിയ്ക്കു് ഒരു ജനസമൂഹത്തിന്റെ വ്യവഹാരഭാഷ, അതിൽനിന്നെല്ലാം ഒഴിഞ്ഞു മാറിനിന്നിരിക്കുവാൻ തരമില്ല. നമ്മുടെ മലയാളസാഹിത്യം പരിശോധിക്കുമ്പോൾ അതിന്റെ ചില ഘട്ടങ്ങളിൽ കണ്ടെത്തുന്ന നാടോടിപ്പാട്ടുകൾ നാം സ്വീകരിക്കുകയോ ഉപേക്ഷിക്കുകയോ വേണ്ടതു്? ഇംഗ്ലീഷുസാഹിത്യത്തിന്റെ വൈപുല്യത്തിനു് ഹേതുഭൂതമായിക്കാണുന്നതു് ഇത്തരത്തിലുള്ള നാടൻ കവിതയല്ലേ? അതുകയാൽ കൊടുന്തമിഴിലുണ്ടായ കൃതികൾ മലയാളികളുടെ ദൃഷ്ടിഗോചരമായിത്തീർന്നിട്ടില്ലെന്നുള്ള ഏകകാരണത്താൽ അവയുടെ അഭാവം തെളിയിക്കാവുന്നതല്ല. ഈ വഴിയ്ക്കാലോചിച്ചാൽ അന്നത്തെ കൊടുന്തമിഴ് സാഹിത്യരൂപംപ്രാപിച്ചതിന്റെ ഒരു മകുടോദാഹരണമായി "രാമചരിതം" ഉദാഹരിക്കാവുന്നതാണു്. തമിഴോ മലയാളമോ എന്നൊരു 'വടം പിടുത്തം' ഈകൃതിയെ സംബന്ധിച്ചിടത്തോളം ഇന്നും ഊർജ്ജിതമായി നിൽക്കുന്നതു് ഈ സമാധാനംകൊണ്ടു പരിഹരിക്കാവുന്നതും ആണു്. ഈ പ്രസംഗം ഇവിടെ നിൽക്കട്ടെ.

മലയാളികളുടെ പൂർവ്വന്മാരായ കേരളീയർ ഏറിയ ക്രൂരം കേരളത്തിൽ തന്നെയാണു് വസിച്ചിരുന്നതു്. കൊങ്ങുനാട്ടിലെ ചേരന്മാർ തമിഴർതന്നെയായിരുന്നോ എന്നു സംശയിക്കാൻ വഴിയുണ്ടു്. എന്തായാലും അവർക്കു കേരളത്തിലെപ്പോലെ ആയ്വന്മാരുമായി ക്രൂടിക്കഴിയുവാൻ ഇടയായിട്ടുണ്ടോ എന്നു തിട്ടപ്പറയുവാൻ പാടില്ല. കൊങ്ങുരാജ്യത്തിന്റെ തലസ്ഥാനമായിരുന്ന 'വഞ്ചിക്കരുവൂർ'. അവിടെ ഇരുന്നുകൊണ്ടു് ആ രാജ്യംമാത്രം ഭരിച്ച രാജാക്കന്മാരെ കേരളചക്രവർത്തികൾ എന്നു പറയാമോ എന്നു സംശയിക്കേണ്ടതുണ്ടു്. പെരുഞ്ചോറുദയൻ തുടങ്ങിയ രാജാക്കന്മാർ എല്ലാവരും കേരളത്തിന്റെ മദ്ധ്യഭാഗത്തായി കടൽത്തീരത്തു സ്ഥിതിചെയ്യുന്ന തിരുവഞ്ചിക്കുളത്തുവാണിരുന്നു എന്നും പറയാവുന്നതല്ല. ചേരമാൻകോട്ട, ചേരമാൻകോവിൽ, ചേരനല്ലൂർ ഇങ്ങനെ അനവധി സ്ഥലനാമങ്ങളും, സ്ഥാപനനാമങ്ങളും കേരളത്തിൽ കാണുന്നതിനു് ഉപപത്തി കണ്ടുപിടിക്കേണ്ടി

യിരിക്കുന്നു എങ്കിലും, പ്രാചീന ചേരരാജധാനി എല്ലായ്പ്പോഴും തിരുവഞ്ചിക്കുളംതന്നെ ആയിരുന്നു എന്നു സ്ഥാപിക്കുവാൻ വളരെ ആലോചിച്ചിട്ടുവേണം. ദേശാഭിമാനത്താൽ മതിമറന്നു പോകുമ്പോൾ ചരിത്രവസ്തുതകളെ ധിക്കരിക്കുന്നതു കഷ്ടമാണല്ലോ. ആകയാൽ ക്രിസ്താബ്ദാരംഭത്തിൽ ഉണ്ടായതായി തമിഴപണ്ഡിതന്മാർ മിക്കവാറും തീച്ചപ്പെടുത്തിക്കഴിഞ്ഞിട്ടുള്ള 'സംഘം കൃതിക'ളിൽക്കൂടി പ്രതിഫലിച്ചുകാണുന്ന ജനങ്ങൾ ഇപ്പോഴത്തെ മലയാളികളുടെ പൂർവ്വപിതാമഹന്മാർ തന്നെ ആയിരുന്നുവോ എന്നു ഖണ്ഡിച്ചു പറയാവുന്നതല്ല. അങ്ങനെ വരുമ്പോൾ പ്രസിദ്ധ ചെന്തമിഴമഹാകാവ്യമായ "ചിലപ്പതികാര"ത്തിനും കേരളീയകൃതിയെന്നുള്ള അഭിപ്രായത്തിന് അവകാശമില്ലാതെ വന്നേക്കാം.

ഇപ്പോൾ നാം മലയാളികൾ എന്നു സാധാരണയായി കേരളത്തിൽ അധിവസിക്കുന്നവരെ അടക്കിപ്പറയാറുണ്ട്. ആദികേരളീയരിൽ ഭൂരിഭാഗവും ജാതിമതഭേദമില്ലാത്ത ഒരുവക ജനങ്ങളായിരുന്നു എന്നാണ് അന്വേഷണത്തിൽ അറിയുന്നതു്. അവർ ആര്യന്മാരുമായി സമീപിച്ച കാലം മുതൽ വൈദികദേവന്മാരേയും ദേവിമാരേയും ആരാധിക്കുവാൻ തുടങ്ങിയതായിക്കാണുന്നു. ഈ ആരാധനക്രമങ്ങൾ തമിഴകത്തു് ആദ്യമായി പ്രാബല്യത്തിൽ വന്നുകാണുന്നതു് കേരളത്തിലാകുന്നു. തമിഴരുമായി അകലുവാനുള്ള ഒരു പ്രധാനകാരണംതന്നെ പില്ക്കാലത്തു് ഇടവിടാതെ സംഭവിച്ചുകാണുന്ന ആര്യസംസർഗ്ഗംതന്നെ ആണെന്നു പറയേണ്ടിയിരിക്കുന്നു. ആര്യന്മാർ ചേരനാട്ടിലേയ്ക്കു വന്നതു് കിഴക്കൻ വഴിയായാലും ശരി പടിഞ്ഞാറൻ വഴിയായാലും ശരി, കേരളത്തിൽ പ്രവേശിച്ചതിനുശേഷം മറ്റു പ്രദേശങ്ങളേക്കാൾ അധികമായ താൽപ്പര്യം അതിനോടു കാണിച്ചു എന്നുള്ളതിനു തർക്കമില്ല. ആര്യസമ്പർക്കത്താൽ പൊടുന്നനെ തമിഴർ മലയാളികളിൽനിന്നും അകന്നുപോയി എന്നു പറയുന്നതു് അബദ്ധമാണെങ്കിലും, കാലക്രമത്തിൽ അങ്ങനെ സംഭവിച്ചു എന്നു തീച്ചപ്പെടുത്താവുന്നതാണ്. എന്നാൽ, 'തമിഴസംഘം' കൃതികളെ ആസ്പദമാക്കി തമിഴരും മലയാളികളും ഒരേ വർഗ്ഗക്കാർതന്നെ ആയിരുന്നു എന്നും ഒരേ ഭാഷതന്നെയാണ് അവർ

സംസാരിച്ചുവന്നതെന്നും മറവും വിധി കല്പിക്കുവാൻ ഒരു ന്യായവും കാണുന്നില്ല. തമിഴ കവികൾ കേരളത്തെപ്പറ്റി അനവധി പരാമർശങ്ങൾ ചെയ്യുന്നുണ്ടെന്നു സമ്മതിച്ചേതീരു. എന്നാൽ കേരളത്തെപ്പറ്റി അറിവുണ്ടായിരുന്നതിനേക്കാൾ അധികം അജ്ഞതയാണ് അവർ വെളിപ്പെടുത്തീട്ടുള്ളതു്. അതിനവരെ കുറ്റം പറയുവാനുമില്ല. അവരിൽ ഭ്രരിപക്ഷവും കേരളത്തേയും അവിടത്തെ നാടുവാഴികളേയും പുകഴ്ത്തുന്നതു്,

"ദീപസ്തംഭം മഹാശ്ചര്യം
നമ്മൾക്കും കിട്ടണം പണം"

എന്ന രീതിയിലാണ്. സ്തുതിയുടെ വിധേയരായ ചേരന്മാർ അവർക്കു കല്പവൃക്ഷതുല്യന്മാരായിരുന്നു എന്നു് പാട്ടുകൾ വിശദമാക്കുന്നു. നാല്പതുന്നൂറായിരംപൊന്നു്, രാജഭോഗാംശം, ഒരു കുന്നിന്മേൽ കേറിനിന്നു നോക്കിയാൽ കണ്ണെത്തുന്നിടത്തോളം ഭ്രമി—എന്തിനധികം—സ്വന്തം പുത്രനെപ്പോലും യശഃപ്രാർത്ഥികളായ ഈ രാജാക്കന്മാർ സ്തുതിപാഠപട്ടക്കളായ കവികൾക്കു നൽകിട്ടുള്ളതായി പതിറ്റുപ്പത്തു്, പുറനാനൂറു് മുതലായ സംഘകൃതികളിൽ കാണാവുന്നതാണ്. ഈ പാട്ടുകൾ സാമാന്യമായി ചെന്തമിഴിൽ രചിതങ്ങളായിരുന്നു സ്ഥിതിയ്ക്കു് അവയുടെ അന്തരാർത്ഥം വഴിപോലെ ഗ്രഹിക്കുവാൻപോലും മലനാട്ടുകാർക്കു കഴിഞ്ഞിരുന്നോ എന്നു സംശയമാണ്. പാട്ടുകൾ പാടിയവർ സമ്മാനവുംകൊണ്ടു പോയാൽപിന്നെ അവരെയും അവരുടെ കൃതികളേയും കാണുവാൻ പ്രയാസമായിരുന്നു. ചുരുക്കം ചിലർ കേരളത്തിൽത്തന്നെ സ്ഥിരവാസം ഉറപ്പിച്ചിരിക്കാം. എങ്കിലും മലയാളികളുമായി സൈരം സഹവസിച്ചിരുന്നോ എന്നു സംശയമാണ്.

ഈ പാട്ടുകാർ വിമർശിച്ചിട്ടുള്ള തമിഴപണ്ഡിതന്മാർ പറയുന്നതു ശരിയാണെങ്കിൽ അക്കാലത്തെ മലയാളികളും തമിഴരുമായിയാതൊരുകാര്യത്തിലും വലിയ അന്തരമുണ്ടായിരുന്നിരിക്കാൻ തരമില്ല. 'ചിലപ്പതികാരം'പോലെയുള്ള തമിഴ മഹാകാവ്യങ്ങൾ അവർ വായിച്ചുരസിക്കുവാൻ പ്രാപ്തിയുണ്ടായിരുന്നു. ചേരലാതൻ, കെഴക്കുട്ടുവൻ, ചെങ്കുട്ടുവൻ, അന്ധുവൻ, പെരുഞ്ചേരൻ, മാകോതൻ മുതലായ പേരുകൾ

രാജാക്കന്മാർക്ക് സർവസാധാരണമായിരുന്നു. രാജകീയചിഹ്നമായ വൃക്ഷം വെട്ടിമുറിക്കുക, കൊറവ എന്ന യുദ്ധദേവതയെ ആരാധിക്കുക എന്നിങ്ങനെയുള്ള അനവധി സമരതന്ത്രങ്ങൾ അന്ന പ്രയോഗത്തിലിരുന്നുവത്രെ! കവികളുടെ പേരുകൾ എന്നുവേണ്ട അവരുടെ കൃതികളും ചെന്തമിഴ്തന്നെ! സംഗീതവും താളമേളങ്ങളും തമിഴ്പ്രദേശങ്ങളെ അനുകരിക്കുന്നവയാണ്. ആകപ്പാടെ ഇതൊരു ചെന്തമിഴ്രാജ്യമായിരുന്ന എന്നു തോന്നും.

ഇവക്ക് പ്രമാദംപറഞ്ഞിപ്പോയി എന്നു പറയാവുന്നതാണൊ? പാട്ടുകളിൽ വർണ്ണനയ്ക്കു വിഷയങ്ങളായിത്തീർന്നിരിക്കുന്ന സംഭവങ്ങളും, പ്രസ്ഥാനങ്ങളും, ജനങ്ങളും എല്ലാം കേരളത്തിൽത്തന്നെ ഉണ്ടായിരുന്നുവോ? അഭൂതാ അതെല്ലാം സങ്കല്പമാത്രമാണോ? കൊങ്ങരാജ്യത്തിന്റെ തലസ്ഥാനമായിരുന്ന വഞ്ചിക്കരുവൂരാണ് വർണ്യസ്ഥലമെങ്കിൽ ഇതൊക്കെ ഒരുവിധം ശരിപ്പെട്ടുത്താമായിരുന്നു. എന്നാൽ അതിനു നമ്മുടെ കേരളീയപണ്ഡിതന്മാർ സമ്മതിക്കുന്നതുമല്ല. ഈ ധർമ്മസങ്കടത്തിലെന്താണ് ചെയ്യുക? കേരളത്തിൽ കേട്ടുകേൾവിപോലുമില്ലാത്ത കാര്യങ്ങൾ ഇവിടെ നടന്നതായി അംഗീകരിക്കുന്നതെങ്ങനെ? അങ്ങനെ കേട്ടുകേൾവിയെങ്കിലുമുള്ള പലതും നാം സ്വീകരിച്ചിട്ടുണ്ടെന്നതിലേയ്ക്ക് 'ചേരമാൻ പെരുമാ'ളും 'ശ്രീശങ്കരാചാര്യ'രും നല്ല തെളിവുകളായിരിക്കുന്നു. കിംവദന്തികൾ ശരിയാണോ എന്നന്വേഷിക്കേതോറും നമ്മുടെ വിശ്വാസ്യതയ്ക്കു ബലം ക്ഷീണിവരുന്നു എന്നു പറഞ്ഞേതീരൂ. എന്നാൽ സംഘടനകൾ മുമ്പിൽവച്ചുകൊണ്ട് നാം നടത്തുന്ന അന്വേഷണം വിപരീതഫലമാണു നൽകുന്നതു്. ഉദാഹരണത്തിന് 'ചെം കുട്ടുവൻ' എന്ന ചേരരാജാവിന്റെ കാര്യം നോക്കാം. അദ്ദേഹം പേരുകൊണ്ടും മറ്റും സാമാന്യം ഭേദമാണ്. എങ്കിലും കേൾവി എപ്രകാരമിരിക്കുന്നു എന്നു നോക്കുക. കേരളീയർ അദ്ദേഹത്തെ ഒരു 'പെരുമാൾ' ആയിട്ടാണ് അല്പമെങ്കിലും ധരിച്ചുവച്ചിട്ടുള്ളതു്. 'ചെങ്കുറപ്പെരുമാൾ' എന്നും 'ചെങ്കുന്നൂർ' എന്നും ഒരു ചരിത്രപണ്ഡിതയിൽ കാണുന്നു. ഇതെല്ലാം കൊങ്ങരാജ്യത്തു നടന്ന കഥ ഐതിഹ്യമായി പരിണമിച്ചതല്ലയോ എന്നു സംശയിക്കുന്നു.

കുറച്ചൊക്കെ കേരളപരമായും ശരിയാണു്. എന്തെന്നാൽ ഈ ലേഖനത്തിൽ അന്യത്ര സൂചിപ്പിച്ചതുപോലെ കൊങ്ങായിരുന്ന അന്നു കേരളത്തിന്റെ പ്രധാനവിഭാഗം. അവിടെ ഇരുന്നുകൊണ്ടു് ചെങ്കുട്ടുവൻ കേരളം ഭരിച്ചതായി വിചാരിക്കുവാൻ പല ന്യായങ്ങളുമുണ്ടു്. തിരുവഞ്ചിക്കുളമായിരുന്ന ചേരന്മാരുടെ പഴയ രാജധാനി എന്നു പലരും തെറ്റായി ധരിച്ച കൂട്ടത്തിൽ ഒരു കാലത്തു ഞാനും ഉൾപ്പെട്ടിരുന്നു. എന്നാൽ തിരുപ്പതിയിൽ നടന്ന പൌരസ്ത്യസമ്മേളനത്തിൽ മഹാവിദ്വാൻ ആർ. രാഘവയ്യങ്കാരുടെ പ്രസംഗം കേട്ടതിനുശേഷം നടത്തിയ ഗവേഷണമെല്ലാം വഞ്ചിക്കരുവൂരിനു് അനുകൂലമായിരുന്നു എന്നു പറഞ്ഞുകൊള്ളട്ടെ. സ്വദേശഭക്തി പരസ്വാപഹരണത്തിൽ കലാശിക്കരുതല്ലോ. നമ്മുടേതു നമുക്കിരിക്കട്ടെ. തിരുവഞ്ചിക്കുളം പിൽക്കാലത്തു പ്രധാന രാജധാനിയായിത്തീർന്നു എന്നതിനു തർക്കമില്ല. ചേരമാൻ കോട്ടയും മറ്റും ഉദ്ധരണഗതിയിലിരിക്കുന്നതു് അഭിമാനഹേതുകം തന്നെ! ചെങ്കുട്ടുവൻ ഭരിച്ചതും 'ഇളംകോ അടികൾ' ചിലപ്പതികാരരചനകൊണ്ടു ധന്യധന്യമാക്കിത്തീർത്തതും വഞ്ചിക്കരുവൂർ തന്നെയാണു്. പിന്നീടു തലസ്ഥാനം മാറിയതോടുകൂടി പഴയരാജധാനിയിലെ പല സ്ഥാപനങ്ങളും സങ്കല്പമാത്രമായിട്ടെങ്കിലും മാറ്റി പ്രതിഷ്ഠിക്കുവാൻ ഇടയായി. കൊടുങ്ങല്ലൂർ ശിവക്ഷേത്രവും അതിലെ 'പത്തിനി'പ്രതിഷ്ഠയും മറ്റും ഈ വഴിപിടിച്ചാലോചിച്ചാൽ സുഗമമായിത്തീരും.

ചെംകുട്ടുവൻ പെരിയാറിൻ തീരത്തുള്ള വിശാലമായ മണൽപ്പുറത്തു പാളയമടിച്ചു എന്നു ചിലപ്പതികാരത്തിൽ പറഞ്ഞിരിക്കുന്നതു് കേരളത്തിലെ പെരിയാറാകാൻ ഇടയുണ്ടു്. എന്നാൽ തമിഴപണ്ഡിതന്മാർ അതു സമ്മതിക്കുന്നതല്ല. അതു വടക്കുള്ള ഒരു ചെറിയ നദി വലുതാക്കി വർണ്ണിച്ചിരിക്കയാണെന്നാണു് അവരുടെ വ്യാഖ്യാനം. ചെംകുട്ടുവൻ വഞ്ചിക്കരുവൂരുനിന്നും സ്വന്തരാജ്യത്തിലുൾപ്പെട്ട പെരിയാറിൻ തീരത്തു് പ്രകൃതിശോഭ സംവീക്ഷിക്കുവാൻ മഹാരാജ്ഞിയുമൊരുമിച്ചു ചെന്നെത്തി എന്നു പറയുന്നതിൽ എന്താണു് യുക്തിഭംഗമുള്ളതു് എന്നറിയുന്നില്ല. ഇളംകോ അടികളുടെ വർണ്ണനത്തിലും മനോധർമ്മനിർമ്മിതങ്ങളായ അവസ്ഥാവിശേഷങ്ങൾ വരാൻ മേലെന്നില്ലല്ലോ.

പെരിയാറ് അന്നും ഇന്നും കടലിലേയ്ക്ക് പ്രവഹിച്ചുകൊണ്ടിരിക്കുന്നു. പതനസ്ഥലത്തുള്ള കൊട്ടങ്ങല്ലൂരും തിരുവഞ്ചിക്കുളവും അന്നുണ്ടായിരിക്കണം. പ്ലിനി, ടാളമി മുതലായ കപ്പൽ സഞ്ചാരികൾ അതിനു വേണ്ട തെളിവു നൽകുന്നുണ്ട്. എന്നാൽ ചിലപ്പതികാരത്തിൽ വർണ്ണിച്ചിരിക്കുന്നതുപോലെയുള്ള ഉദ്യാനങ്ങളും, വിശിഷ്യ സ്നാനഘട്ടങ്ങളും മറ്റും അവിടെ അന്നുണ്ടായിരുന്നോ എന്നു സംശയിക്കേണ്ടിയിരിക്കുന്നു. ഉപ്പുവെള്ളത്തിൽ ജലക്രീഡയ്ക്ക് എത്രമാത്രം പ്രസക്തിയുണ്ടെന്നു വായനക്കാർ ചിന്തിക്കട്ടെ. നദിയിലെ കടവുകൾ (സ്നാനഘട്ടങ്ങൾ) പ്രത്യേകം വർണ്ണിച്ചിരിക്കുന്ന സ്ഥിതിയ്ക്ക് വിഷയം മാറ്റി മനസ്സിലാക്കേണ്ട ആവശ്യമില്ലല്ലോ. തുമ്പമാലയുടെ കാര്യം പോകട്ടെ. മിക്ക യുദ്ധവീരന്മാരും അണിഞ്ഞിരുന്ന 'വഞ്ചിമാല' ഉണ്ടാക്കുവാൻ തിരുവഞ്ചിക്കുളത്തു സാധിക്കുമോ? ആറുവഞ്ചിയോ, അശോകമോ, വള്ളിച്ചൂരലോ (വഞ്ചുളം) എന്താണ് ഈ വഞ്ചി എന്നു വിശദമാക്കുന്നില്ല. അശോകമാണെങ്കിൽ തിരുവഞ്ചിക്കുളത്തു ധാരാളം കാണാവുന്നതാണ്. 'തിരുവഞ്ചിക്കുളം' എന്ന പേരുകൊണ്ട് ഓരോ വിമർശകന്മാർ കാണിച്ചിട്ടുള്ള ഇന്ദ്രജാലപാടവം ഞാനിവിടെ വിസ്തരിക്കുന്നില്ല. ആകെക്കൂടി നോക്കിയാൽ ക്രിസ്താബ്ദം രണ്ടാംനൂറ്റാണ്ടിൽ തിരുവഞ്ചിക്കുളം ഒരു രാജധാനി ആയിരുന്നുവോ എന്നിനിയും തീർച്ചപറയാറായിട്ടില്ല.

ദാശകന്യകമാരുടെ ആട്ടവും പാട്ടും ഉണ്ടായതുപോലെതന്നെ വേടകന്യകമാരുടെ ആട്ടവും പാട്ടും ചെംകുട്ടുവന്റെ രാജ്യത്തു കേൾക്കാമായിരുന്നു എന്നു കവി വർണ്ണിച്ചിട്ടുള്ളതു് അദ്ദേഹം (രാജാവു്) കടലിന്റേയും പർവതത്തിന്റേയും അധിപനായിരുന്നു എന്നു കാണിക്കുവാൻ മാത്രമാണ്. അതായതു് പർവതപ്രദേശങ്ങൾ മുതൽ കടൽത്തീരംവരെ ജനങ്ങൾ ആ ശുഭാവസരത്തിൽ (ചെംകുട്ടുവന്റെ ജൈത്രയാത്രാവസാനത്തിൽ) ആഹ്ലാദഭരിതരായി വർത്തിച്ചു എന്നോ അതിനു താത്പര്യമുള്ളൂ. ദാശകന്യകമാരുടെ പ്രസ്താവം ഉള്ളതുകൊണ്ടു രാജധാനി കടൽക്കരെ ആയിരുന്നു എന്നുഹിക്കാവുന്നതല്ല.

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ആയ്വ്സംസ്കാരം കേരളത്തിൽ പ്രചരിച്ചു് നാട്ടുകാർ മലയാളികളായിത്തീരുന്നതിനുമുമ്പുള്ള ഒരു കാലഘട്ടത്തിലെ സ്ഥിതിഗതികൾ യഥാർത്ഥം ഗ്രഹിക്കുവാൻ സംഘം കൃതികൾ നമ്മെ സഹായിക്കുന്നില്ലെന്നതു് ഇതുകൊണ്ടു വന്നുകൂടുന്നതു്. നമ്പൂരിമാരെപ്പറ്റി ഒരക്ഷരം പോലും ഈ കൃതികളിൽ കാണുന്നില്ല. ആയ്വ്സംസ്കാരസൂചകങ്ങളായ സംഗതികൾ അവിടവിടെ കാണാനുണ്ടെങ്കിലും കേരളത്തിൽ അവ അതുപയോഗിച്ചുള്ളതല്ലോ എന്നു നാം അങ്ങീകരിപ്പാൻ തേടിയിരിക്കുന്നു. ഇതിൽ നിന്നും മനസ്സിലാക്കേണ്ടതു്, കേരളമല്ല, അതിനു പുറമേ സ്ഥിതിചെയ്തിരുന്ന ഒരു മലനാടാണു് തമിഴ്കവികളുടെ മനോധർമ്മത്തിനു വിഷയീഭവിച്ചിരിക്കുന്നതെന്നാണു്. അഥവാ കേരളംതന്നെയാണെങ്കിൽ വിദേശീയരായ ഈ കവികൾ ഭീമമായ അജ്ഞത വെളിപ്പെടുത്തിയിരിക്കയാണു്. ഇപ്പോൾ ഈ പാട്ടുകൾക്കു കേരളചരിത്രസംബന്ധമായ പ്രാധാന്യം കല്പിക്കുന്ന സ്ഥിതിയ്ക്കു് അവയെപ്പറ്റി മലയാളികൾ ഉദാസീനരായിരുന്നാൽ ശ്രീമാൻ കെ. ജി. ശേഷയ്യരുടെ "ചേരരാജാക്കന്മാർ"പോലെയുള്ള ഗ്രന്ഥങ്ങൾ സപ്രമാണങ്ങളായിത്തീരും. തമിഴരും മലയാളികളും ആദികാലത്തു് ഒരേ വർഗ്ഗക്കാരായിരുന്നു എന്നു സകാരണം തെളിയിക്കുന്ന പക്ഷം അതു സ്വീകരിക്കുവാൻ ഞാനായിരിക്കും ഒന്നാമൻ എന്നു മാത്രമേ തൽക്കാലം പറയേണ്ടതായിട്ടുള്ളൂ.

നവയുഗം

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പരിഷ്കാരം ഒരു പരിവർത്തനമല്ല, പ്രത്യുത ഒരു ഭ്രമണം മാത്രമാണ്. ഈ വസ്തുത പ്രാക്തനകാലം മുതലുള്ള ലോകചരിത്രം നമ്മെ പഠിപ്പിക്കുന്നു. സുഖകാംക്ഷിയായ മനുഷ്യൻ തന്റെ ബുദ്ധിവൈഭവം ഉപയോഗിച്ച് സൃഷ്ടിച്ച ഉപാധികളിൽ ഏറ്റവും ശ്രേഷ്ഠമായുള്ളതു് അഭിപ്രായവിനിമയത്തിനുള്ള ഭാഷയത്രേ. ഈ ഭാഷയ്ക്ക് ക്രമമായ പുരോഗതി ഉണ്ടായി. എന്നാൽ കേവലം അഭിപ്രായങ്ങൾ മറ്റുള്ളവരെ ധരിപ്പിക്കുന്നതിനു മാത്രമല്ല, ചമൽക്കാരജനകമായ വാക്യത്താൽ മനസ്സിനു് ഉല്ലാസം നൽകുന്നതിനും ഭാഷ ഉപകരിക്കുമെന്നു മനുഷ്യൻ മനസ്സിലാക്കി. തൽഫലമായി സാഹിത്യം ഉണ്ടായി. ഈ സാഹിത്യം സംസാരസമുദ്രത്തിൽ കിടന്നു വലയുന്ന മനുഷ്യന്റെ ഹൃദയവേദന തീർക്കുന്നതിനെന്നുമാത്രമല്ല, അവനിൽ സന്മാർഗ്ഗപ്രസക്തി ജനിപ്പിക്കുന്നതിനും ഉതകുമെന്നു തൽപ്രണേതാക്കൾ ധരിച്ചിരുന്നു. അതിപുരാതനങ്ങളായ വേദഗ്രന്ഥങ്ങളിൽപോലും സദാചാരപ്രതിപാദകങ്ങളായ ഭാഗങ്ങൾ കാണുന്നതിനുള്ള കാരണം ഇതല്ലേ? ഋഗ്വേദസംഹിതയിൽ ഒരു ചൂതുകളിക്കാരന്റെ വിലാപം എത്രയും രസകരമായിരിക്കുന്നു:—

*അന്യേ ജായാം പരിമൃശന്ത്യസ്യ
യസ്യാഗൃധദ്വേദനേ വാജ്യക്ഷഃ।
പിതാ മാതാ ഭ്രാതര ഏനമാഹുർ
ന ജാനീമോ നയതാ ബദ്ധമേതം॥
യദാദീധ്യേ ന ദവിഷാണ്യേഭിഃ
ചരായദ്ഭ്യോടവ ഹീയേ സഖിഭ്യഃ।

* ആരുടെ ധനത്തെയാണോ ചൂതു് കൈവശപ്പെടുത്തിയതു് അവന്റെ പത്നിയെ അന്യന്മാർ ആലിംഗനം ചെയ്യുന്നു. "ഞങ്ങൾ അവനെ അറിയുകയില്ല; അവനെ ബന്ധിച്ചുകൊണ്ടുപോക" എന്നു പിതാവു്, മാതാവു്, സഹോദരൻ എന്നിവർ

ന്യത് പാശ്വ ബദ്ധവോ വാചമക്രതം
ഏമീദേഷാം നിഷ്ഠുതം ജാരിണീവ ॥.

ഇവിടെ കവിയുടെ ഉദ്ദേശ്യം സദാചാരോപദേശമാണെന്നുള്ളതു് സ്പഷ്ടമായിരിക്കുന്നു. മഴക്കാലം വരുന്നുവെന്നു് മുന്നറിവു തരുന്നവയും കൂട്ടം കൂട്ടമായി വന്നു് സംഘത്തലവന്റെ ശബ്ദത്തെ പിൻതുടരുന്നവയുമായ മണ്ഡൂകങ്ങളെ, വേദോച്ചാരണം നടത്തുന്ന ബ്രാഹ്മണരോടുപമിച്ചതു് എത്രയും സമഞ്ജസമായിരിക്കുന്നു! ഇന്നു ക്ഷേത്രത്തിനുള്ളിലും പരിസരങ്ങളിലും ഇരുന്നു് സംഗീതരസം അശേഷമില്ലാതെയും അർത്ഥം ഗ്രഹിക്കാതെയും വേദം ചൊല്ലുന്ന മഹാന്മാരെ സ്മരിക്കുന്ന ഈ വർണ്ണന സാർവ്വകാലികമായ "ജീവൽസാഹിത്യ"മായി കരുതുന്നതിൽ തെറ്റില്ല. ലോകോപ്പത്തിയെപ്പറ്റി വേദകർത്താക്കൾ കണ്ട വസ്തുത തന്നെയാണു് പലരും കവിതാരൂപത്തിൽ വീണ്ടും എഴുതി വരുന്നതു്. കാളിദാസൻ ശകുന്തളാപരിത്യാഗത്തിലും, അഗ്നിമിത്രന്റെ കാമപാരവശ്യത്തിലും അന്നത്തെ രാജാക്കന്മാരുടെ ഉച്ചൃംഖലത്വമല്ലേ പ്രതിപാദിച്ചിരിക്കുന്നതു്?

അ പരിതോഷാദവിദുഷാം
ന സാധുമന്യേ പ്രയോഗവിജ്ഞാനം

എന്നു തുടങ്ങി തനിക്കു സിദ്ധിച്ചുവന്ന പ്രോത്സാഹനവും തന്റെ ശുഭാപ്തിവിശ്വാസവും വെളിവാക്കിയ ആ മഹാകവിയുടെ ചിന്താഗതി ഇന്നു നാം വള്ളത്തോൾ തുടങ്ങിയുള്ളവരിൽ കാണുന്നുവെങ്കിൽ, "എന്തെഴുതിയാലെന്തു്? ജനങ്ങൾ എല്ലാറ്റിനേയും പഴിക്കുന്നവരാണു്. അഗ്നിപരിശുദ്ധയായ സീതയെപ്പോലും അവർ കുറ്റപ്പെടുത്തിയില്ലേ?"— എന്നിങ്ങനെ ഭവഭൂതിയിൽ കണ്ടിരുന്ന ശോകഛായയും നരജീവിതം വേദനയായി കരുതിയ കുമാരനാശാനിലും മറ്റും കാണുന്നുണ്ടു്. വിദൂര ഗ്രഹത്തിൽനിന്നു് ശ്രീകൃഷ്ണനെ ഭക്ഷണം കഴിപ്പിക്കയും ഏകലവ്യനെ അസ്ത്രവിദ്യാപാരംഗതനാക്കുകയും ചെയ്ത മറ്റാഭാരതകർത്താവും 'വേട

പറയുന്നു. "ഞാൻ ഇനി പോകയില്ല; എന്റെ സ്നേഹിതന്മാർ എന്നെ ഉപേക്ഷിക്കുന്നു" എന്നു വിചാരിക്കുവേ ചൂതിന്റെ ശബ്ദംകേട്ടു് അഭിസാരിക സങ്കേതസ്ഥലത്തേയ്ക്കു പോകുന്നപോലെ ഞാൻ പോകുന്നു.

ക്കിഴവികഥം' ബഹുപ്പെട്ട് 'വഴിയൊഴിവതുകണ്ട്' വേണ്ടയെന്ന കഥാനായകനെക്കൊണ്ട് അരുളിച്ചെയ്യിച്ച കേശവീയകത്താവും 'ദുരവസ്ഥ' നിമ്മിച്ച ആശാനും വേദശാസ്ത്രപുരാണാദികഥം 'മേൽജാതിതൻപൈതുക'മല്ലെന്ന് പറഞ്ഞുപോയ വള്ളത്തോളും അധഃകൃതോദ്ധാരണവിഷയത്തിൽ വിഭിന്നമായ ആദർശമുള്ളവരായിരുന്നുവെന്ന് കരുതാൻ തരമില്ല.

ശബ്ദംകൊണ്ടു കവിത മോടിപിടിക്കുന്ന സമ്പ്രദായം ഒരുകാലത്തെന്നല്ല ഏതുകാലത്തും ചിലർക്ക് സന്തോഷകരമായി തോന്നാം. ഇംഗ്ലീഷ്, സംസ്കൃതം തുടങ്ങിയുള്ള ഭാഷകഥം ഇതിൽനിന്നും തീരെ വ്യത്യസ്തങ്ങളാണെന്നു പറവാനും നിവൃത്തിയില്ല. ദ്രാവിഡഭാഷകഥം പൊതുവെയും വിശേഷിച്ച് തമിഴും ശബ്ദാഡംബരത്തിൽ അല്പം കൂടുതലായി ഭ്രമിച്ചു. അച്ചടി നടപ്പില്ലായ്കയാൽ പദ്യങ്ങഥം ചൊല്ലിപ്പഠിക്കേണ്ടിയിരുന്ന കാലത്തു് ശബ്ദാലങ്കാരം ആവശ്യമായിരുന്നിരിക്കാം. എന്നാൽ ശബ്ദത്തിനുവേണ്ടി അർത്ഥം ബലികഴിക്കരുതെന്നുള്ള തത്ത്വം പ്രാകൃതകാലം മുതല്ക്കേ കവികഥം സ്മരിച്ചിരുന്നു. വാല്മീകി തുടങ്ങിയുള്ള ആഷ്കവികഥം ശബ്ദാഡംബരത്തിൽ ഭ്രമിച്ചിരുന്നില്ല. ചില ഒറ്റശ്ലോകങ്ങളിലും ഖണ്ഡകൃതികളിലും ശബ്ദാലങ്കാരം പ്രയോഗിച്ച കാളിദാസൻ പ്രൌഢകൃതികളിൽ ഐദംപര്യേണ അർത്ഥഗാംഭീര്യത്തെയാണ് അവലംബിച്ചിട്ടുള്ളതു്. സരളപദപ്രയോഗംകൊണ്ട് മധുരമധുരമായ മാഘകാവ്യത്തിൽ ശബ്ദംകൊണ്ടുള്ള ഇന്ദ്രജാലവിദ്യ കവി ചിത്രസൂത്തിലേയ്ക്കു മാറിവച്ചിരിക്കുന്നതും ശ്രദ്ധേയമാണ്. ശ്രീഹർഷനെപ്പോലെയുള്ള ഒരു കവീന്ദ്രനപോലും 'രരാജ നിരാജനയാ സ രാജഘ്നഃ' എന്നിത്യാദി ഭാഗങ്ങളിൽ പ്രാസഭ്രമം മൂലം അബദ്ധം പററിയതോക്കുമ്പോഥം സാധാരണക്കാരുടെ കഥ പറവാനുമില്ല. നീലകണ്ഠദീക്ഷിതർ :—

ദിഷ്ട്യൌധിഷ്ഠിരാഃ കവിതാധിരാജ്യം
ധീരോ രമന്തേ നഹി ശബ്ദചിത്രേ।
സപ്തർഷ്വപി ഗതപ്രാസ്സരസ്യാം ഗണോയം
കാണൈവ കിം കാപി ഗവേഷണീയാ॥

എന്ന് ശബ്ദഭ്രമക്കാരെ പരിഹസിച്ചുവെങ്കിൽ മിൽട്ടൺ 'Paradise Lost' എന്ന കൃതിയുടെ മുഖവുരയിലും ഷേക്സ്പിയർ Henry IV നാടകത്തിലും ഭംഗ്യന്തരേണ ഇതേ ആശയംതന്നെ പ്രകടിപ്പിച്ചിരിക്കുന്നു! സാഹിത്യത്തിൽ വാപ്പും ഉടച്ചുവാപ്പും മുറയ്ക്കു നടന്നുകൊണ്ടിരിക്കുന്നു.

അതിനാൽ :—

'യദായദാഹി ധർമ്മസ്യ
ഗ്ലാനിർഭവതി ഭാരത!
അഭ്യുത്ഥാനമധർമ്മസ്യ
തദാത്മാനം സൃജാമ്യഹം.'

എന്ന മട്ടിൽ ഓരോ കാലത്തു് സാഹിത്യമർമ്മജ്ഞന്മാർ അവതരിച്ചുകൊണ്ടുമിരിക്കും. ഭാഷാഭിവൃദ്ധിയെ ലാക്കാക്കി അവർ സപ്രാഭിപ്രായങ്ങളും സധൈര്യം പുറത്തുപറയും. കൈരളിയുടെ ശബ്ദാഡംബരഭ്രമത്തെപ്പറ്റിയുള്ള ഉപാലംഭം അടുത്ത കാലത്തു് ദ്വിതീയാക്ഷരപ്രാസവാദമായി കലാശിച്ചതും ഇവിടെ സ്മരണീയമാണു്. ഈ വാദത്തിൽ നിന്നും നമുക്കു് നൂതനസാമഗ്രികളും അധികമായി സിദ്ധിച്ചില്ല. എന്നാൽ നമുക്കു് അജ്ഞാതമായിക്കിടന്നിരുന്ന പല തത്ത്വങ്ങളും പുറത്തുവന്നു. ദ്വിതീയാക്ഷരപ്രാസം സ്വരവ്യഞ്ജനൈകരൂപ്യത്തോടുകൂടി പ്രയോഗിച്ചു് കവിത നിർമ്മിച്ചവരിൽ പലരും നിരർത്ഥപദങ്ങളും 'കുത്തിത്തിരുകി'യതിൽ പശ്ചാത്തപിച്ചു. രമണീയമായ അർത്ഥാനന്തത്താൽ ആനന്ദം നൽകുന്ന വാണിയെ ആശ്രയിച്ച 'കേശവകവി' കാവ്യസരണിയിൽ വന്നുകൂടീട്ടുള്ള അന്ധകാരത്തെ നീക്കുന്നതിനു് ശ്രീകാളിദാസന്റെ കാൽനഖേന്ദുമരീചികളെയത്രേ ശരണം പ്രാപിക്കുന്നതു്. കേശവീയത്തിന്റെ പ്രാദുർഭാവം ഭാഷാകവിതാപ്രസ്ഥാനത്തിൽ വലുതായ ഒരു പരിവർത്തനം ഉളവാക്കി. എന്തു കാരണത്താലോ കവികൾ മഹാകാവ്യപ്രസ്ഥാനത്തിൽ കൈവച്ചു കാണുന്നില്ല. ഖണ്ഡകാവ്യങ്ങളും വീണ്ടും മുന്നണിയിലെത്തി. ബുദ്ധിമാന്മാരായ കവികൾ പ്രാസഭ്രമം നിർദ്ദോഷം കൈവെടിഞ്ഞു. ഇങ്ങനെ നോക്കുമ്പോൾ നവയുഗം എന്നൊന്നുണ്ടോ? ഓരോ കാലത്തും ജീവിച്ചിരിക്കുന്നവർക്കു് തങ്ങളുടെ കാലം ഒരു നവയുഗമായിത്തോന്നാം. കാലയവനികയ്ക്കുള്ളിൽ മറഞ്ഞു

കിടന്നിരുന്ന പ്രസ്ഥാനങ്ങളും കാർമേഘശകലങ്ങളും ചിതറിക്കിടക്കുന്ന ആകാശത്തിലെ ചന്ദ്രനെന്നപോലെ ക്രമേ ക്രമേ തെളിഞ്ഞുവരിക പതിവാണ്. അവയ്ക്ക് പുതിയപേരുകളും കല്പിക്കുന്നതു് സൂക്ഷിച്ചു വേണ്ടിയിരിക്കുന്നു.

എന്നാൽ 'നവയുഗം' എന്ന സംജ്ഞ കേവലം അർത്ഥശൂന്യ മല്ല. ഇപ്പോൾ ലോകത്തിന്റെ ഏതൊരു ഭാഗവും വിവിധഭാഷാ സാഹിത്യങ്ങളുടെ ഒരു സമ്മേളനഭൂമിയായിത്തീർന്നിട്ടുണ്ട്. വിദൂരദേശ മായ ഇംഗ്ലണ്ടിലെ സാഹിത്യത്തിന്റെ പുരോഗതി നമ്മെയും സ്വാധ മായി ബാധിച്ചു. തൽഫലമായി നോവൽ, ചെറുകഥ, ഉപന്യാസ ങ്ങളും, സംഭാഷണങ്ങളും, ലേഖനങ്ങളും എന്നിങ്ങനെ പല പുതിയ പ്രസ്ഥാനങ്ങളും മലയാളഭാഷയിൽ ജനിച്ചുവളർന്നു. ചാക്യാർക്കൂത്തു്, കഥകളി, കല്യാണക്കളി, തിരുവാതിരക്കളി മുതലായവയിൽ കുടികൊ ണ്ടിരുന്ന ദൃശ്യകലയുടെ ശ്രേഷ്ഠ നാടകത്തിൽ പതിഞ്ഞു. കൃഷ്ണഗാഥ, രാമായണം, ചന്ദ്രോത്സവം തുടങ്ങിയുള്ള കൃതികളിൽ സ്വതന്ത്രമാടിക്കളി ച്ചിരുന്ന വൈദർഭി കുറേക്കാലം കാട്ടുകയറിട്ട് കൈരളിയെ വീണ്ടും ആലിംഗനംചെയ്തു. അവളുടെ ആശയഗാംഭീര്യവും പൂർവ്വാധികം വർദ്ധിച്ചു. പ്രകൃതിയും മനുഷ്യനും തമ്മിലുള്ള അഭേദ്യബന്ധം പ്രതിപാദിച്ചു് പൂവിലും മഴവില്ലിലും പലാശത്തിലും പല വിശിഷ്ടതത്ത്വങ്ങളും ദർശി ക്കാൻ കവികളെ വീണ്ടും പഠിപ്പിച്ചു. കൈരളി ആനന്ദലഹരിയിൽ മുഴുകി ശ്രദ്ധാത്മകവനവും ആരംഭിച്ചു. മനസ്സു് ഭൌതികലോകത്തിൽ നിന്നുയർന്നു് ഈശ്വരശക്തിയെ ആലിംഗനംചെയ്യുമ്പോൾ ഉണ്ടാകുന്ന ഒരു പ്രത്യേകാനുഭവത്തെ പ്രതിപാദിക്കുന്ന ഒന്നത്രേ ശ്രദ്ധാത്മകവിത. സാധാരണ കവികൾക്കു് അതിലേയ്ക്കുള്ള പ്രവേശനം അസാദ്ധ്യമല്ലെ ങ്കിലും ക്ലിഷ്ടമാണു്. പലരും അതിൽ പ്രവേശിച്ചു് കാൽവഴുതി വീഴു ന്നുണ്ടു്. എന്നാൽ ചുരുക്കം ചിലർക്കു് വിജയവും സിദ്ധിക്കുന്നു. ക്ഷണ പ്രഭാതുല്യമായ ഈ ആയുസ്സിൽ ലോകമാകുന്ന ഗ്രന്ഥത്തിന്റെ ഏതാ നും വരികളും വായിക്കാൻ അഭ്യസിക്കുന്നതിനു മുമ്പു് സൃഷ്ടികർത്താവു് നമ്മെ അങ്ങോട്ടുവിളിക്കുന്നു!! അതിനിടയിൽ ആ ജഗന്നിയന്താവിന്റെ മഹത്വം അണുവെങ്കിലും അനുഭവപ്പെട്ട ഭാഗ്യവാന്മാർ ഏതുകാലത്തും

പൂജ്യരത്നേ. അനുദിനം തനിക്കുണ്ടായ ഈശ്വരസാക്ഷാൽക്കാരംനിമിത്തം സ്നേഹഗാനങ്ങളാൽ പാടി ലോകത്തെ ആനന്ദസാഗരത്തിൽ ആറാടിച്ച ശ്രീ രവീന്ദ്രനാഥ ടാഗോറിനെപ്പോലുള്ള കവിവര്യന്മാർ കേരളത്തിലും ഉണ്ടാകട്ടെ; അവർ കേരളത്തിന്റെയെന്നല്ല ഭാരതഭൂവിന്റെ അന്തസ്സാരം നിതരാം വെളിവാക്കട്ടെ; ദേശീയബോധം, തൊഴിലിന്റെ മാന്യത, പരിശ്രമശീലം, പരോപകാരം മുതലായ ഗുണങ്ങളാൽ അവരുടെ കൃതികളിൽ നിരക്ഷീരന്യായേന കലർന്നുകാണട്ടെ; സമത്വം സാഹോദര്യം എന്നിവ ജനസമുദായത്തിന്റെ ഹൃദയത്തിൽ ശ്രുതിമൂലകമാകത്തക്കവണ്ണമുള്ള സജീവചിത്രങ്ങളാൽ അവർ നിറയ്ക്കട്ടെ; അക്കാലം നമുക്ക് ഒരു നവയുഗമായി കരുതാം.

ജാതിചിന്ത, തങ്ങളുടെ പ്രത്യേകസാഹചര്യങ്ങൾ, പാഠപുസ്തകക്കമ്മിറ്റികളിലെ അംഗങ്ങളുടെ ഇഷ്ടാനിഷ്ടങ്ങൾ എന്നിവ വിസ്മരിച്ച് ഗ്രന്ഥങ്ങൾക്ക് നിഷ്പക്ഷനിലയിൽ നിരൂപണങ്ങളെഴുതാൻ ഭാഷാഭിമാനികൾക്ക് സന്മനസ്സുണ്ടാകട്ടെ; ജീവിതസ്മരണകളും ജീവചരിത്രങ്ങളും എഴുതുന്ന മഹാന്മാർ സ്വന്തം പരാക്രമങ്ങൾ പർവ്വതാകൃതിയിൽ വർണ്ണിച്ച് ഗ്രന്ഥം വിപുലമാക്കാതെ കഥാനായകന്റെ ജീവിതഗതിയിലുള്ള സംഭവങ്ങൾ അന്യർക്ക് എത്രത്തോളം പ്രയോജനപ്പെടുമെന്ന് ശാന്തമായി ചിന്തിച്ചതിനുശേഷം ഗ്രന്ഥമെഴുതട്ടെ; കവി ഒരു തത്ത്വോപദേഷ്ടാവല്ലെങ്കിലും അയാളുടെ പരമോദ്ദേശ്യം ജനക്ഷേമംമാത്രമാണെന്ന് ഏവരും സമ്മതിക്കും. ഈ തത്ത്വം സ്മരിച്ച് സദാചാരത്തിനു വൈകല്യം വരുത്തുന്ന ഗ്രന്ഥങ്ങൾ കവികളാരുംതന്നെ എഴുതാതിരിക്കട്ടെ; അതുപോലെതന്നെ സ്വാർത്ഥത്പരരായ ചില ചരിത്രകാരന്മാർ എഴുതിവെച്ചിട്ടുള്ള ചരിത്രരേഖകൾ കണ്ണുമടച്ചു വിശ്വസിച്ചുകൊണ്ട് അതും കാവ്യങ്ങൾ നിർമ്മിക്കാതിരിക്കട്ടെ; സർവ്വോപരി ലോകത്തിൽ ശാന്തി വളർത്തുന്നതിനു പര്യാപ്തമായ സാഹിത്യകൃതികൾ അനുദിനം ഉണ്ടാകട്ടെ; അക്കാലം ഒരു നവയുഗമായി നമുക്ക് കരുതാം.

ശ്രീ

ഭഗവദ്ഗീത

By T. K. KRISHNA MENON, B.A., Ernakulam.

ഓം നമോ ഭഗവതേ വാസുദേവായ

"ബ്രഹ്മാനന്ദം പരമസുകൃതം കേവലം ജ്ഞാനമൂർത്തിം
വിശ്വാതീതം ഗഗനസദൃശം തത്ത്വമസ്യാദിലക്ഷ്യം
ഏകം നിത്യം വിമലമചലം സർവ്വധീ സാക്ഷിഭൂതം
ഭാവാതീതം ത്രിഗുണരഹിതം സൽഗുരും തം നമാമീം."

ഈശ്വരനുണ്ട്. ആ ജഗദീശ്വരനെ ഓരോരുത്തർ, അവരവരുടെ ഹിതമനുസരിച്ച്, പരമാത്മാവു്, പരബ്രഹ്മം, ആദികാരണം, പരമപുരുഷൻ, സൽഗുരു എന്നിങ്ങിനെ ഏതെങ്കിലും ഒരു പേരു വിളിച്ചു വരുന്നു. പരമാത്മാവു് ഏകനും നിത്യനുമാണ്. നവീനശാസ്ത്രപ്രകാരം വസ്തുവും ശക്തിയും ഏതുപ്രകാരമോ, ഏകദേശം അതുപ്രകാരം, പരമാത്മാവു് പരാപരാ എന്നാ ഉഗ്മപ്പിരിവോടുകൂടിയ മായ, അല്ലെങ്കിൽ മൂലപ്രകൃതിയുമായി ബന്ധപ്പെട്ടിരിക്കുന്നു. പരമാത്മാവിൽ ഈ സ്വഭാവം നിത്യമായി ലീനമായിട്ടുള്ളതാകുന്നു. പരാ പ്രകൃതിയോടുകൂടിയ പരമാത്മാവാണ് ജീവൻ. അമേയവും നിത്യവുമായ ആകാശവും കുടത്തിലെ ആകാശവും എങ്ങനെയോ, ഏകദേശം അതുമാതിരിയാണ് പരമാത്മാവും ജീവാത്മാവുമായുള്ള ബന്ധമെന്നു് വ്യവഹരിക്കാം. പരാ, അപരാപ്രകൃതികളോടുകൂടിയ പരമാത്മാവാണ് പ്രത്യക്ഷഭാവത്തിൽ പ്രപഞ്ചമായി പ്രകാശിക്കുന്നതു്. പ്രപഞ്ചം അനിത്യം.

"ബ്രഹ്മം സത്യം ജഗച്ചിത്ഥ്യാ
ജീവോ ബ്രൈവനാപരാ."

സ്വമായകൊണ്ടു് പരമാത്മാവിനു ദേഹവാനായിതീരാം; സൃഷ്ടിസ്ഥിതിസംഹാരങ്ങളെയും, ഏറ്റെടുത്താം. പിണ്ഡശരീരത്തോടും ദ്വന്ദഭാവത്തോടും ജീവാത്മാവിന്റെ ഈ ലോകത്തിലുള്ള യാത്രാനിർവ്വഹണം

തന്നെ സംസാരം. നാളതുവരെ ആർജ്ജിച്ച, പൂർവ്വകൃതധർമ്മാധർമ്മങ്ങളെ ആശ്രയിച്ച സംസ്കാരവിശേഷത്തോടുകൂടിയിരിക്കും മനുഷ്യന്റെ കർമ്മങ്ങൾ. അതിനാലാണ് ജീവപ്രകൃതി, വാസന, ത്രിഗുണാത്മികയായി, അതായത് സത്വരജസ്തമോമയമായി ഇരിക്കുന്നതു്. ത്രിഗുണരൂപമായയാൽ ജീവാത്മാപരമാത്മാക്കൾക്കുകൂടി മൂടപ്പെട്ടിരിക്കുന്നു എന്നു പറയുന്നതിൽ വലിയ തെറ്റില്ല. ഏറെക്കുറെ നമ്മുടെ പൂർവ്വസൂരികളുടെ മതമിതാണ്. പാശ്ചാത്യദേശങ്ങളിലെ നവീനശാസ്ത്രലോകവും സംശയം കൂടാതെ ഒന്നു സമ്മതിക്കുന്നുണ്ട്. അതായതു്, ഈ ലോകത്തിൽ കാണുന്ന ദ്രവ്യങ്ങളും ഇവയുടെ ശക്തിയും കൊണ്ടല്ല ആദ്യം ലോകമുണ്ടായതു്; പരമാണുക്കളിൽ അന്തർഭവിച്ചുകിടക്കുന്ന ശക്തികൊണ്ടുമല്ല; ഇവക്കെല്ലാറ്റിനും ഹേതുവായി അജ്ഞാതവും അവ്യക്തവുമായി ഒരു ശക്തിയുണ്ടു് എന്നു്. ഈ ശക്തിയെയാണ് നമ്മുടെ സിദ്ധന്മാർ ബ്രഹ്മമെന്നും പരമാത്മാവു് എന്നും മറ്റും വ്യവഹരിച്ചു വരുന്നതു്.

ജീവാത്മാവു്, ജഗത്തു്, പരമാത്മാവു് എന്നിവയുടെ സദ്ഭാവത്തിനും ഘടനയ്ക്കും ഉള്ള പ്രമാണമെന്തു്? പ്രത്യക്ഷാനുഭവവും അനുമാനവും തരമില്ലെങ്കിൽ പിന്നെ ശരണമെന്തു്? ആപ്തോപദേശമായ ശബ്ദം മാത്രമാണ് ഒടുവിൽ ശേഷിക്കുന്നതു്. യാതൊരു ദുരുദ്ദേശമില്ലാതെ സത്യാന്വേഷണത്തിൽ ഏർപ്പെട്ടിരുന്ന സാക്ഷാനുഭവത്തോടുകൂടിയ തത്വദർശികൾ ലോകോപകാരത്തിനായി പറഞ്ഞിട്ടുള്ള വാക്കുകളെ എന്തുകൊണ്ടു വിശ്വസിച്ചുകൂടാ? അവർ നിസ്പൃഹന്മാരും അപക്ഷപാതികളുംകൂടിയാകുന്നു.

ഉപനിഷദ് മഹാവാക്യങ്ങൾ അങ്ങിനെയുള്ള പരമഹംസന്മാരുടെയാകുന്നു.

"ഏകോ ദേവഃ സർവ്വഭൂതേഷുഗൂഢഃ
സർവ്വവ്യാപീ സർവ്വഭൂതാന്തരാത്മാ."

എന്നാകുന്നു ഉപനിഷദ്സിദ്ധാന്തം. "ഉപദേക്ഷ്യന്തികേ ജ്ഞാനം ജ്ഞാനിനഃ സത്യദർശിനഃ" അവരുടെ വാക്കുകളെ കണ്ണടച്ചു വിശ്വസിക്കേണമെന്നാരും ആവശ്യപ്പെടുന്നില്ല. ഉത്തമനായ ആചാര്യനിൽ

നിന്ന്, വിനയാനപിതനായി സംശയങ്ങളറുപോകുംവിധം, മുമുക്ഷുവായ ശിഷ്യൻ വേദാന്തത്തെ അഭ്യസിക്കണം എന്നാണ് പറഞ്ഞിരിക്കുന്നത്.

"തദ്വിദ്ധി പ്രണിപാതേന
പരിപ്രശ്നേനസേവയാ"

പിന്നെ ഏകാഗ്രചിത്തത്തോടുകൂടി മനനംചെയ്തു വേദാന്തസാരത്തെ ഗ്രഹിക്കണം. "ശ്രോതവ്യോ, മന്തവ്യോ, നിദിധ്യാസിതവ്യഃ", "യസ്തക്കിന്നാനുസംധത്തേ സധമ്മ വേദനേരതഃ" ഈ വിധമുള്ള അഭ്യാസംകൊണ്ടാണ് ഭകുതൻ,

"യോമാം പശ്യതിസർവ്വത്ര
സർവ്വംചമയി പശ്യതി
തസ്യാഹം ന പ്രണശ്യാമി
സചമേന പ്രണശ്യതി."

എന്നു ഭഗവൽഗീതയിൽ ഉപദേശിക്കുന്ന അവസ്ഥയെ പ്രാപിക്കുന്നത്. താനും ബ്രഹ്മാവും തമ്മിൽ അഭേദബുദ്ധിയുണ്ടാകുന്നതുതന്നെ മോക്ഷം. മോക്ഷം കിട്ടിയാൽ പിന്നെ ഭവഭയവും വേണ്ടല്ലൊ. സർവ്വകമ്മസന്ന്യാസപൂർവ്വകമായ ആത്മജ്ഞാനമൊന്നു പരമാത്മപ്രാപ്തിക്കുതക്കു, എന്നു ഗീത ഉറന്നു പറയുന്നു. അതോടുകൂടി അഹംഭാവം പോകും, ശമധനനാകും; ഇഷ്ടാനിഷ്ടങ്ങളും ഹർഷവിഷാദങ്ങളും നശിക്കും. ഭേദഭാവം പോകുമെന്നു സാരം.

ഇതാണ് ഗീതയുടെ ഒരു രത്നച്ചുരുക്കം. വേദോപനിഷത്തുകളിലും പുരാണങ്ങളിലുമെല്ലാം ഈ വിഷയത്തെക്കുറിച്ചു പ്രതിപാദിച്ചുകാണും. എങ്കിലും ഗീതയിലെപോലെ, സംശയലേശം വരുത്താതെ, കുറകളഞ്ഞമട്ടിൽ, അതു സുഗമമായി മറെറാരുദിക്കിലും ഈ വിഷയത്തെ അതിന്റെ നാനാമുഖങ്ങളെയും സ്പർശിച്ചുകൊണ്ടു വിശദീകരിച്ചിട്ടില്ലെന്നവേണം പറയുവാൻ. ശിഷ്യൻ അർജ്ജുനൻ, ഗുരു ശ്രീകൃഷ്ണൻ, സന്ദർഭം ഭാരതയുദ്ധത്തിന്നാട്ടത്തുമുമ്പും. പിന്നെ ഉപദേശവും രീതിയും പ്രഥമസ്ഥാനം വഹിക്കാതിരിക്കുന്നതെങ്ങനെ?

"ഇത്യഹം വാസുദേവസ്യ പാർത്ഥസ്യച മഹാത്മനഃ
സംവാദമിമമശ്രൌഷ മദ്ഭുതം രോമഹർഷണം."

എന്ന സഞ്ജയൻ പറഞ്ഞതിൽ ആശ്ചര്യപ്പെടുവാനില്ല. വേദാന്ത ദേശികാചാര്യരും വെറുതെയല്ല ഈവിധം ഗീതയെക്കുറിച്ചു ശ്ലോഷി ച്ചിട്ടുള്ളതു്.

"ദുഗ്ദ്ധേജ്ഞേയൈഃ നിഗമഗഹനൈഃ ദൂരവിശ്രാന്തി ദേശൈഃ
ബാലാനഫൈ ബ്ബുദ്ധഭിരയനൈഃ ശോചതോനഃ സുപന്ഥാ
നിഷ്പത്യൂഹം നിജപദമസൌനേതുകാമഃ സചക്രേ
സൽപാഥേയം കിമപിവിദധേ സാരഥിഃ സർവ്വനേതാ."

സർവ്വജനസമ്മതമായൊരു സദാചാരത്തെയാണു് ഗീതയിൽ പ്രതിപാ ദിച്ചിട്ടുള്ളതു്. സകലസനാതനത്തിനും ഇതൊരാധാരമാണു്. ഭിന്ന മതക്കാക്കു് ഒരുപോലെ ഉപയോഗപ്പെട്ടുന്നൊരു വഴിയാണു് ഇതിൽ വെട്ടിത്തുറന്നിരിക്കുന്നതു്. "അദ്ധ്യാത്മവിഷയമായി ഏതെല്ലാം പ്ര സ്ഥാനങ്ങളുണ്ടോ, അവയിലെ എല്ലാം സാരാംശം അടങ്ങിയതാണീ ഗീത. ജാതിമതഭേദമെന്യേ, ഇതു സർവ്വരാലും ആദരണീയമാണു്". യോഗിക്കും ഭോഗിക്കും, പുണ്യവാനും പാപിക്കും, എന്നുവേണ്ട, സംസ്കാ രത്തിന്റെ ഏതുനിലയിലിരിക്കുന്നവക്കും മേൽഗതിക്കും ഇതിൽ സുഗമ മായമാർഗ്ഗം നിർദ്ദേശിച്ചിട്ടുണ്ടു്. അതാണു് ഇതിനു മതഗ്രന്ഥങ്ങളിൽ ആരാദ്ധ്യവും ഉന്നതവും ശാശ്വതവുമായൊരു സ്ഥാനത്തിനുള്ള കാര ണം. എത്ര പരിഭാഷകളും എത്ര വ്യാഖ്യാനങ്ങളുമാണു് ഇതിനുള്ളതു് എന്നതിനു കണക്കില്ല.

ഗീതയിൽ പതിനെട്ടു അദ്ധ്യായങ്ങളും എഴുന്നൂറ്റൊരു ശ്ലോകങ്ങളു മാണുള്ളതു്. ഭാഷയും വിഷയവും രീതിയും നോക്കുന്നതായാൽ, ഷഡ് ദർശനസിദ്ധാന്തങ്ങളുംകൂ :സ്ഥിരപ്രതിഷ്ഠ നേടുന്നതിനു മുമ്പൊരുകാ ലത്താണു് ഗീത ആവിർഭവിച്ചിട്ടുള്ളതെന്നു കാണാം. ഗീതയെ ഒരു ഉപനിഷത്തായി നാമകരണം ചെയ്തിട്ടുള്ളതിൽ യാതൊരു അനൌചി ത്യവുമില്ല.

ഗീത മഹാഭാരതത്തിലെ ഭീഷ്മപർവ്വത്തിന്റെ ഒരു ഭാഗമായിട്ടാ ണല്ലോ ഇരിക്കുന്നതു്. ഭാരതത്തിന്റെ ശരിയായ ഒരു അംശമാണോ

ഇതു്? അതോ, മുമ്പുണ്ടായിരുന്നതിനേയോ പിന്നീടു ഉണ്ടാക്കിയതിനെയൊ ക്രോടിച്ചേർത്തതോ? യുദ്ധത്തിനായി ഒരുങ്ങിനില്ക്കുന്ന ഇരുസേനകളുടേയും മദ്ധ്യത്തിൽവെച്ചു് ഇങ്ങനെയൊരു ഭാഷണം നടക്കുമോ? ഇത്രവേഗത്തിൽ ഇതെല്ലാം ഉപദേശിക്കുവാൻ സാധിക്കുമോ? എന്നീ പ്രശ്നങ്ങൾക്കുള്ള തക്ക സമാധാനങ്ങളെ ഇവിടെ കൊടുക്കുവാൻ തുടന്നാൽ ലേഖനം ദീർഘിക്കും എന്നുള്ളതൊഴിച്ചു്, അതുകൊണ്ടു വലുതായൊരു ഗുണവും ഇതിനു സിദ്ധിക്കുവാൻ ഇല്ല. വേണമെന്നുള്ള വർക്കു വേണ്ട ഗ്രന്ഥങ്ങൾ നോക്കി തൃപ്തിപ്പെടുവാൻ സൌകര്യവുമുണ്ടു്.

ഗീതയെ മൂന്നു ഷട്കങ്ങളായി വിഭജിച്ചിട്ടുള്ളതായി വിചാരിക്കാം. ഒന്നാമത്തേതിൽ, തത്പദസിമഹാവാക്യത്തിലെ തത് പദം, അഥവാ ബ്രഹ്മാഹമസ്മിയിലെ അഹം പദം വിസ്തരിക്കുന്നു. അതിലടങ്ങിയ ജീവാത്മാവിന്റെ പരമാർത്ഥം വെളിപ്പെടുത്തി, അതിനു യഥാർത്ഥത്തിൽ കർത്തൃത്വാകർത്തൃത്വങ്ങൾ ഇല്ലെന്നും വരുത്തി, സർവ്വകർമ്മസന്യാസംതന്നെ അതിന്റെ ശരിയായ ധർമ്മം എന്നും സൂചിപ്പിച്ചു. അതിനെ സാക്ഷാൽകരിക്കുവാനുള്ള വഴിയെക്കുറിച്ചും പറഞ്ഞു. ഒടുവിൽ ആത്മാവിൽ സ്ഥിതമായ ചിത്തവൃത്തികൊണ്ടു പരമാത്മാവിനെ ഭജിക്കുകതന്നെ ഉത്തമമെന്നും വിധിച്ചു. തൽ, പരമാത്മാ, എന്നാലെന്തു് എന്നു ദ്വിതീയഷട്കത്തിൽ പറയുന്നു. നിർഗുണമായ സ്വരൂപത്തെ വർണ്ണിച്ചിട്ടുണ്ടെങ്കിലും, ഈ ഷട്കത്തിൽ അധികഭാഗത്തെയും സഗുണ ബ്രഹ്മോപാസനയെക്കുറിച്ചു പറയുവാനാകുന്നു ഉപയോഗിച്ചിട്ടുള്ളതു് എന്നു കാണാം. ഒടുവിലത്തെ ഷട്കത്തിൽ, അസിപദത്തിന്റെ വ്യാഖ്യാനമാണു്—തൽ (ബ്രഹ്മവും) ത്വം (ജീവാത്മാവും) സത്യത്തിലൊന്നാണെന്ന സംഗതിയെപ്പറ്റി പറയുന്നു. ഒന്നുകൂടി സൂക്ഷിച്ചാൽ, രണ്ടാമദ്ധ്യായം പതിനൊന്നാംശ്ലോകം മുതല്ക്കാണു് ഉപദേശം തുടങ്ങുന്നതെന്നു കാണാം. അതുവരെ, അതിനുള്ള ഹേതു ഇന്നതെന്നു കാണിച്ചു. രണ്ടാമദ്ധ്യായം ഗീതയുടെ ഒരു സിദ്ധാന്തച്ചുരുക്കവും പതിനെട്ടാമദ്ധ്യായം ഗീതയുടെ ആകെയുള്ള ചുരുക്കവുമാകുന്നു എന്നു ഗണിക്കാം. പതിനഞ്ചുകൊണ്ടു അസിശബ്ദത്തിന്റെ അർത്ഥം വിവരിച്ചുതീരും. പതിനാറും പതിനേഴും ചില പദങ്ങളുടെ നിർവ്വചനവും മറ്റുമാകുന്നു.

ഈ വിഭാഗം വിഷയങ്ങളെ എല്ലാം സംഗ്രഹിച്ചിട്ടുള്ള ഒന്നാണെന്നു സമ്മതിക്കുവാൻ തരമില്ല. എന്നാല്ല, ഗീതക്കൊരു വിശേഷമുണ്ട്. അതിന്റെ ഒരു സ്വരൂപജ്ഞാനം കിട്ടേണമെന്നുള്ളവർ, അതിനെ വേണ്ടതുപോലെ, ഉപയോഗപ്രദമാകുംവിധം, മനസ്സിലാക്കേണമെന്നുള്ളവർ, ഗീതയെ പല പ്രാവശ്യം പാരായണം ചെയ്യുകയും ശ്ലോകാർത്ഥത്തെക്കുറിച്ചു ചിന്തിക്കുകയും വേണം. അതല്ലെങ്കിൽ, പരസ്പരവിരുദ്ധങ്ങളായ പല അഭിപ്രായങ്ങളും അതിലുള്ളതായി ആദ്യം തോന്നിപ്പോകുവാൻ എളുപ്പമുണ്ട്. വായിക്കുന്നവരെ അവ പകർപ്പിക്കുകയും ചെയ്യും. അതുകാരണമാണ് ഗീതയെ എല്ലാവർക്കും ഉപദേശിച്ചു കൂടെന്നു പറഞ്ഞിട്ടുള്ളതു്.

"ഇദം തേനാ തപസ്കായ നാ ഭക്തായകദാചന
ന ചാ ശുശ്രൂഷവേ വാച്യം ന ചമാംയോ ഽഭ്യസൂയതി."

ചുരുക്കത്തിൽ പറയുന്നതായാൽ, ഗീതാഭ്യാസം ഭക്തിയോടും യുക്തിയോടും കൂടി ചെയ്യേണ്ടതാകുന്നു. അതുകൊണ്ടുള്ള ഫലപ്രാപ്തിക്കു് ഈ കാരണങ്ങളെക്കൊണ്ടും ശാസ്ത്രവിധി ശ്രദ്ധയോടുകൂടി ചെയ്യുവാൻ ഒരുക്കവും ഉണ്ടായിരിക്കേണം.

പ്രാപ്യസ്ഥാനത്തു ചെല്ലുന്നതിനു ഗീത കർമ്മം, ഭക്തി, ജ്ഞാനം, എന്നീ മൂന്നു മാർഗ്ഗങ്ങളെയാകുന്നു കാണിച്ചിട്ടുള്ളതു്. ഇവ സമ്മിശ്രമായിട്ടുള്ള വഴികളാണെന്നും, അതല്ലാതെ അന്യോന്യം യാതൊരാശ്രയമില്ലാത്തവയല്ലെന്നും അല്പം ആലോചിച്ചാൽ മനസ്സിലാക്കുവാൻ പ്രയാസമുണ്ടാകുകയില്ല. കർമ്മം എന്നാൽ ക്രിയ, പ്രവൃത്തി എന്നേ ഇവിടെ അർത്ഥമുള്ളൂ. ഭക്തനും ജ്ഞാനിക്കും കർമ്മം കൂടാതെ കഴിയുമോ? ജ്ഞാനാനുഭൂതിക്കു കർമ്മകുശലതയോടുകൂടി ചിരകാലം യോഗാഭ്യാസം വേണ്ടിവരും. ഭക്തിയല്ലേ മറിച്ചുവർക്കുംകൂടി ഒരു പ്രോത്സാഹനകാരണമായിത്തീരുന്നതു്. ജ്ഞാനശകലം ഇല്ലെങ്കിൽ, കർമ്മമുണ്ടോ, ഭക്തിയുണ്ടോ വേണ്ടമാതിരി വളരുന്നു!

ജ്ഞാനമാർഗ്ഗം ക്ലേശാവഹമായിട്ടുള്ള ഒന്നാകുന്നു. അതിൽകൂടിയുള്ള സഞ്ചാരം എല്ലാവർക്കും സാദ്ധ്യമായി എന്നു വരികയില്ല.

"ബഹൂനാം ജന്മനാമന്തേ ജ്ഞാനവാന്മാം പ്രപദ്യതേ
വാസുദേവ സർവ്വമിതി സ മഹാത്മാസു ദുർല്ലഭഃ"

എന്നാണ് ഭഗവാൻ തുറന്നു പറയുന്നതു്. അതിനുള്ള കാരണവും അദ്ദേഹം കാണിക്കുന്നുണ്ടു്. അതിലേക്കു അല്പമൊന്നു മനസ്സോടിക്കു. ഇങ്ങനെ ബുദ്ധിയെ സ്വാധീനിപ്പിക്കുന്നതു് എളുപ്പമാണോ? അതിനു എത്രകാലം എന്തെല്ലാം ചെയ്യണം ആലോചിച്ചുനോക്കു. ഔപചാരിക ഇതു ബുദ്ധിമുട്ടുള്ളതാണ് എന്നല്ലാതെ, മറേറതു രണ്ടും അയത്നസാദ്ധ്യങ്ങളാണെന്നു അഭിപ്രായപ്പെടുന്നില്ല. കഠിനമെന്നു കരുതി കളയേണ്ടകാര്യവുമല്ലെന്നു പ്രത്യേകം ഓർമ്മവേണം.

"ബുദ്ധ്യാ വിശുദ്ധയായുക്തോ ധൃത്യാത്മാനം നിയമ്യച
ശബ്ദാദീൻ വിഷയാംസ്ത്യക്ത്വാ രാഗദ്വേഷൌ വ്യുദസ്യച॥
വിവിക്തസേവീലഘ്വാശീ യതവാക്കായ മാനസഃ
ധ്യാനയോഗപരോനിത്യം വൈരാഗ്യം സമുപാശ്രിതഃ॥
അഹങ്കാരം ബലം ദർപ്പം കാമം ക്രോധം പരിഗ്രഹം
വിമുച്യ നിർമ്മമഃശാന്തോ ബ്രഹ്മഭൂയായകല്പതേ॥"

ഏതായാലും വഴിപിഴക്കാതിരിക്കുവാൻ വിജനവാസം, അല്പാഹാരം, വൈരാഗ്യം എന്നിവയെ ശീലിക്കണം. വാങ്മനഃകായനിയമനം ചെയ്യണം. ചില മനോവികാരങ്ങളെ തീരെ ത്യജിക്കണം. എന്നാലേ ബ്രഹ്മാവസ്ഥക്കു യോഗ്യനായിത്തീരുകയുള്ളു. അതിനുശേഷം, ആ അവസ്ഥ ഈ വിധം പ്രാപിക്കുകയും ചെയ്യും.

"ബ്രഹ്മഭൂതഃപ്രസന്നാത്മാ ശോചതി ന കാംക്ഷതി
സമഃസർവ്വേഷുഭൂതേഷു മദ്ഭക്തിം ലഭതേപരാം॥
ഭക്ത്യാമാമഭിജാനാതി യാവന്യശ്ചാസ്മിതത്വതഃ
തതോമാം തത്വതോജ്ഞാത്വാ വിശതേതദനന്തരം."

ഇവിടെ അല്പമൊന്നു വിവരിക്കാം.

"അമാനിത്വമദംഭിത്വ മഹിംസാ ക്ഷാന്തിരാർജ്ജവം
ആചാര്യോപാസനം ശൌചം സ്ഥൈര്യമാത്മ വിനിഗ്രഹഃ॥

ഇന്ദ്രിയാർത്ഥേഷു വൈരാഗ്യ മനഹങ്കാര ഏവച
ജന്മമൃത്യുജരാവ്യാധി ദുഃഖദോഷാനു ദർശനം॥
അസക്തിരനഭിഷ്വംഗഃ പുത്രദാരഗൃഹാദിഷു
നിത്യംച സമചിത്തത്വ മിഷ്ടാനിഷ്ടോപപത്തിഷു॥
മയിചാനന്യയോഗേന ഭക്തിരവ്യഭിചാരിണീ
വിവിക്തദേശസേവിത്വ-മരനിജ്ജന സംസദി॥
അദ്ധ്യാത്മജ്ഞാന നിത്യത്വം തത്ത്വജ്ഞാനാർത്ഥദർശനം
ഏതൽ ജ്ഞാനമിതിപ്രോക്ത മജ്ഞാനം യദതോ≤ന്യഥാ."

ഇവയിൽ ഒന്നുമുതൽ പതിനൊന്നുവരെയുള്ള ഗുണങ്ങളും പ്രത്യേകിച്ചു കമ്മിക്കും, പന്ത്രണ്ടുമുതൽ പതിനാറുവരെയുള്ളവ ഭക്തനും, പതിനേഴുമുതൽ ഇരുപതുവരെയുള്ളവ ജ്ഞാനമാർഗ്ഗിക്കും പറഞ്ഞിരിയവയാകുന്നു. താഴ്ന്നനിലക്കാർക്കു ഈശ്വരപ്രീതിക്കായിക്കൊണ്ടു് ശീലിക്കുവാനുള്ള കാര്യങ്ങളെക്കൂടി ഈ സന്ദർഭത്തിൽ കാണിക്കേണ്ടവയാണെന്നു വിശ്വസിക്കുന്നു.

"അദ്വേഷാ സർവ്വഭൂതാനാം മൈത്രഃ കരുണ ഏവച
നിർമ്മമോ നിരഹങ്കാരഃ സമ ദുഃഖസുഖഃ ക്ഷമീ,॥
സന്തുഷ്ടഃ സതതം യോഗീ യതാത്മാ ദൃഢനിശ്ചയഃ
മയ്യർപ്പിതമനോബുദ്ധിർയ്യോ മേ ഭക്തഃ സമേപ്രിയഃ॥
യസ്മാന്നോദ്വിജതേ ലോകോ ലോകോന്നോദ്വിജതേചയഃ
ഹർഷാമർഷഭയോദ്വേഗൈ-ർമുക്തോയഃ സചമേപ്രിയഃ॥
അനപേക്ഷഃ ശുചിർദ്ദക്ഷഃ ഉദാസീനോ ഗതവ്യഥഃ
സർവ്വാരംഭപരിത്യാഗീ യോ മൽഭക്തഃ സമേപ്രിയഃ॥
യോനഹൃഷ്യതിനദ്വേഷ്ടി ന ശോചതി ന കാംക്ഷതി
ശുഭാശുഭപരിത്യാഗീ ഭക്തിമാൻ യഃസമേപ്രിയഃ॥
സമഃശത്രൌചമിത്രേച തഥാമാനാപമാനയോഃ
ശീതോഷ്ണ സുഖദുഃഖേഷു സമഃസംഗവിവർജ്ജിതഃ॥
തുല്യനിന്ദാസ്തുതിർമ്മൌനി സന്തുഷ്ടോയേനകേനചിൽ
അനികേതഃസ്ഥിരമതി-ർഭക്തിമാൻ മേ പ്രിയോ നരഃ"

പ്രായേണ ലോകത്തിൽ, സ്വകാര്യങ്ങളിൽ താല്പര്യവും പരോപകാരം ചെയ്യുന്നതിൽ അലസതയുമാണല്ലോ കാണുന്നതു്. അതു ഹേതുവായിട്ടു്, ഈ മുവടെയുള്ള പടിയിലേക്കു വേണ്ട മനസ്ഥിതിയുണ്ടാകുന്നതുതന്നെ പ്രയാസമായിട്ടല്ലേ ഇരിക്കുന്നതു്? വഴി എളുപ്പമല്ലെന്നു പറയുവാനുള്ള കാരണമതാണു്. ക്ഷിപ്രസാദ്ധ്യമല്ലെങ്കിലും, അഭ്യാസംകൊണ്ടു് സാധിക്കാമെന്നുള്ളതിനു സംശയമില്ല. മനുഷ്യജന്മം കിട്ടീട്ടുള്ളവർ അതു സാധിക്കുകയുംവേണം.

നിർഗ്ഗുണബ്രഹ്മത്തെ ശരിയായി ഉപാസിക്കുവാൻ അപൂർവ്വം ചില ജ്ഞാനികൾക്കേ സാധിക്കൂ. മറുള്ളവർക്കു സഗുണോപാസനതന്നെ ആശ്രയസ്ഥാനം. ഏതുമാർഗ്ഗത്തെ അവലംബിക്കുന്നു എന്നാലും വേണ്ടതില്ല, എളുകിമറിയുന്ന മനസ്സിനെ പതറാതിരിക്കുവാൻ അടക്കി ഒതുക്കി ചിത്തവൃത്തികളെ ക്രമപ്പെടുത്തേണ്ടതായിട്ടുണ്ടു്. അതിനുള്ള ദിനചര്യ, ആഹാരം, ആസനം, അനുഷ്ഠാനക്രമം, എന്നിവയെ എല്ലാം ഗീത കാണിച്ചുതരുന്നുണ്ടു്. ഇവയെ സ്വീകരിച്ചുപോയാൽ പ്രാപ്യസ്ഥാനത്തെത്തുവാൻ വളരെ എളുപ്പമുണ്ടു്.

നിർഗ്ഗുണബ്രഹ്മത്തിൽ ലയിപ്പാൻ ശക്തിയുള്ള ആത്മജ്ഞാനിയായ വിദ്വാൻപോലും മറുള്ളവരെ ഭ്രമിപ്പിക്കരുതു്. കർമ്മം ചെയ്യണം. കാരണം ലോകം ശ്രേഷ്ഠന്മാരെ അനുകരിക്കുവാനാണല്ലോ ശ്രമിക്കുക.

"ന ബുദ്ധിഭേദം ജനയേദജ്ഞാനം കർമ്മസംഗിനാം
യോജയേൽ സർവ്വകർമ്മാണി വിദ്വാൻ യുക്തഃസമാചരൻ
യദ്യദാചരതിശ്രേഷ്ഠ സ്തത്തദേവേതരോജനഃ
സയൽപ്രമാണം കുരുതേലോക സ്തദനുവർത്തതേ."

പക്ഷേ, കർമ്മമാർഗ്ഗാവലംബികൾ ഒരു കാര്യം പ്രത്യേകം ഓർമ്മയിൽ വെക്കേണമെന്നു ഭഗവാൻ ഉറപ്പിച്ചു പറയുന്നുണ്ടു്. അതു ചെയ്യാത്തതുകൊണ്ടു് ഇന്നു ലോകം തലകുത്തിമറിയുകയും ചെയ്യുന്നുണ്ടു്.

"ശ്രേയാൽ സ്വധർമ്മോവിഗുണഃ പരധർമ്മാൽ സ്വനുഷ്ഠിതാൽ
സ്വഭാവനിയതംകർമ്മ കുർവ്വന്നാപ്നോതി കിൽബിഷം."

മുക്തിക്ക ജ്ഞാനിയാകേണമെന്നില്ല എന്ന സൂചിപ്പിച്ചുവ ല്ലൊ. ഭക്തിയോടുകൂടി ഭഗവാനെ ഭജിച്ചാലും മുക്തി ലഭിക്കും. വിശ്വാ സംവേണം. പരമപ്രേമസ്വരൂപത്തോടുകൂടിയതാണ് ഭക്തി. "കാര രണമനേഷിക്കാത്ത പരപൂർണ്ണവിശ്വാസമൊന്നാണ് ഭക്തിമാർ ത്തിന്റെ നാരായവേര്" ".

"പത്രം പുഷ്പം ഫലം തോയം യോമേ ഭക്ത്യാപ്രയച്ഛതി
തദഹം ഭക്ത്യുപഹൃത മശ്നാമി പ്രിയതാത്മനഃ"

ഭഗവന്നാമസങ്കീർത്തനം, ഭാഗവതാദിപുരാണവായന, ഭക്തന്മാരായുള്ള സംസർഗ്ഗം, ഇവയെല്ലാം ഭക്തിയുടെ അഭിവൃദ്ധിക്ക ഹിതകരങ്ങളായ ഹേതുക്കളാകുന്നു. സംശയലേശംപോലുമില്ലാതെ ഭജിക്കുവാൻ ഭഗവാൻ ശക്തിയോടുകൂടി ഉപദേശിക്കുന്നുണ്ട്.

"മന്മനാഭവമദ്ഭക്തോ മദ്യാജീമാം നമസ്കുരു
മാമേ വൈഷ്യസി സത്യം തേ പ്രതിജാനേ പ്രയോസിമേ."

കർമ്മമാർഗ്ഗത്തെ ഇതരമാർഗ്ഗങ്ങളിൽവെച്ചു സുഗമമെന്നാ രീതിയിലാണ് ഗീതയിൽ പ്രതിപാദിച്ചിട്ടുള്ളതു്. കർമ്മമെന്നാൽ വിഹിതമായ കർമ്മം എന്നത്രേ. എല്ലാവരും കർമ്മംചെയ്യുന്നു. ആർക്കും അതൊഴിച്ചുകൂ ടുന്നതല്ല.

"നഹി കശ്ചിൽ ക്ഷണമപി ജാതുനിഷ്ഠത്യകർമ്മകൃൽ
കാര്യതേഹ്യവശഃ കർമ്മ സർവ്വഃ പ്രകൃതിജൈർഗ്ഗുണൈഃ"

യോഗികളും കർമ്മംചെയ്യുന്നു.

"കായേന മനസാബുദ്ധ്യാ കേവലൈരിന്ദ്രിയൈരപി
യോഗിനം കർമ്മകുർവ്വന്തി സംഗം ത്യക്ത്വാത്മശുദ്ധയേ."

ഭഗവാൻകൂടി കർമ്മം ചെയ്തുകൊണ്ടേ ഇരിക്കുന്നു.

"നമേ പാർത്ഥാസ്തികർത്തവ്യം ത്രിഷുലോകേഷുകിംചന
നാനവാപ്തമവാപ്തവ്യം വർത്ത ഏവച കർമ്മണി."

പ്രവർത്തി (കർമ്മ) മാർഗ്ഗത്തിൽക്കൂടിയല്ലാതെ പ്രകൃതിക്ക പ്രത്യ ക്ഷമാകുവാൻ വഴിയില്ല. പരമാത്മാവിനെ അനുമാനിക്കുന്നതു പ്രകൃ

തിമൂലമല്ലാതെയും തരമില്ല. അതുകൊണ്ടും കർമ്മത്തിന്റെ പ്രാധാന്യം ഉൗഹിക്കാവുന്നതാകുന്നു.

കർമ്മമാർഗ്ഗത്തിൽ ചരിച്ചാൽ പരമപദം കിട്ടുമോ എന്നു സംശയിക്കേണ്ട.

"കർമ്മണൈവഹി സംസിദ്ധി മാസ്ഥിതോ ജനകാദയഃ—
ലോകസംഗ്രഹമേവാപി സംപശ്യൻ കർത്തുമർഹസി."

ഫലാപേക്ഷയും കർതൃതാഭിമാനവും കൂടാതെ ലോകസംഗ്രഹത്തിനായിക്കൊണ്ടുള്ള കർമ്മമാണ് കർമ്മം. അതു വക പ്രവൃത്തിയിൽ ഏർപ്പെട്ടിരിക്കുന്നോളാണ് കർമ്മയോഗി. അജ്ഞനു ഫലേച്ഛയായിരിക്കും പ്രവർത്തിക്കുള്ള പ്രേരണശക്തി; ബുദ്ധിമാനു സ്വധർമ്മബോധമായിരിക്കും. പരോപകാരം പുണ്യം, പാപം പരപീഡനവും. ഈ വിചാരം സർവ്വോൽകൃഷ്ടത്തിനും കാരണമാണ്. സ്വാർത്ഥമായ അന്തഃകരണമുള്ളവർക്ക് സമബുദ്ധി സർവ്വസാധാരണയായിരിക്കും. അങ്ങനെയുള്ള സന്മനസ്സുണ്ടാകുവാനും ഉണ്ടാക്കുവാനും അതുകൂടി സ്വദേശാഭിമാനികൾ ശ്രമിക്കേണ്ടതുണ്ട്. ധനാർജ്ജനത്തിനായി ലോകമാസകലം സമരം നടക്കുന്ന ഇക്കാലത്തു് ഈശ്വരപ്രഭാവത്തെ കുറിച്ചു പ്രസംഗിക്കുന്നതും അതു ശക്തിയെ അദ്ധ്യാരോപിക്കുവാൻ ശ്രമിക്കുന്നതും പക്ഷേ സാഹസമായിരിക്കും. എങ്കിലും സ്രഷ്ടാവു്, നേതാവും നാഥനുമാണെന്നും, ഈ കാണുന്നതെല്ലാം ദൈവവിലാസമാണെന്നും, ബാലഹൃദയങ്ങളെ ധരിപ്പിച്ചു് അവരെ സദാചാരങ്ങളിലും ഈശ്വരാരാധനയിലും പ്രേരിപ്പിച്ചു നയിപ്പിക്കേണ്ടതു് സന്മാർഗ്ഗനിഷ്ണാതന്മാരായ ഗുരുജനങ്ങളുടെ കർത്തവ്യങ്ങളിൽ ഒട്ടും അപ്രധാനമല്ലാത്ത ഒന്നാണല്ലോ. ഈ തരത്തിലുള്ള ഗുരുവരന്മാർ വളരെ പേർ ഉണ്ടായിവരട്ടെ എന്നു പ്രാർത്ഥിച്ചുകൊണ്ടു് ഈ ഉപന്യാസത്തെ ഉപസംഹരിച്ചുകൊള്ളട്ടെ.

ധ്വനികാരന്റെ എതിർവാദികൾ

By P. KRISHNAN NAIR, V. S. Siromani,
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*"കാവ്യസ്യാത്മാ ധ്വനിരിതി ബുധൈർയ്യസ്സമാമ്നാതപൂർവ്വ-
സ്തസ്യാഭാവം ജഗദുരപരേ ഭാക്തമാഹുസ്തമന്യേ
കേചിദ്വാചാം സ്ഥിതമവിഷയേ തത്ത്വമൂചുസ്തദീയം
തേന ബ്രൂമസ്സഹൃദയമനഃപ്രീതയേ തത്സചേതഃ."

എന്നിങ്ങിനെ ആനന്ദവർദ്ധനാചാര്യർ തന്റെ ധ്വന്യാലോകത്തിലെ പ്രഥമകാരികയെക്കൊണ്ടു പ്രകാശിപ്പിച്ചിരിക്കുന്ന ധ്വനിപ്രസ്ഥാനവിരോധിയായ അഭാവവാദവും ഭാക്തവാദവും അനാഖ്യേയവാദവും, †"ന ചാസ്മാഭിരഭാവവാദിനാം വികല്പാഃ ശ്രുതാഃ; കിന്തു സംഭാവ്യ ദൂഷയിഷ്യന്തേ" ഇത്യാദി ലോചനവാക്യമനുസരിച്ചു കേവലം സംഭാവനീയങ്ങളാണെന്നു വരികിലും,

‡തഥാചാന്യേന കൃത ഏവാത്ര ശ്ലോകഃ—

"യസ്മിന്നസ്തി ന വസ്തു കിഞ്ചന മനഃപ്രഹ്ലാദി സാലംകൃതി
വ്യൽപന്നൈ രചിതഞ്ച നൈവ വചനൈർവ്വക്രോക്തിശൂന്യഞ്ച യൽ

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* "കാവ്യാത്മാവെന്നു പണ്ടേ ബുധപരിപൂജ്യരാൽ സമ്യഗാമ്നാതമതൊ-
ന്നില്ലതു ഹൃദ്യമാമാധ്വനി; ചിലരതിനെ ഭംഗ്യാകൃതമെന്നതിട്ടന്തു;
ഞാനിച്ചിട്ടുണ്ടു വേറേ ചിലരിതവിഷയം വാക്കിനെന്നാകയാൽ നോം
തത്ത്വം നിർവ്വചിക്കാം സഹൃദയഹൃദയാനന്ദസിദ്ധിക്കിതാനീം."

(കാവ്യാലോകം—ഭോജ)

† നോം അഭാവവാദികളുടെ വിപരീതാഭിപ്രായങ്ങളും കേൾക്കുകയുണ്ടായിട്ടില്ല. എങ്കിലും സംഭാവനം ചെയ്തു ഖണ്ഡിക്കാൻ പോകുന്നു.

‡ ഇതിനെക്കുറിച്ചു് ഏതാണ്ടൊരു കവി ഒരു പദ്യം നിർമ്മിച്ചിട്ടുമുണ്ടു്.

"യാതൊന്നിൽ തെല്ല സാലംകൃതി സരസമനോഹാരിയാം വസ്തുവില്ലെ-
ന്നാലേ വൈചിത്ര്യശൂന്യം വചനനിചയമെന്നാല വക്രോക്തിയില്ല;
അക്കാവ്യം പ്രീതിമൂലം ധ്വനിവിലസിതമെന്നോർത്തിട്ടും മുദ്ധരെന്തും-
ണാവോ ചോദിക്കിലോതുന്നിതു സുമതിയൊടായ് തൽസചേതഃപ്രകർഷം."

(കാവ്യാലോകം—ഭോജ)

കാവ്യം തദ്ധ്വനിനാ സമനുഭിതമിതി പ്രീത്യാ പ്രശംസൻ ജഡോ
നോ വിദ്മോദ്ഭിദ്യതി കിം സുമതിനാ പൃഷ്ടഃ സ്വരൂപം ധ്വനേഃ"

എന്ന ഗ്രന്ഥസന്ദർഭംകൊണ്ടും വിശേഷിച്ചു്, * "ഗ്രന്ഥകൃൽസമാനകാല ഭാവിനൈവ മനോരഥനാമ്നാ കവിനാ" എന്ന ലോചനപംക്തികൊണ്ടും ധ്വനികാരന്റെ കാലത്തുതന്നെ ധ്വനിപ്രസ്ഥാനവിരോധിയായി മനോരഥനെന്നൊരു കവിയുണ്ടായിരുന്നുവെന്നറിയുന്നുണ്ടു്.

ഭാമഹാദികളായ പ്രാചീനാലങ്കാരികന്മാരുടെ സാഹിത്യശാസനങ്ങൾക്കു വിധേയങ്ങളായി ആത്മമഹത്ത്വമുപേക്ഷിച്ചു കാവ്യോപസ്കരണകൃത്യം നടത്തി തുച്ഛമായ രീതിയിൽ ജീവിച്ചുപോന്ന രസഭാവാദികളേയും നാമാന്തരത്തിൽ അജ്ഞാതവാസമനുഷ്ഠിച്ചുകൊണ്ടു ക്ലേശിച്ചു കാലംകഴിച്ചിരുന്ന വസ്തുവലങ്കാരധ്വനികളേയും മഹാനായ ആനന്ദവർദ്ധനാചാര്യർ 'ധ്വന്യാലോകം' വഴിക്കു് അക്കൂട്ടരുടെ ക്രൂരശാസനങ്ങളിൻപിടിയിൽനിന്നു വിടുവിച്ചു സാഹിത്യസാമ്രാജ്യത്തിൽ യഥായോഗം ഉത്തമസ്ഥാനം നല്കി. ആക്കീമെളപ്പത്തിൽ ഇളക്കുവാൻ കഴിയാത്ത വണ്ണം പ്രബലമായി പ്രതിഷ്ഠിച്ചിരുന്നിട്ടും ആ പ്രതിഷ്ഠയെ ആക്രമിച്ചു ധ്വനിസാമ്രാജ്യത്തെ അലങ്കോലപ്പെടുത്തുവാൻ പ്രതിയോഗികൾ പരിശ്രമിച്ചുനോക്കാതിരുന്നിട്ടില്ല.

"ഏതേന ശബ്ദസാമർത്ഥ്യ-മഹിമ്നാ സോപി വാരിതഃ
യമന്യഃ പണ്ഡിതംമന്യഃ പ്രപേദേ കഞ്ചന ധ്വനിം
വിധേർനിഷേധാവഗതിർവ്വിധിബുദ്ധിർനിഷേധതഃ
ഭേദമധ്യമിഅ വീസന്തോ മാ സ്മ പാന്ഥ ഗൃഹം വിശ
മാനാന്തരപരിച്ഛേദ്യ-വസ്തുരൂപോപദേശിനാം
ശബ്ദാനാമേവ സാമർത്ഥ്യം തത്ര തത്ര തഥാ തഥാ
അഥവാ നേദൃശീ ചർച്ചാ കവിഭിസ്സഹ ശോഭതേ
വിദ്വാംസോപി വിമുഹ്യന്തി വാക്യാതേഃ ഗഹനേ പഥി."

എന്നിങ്ങിനെ ആക്ഷേപിച്ചിരിക്കുന്ന ന്യായമഞ്ജരീകാരനായ ജയന്തഭട്ടന്റേയും മറ്റും സ്ഥിതിയിരിക്കട്ടെ; ധ്വനിപ്രസ്ഥാനത്തിനു വിരോ

* ഗ്രന്ഥകാരന്റെ സമാനകാലികനായ മനോരഥനെന്ന കവിയാൽ.

ധികളായി സാഹിത്യശാസ്ത്രകാരന്മാരിൽത്തന്നെ പലരും ഉണ്ടായിരുന്നു. ഭട്ടനായകൻ, പ്രതീഹാരേന്ദുരാജൻ, ധനഞ്ജയൻ, ധനികൻ, മഹിമഭട്ടൻ എന്നിവരാകുന്നു അവരിൽ പ്രധാനന്മാർ. ആനന്ദവർദ്ധനാചാര്യരുടെ ധ്വനിപ്രതിഷ്ഠയെ അഭിജ്ഞോത്തമനായ അഭിനവഗുപ്തപാദാചാര്യർ യുക്തികളെക്കൊണ്ടും പ്രമാണങ്ങളെക്കൊണ്ടും 'ലോചന'മെന്ന അത്ഭുതമായ ഒരു കോട്ട കെട്ടി സുരക്ഷിതമാക്കിട്ടപോലും അതൊന്നും ക്ഷുദ്രാക്കാതെ മഹിമഭട്ടൻ വളരെ ശക്തിയോടുകൂടി എതിർത്തിരിക്കുന്നു. ഈ വക എതിർപ്പുകൾ തീരെ ശമിച്ചതു മമ്മടഭട്ടന്റെ കാവ്യപ്രകാശത്തിനു ശേഷമാണെന്നു വേണം പറവാൻ. മമ്മടഭട്ടനു സപ്തവൃത്തിയുണ്ടായിരുന്നു സരസ്വതീകണ്ഠാഭരണം, ശൃംഗാരപ്രകാശം എന്നിവയുടെ കർത്താവായ ഭോജനും പിമ്പുണ്ടായിരുന്ന 'അലങ്കാരശേഖര'കാരനായ കേശവമിശ്രനും മറ്റും പ്രാചീനപദ്ധതിയെയാണ് അനുസരിച്ചിരിക്കുന്നതെങ്കിലും വിശേഷിച്ചു ധ്വനിനിരാസത്തിനു് അവർ തുനിഞ്ഞിട്ടില്ല. 'വക്രോക്തിജീവിത'കാരനായ കുന്തകന്റെ വക്രോക്തിജീവിതവാദവും 'ഔചിത്യവിചാരചർച്ച'കാരനും അഭിനവഗുപ്തശിഷ്യനുമായ ക്ഷേമേന്ദ്രന്റെ ഔചിത്യജീവിതവാദവും പ്രകാരാന്തരത്തിലുള്ള പ്രതിപാദനം മാത്രമാണെന്നല്ലാതെ ധ്വനിപ്രസ്ഥാനത്തിനു വിരുദ്ധമായി വിചാരിക്കവയ്യ. ധ്വനിപ്രസ്ഥാനത്തിന്റെ പ്രധാനവിരോധികൾ ഭട്ടനായകാദികളാകുന്നു. അതിലും ധ്വനിനിരസനത്തിനായി പ്രൈമ്പയ്യേണ പ്രവർത്തിച്ചിരിക്കുന്നവർ ഭട്ടനായകനും മഹിമഭട്ടനുമാണു്. കേവലം ധ്വനിഖണ്ഡനത്തിനായി യഥാക്രമം 'ഹൃദയദർപ്പണം' എന്നും 'വ്യക്തിവിവേകം' എന്നും ഓരോ ഗ്രന്ഥം നിർമ്മിച്ചിട്ടുള്ളവർ അവർ മാത്രമാണല്ലോ. ഭട്ടനായകന്റെ ഹൃദയദർപ്പണം ഇതുവരെ കണ്ടുകിട്ടീട്ടില്ലെങ്കിലും,

"സഹസാ യശോധിഗന്തും
സമുദ്യതാടദൃഷ്ടദർപ്പണാ മമ ധീഃ"

എന്ന 'വ്യക്തിവിവേക'വൃത്തിന്റെ വ്യാഖ്യാനത്തിൽ കാണുന്ന "ദർപ്പണഃ ഹൃദയദർപ്പണാഖ്യോ ധ്വനിധ്വംസഗ്രന്ഥോപി" എന്ന വാക്യംകൊണ്ടു് 'വ്യക്തിവിവേക'ംപോലെ ഇതും ഒരു ധ്വനിഖണ്ഡനഗ്രന്ഥമാണെന്നു വിചാരിക്കാവുന്നതാണു്. 'ഹൃദയദർപ്പണം' കാരികയും

വൃത്തിയും ക്രൂടിയതാണെന്നു ലോചനകാരൻ ഉദ്ഘോഷിച്ചുകാണിച്ച ഭാഗങ്ങൾകൊണ്ടു ഗ്രഹിക്കാം. മഹിമഭട്ടന്റെ ധ്വനിഖണ്ഡനാത്മകമായ 'വ്യക്തിവിവേക'ത്തിന്നു് അലങ്കാരസർവ്വസ്വകാരൻ പ്രൌഢവും മഹനീയവുമായ ഒരു വ്യാഖ്യാനം നിർമ്മിച്ചിട്ടുണ്ടു്. എന്നാൽ, അതിൽ വ്യക്തിവിവേകകാരന്റെ അഭിപ്രായത്തെ ഖണ്ഡിച്ചുകൊണ്ടു ധ്വനികാരമതത്തെ സ്ഥാപിക്കയാണു് വ്യാഖ്യാതാവു് ചെയ്തിരിക്കുന്നതു്. കാലദോഷത്താൽ പ്രസ്തുതവ്യാഖ്യാനം മുഴുവനും ലഭിക്കാതിരിക്കുന്നതു സാഹിത്യശാസ്ത്രസമ്പത്തിക്കു വലിയ ന്യൂനതയാണെന്നു പറയേണ്ടിയിരിക്കുന്നു. കിട്ടിയേടത്തോളം—ആദ്യത്തെ വിമർശനത്തിന്നും രണ്ടാമത്തേതിൽ വാച്യാവചനദോഷപ്രസ്താവത്തിലെ അർത്ഥദോഷനിരൂപണപ്രസ്താവം വരെയും—വ്യാഖ്യാനത്തോടുകൂടി 'വ്യക്തിവിവേകഗ്രന്ഥം' അനന്തശയനം സംസ്കൃതഗ്രന്ഥാവലിയിൽ 5-ാം നമ്പരായി പ്രസിദ്ധപ്പെടുത്തീട്ടുണ്ടു്. ക്രടാതെ, 'മധുസൂദനവിവൃതി' എന്ന ഇദാനീതനവ്യാഖ്യാനത്തോടുകൂടി കാശി സംസ്കൃതഗ്രന്ഥമാലവകയായും ഒരു പതിപ്പു പുറത്തായിട്ടുണ്ടു്. വ്യക്തിവിവേകകാരന്റെ അനുമാനവാദം എന്റെ 'കാവ്യാലോക'ത്തിനുള്ള 'ആസ്വാദപദവി' എന്ന വ്യാഖ്യാനത്തിൽ സംഗ്രഹിച്ചെടുത്തു കാണിച്ചു ഖണ്ഡിച്ചിട്ടുള്ളതിനാൽ ഇവിടെ പ്രസ്താവിക്കുന്നില്ല. ഭട്ടനായകന്റെ വാദപ്രകാരം അഭിനവഗുപ്താചാര്യർ ലോചനത്തിൽത്തന്നെ അനുവദിച്ചു നിരസിച്ചിരിക്കകൊണ്ടു് ഉപേക്ഷിച്ചിരിക്കുന്നു.

പ്രതീഹാരേന്ദുരാജൻ, ധനഞ്ജയൻ, ധനികൻ എന്നിവർ ധ്വനിനിരാസത്തിന്നായി പ്രത്യേകം ഗ്രന്ഥം നിർമ്മിച്ചിട്ടില്ല. പ്രതീഹാരേന്ദുരാജൻ ഉദ്ഭടന്റെ 'കാവ്യാലങ്കാര'ത്തിന്നുള്ള തന്റെ വ്യാഖ്യാനമായ 'ലഘുവിവൃതി'യുടെ അവസാനം *"നന്വ യത്ര കാവ്യേ സഹൃദയഹൃദയാഹ്ലാദിനഃ പ്രധാനഭൂതസ്യ സ്വശബ്ദവ്യാപാരാസ്പൃഷ്ടതേവ പ്രതീയമാനൈകരൂപസ്യാർത്ഥസ്യ സദ്ഭാവ സ്തത്ര തഥാ വിധാർത്ഥാഭിവ്യക്തി

* അതെ, യാതൊരു കാവ്യത്തിൽ സഹൃദയഹൃദയാഹ്ലാദിയും പ്രധാനഭൂതവും അഭിധയോ ലക്ഷണയോ ആയ ശബ്ദവ്യാപാരത്തിനു വിഷയമാകാതെ പ്രതീയമാനമാത്രസ്വരൂപവുമായ അർത്ഥം വിലസുന്നുവോ അത്തരത്തിലുള്ള അർത്ഥത്തിന്നു ഹേതുവും

ഹേതുഃ കാവ്യജീവിതഭൂതഃ കൈശ്ചിത്സഹൃദയൈർധ്വനിർനാമ വ്യംജകഭേദാത്മാ കാവ്യധർമ്മോഭിഹിതഃ. സ കസ്മാദിഹനോപദിഷ്ടഃ" എന്നു ചോദിച്ചുകൊണ്ടു്, *"ഉച്യതേ; എഷോപവാലങ്കാരേഷ്വന്തർഭാവാൽ" എന്നു തുടങ്ങുന്ന ഗ്രന്ഥസന്ദർഭംകൊണ്ടു് അലങ്കാരങ്ങളിൽ അന്തർഭാവമുപപാദിച്ചു ധ്വനിപ്രസ്ഥാനത്തെ നിരസിക്കുകയാണു് ചെയ്തിരിക്കുന്നതു്.

ധനഞ്ജയന്റെ മതം ധ്വനിപ്രസ്ഥാനാനുസാരിയല്ലെങ്കിലും അദ്ദേഹം തന്റെ 'ദശരൂപക'ത്തിൽ ധ്വനിവാദമനുവദിച്ചു ഖണ്ഡിക്കുന്നില്ല.

"വാച്യപ്രകരണാദിഭ്യോ ബുദ്ധിസ്ഥാ വാ യഥാ ക്രിയാ
വാക്യാർത്ഥഃ കാരകൈർയ്യുക്താ സ്ഥായീ ഭാവസ്തഥേതരൈഃ"

എന്ന കാരികയെക്കൊണ്ടു്, ലൌകികവാക്യത്തിൽ വാച്യമോ ബുദ്ധിസ്ഥമോ ആയ ക്രിയ കാരകവിശിഷ്ടമായ്തീർന്നു് വാക്യാർത്ഥമാകുന്നതുപോലെ കാവ്യവാക്യത്തിൽ വാച്യമോ ബുദ്ധിസ്ഥമോ ആയ രത്യാദിഭാവം വിഭാവാദിവിശിഷ്ടമായി വാക്യാർത്ഥമായി ഭവിക്കുന്നു എന്നുമാത്രം പറഞ്ഞു കടന്നുകളകയാണു് ചെയ്തിരിക്കുന്നതു്.

ദശരൂപകവൃത്തികാരനായ ധനികൻ അത്രമാത്രംകൊണ്ടു തൃപ്തിപ്പെട്ടുന്നില്ല. അദ്ദേഹം തന്റെ 'അവലോക'മെന്ന വൃത്തിയിൽ ധ്വനികാരന്റെ മതത്തെ സംക്ഷേപിച്ചനുവദിച്ചുകൊണ്ടു്, ധനഞ്ജയന്റെ "വാച്യപ്രകരണ—" എന്ന കാരികയെ അവതരിപ്പിക്കുകയും *"യൽ പരശ്ശബ്ദസ്യശബ്ദാർത്ഥഃ" എന്ന നയം പുരസ്കരിച്ചു ധ്വനിതാൽപര്യാർത്ഥത്തിൽനിന്നു ഭിന്നമല്ലെന്നും രസത്തിന്നും കാവ്യത്തിന്നുമുള്ള സംബന്ധം ഭാവ്യഭാവകഭാവമാണെന്നും പ്രതിപാദിച്ചുകൊണ്ടു ധ്വനിപ്രസ്ഥാനത്തെ എതിർത്തിരിക്കുന്നു. ധനികന്റേയും പ്രതീഹാരേന്ദുരാജന്റേയും ധ്വനിഖണ്ഡനം നിസ്സാരമാകയാൽ അസാധാരണപദവിയിൽ ഭട്ടനായകന്റേയും മഹിമഭട്ടന്റേയും വാദങ്ങൾക്കെന്നപോലെ പ്രാധാന്യം

കാവ്യാത്മഭൂതവും ധ്വനിയെന്ന പ്രസിദ്ധവും വ്യംജകഭേദരൂപവും ആയ കാവ്യധർമ്മം ചില സഹൃദയന്മാരാൽ പറയപ്പെട്ടിരിക്കുന്നു. അതു് എന്തുകൊണ്ടു് ഈ ഗ്രന്ഥത്തിൽ പറഞ്ഞില്ല.

* പറയാം; ഈ അലങ്കാരങ്ങളിൽത്തന്നെ ഉൾപ്പെട്ടുകയാൽ.

കൊടുത്തിട്ടില്ലെങ്കിലും—പ്രത്യേകമെടുത്തു വിസ്തരിച്ചു ഖണ്ഡിച്ചിട്ടില്ലെങ്കിലും—മതാന്തരനിരാസാർത്ഥം പ്രദർശിപ്പിക്കപ്പെട്ട യുക്തികളെക്കൊണ്ട് അവയേയും യഥാസന്ദർഭം നിരസിച്ചു കാണിച്ചിട്ടുണ്ട്. 'ആസ്ഥാന പദവി'യോടു കൂടിയ 'കാവ്യാലോക'ത്തിന്റെ മുദ്രണം ആരംഭിച്ചിരിക്കയാൽ ആ ഗ്രന്ഥം അടുത്തുതന്നെ മലിരാശി വിശ്വവിദ്യാലയത്തിൽനിന്നു പ്രസിദ്ധപ്പെടുത്തുന്നതാണ്.

സാഹിത്യശാസ്ത്രകാരന്മാരിൽത്തന്നെ സാക്ഷാൽ ധ്വനിപ്രസ്ഥാനവിരോധികളായ അലങ്കാരികന്മാരാരെല്ലാമാണെന്നു മാത്രമാണ് ഇവിടെ ഉപന്യസിച്ചിരിക്കുന്നത്. ഇതരശാസ്ത്രകാരന്മാരിൽ വൈയാകരണന്മാർ ഒഴിച്ചു മറവുള്ളവരാരും--നൈയായികമാർ, മീമാംസകന്മാർ, വേദാന്തികൾ എന്നിവരാരും—ശബ്ദത്തിനു ധ്വനനമെന്ന അതിരിക്തമായ വ്യാപാരം സ്വീകരിക്കുന്നില്ല. വിപുലവും ഗഹനവും അപ്രസ്തുതവുമായ ആ വക വിചാരത്തിനു തൽക്കാലം പുറപ്പെടുന്നില്ല.

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* ശബ്ദത്തിൽനിന്ന് ഏതേതർത്ഥങ്ങൾക്കു പ്രതീതിവരുന്നുവോ അതെല്ലാം ശബ്ദത്തിന്റെ അർത്ഥംതന്നെയാണ്.

കവിത

By K. K. KURUP

(ഒരു നിരൂപണം).

കവിതയ്ക്ക് പല ഭാഷകളിലും പല നിർവ്വചനങ്ങളുമുണ്ടെങ്കിലും സർവ്വാത്മനാ പൂർണ്ണമായും, സർവ്വസമ്മതവുമായുള്ള ഒരു കാവ്യലക്ഷണം കണ്ടു കിട്ടുമോ എന്നു സംശയമാണ്. നാം കാണുന്ന കവിതാവിവരണങ്ങളിൽ അധികഭാഗവും നിരൂപകന്മാരാൽ നിർമ്മിതവും, ബാക്കിയുള്ളതു് കവികളാൽത്തന്നെ കൃതവുമാകുന്നു. ഒരു വിദ്വാൻറെ കാവ്യനിർവ്വചനമാണെങ്കിൽ അതു് അപഗ്രഥനരീതിയിൽ കാവ്യാംശങ്ങളെ വിവരിയ്ക്കുന്നതും, അതിനാൽ സാധാരണന്മാർക്ക് സുഗ്രഹമല്ലാതെയുള്ളതുമായിരിയ്ക്കും. ഒരു കവിയുടെ കവിതാവിവരണമാണെങ്കിൽ അതു് കവിതാരചനയ്ക്ക് ഉപയുക്തങ്ങളായ കവിധർമ്മങ്ങളെ ക്രോഡീകരിക്കുന്നതും, അതിനാൽ കവിഹൃദയത്തെ പ്രകാശിപ്പിയ്ക്കുന്നതുമായിരിക്കുമെന്നു തീർച്ചയാണ്. നിരൂപണകർത്താവു് കവിതയേയും, കവനകർത്താവു് ആത്മാവിനേയും അവലോകനം ചെയ്യുന്നതുകൊണ്ടാണ് അവർ രണ്ടു പേരുടേയും കാവ്യനിർവ്വചനങ്ങൾ ഇങ്ങിനെ രണ്ടു വഴിയ്ക്ക് തിരിയുന്നതു്.

കവിതയെന്നാലെന്താണെന്നും, അതിൻറെ ഉദ്ദേശമെന്താണെന്നും, പ്രഥമമായിത്തന്നെ ആരാഞ്ഞു നോക്കാം. കവിത വികാരപരമായിരിയ്ക്കുന്നതാണെന്ന സംഗതിയെപ്പറ്റിയേടത്തോളം പാശ്ചാത്യരും, പൌരസ്ത്യരുമായ കവികളും, കാവ്യവിമർശകന്മാരും ഏറെക്കുറെ ഏകാഭിപ്രായക്കാരായിട്ടാണ് കാണപ്പെടുന്നതു്. കാവ്യത്തിൻറെ ഉദ്ദേശം ധർമ്മോപദേശമോ, ആഖ്യാനപ്രധാനമോ എന്നുള്ളതിനെപ്പറ്റി പൌരസ്ത്യാലങ്കാരികന്മാരുടെ ഇടയിലെന്നപോലെ പാശ്ചാത്യവിമർശകന്മാരുടെ ഇടയിലും പല തർക്കങ്ങൾ നടന്നിട്ടുണ്ട്. യവനചിന്താഗ്രേസരനായ പ്ലേറോ കാവ്യത്തിൻറെ മുഖ്യകർത്തവ്യമായിക്കണ

ക്കാക്കിയതു് തത്വോപദേശത്തെയാണു്. ബെൻ ജോൺസൺ, കാർലൈൽ മുതലായ പലെ അനന്തരകാലീനന്മാരും പ്ലേറോവിന്റെ അനുയായികളായിരുന്നു. എന്നാൽ അരിസ്റ്റോട്ടിൽ എന്ന യവനമഹാപണ്ഡിതനാകട്ടെ ആനന്ദപ്രദായിത്വത്തിന്നാണു് പ്രാധാന്യം കല്പിച്ചതു്. "കാവ്യമെന്നതു് മനസ്സിന്റെ സ്വച്ഛതയും, സ്വതന്ത്രതയുമായ ഒരു വ്യാപാരവിശേഷമാകുന്നു. അതു് മതം, രാഷ്ട്രം മുതലായവയുടെ പരിധിയിൽനിന്നു് പുറമെനില്ക്കുന്ന ഒന്നാണുതാനും. വിദ്യാഭ്യാസം, സാന്മാർഗ്ഗികപോഷണം എന്നിവയിൽനിന്നു് ഭിന്നമായി സ്വന്തമായോരുദ്ദേശമാണതിന്നുള്ളതു്." ഇതത്രെ അദ്ദേഹത്തിന്റെ അഭിപ്രായം. ബേക്കൺ, ഡോക്ടർ ജോൺസൺ, കോളറിഡ്ജ്, ഹാസിലിറ്റ് തുടങ്ങിയ ആംഗ്ലേയവിദ്വച്ഛിരോമണികളെല്ലാം ഈ അഭിപ്രായത്തെ സ്വീകരിച്ചവരായിരുന്നു. "മനസ്സിനെ ആഹ്ലാദിപ്പിച്ചു വിചാരങ്ങൾക്കു് ഉല്ക്കർഷം നൽകുകയാണു് കാവ്യത്തിന്റെ ധർമ്മ"മെന്നു് കീറ്റ്സ് മഹാകവി തന്റെ ഒരു കൃതിയിൽ പ്രഖ്യാപനം ചെയ്തിട്ടുണ്ടു്. ഭൂരിപക്ഷം വിമർശകന്മാരാൽ അംഗീകൃതമായ മതവും ഇതുതന്നെയാണു്.

"ധ്വനി പ്രധാനം കാവ്യന്തു
കാന്താസമ്മിതമീരിതം
ശബ്ദാത്ഥൗ ഗുണതാം നീത്വാ
വ്യഞ്ജനപ്രഭവം യതഃ"

ആകപ്പാടെ നോക്കുമ്പോൾ കാവ്യമെന്നതു് രസാത്മകമായ വാക്യമാണെന്നും, രമണീയാത്ഥപ്രതിപാദകമായ ശബ്ദമാണെന്നും, കാന്താസമ്മിതമാണെന്നും മറ്റും നമ്മുടെ അലങ്കാരികന്മാർ പറഞ്ഞിട്ടുള്ളതുതന്നെയാണു് പാശ്ചാത്യരും പറയുന്നതു്. പഞ്ചസാരയിൽപൊതിഞ്ഞ സഞ്ജീവിനിയെപ്പോലെയാണു് കാവ്യം ധർമ്മാധർമ്മബോധത്തെ ആഹ്ലാദജനകമായ രീതിയിൽ നമുക്കു നൽകുന്നതു്. രാമണീയകവും, രസവും തന്നെയാണു് കാവ്യത്തിന്റെ മുഖ്യലക്ഷണങ്ങൾ; അഥവാ കാവ്യോദ്യാനത്തിലെ കുസുമങ്ങൾ രാമണീയകങ്ങളും, മകരന്ദം രസവുമാകുന്നു എന്നു് മറെറാരുവിധത്തിൽ പറയാം. അതായതു് കാവ്യ

ത്തിന്റെ ആസ്വാദം സൌന്ദര്യവും, വിശ്രാന്തി, രസജന്യമായ ആനന്ദത്തിലുമാകുന്നു എന്നാത്മം. ഇവിടെ സൌന്ദര്യമെന്നും രസമെന്നുമുള്ള പദങ്ങൾക്ക് ഏറ്റവും വിവൃതവും ബഹുഗ്രാഹ്യവുമായ അർത്ഥം കൊടുക്കേണ്ടതാണ്.

"കണ്ണം ഗതം ശ്രുഷ്യതി കണ്ണ ഏവ
സങ്ഗീതകം സൈകതവാരിരീത്യാ
ആനന്ദയത്യന്തരനുപ്രവിശ്യ
സൂക്തിഃകവേരേവ സുധാസഗന്ധാ."

മണലിൽച്ചെന്നുചേരുന്ന വെള്ളംപോലെ സങ്ഗീതം ചെവിയിൽ കേറിയാൽ അവിടെത്തന്നെ വറ്റിപ്പോകുന്നു; അകത്തു കടന്ന് ആനന്ദിപ്പിക്കുന്നതു് അമൃതതുല്യമായ കവിസൂക്തി മാത്രമാകുന്നു.

ശക്തിയോടുകൂടി ഉദിയ്ക്കുന്ന മനോവികാരങ്ങളുടെ നിരർഗ്ഗളമായ ബഹിർഗ്ഗമനമാണ് കവിത എന്ന് വേർഡ്സ്വർത്തും; ഉൽക്കൃഷ്ടമായ ഹൃദയത്തിൽ ഉൽക്കൃഷ്ടമായ സന്ദർഭത്തിൽ ഉളവാകുന്ന ഉൽക്കൃഷ്ടമായ മനോഭാവമാണ് കവിതയായിത്തീരുന്നതെന്ന് ഷെല്ലിയും പറയുന്നു. കവിതയെപ്പറ്റി കലെഹണ്ട് എന്ന മഹാൻ, സത്യത്തേയും, സൌന്ദര്യത്തേയും പ്രകാശിപ്പിക്കുന്നതിനാലുള്ള വികാരത്തിന്റെ ബഹിസ്സ്മരണമാണെന്നും; ഹാസിലിറ്റ് എന്ന വിദ്വാൻ അതു് ഭാവത്തിന്റേയും, ഭാവനയുടേയും ഭാഷയാണെന്നും സിദ്ധാന്തിയ്ക്കുന്നു. "നിഷാദ വിദ്ധാണ്ഡജ ദർശനോത്ഥഃ ശ്ലോകത്വമാ പദ്യത യസ്യശോകഃ" എന്ന് മഹാകവി കാളിദാസൻ പറഞ്ഞിട്ടുള്ളതു് കവിതയുടെ വികാരമയത്വത്തെത്തന്നെയാണ് ലക്ഷീകരിയ്ക്കുന്നതു്. സാഹിത്യപാരാവാരപാരീണന്മാരും, വിശാലചിത്തന്മാരുമായ കവികൾക്ക് പ്രകൃതിയിൽനിന്നും ജീവിതത്തിൽനിന്നുമുണ്ടാവുന്ന അനുഭവങ്ങളും അവരിൽ ശക്തിമത്തുക്കളായ മനോവികാരങ്ങളെ ജനിപ്പിയ്ക്കുമ്പോൾ അതുകൾ അവരുടെ അന്തർഭാഗത്തു് ഒളുങ്ങാതെ വാക്യരൂപത്തിൽ പുറപ്പെടുമ്പോഴാണ് കവിതയുണ്ടാവുന്നതു്. അതുതന്നെയാണ് ഹൃദയസിരകളെ തട്ടിയിളക്കുന്ന സരസപ്രതീപ്രവാഹവും. കവി തന്റെ തൂലികയെ സ്വതന്ത്രം

ജീവിതരക്തത്തിൽ മുക്കിയെഴുതുന്നതാണ് കവിതയെന്നുണ്ടെങ്കിൽ അതു് വികാരമയമായിരിയ്ക്കാതെ തരമില്ലെന്നുള്ളതു തീച്ചയാണ്. ഏതൊരു കവിതയിലാണോ വിചാരസംവലിതമായ വികാരം, അല്ലെങ്കിൽ ഭാവനാശിഷ്ടമായ ഭാവം സ്ഫുടതയോടുകൂടി സ്ഫുരിക്കാതിരിയ്ക്കുന്നതു് ആ കവിത ഒരു യഥാർത്ഥകവിതയാണെന്നു പറയുവാൻ പാടുള്ളതല്ല. നീരസമായ കാവ്യം നിർജ്ജീവമായ ശരീരംപോലെ ഹേയമായിട്ടുള്ളതാണെന്നു പറയുന്ന ആലങ്കാരികന്മാരുടെ ആശയവും ഇതുതന്നെയാണ്.

കവിഹൃദയത്തിലുത്ഥാനംചെയ്യുന്ന എല്ലാവികാരങ്ങളും, എല്ലാസമയങ്ങളിലും, കവിതയ്ക്കു് കാരണങ്ങളായിത്തീരുന്നതല്ല. പ്രകൃതിയിൽനിന്നോ മനുഷ്യജീവിതത്തിൽനിന്നോ കവികൾക്കുണ്ടാവുന്ന അനുഭവങ്ങളും എത്രതന്നെ ഗരീയസ്സുകളായിരുന്നാലും, ആ അനുഭവങ്ങളും ഉളവാക്കുന്ന ഭാവവികാരങ്ങളും എത്രതന്നെ ഉൗർജ്ജസ്വലങ്ങളായിരുന്നാലും, അതുകൊണ്ടു സാധാരണജനങ്ങളുടെ തോതിൽനിന്നു് കവിഞ്ഞു നില്ക്കുന്ന ഉൽക്കൃഷ്ടങ്ങളായ ആശയങ്ങളെ കവിഹൃദയത്തിൽ ഉദിപ്പിയ്ക്കാത്തപക്ഷം യഥാർത്ഥകവിതയായിത്തീരുന്നതല്ല. രമണീയമായും വിശ്വജനീനമായുമുള്ള വസ്തുക്കളേയും, പ്രപഞ്ചത്തിലുണ്ടാവുന്ന സംഭവങ്ങളേയും സാധാരണന്മാക്കു് സാധിയ്ക്കാത്തനിലയിൽ ദർശിയ്ക്കുവാനും, അവയിൽ ഒളിഞ്ഞുകിടക്കുന്ന സൂക്ഷ്മതത്വങ്ങളെ കണ്ടുപിടിയ്ക്കുവാനും ഇടയാക്കിത്തീർക്കുന്ന ഒരസാധാരണശക്തിവിശേഷം യഥാർത്ഥകവികൾക്കെല്ലാം ഉണ്ടായിരിയ്ക്കുന്നതാണ്. ആ അസാധാരണദർശനശക്തി എപ്പോഴാം പ്രബുദ്ധമായിത്തീർന്നു് പ്രതിഭാസിയ്ക്കുന്നുവോ അപ്പോഴാം അവർ കാണുന്നതെല്ലാം നവനവങ്ങളായും വിശേഷാർത്ഥഗർഭങ്ങളായും അവക്കു് തോന്നുന്നതായിരിയ്ക്കും. ആ നിലയിൽ അവർ വർണ്ണിയ്ക്കുന്നതാണു് യഥാർത്ഥകവിത. ഇതാണ് കവിതയുടെ ജീവിതവിമർശം. അതാണ് കവികളുടെ ലോകവ്യാഖ്യാനം; അതാണ് കവികൾ സൃഷ്ടിയ്ക്കുന്ന സുന്ദരലോകം.

ഇപ്പറഞ്ഞ അസാധാരണദർശനശക്തിയാവുന്ന ദിവ്യപക്ഷിയും വീരുത്തിക്കൊണ്ടു് കവിയുടെ ആത്മാവു്, നിത്യഭാസ്വരമായ നക്ഷത്രമണ്ഡലത്തിലും, ഉജ്ജ്വലകാന്തി ചിന്നുന്ന ഉദയാദ്രിശൃംഗത്തിലും, അനന്ത

ശോഭാശബളമായ അസ്തമനപർവ്വതസാനുവിലും, സ്വതന്ത്രമായി പാടിപ്പറന്നു നടക്കുന്നു. തീവ്രമായ ജീവിതമത്സരത്തിലെ ബഹുലമായ ബഹളത്തിൽനിന്നും പുറപ്പെടുന്ന ദുസ്സഹമായ അപസ്വരത്തിനിടയിലും കവിയുടെ മധുരമായ ആ ആത്മസംഗീതം എല്ലാറ്റിനും ഉപരി ഉയർന്നു നില്ക്കുന്നു. കവിയുടെ ആ ആത്മസംഗീതത്തിൽക്കൂടെയാണ് നാം നമുക്ക് നേരിട്ട കേൾക്കുവാൻ കഴിയാത്ത നാദബ്രഹ്മസംഗീതംകേട്ട് രസിയ്ക്കുന്നതു്.

നമ്മുടെ നഗ്നദൃഷ്ടിയ്ക്ക് ഗോചരമായിത്തീരാത്ത സൌന്ദര്യവും ഗാംഭീര്യവും പ്രകൃതിയ്ക്കുള്ള പ്രതിഭാസങ്ങളിൽ നമുക്ക് കാണിച്ചുതരുന്ന കവിയുടെ മേൽപറഞ്ഞ ശക്തിവിശേഷത്തെ ഭാവനാശക്തിയെന്നു പറയുന്നു. ശുക്തിയിൽ വീഴുന്ന നവാംബുബിന്ദുക്കൾ മനോഹരങ്ങളായ മുക്താമണികളായി പരിലസിയ്ക്കുന്നതുപോലെയും, വേണുവിൽ പ്രവേശിയ്ക്കുന്ന കേവലശബ്ദം മോഹനമായ സംഗീതനാദമായിത്തീരുന്നതുപോലെയും, ഭാവനാശക്തിയിൽ പ്രതിഫലിയ്ക്കുന്ന കവിയുടെ വിചാരങ്ങൾ കമനീയമായ കവിതയായിച്ചമയുന്നു.

കവികൾ ലോകത്തെ അവലോകനംചെയ്യുന്നതും, ലോകം അവരുടെ ദൃഷ്ടികൾക്ക് ഗോചരീഭവിയ്ക്കുന്നതും, ഒരേപ്രകാരത്തിലല്ലാത്തതിനാൽ അവരുടെ ഭാവനാശക്തി വ്യാപരിയ്ക്കുന്നതും, അവർ ലോകത്തെ വർണ്ണിക്കുന്നതും ഒരേപ്രകാരത്തിലല്ല. ഓരോകാലത്തും ഓരോ ദേശത്തും ഉണ്ടായിട്ടുള്ള മഹാകവികളുടെ കവനങ്ങളിൽ ഭാവനാശക്തിയുടെ വ്യാപാരം ഓരോപ്രകാരത്തിൽ കാണുന്നതനുസരിച്ച് പല കാവ്യനിരൂപകന്മാരും അതിന് പലപ്രകാരത്തിലുള്ള വ്യാഖ്യാനങ്ങളും കൊടുത്തിട്ടുണ്ട്. മഹാശയന്മാരായ കവികൾ തങ്ങളുടെ ആത്മാക്കളെ അന്യന്മാരുടെ ജീവിതാനുഭവങ്ങളിലേയ്ക്ക് പ്രക്ഷേപിച്ച് അവരുടെ ആത്മാക്കളുമായി ഐക്യം പ്രാപിയ്ക്കുവാൻ ശക്തരായിത്തീരുന്നതു് ഏതൊന്നിന്റെ വൈഭവത്താലാണോ ആ ശക്തിവിശേഷമാണ് ഭാവന. കവികൾക്ക് ലോകത്തിൽനിന്നുണ്ടാവുന്ന അനുഭവങ്ങളിലുളവാകുന്ന തന്മയീഭാവം ഇപ്പറഞ്ഞ ഭാവനാശക്തിയുടെ ഒരു മുഖ്യഭാഗമാകുന്നു. ധർമ്മബോധമുള്ള മഹാനുഭാവന്മാരിലെല്ലാം എറക്കുറെ

ഈ ശക്തിവിശേഷം ഉണ്ടായിരിയ്ക്കുമെങ്കിലും ക്രാന്തദർശികളായ യഥാർത്ഥകവികളെ ദർശിയ്ക്കുമ്പോൾ മാത്രമേ ഇതു് സൃഷ്ടിശക്തിയായി പ്രത്യക്ഷപ്പെടുന്നുള്ളൂ. വള്ളത്തോളിന്റെ "വെടികൊണ്ട പക്ഷി"യും, ഉള്ളൂരിന്റെ "എന്റെ സ്വപ്ന"വും, ആശാന്റെ "വീണപൂവു"ം മേൽ വിവരിച്ചവിധത്തിലുള്ള ധാർമ്മികമായ ഭാവനാശക്തിയുടെ വ്യാപാരത്തിന്നു് നിദർശനങ്ങളായിട്ടുള്ള കൃതികളാകുന്നു. ബുദ്ധിയുടെ സാമീപ്യത്തോടുകൂടി വ്യാപരിയ്ക്കുന്ന ഭാവനയിൽനിന്നു് പുറപ്പെടുന്ന കവിത വിചാരപ്രധാനമായും, ഹൃദയത്തിന്റെ സാരഥ്യത്തോടുകൂടി ഭാവനയിൽനിന്നു് നിർമ്മിയ്ക്കുന്ന കവിത വികാരപ്രധാനമായും ഇരിയ്ക്കുന്നതാണു്. വർണ്യവിഷയങ്ങളെ അതാതിന്റെ പരിസരാവസ്ഥകൾക്കു് അനുരൂപമായ രൂപത്തിൽ ദർശിയ്ക്കുകയും, അവയ്ക്കു് അനുരൂപമായ ഗുണവും നിറവും കല്പിയ്ക്കുകയും ചെയ്യുന്ന കവിശക്തിയും ഒരുതരം ഭാവനയാണെന്നു് പറയപ്പെടുന്നു. വർണ്യവസ്തുക്കളുടെ സ്വഭാവമനുസരിച്ചുള്ളവാകുന്ന ഏതേതുമനോഭാവങ്ങളോടുകൂടി കവി അവയെ അവലോകനംചെയ്യുന്നുവോ, അതാതു മനോഭാവങ്ങളുടെ രൂപവും നിറവും അവയ്ക്കു് നൽകുകയെന്നതാണു് ഈ ഭാവനാശക്തിയുടെ വ്യാപാരം. ഇതിന്റെ വൈഭവത്താൽ വർണ്യവിഷയങ്ങൾ വർണ്ണനാകർത്താവിന്റെ മനോഭാവത്തിൽ ചില വൈചിത്ര്യങ്ങൾ വരുത്തുന്നപോലെ, വർണ്ണനാകർത്താവിന്റെ മനോഭാവം വർണ്യവിഷയങ്ങളിന്മേലും ചില ഛായപ്പണികൾ നടത്തുന്നുണ്ടു്. നോക്കുക:—

"നീലക്കാർവർണ്ണന്റെ പുഞ്ചിരി പാൽക്കഴ-
മ്പോലും തിരുമുഖം ധ്യാനിയ്ക്കുയും,
വീരനാപ്പാൽവെണ്ണക്കുള്ളനെഞ്ഞെന്ന പേ-
ത്താരാഞ്ഞുകൊൾകയും ചെയ്യുംപോലെ,
നേത്രമിമ്മിഴിയ്ക്കുന്ന മോഹന-
പാത്രത്തിൻവക്കത്തി പ്പാൽപ്പതകർ"

അമ്പാടിയിൽച്ചെല്ലുന്ന അക്രൂരനെപ്പോലെ ഭക്തിഭാവാവിഷ്ടനായിത്തീരുന്ന കവി തന്റെ സങ്കല്പദൃഷ്ടിയ്ക്കു മുമ്പിൽ ബാലഗോപാലനായ ഭഗവാൻ വസിയ്ക്കുന്ന അമ്പാടിയേയും അവിടെയുള്ള ഗോപസ്ത്രീകളേയും,

ഗോക്കളേയും, ഗോദോഹനത്തേയും പ്രത്യക്ഷത്തിലെന്നപോലെ ദർശിക്കുന്നു. ആ സമയത്തു് പാൽക്കറക്കുന്ന പാത്രത്തിന്റെ വക്കത്തു് പറ്റിയ പാൽപ്പതകൾ നിമിഷനേരംനിന്നു് വറ്റിപ്പോകുന്നതുകാണുന്ന കവിക്കു് ആ പാൽപ്പാത്രങ്ങൾ ബാലഗോപാലന്റെ കോമളദിവ്യരൂപം ധ്യാനിയ്ക്കുന്നതിന്നിടയിൽ ആ പാൽവെണ്ണക്കള്ളൻ എങ്ങോട്ടുപോയെന്നു് അന്വേഷിച്ചുനോക്കുന്ന മട്ടിൽ കണ്ണിമച്ചു മിഴിയ്ക്കുന്നതായിട്ടാണു് തോന്നുന്നതു്. ഇവിടെ വർണ്യവസ്തുക്കൾ കവിയുടെ മനസ്സിനെ ഭക്തിഭാവത്തിൽ ആഴ്ത്തിയതിന്നനുസരണമായി കവി, വർണ്യങ്ങളായ പാൽപ്പതകൾക്കു് ധ്യാനസ്ഥിതനായ ഭക്തന്റെ രൂപം നൽകിയിരിയ്ക്കുന്നു.

"സഞ്ചിതാത്ഥങ്ങളായി സന്തതം നിന്മേനിമേൽ
സഞ്ചരിപ്പു വഞ്ചികൾ സഹസ്രസംഖ്യാകങ്ങൾ
പോതപ്പായങ്ങളാ മനൌകകൾ ഭവതി തൻ
പോതതല്പജങ്ങളോ സാഗരസധമ്മിണി
ആവാ, മല്പെന്നാലെന്തിന്നവതന്നരക്കെട്ടിൽ
തൂബിടു പ്പള്ളകുണികിങ്ങിണി നിബന്ധിപ്പൂ."

ഈ കവിതയിൽ ഉള്ളൂർ പെരിയാറിനെ മാതാവായി വിഭാവനംചെയ്യുന്നതിന്നാധാരണമായി, കവിയ്ക്കു് ആറ്റിൽക്കൂടെ പോകുന്ന വഞ്ചികൾ മാതൃവക്ഷസ്സിൽ വിഹരിയ്ക്കുന്ന പിഞ്ചുപൈതങ്ങളായും, വഞ്ചികളുടെ പാർശ്വങ്ങളിൽ പൊന്തിയ നീർക്കുമിളകൾ മാതാവു് ശിശുക്കളെ അണിയിച്ച പള്ളകുണുക്കിങ്ങിണികളായും തോന്നുന്നതു് ഈ ഭാവനാശക്തിയുടെ വ്യാപാരംകൊണ്ടാകുന്നു. ഇതുപോലെത്തന്നെ ശങ്കരക്കുറുപ്പിന്റെ,

"സ്മേരമാ മാമുഖം ചന്ദ്രികാ സുന്ദര-
നീരദമെന്നു ഞാൻ ചിന്തിയ്ക്കുന്ന
അല്പായുസ്സിലെൻതനു നീലക്കടമ്പിനേ-
ലുല്ലാസിരോമാഞ്ചമൊട്ടുണ്ടാമോ?
മാധവവേണുവിൻ മോഹനനിസ്വനം
മാധുര്യമാളുന്ന മദ്യമാവാം;
നാലഞ്ചുതുള്ളിയേ കാതാസ്വദിച്ചുള്ളൂ,
കാലടി മന്നിലുറയ്ക്കാതായി.

തുമഞ്ഞു തുള്ളിയായ് ത്തീന്നിരുന്നാകിൽ ഞാ-
നാമണിവണ്ണന്റെ പാദന്യാസം
നെഞ്ചിലേറാനന്ദത്തുന്ദിലം പുഞ്ചിരി
തഞ്ചിമരിച്ചേനേ നിത്യത്തപ്പ."

കവിയുടെ ഓരോ രക്തബിന്ദുക്കളിലും ആ പീതാംബരന്റെ സ്മരണ ഓരോ വികാരകുസുമങ്ങളെ വികസിപ്പിയ്ക്കുന്നു.

"കരുതരുതുരുദ്ധതി കാൺകിലും
സ്ഥിരശ്രുഭയാണിഹ ലീലയെന്നുനാം
പരമരുചിരമാ മഹമ്മുഖം
ചരമധരോപരി കാറുനിൽക്കവേ."

എന്നിങ്ങിനെ ആശാൻ ലീലയുടെ സൌഭാഗ്യലക്ഷ്മി ആസന്നമായ ആപത്തിന്റെ നിഴലിൽപ്പെട്ടകയാൽ അണയാൻപോകുന്ന ദീപം പോലെയാണിരിയ്ക്കുന്നതെന്ന സംഗതി മേഘാവൃതമായ ഉഷഃശ്രീയുടെ ഉപമകൊണ്ട് ഭംഗിയായി വെളിപ്പെടുത്തിയിരിയ്ക്കുന്നു. സമ്പത്തിന്റെ മിന്നിച്ചയ്ക്ക് ചുറും ആപത്തിന്റെ കരിനിഴലുണ്ടെന്ന നിരക്ഷരമായ പ്രകൃതിസന്ദേശം നമുക്കറിഞ്ഞുകൂടാ. പ്രകൃതിയുടെ സന്ദേശവാഹകനായ കവി നമുക്കറിയുന്ന ഭാഷയിൽ അതിനെ ഉദ്ഘോഷണംചെയ്യുമ്പോൾ മാത്രമേ നമ്മളതു് മനസ്സിലാക്കുന്നുള്ളൂ. മഹാകവി വള്ളത്തോൾ "ശ്രുശ്രൂരിൽ ശ്രുശ്രൂൻ" എന്ന കവിതയിൽ,

"ആലയമതുകിനാവിങ്കലും നിനയാത്ത
കാലദോഷത്തിൻ ജ്വാലാപാളിയാൽ മൂടപ്പെട്ട
ആപത്തിൻതളിർ പ്പട്ടമേലാപ്പിൻ ചുവട്ടിൽത്താ-
നാണല്ലോ സുവിശ്രമം കൊൾവതീലോകം മുറും."

എന്നിങ്ങിനെ ആളകലം അകത്തു കിടന്നുറങ്ങുന്ന വീടിന്നു് തീപിടിച്ചതിനെപ്പറ്റി പ്പറയുമ്പോൾ ആ വിശേഷസംഭവത്തെ സമ്പത്തു് എപ്പോഴും ആപത്തിന്റെ വലയത്തിന്നുള്ളിലാണു് വത്തിയ്ക്കുന്നതെന്നുള്ള സാമാന്യസംഗതികൊണ്ടു് വിശദീകരിച്ചതുവഴിയായി വെളിപ്പെടുന്നു. അഗ്നിയ്ക്കും, ആപത്തിന്നും, അഗ്നിജ്വാലയ്ക്കും പട്ടമേലാപ്പിന്നും തമ്മിലുള്ള സാദൃശ്യസംബന്ധം ആ സാമാന്യവിശേഷത്തെ സുന്ദരരൂപത്തിൽ സ്ഥാപിയ്ക്കുന്നതിന്നു കവിയ്ക്കു് സാധിച്ചിട്ടുണ്ടു്.

വിഷയരീത്യാദികഠം, പ്രതിപാദനം, വണ്ണനാസമ്പ്രദായം, സങ്കല്പനം മുതലായവയിൽ, പ്രാചീനകവിതാരീതിയിൽനിന്ന് എത്രയോ വിഭിന്നമായ ഒന്നാണ് ആധുനികപ്രസ്ഥാനം. ജീവിതോദ്ദേശത്തെ സാധിയ്ക്കുന്നതിനും, ചിത്തത്തിന്ന് വിസ്തൃതിയേയും, ഉല്കൃഷ്ടതയേയും ഉളവാക്കുന്നതിന്ന് പര്യാപ്തമായ കാവ്യങ്ങൾ കുറച്ചുകാലം മുമ്പുവരെ അത്ര സുലഭങ്ങളായിരുന്നില്ല. ആശാന്റെ ദൃഷ്ടിയ്ക്ക് "വീണപൂവ്" വിഷയമായതോട്ടുകൂടി തത്വചിന്താപരമായ ഒരു നവീനകാവ്യപ്രസ്ഥാനം കൈരളിയ്ക്ക് ലഭ്യമായി. അദ്ദേഹത്തിന്റെ നളിനി, ലീല, പ്രരോദനം, കരുണ എന്നീ കൃതികളെല്ലാം തന്നെ ജീവിതതത്വചിന്തയാകുന്ന ഒരേ ആദർശത്തിന്റെ—ഒരേ വിശിഷ്ടഭാവത്തിന്റെ വിവിധപ്രതിഫലനങ്ങളാണ്.

"ഹാ! പുഷ്പമേ, അധിക തുംഗപദത്തിലെത്ര
ശോഭിച്ചിരുന്നിതൊരു രാജ്ഞികണക്കയേ നീ
ശ്രീ ഭ്രുവിലസ്ഥിര-അസംശയം-ഇന്നു നിന്റെ-
യാഭ്രുതിയെങ്ങു, പുനരെങ്ങു കിടപ്പിതോർത്താൽ!"

കവിയുടെ ഹൃദയം സ്പർശിച്ചു പുറപ്പെട്ടതുതന്നെയാണിതു്. ലൌകികമായ സുഖസൌകര്യങ്ങൾ, ക്ഷണികങ്ങളാകയാൽ ലോകത്തിന്റെ മായാവിഭ്രമങ്ങളിൽ ഭ്രമിയ്ക്കരുതെന്നും ഈ പൂവിന്റെ സ്ഥിതിതന്നെയാണ് അടുത്തഭാവിയിൽ തനിയ്ക്കുമുണ്ടാവാൻ പോകുന്നതെന്നും മറ്റുമുള്ള വിചാരങ്ങളാൽ വായനക്കാരന്റെ ഹൃദയവും ഇളകിവശാകുന്നു. കൃത്രിമതയോ, അലങ്കാരപ്പകിട്ടോ, യാതൊന്നും ഇതിലില്ല. മംഗളാചരണനിയമങ്ങളും ആചരിച്ചിട്ടില്ല. പുരാണപ്രസിദ്ധമായ ഇതിവൃത്തവുമല്ല. പക്ഷേ തുടങ്ങിയതു കാവ്യമാകുന്നു.

"ഉൽപന്നമായതു് നശിയ്ക്കും, അണുക്കളം നില്ക്കും,
ഉൽപന്നമാമുടൽവെടിഞ്ഞൊരുദേഹി വീണ്ടും
ഉൽപത്തി കർമ്മഗതിപോലെവരും ജഗത്തിൽ
കല്പിച്ചിട്ടുനിവിടെയിങ്ങിനെ യാഗമങ്ങളം."

"കണ്ണേ മടങ്ങുക, കരിഞ്ഞു മലിഞ്ഞുമാഗ്രു-
മണ്ണാകുമീമലരു വിസ്മൃതമാകുമിപ്പോളം

എണ്ണീടുകാക്ക മിതുതാൻഗതി, സാദ്ധ്യമെന്തു
കണ്ണീരിനാൽ? അവനി വാഴ്വു കിനാവുകഷ്ടം!"

ഇങ്ങിനെ സരസമായി തത്വവഷ്ണം ചെയ്യുന്ന കവി പ്രകൃതിസൌന്ദര്യ്യത്തിന്റെ മാഹാത്മ്യത്തെ വിസ്മരിയ്ക്കുന്നില്ല. കവിയ്ക്ക് ഭാവനാശക്തിയുണ്ടായാൽ എന്തു വൈചിത്ര്യംതന്നെ വരുത്തിക്കൂടാ? "കടിയാന്മാരുടെ പ്രാർത്ഥന" എന്ന കവിതയിൽ വള്ളത്തോൾ പറയുന്നതു നോക്കുക:—

"ചിന്തിതഫലമെന്തു മേകുവാൻകഴിവുള്ള
നിന്തിരുവടിയല്പം പ്രസാദിച്ചരുളുകിൽ
പാഴ്മരം മരതകച്ചെണ്ടുകൾ ചൂടിടുന്ന
കോമളത്തങ്കത്തണ്ടായ് മാറുന്ന പുല്ലിൻകൊടി."

ഇലകൊഴിഞ്ഞു് ശൂന്യശിരസ്സായി തീരുന്ന മരം ഭൂദേവിയുടെ പ്രസാദത്താൽ പുതുചില്ലികൾ പൊട്ടിത്തഴച്ചു് പച്ചപിടിയ്ക്കുന്നതിനെ മരതകച്ചെണ്ടുകൾ ചൂടുന്നതായും പുൽച്ചെടികൾ പഴുത്തു് മഞ്ഞക്കതിരുകളോടുകൂടി നില്ക്കുന്നതിനെ കോമളത്തങ്കത്തണ്ടുകളായി പരിണമിയ്ക്കുന്നതായും കണ്ടു രസിയ്ക്കുന്നതിന്നു് സൌന്ദര്യ്യബോധസമ്പന്നമായ ഒരു ഭാവനാശക്തി ഉണ്ടായേ കഴിയൂ.

മറെറാരു വിശേഷമുള്ളതു്, മിതമായ വർണ്ണനവും, അലങ്കാരൌചിത്ര്യവുമാകുന്നു. വസ്തുസൌന്ദര്യ്യത്തെ പ്രകടീകരിയ്ക്കുന്നതിന്നും ജീവിതതത്വങ്ങളെ സ്പഷ്ടതരമാക്കുന്നതിന്നും തദ്വാരാ കാവ്യത്തിന്നു് ശോഭാതിശയം ഉളവാക്കുന്നതിന്നും ആവശ്യമായ അലങ്കാരങ്ങളെ മാത്രമേ ഇന്നത്തെ കവികൾ സ്വീകരിച്ചു കാണുന്നുള്ളൂ. ആശാന്റെ നളിനിയിലെ....."അത്ഭുതാംഗിയുടെ ചന്ദ്രനോ യതി", എന്ന ഏറ്റവും ചെറിയ ആ വാക്യം വിസ്തൃതമായ ഭാവങ്ങളെ ചിത്രീകരിയ്ക്കുന്നു.

കലാവിദ്യ അനുകരിയ്ക്കുന്നതായി പറയപ്പെടുന്ന പ്രകൃതി, മനുഷ്യപ്രകൃതിയോ, ബാഹ്യപ്രകൃതിയോ അല്ലെങ്കിൽ രണ്ടുംകൂടിയതോ ആവാം. രണ്ടിലും രസിയ്ക്കുവാനുള്ള പ്രേരണാശക്തി നമുക്ക് നൈസർഗ്ഗികമാണ്. മനുഷ്യപ്രകൃതിയെ വർണ്ണിക്കുന്നതായാൽ, ദുഷ്ടസ്വഭാവം, സൽസ്വഭാവം എന്നിവയെ സ്പഷ്ടമാക്കി ആദ്യത്തേതിനെ വെറുക്ക

വാനും, രണ്ടാമത്തേതിനെ അനുകരിയ്ക്കുവാനും തോന്നിയ്യുണ്ടായ് കവിധമ്മമാണു്. വൃക്ഷലതാദികളും, പക്ഷിമൃഗാദികളും, ആകാശം, സമുദ്രം, പർവ്വതം, നദി മുതലായവയെല്ലാം അടങ്ങിയവയാണു് ബാഹ്യ പ്രകൃതി എന്നു പറയുന്നായ്. ഇതും കാവ്യത്തിനു വിഷയമായി സ്വീകരിയ്യുന്നുണ്ടു്. സംസ്കാരത്തിന്റെ പ്രാരംഭദശയിൽ അവ മനുഷ്യന്റെ നിത്യജീവിതത്തിനു് ഏതു വിധത്തിൽ ഉപകരിയ്ക്കുന്നു എന്ന നിലയിൽ നിന്നുകൊണ്ടാണു് കവികൾ അവയെ വർണ്ണിച്ചിരുന്നായ്. പിന്നീടവർ കേവലമനോഹരിതപത്തെ പാടുവാൻ ആരംഭിച്ചു. ക്രമേണ പ്രകൃതിവർണ്ണനയും സങ്കേതങ്ങളും സ്ഥലം പിടിച്ചു തുടങ്ങിയതോടുകൂടി കവികൾ കണ്ണടച്ചുകൊണ്ടു് വർണ്ണനകളും തുടങ്ങി. പൂർവ്വികന്മാരായ കവികൾ പ്രകൃതിവർണ്ണനമെന്നായ് ചമൽക്കാരമുണ്ടാക്കുവാനുള്ള ഒരു സന്ദർഭം മാത്രമായിട്ടേ അവർ കരുതിയിരുന്നുള്ളൂ. പ്രകൃതിവർണ്ണനമാകുന്ന ചരടിൽ ഉല്പേഖരത്നങ്ങളും കോർത്തു് മനോഹരങ്ങളായ കാവ്യമാലകളും ഉണ്ടാക്കുവാനാണു് അവർ ഉദ്യമിച്ചായ്. ഇന്നത്തെ കവികളാകട്ടെ പ്രകൃതിയുടെ സമസ്തവ്യാപാരങ്ങളുംകൂടെ മനുഷ്യസഹജമായ ഭാവങ്ങളേയും വികാരങ്ങളേയും കല്പിച്ചു് അനുവാചകഹൃദയത്തെ വിചാരപരമ്പരയിലേയ്ക്കു് കടത്തിവിടുകയാണു് ചെയ്യുന്നായ്. ലാളിത്യം, സ്തോഭജനകത്വം, ചിത്രനിർമ്മാണശക്തി എന്നീ ധർമ്മങ്ങളുടെ സമുച്ചയമാണു് കവിത എന്ന സിദ്ധാന്തം തികച്ചും പ്രയോജിതമായിട്ടുള്ളായ് ആധുനികകാവ്യപ്രസ്ഥാനത്തിലാണെന്നു പറവാൻ ആരും മടിയ്ക്കുകയില്ല. വള്ളത്തോളിന്റെ:—

"താരാ പുഷ്പങ്ങളംചിന്തി പ്പുലപറവകളം തൻ
കൊഞ്ചലാൽ സ്തോത്രമോതി
സ്താരാകാശചെരാതിൽ ത്തരുണദിനകര
പ്പൊൻവിളക്കും കൊളുത്തി
ആരാഗ ക്കാവിവസ്ത്രത്തൊട്ടു വിചസുമുഷ-
സ്സന്ധ്യ യാരെപ്പിഴയ്ക്കാ-
താരാധിയ്ക്കുന്നു നമ്മളംകണർവരുളണമ-
സ്സുവ്വലോകൈകനാഥൻ.

ഉഷസ്സിനെ ആരാധകഭാവത്തിൽ സങ്കല്പിച്ചു് പ്രഭാതപ്രകൃതിയുടെ സൌഭാഗ്യത്തേയും, പ്രകൃതിയിലൂടെ ദൃശ്യമാകുന്ന ഈശ്വരമാഹാത്മ്യത്തേയും പ്രസ്പഷ്ടമാക്കുന്ന ഒന്നാണല്ലോ ഈ പദ്യം. മനോഹരമായ ശയ്യാഗുണംകൊണ്ടു് ഹൃദ്യോത്പത്തെ സംഗീതമധുരമാക്കുന്നു എന്നതുമാണു് ഇതിലെ മറെറാരു ഗുണം. വായനക്കാരിലേയ്ക്കു പകരുന്ന കവിയുടെ വികാരം മഹത്തായ ഒന്നല്ലെങ്കിൽ അതിനു് ചമൽക്കാരം മതിയാവുകയില്ലെന്നു് പറയേണ്ടതില്ലല്ലോ. പരമാത്മവസ്തു ചിന്തയിൽനിന്നും പുറപ്പെടുന്ന പരിശുദ്ധാങ്കുളായ ആശയങ്ങളുടെ പ്രവാഹത്തിൽ കവിയുടെ ഹൃദയവും ഏറക്കുറെ തന്മയത്വമുള്ളതായിരിയ്ക്കുണം. നാലപ്പാടൻ പറയുന്നതു നോക്കുക:—

> ആ ഞങ്ങൾ തന്നോകമനോരഥക്കു-
> മ്പുകസ്ഥലീരംഗമലങ്കരിയ്ക്കേ
> അതിൻ പൂങ്കവിളെത്രയെത്ര
> മുകന്നു ഞാനെൻെറ മനോമുഖത്താൽ."

കവിതയെസ്സംബന്ധിച്ചേടത്തോളം ഭാവനാശക്തിയുടെ വ്യാപാരത്തിൽ അലങ്കാരവും വൃത്തവും സ്വയമേവ വന്നുചേരുന്നതാണു്.

> "ഒരല്ലലില്ലെങ്കിലെനിയ്ക്കു കല്പാ-
> യിരിയ്ക്കുവാനാണിനിമേലിലിഷ്ടം
> മരിച്ചിടും മർത്ത്യതയെന്തിനാണു്
> കരഞ്ഞിടാനും കരയിച്ചിടാനും."

കവിതയുടെ വൃത്തം കവിയുടെ അന്തരംഗത്തിൽ നിഗ്രഥമായിട്ടുള്ള ആത്മസംഗീതത്തിൻെറ ഒരു ബഹിസ്സ്മരണമാണെന്നു് ഈ പദ്യം തെളിയിയ്ക്കുന്നുണ്ടു്.

ഇപ്പിടെയായിട്ടു് മലയാളസാഹിത്യകാരന്മാർ അവരുടെ ശ്രദ്ധയെ തങ്ങളുടെ ചുറുപാടും കിടന്നു് കഷ്ടപ്പെടുന്ന സാധുസഹോദരങ്ങളിലേയ്ക്കു തിരിച്ചു് അവരുടെ ജീവിതത്തെ ചിത്രീകരിയ്ക്കുവാൻ മുതിൻ കാണുന്നതു് സാഹിത്യാഭിവൃദ്ധിയുടെ ഒരു സൂചകമാണു്.

കേരളവും സംഗീതവും

By K. PARVATHI AMMA, Head of the Music Department, Cochin Educational Service.

രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരവർകളുടെ ഷഷ്ട്യബ്ദപൂർത്തി പ്രമാണിച്ചു പ്രസിദ്ധപ്പെടുത്തുന്ന സ്മാരകാവലിയിലേക്ക് 'കേരളസംഗീത'ത്തെ കുറിച്ചു് ഒരു ലേഖനം കിട്ടിയാൽ കൊള്ളാമെന്നുള്ള തൽഭാരവാഹികളുടെ കത്തു് എനിക്കു് എന്തെന്നില്ലാത്ത ഒരു അനുഗ്രഹംപോലെയാണു് തോന്നിയതു്. സംഗീതകലയുടെ പോഷണാർത്ഥം എത്രയും പരിശ്രമിച്ചിട്ടുള്ള ഒരു മാന്യന്റെ--ജനങ്ങളുടെ അജ്ഞതകൊണ്ടും അനാദരവുകൊണ്ടും ക്രമേണ ക്ഷയിച്ചു ക്ഷയിച്ചു നാശഗർത്തത്തിന്റെ വക്കത്തെത്തിയിരുന്ന കർണ്ണാടകസംഗീതം പുനരുദ്ധരിപ്പിച്ചവനായി അവതരിച്ച ആ പുണ്യപുരുഷന്റെ, പാദാരവിന്ദങ്ങളിൽ ഈ ശ്രുതിസന്ദർഭത്തിൽ ഒരു വാടിയ പുഷ്പമെങ്കിലും അർച്ചിക്കുവാൻ സാധിക്കുന്നതിൽ കവിഞ്ഞ എന്തൊരു അനുഗ്രഹമാണു് എന്നെപ്പോലെയുള്ള സംഗീതപ്രണയികൾക്കു കിട്ടുവാനുള്ളതു്!

സംഗീതം മറ്റു കലകളെപ്പോലെ മനുഷ്യനിർമ്മിതമായ ഒന്നല്ല. നേരെമറിച്ചു മനുഷ്യസൃഷ്ടിക്കു് എത്രയോ മുമ്പുതന്നെ സംഗീതം ഉണ്ടായിരുന്നു എന്നാണു് പാശ്ചാത്യരും പൌരസ്ത്യരുമായ ശാസ്ത്രജ്ഞന്മാരുടെ ഐകകണ്ഠ്യമായ അഭിപ്രായം. നാദബ്രഹ്മാത്മകമായ ഗീതത്തിൽനിന്നാണു പ്രപഞ്ചത്തിന്റെ ഉത്ഭവമെന്നും ഏറ്റവും പുരാതനങ്ങളാണെന്നു സ്ഥാപിച്ചിട്ടുള്ള ഗാനശ്രുപങ്ങളായ വേദങ്ങളിൽവെച്ചു ആദിമവേദമായ സാമവേദത്തിന്റെ ഒരു ഉപഭാഗമാണു് സംഗീതം (ഗാന്ധർവ്വശാസ്ത്രം) എന്നുള്ളതിൽനിന്നു സംഗീതത്തിന്റെ പഴക്കത്തേയും മാഹാത്മ്യത്തേയും കുറിച്ചു നമുക്കു് ഏറെക്കുറെ ഊഹിക്കാവുന്നതാണു്. പക്ഷികളുടെ കളകൂജനം, അരുവികളുടെ ഝരാരാപം, വൃക്ഷലതാദികളുടെ മർമ്മരശബ്ദം മുതലായി പ്രകൃതിയിൽനിന്നു് ഉതിരുന്ന നിസർഗ്ഗമധുരമായ സംഗീതത്താൽ (ശബ്ദവിശേഷങ്ങളാൽ) സുര

ചിലമായ ഒരു ലോകത്തിലേക്കാണ് പ്രകൃതികത്താവു മനുഷ്യനെ സൃഷ്ടിച്ചു് അയച്ചിട്ടുള്ളതു്. സംഗീതത്തിന്റെ വശീകരണശക്തിക്കു് മനുഷ്യൻ മാത്രമല്ല, പക്ഷിമൃഗാദികളും പോലും വിധേയരായിത്തീരുന്നതു നമുക്കു കണ്ടറിവുള്ളതാണു്. ക്രൂരമൃഗങ്ങളും ഘോരസർപ്പങ്ങളും മനുഷ്യരുടെ പാട്ടുകൾ കേട്ടു മനം മയങ്ങി ലയംകൊണ്ടു നൃത്തമാടുന്നതു കാണുമ്പോൾ സംഗീതത്തിനു മനുഷ്യലോകത്തിലെന്നപോലെ തുല്യപ്രഭാവമാണു് തിര്യക്കുലോകത്തിനുമെന്നു നമുക്കു അനുഭവപ്പെടുന്നുണ്ടു്. വൃക്ഷലതാദികളും പോലും സംഗീതത്താൽ ആകൃഷ്ടങ്ങളാകുമെന്നാണു സംഗീതശാസ്ത്രം ഉദ്ഘോഷിക്കുന്നതു്. അതുകൊണ്ടു്, മറ്റു കലകളെപ്പോലെ സംഗീതം മനുഷ്യലോകത്തെ മാത്രമല്ല ചരാചരാത്മകമായ പ്രപഞ്ചത്തെ മുഴുവൻ സ്പർശിക്കുന്ന ഒരു വിശിഷ്ടകലയാണെന്നതുതന്നെ വ്യക്തമാകുന്നു.

ഏതൊരു ഭാഷയുടേയും പ്രഥമപ്രകാശനം സംഗീതരൂപത്തിലാണു്. സാഹിത്യത്തിന്റെ (ഭാഷ) ആവിർഭാവത്തിനു മുമ്പു വെറും ചലനവിശേഷങ്ങളോടുകൂടി ശബ്ദരൂപത്തിൽമാത്രം പ്രചരിച്ച സംഗീതം ഭാഷോദയത്തിനുശേഷം വാക്കുകളുമായി കൂടിച്ചേർന്നു പാട്ടുകളുടെ രൂപം പൂണ്ടു ജീവിതരംഗത്തിൽ പ്രവേശിച്ചു. ഇങ്ങിനെ ആദ്യകാലത്തുണ്ടായ പാട്ടുകൾ മിക്കവാറും അക്ഷരവ്യക്തിയോ താളവ്യവസ്ഥയോ ഇല്ലാത്തവയായിരുന്നിരിക്കണം. കേരളത്തിലുണ്ടായ ആദ്യത്തെ പാട്ടു് എന്താണെന്നും എങ്ങിനെ ഉണ്ടായതാണെന്നും കേവലം മനോധർമ്മത്തിനും അനുമാനങ്ങൾക്കും വിഷയമായിരിക്കുന്നു. കൃഷിപ്പണികൊണ്ടു കാലയാപനംചെയ്തിരുന്ന കേരളീയൻ കന്നുപൂട്ടി നിലം ഉഴുതിരുന്ന അവസരങ്ങളിൽ പണിക്കു് ആഹ്ലാദവും ഉന്മേഷവും ഉണ്ടാകുവാൻവേണ്ടി പുറപ്പെടുവിച്ച "ഓ—ഓ—ഓ—" എന്ന കന്നുകാലിപ്രണവത്തിൽനിന്നായിരിക്കാം മലയാളത്തിലെ പാട്ടിന്റെ പുറപ്പാടു്. ക്രമേണ പാടത്തു പോത്തിന്റെ ചെവിയിൽ കിന്നരം വായിച്ച കൃഷ്ണൻ ഗൃഹത്തിൽ കുട്ടികളെ ഉറക്കുന്നതിനു്

"കാക്കെ കാക്കെ കാക്കെ വാ
കുട്ടിടെ കാടത്തം കാണാൻ വാ

പൂച്ചെ പൂച്ചെ നീയും വാ
കുട്ടിടെ പുഞ്ചിരി കാണാൻ വാ."

എന്നു തുടങ്ങിയ താലോലപ്പാട്ടുകൾ പാടിത്തുടങ്ങി. ഭാഷക്ക് സംസ്കാരം വന്നതോടുകൂടി സംഗീതസമ്പത്തും വളർച്ചതുടങ്ങി. സാമുദായിക ഗാനങ്ങൾ പടർന്നു പിടിച്ചു. കേരളത്തിൽ സാമുദായികഗാനങ്ങൾ എണ്ണിയാൽ ഒടുങ്ങാത്തവണ്ണം അത്ര അധികമുണ്ട്. എന്നാൽ അവയിൽ പലതും പരമ്പരയായി പലരുടേയും സ്മൃതിപഥത്തിൽത്തന്നെ സ്ഥാനം പിടിച്ചു പോന്നതിനാൽ അവംലബസ്ഥാനങ്ങളുടെ നാശങ്ങളോടുകൂടി അവയും നഷ്ടപ്പെട്ടുപോയി—പലതും ഭാഷാലോകത്തിൽ നിന്നു മറഞ്ഞുപോകുന്നതിനു ഇനി അധികം കാലതാമസം വേണ്ടിവരില്ലെന്നാണ് തോന്നുന്നതു്.

സർപ്പപ്പാട്ട്, ബ്രാഹ്മണിപ്പാട്ട് തുടങ്ങിയ പാട്ടുകൾ വളരെ പ്രാചീനങ്ങളാണു്. സന്ധ്യാസമയങ്ങളിൽ കുട്ടികൾ കൂടിച്ചു ഭസ്മവും തൊട്ടു നിലവിളക്കിനു ചുറ്റുമിരുന്ന്

"കല്ലിന്മേലും മലമേലും മുള്ളിലും
തല്ലി യന്തകനെന്നെ യിഴയ്ക്കുമ്പോൾ
അല്ലൽ പോക്കുവാനായിട്ടു കാണണം
തുപ്പൂണിത്തുറെ മേവും നാരായണ."

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"കണ്ണനാമുണ്ണിയെ കാണുമാറാകണം
കാറൊളിവർണ്ണനെ കാണുമാറാകണം."

എന്നു തുടങ്ങിയ സ്തോത്രങ്ങൾ അതിമധുരമായ സ്വരത്തിൽ പാടുന്ന കണ്ണും കരളും കവരുന്ന കാഴ്ച പുരാതനകാലം മുതല്ക്കുതന്നെ കേരളത്തിൽ സുലഭമായിരുന്നു. പാന, ഗാഥ, വഞ്ചിപ്പാട്ട്, കിളിപ്പാട്ട് മുതലായവക്ക് പ്രചാരം സിദ്ധിച്ചതോടുകൂടി കേരള സംഗീതകല വളരെ പുഷ്ടിപ്പെട്ടു. "ഇരുപത്തിരണ്ടു രാഗത്തിൽ രാമായണം വായിക്കുവാൻ" അറിഞ്ഞിരുന്ന പല മുത്തശ്ശിമാരും നമ്മുടെ ഇടയിൽ ഉണ്ടായിത്തുടങ്ങി. എന്നാൽ ഇതുകൊണ്ടും അവർ തൃപ്തിപ്പെട്ടില്ല. സംഗീതവാസനാനു

ഗൃഹീതകളായ കേരളീയാംഗനകൾ വിശേഷദിവസങ്ങളിൽ ക്ലട്ടംക്ലടി താളവും ചോട്ടും ഒപ്പിച്ചു പാടിക്കളിക്കുവാൻ ഉതകുന്ന ഒരു പ്രസ്ഥാനം കണ്ടുപിടിച്ചു. അതാണ് കൈകൊട്ടിക്കളി. ആദ്യമായി വഞ്ചിപ്പാട്ട് കുറത്തിപ്പാട്ട് മുതലായ ഗാനരീതികളെ മാത്രം അവലംബിച്ചിരുന്ന കേരളത്തിലെ ഈ കല സംഗീതത്തിന്റെ വിവിധഭാഗങ്ങളിലുള്ള ക്രമ പ്രവൃദ്ധമായ വളച്ചയെ അനുസരിച്ചു വികാസം പ്രാപിച്ചു് ആകർഷ കമായ ഒരു സംഗീതകല എന്നു സ്ഥാനത്തിനുതന്നെ അർഹമായി ത്തീർന്നു. കേരളത്തിലെ ഗാനകല പഴയ പാട്ടുകളുടെ ഹ്രസ്വമായ പരിധിയെ വിട്ട് ഉൽകർഷോന്മുഖമായ കഥകളിപ്രസ്ഥാനത്തിലെ ശാ സ്ത്രാനുസൃതങ്ങളായ മനോഹരഗാനങ്ങളിലേക്കു പദവിന്യാസം ചെയ്ത തോട്ടക്ലടി ഏതാദ്ദശമായ ഒരു പരിണാമം കൈകൊട്ടിക്കളിക്കും വന്നുക്ലടി. "വീര വിരാട കുമാരാ" എന്നു തുടങ്ങിയ ഗാനങ്ങൾ നോ ക്കുക. താളംകൊണ്ടും മേളാദികൾകൊണ്ടും അതുല്യങ്ങളായ ഇത്തരം ഗാനങ്ങൾ കൈകൊട്ടിക്കളിക്കു അലങ്കാരങ്ങളായിതീർന്നതോട്ടക്ലടി കേര ളഗാനകലയിൽ ഈ പ്രസ്ഥാനത്തിനു അതുല്യമായ ഒരു സ്ഥാനവും ലഭിച്ചു.

ഗാനകല പഴയപാട്ടുകളുടെ പരിമിതമായ പരിധിയെ വിട്ട് നാനാമുഖമായ വികാസത്തെ പ്രാപിച്ചതു് കഥകളിയുടെ ആവിർഭാവ ത്തോട്ടക്ലടിയാണു്. ജയദേവകൃതികൾ വെട്ടിത്തെളിയിച്ച വിശിഷ്ട വിശാലമാർഗ്ഗങ്ങളിൽ അനുഗമിച്ചു് സംഗീതസാഹിത്യകോവിദന്മാരായ ഉണ്ണായി പ്രഭൃതികൾ ആട്ടക്കഥക്കു ഉപയുക്തങ്ങളായ ഉൽകൃഷ്ടഗാനങ്ങ ളെ ഉണ്ടാക്കിയതോട്ടക്ലടിയാണു് കേരളസംഗീതത്തിന്റെ സൌവർണ്ണ കാലം ആരംഭിച്ചതു്. സാവ്ത്രികമായി പ്രകാശിക്കുന്ന ഭക്തിരസംകൊ ണ്ടു ത്യാഗരാജസ്വാമികളുടെ കൃതികൾ നമ്മെ എത്രത്തോളം ആനന്ദി പ്പിക്കുന്നുണ്ടോ, രചനാചതുരയും പ്രയോഗവൈചിത്ര്യത്താലുള്ള വ്യുല്പാദ കത ആലോചിക്കുംതോറും അവസാനിക്കാതെ നീണ്ടുനീണ്ടു പോകുന്ന വ്യംഗ്യാർത്ഥത്തിന്റെ ബാഹുല്യം ഈ ഗുണങ്ങൾകൊണ്ടു ദീക്ഷിതകൃതി കൾ നമ്മെ എത്രത്തോളം രസിപ്പിക്കുന്നുണ്ടോ, താളങ്ങളുടെ പ്രയോഗ വൈചിത്ര്യത്താൽ ശ്യാമശാസ്ത്രികളുടെ കൃതികൾ നമ്മെ എത്രത്തോളം

ആസ്വാദിപ്പിക്കുന്നുണ്ടോ അതുപോലെത്തന്നെ ഈ ഗുണങ്ങളെല്ലാം ഒരുപോലെ സമ്മേളിച്ചു കാണുന്ന ഉണ്ണായിവാരിയരുടെ കൃതികൾ കേരളീയരെ സന്തോഷസാഗരത്തിൽ ആറാടിക്കുന്നുണ്ട്. നളചരിതത്തെപ്പറ്റി മഹാമഹിമശ്രീ അപ്പൻ തമ്പുരാൻ തിരുമനസ്സിൽനിന്നു ഇങ്ങിനെ പറയുന്നു. "ഭക്തശിരോമണിയായ ത്യാഗരാജകൃതികളിൽ സാവൂ ത്രികമായി പ്രകാശിക്കുന്ന രസഭാവങ്ങൾ ഭാഷാഗാനങ്ങളിലും കാണാത്തതല്ലെന്നു പറയുന്നതു സാഹസമല്ലെങ്കിൽ നമുക്കു അഭിമാനിക്കുവാൻ അവകാശമുണ്ടു". പൂജ്യപാദനായ ഉണ്ണായിവാരിയരാണു് ഇവരിൽ പ്രഥമഗണനീയൻ. രസത്തിനു അനുഗുണമായ രീതി, രാഗം, താളം, ശയ്യ, പാകം ഇവയെ ക്ഷീരനീരങ്ങൾപോലെ കൂടിയോജിപ്പിച്ചു അക്ഷരകാലവും ജീവിസ്വരവും മമ്മത്തിൽ കൊളുത്തി ആശയത്തിനു ഓജസ്സും ഗാനശരീരത്തിനു പരിപുഷ്ടിയും വരുത്തുന്ന സമ്പ്രദായം വാരിയർ നളചരിതത്തിൽ ആപാദചൂഡം ഉച്ചസ്ഥായിലായി ഉദാഹരിച്ചിട്ടുണ്ടു്. ഉദാഹരണമായി 3-ാംദിവസത്തെ കഥയിലെ "ഘോരവിപിന" മെന്നു പദം നോക്കുക. ഭവനത്തിൽ വനതയും വനത്തിൽ ഗൃഹതയും നളൻ കാണുന്നതു നിർവ്വേദംകൊണ്ടല്ല. തത്വവിചാരത്തിൽനിന്നു മനസ്സിനുണ്ടായ ഒരു ഉറപ്പാണു്. അതുകൊണ്ടുതന്നെയാണു് വീരരസാനുഗുണമായ കല്യാണിരാഗവും ചെമ്പടതാളവും അത്ഥഗാംഭീര്യവും മാർദ്ദവവും കുറഞ്ഞ ശയ്യയും ഉപയോഗിച്ചിട്ടുള്ളതു്. ശാന്തശൃംഗാരങ്ങൾക്കുമാത്രം അനുഗുണമായ വൈദർഭിയേയും ഭയനകത്തിനുകൂടി അനുകൂലമായ ഗൌഡിയേയും വെടിഞ്ഞു പാഞ്ചാലിരീതിയെ അംഗീകരിക്കുവാനും ഇതുതന്നെയാണു് കാരണം. ഇങ്ങിനെയുള്ള വടങ്ങളെല്ലാം ഒരുക്കൂട്ടി "ഘോരവിപിന" എന്നു് അക്ഷരകാലം ഉറപ്പിച്ചു്, "ഘോര" എന്ന ഭാവത്തിനനുസൃത ജീവസ്വരംകൊണ്ടു് ഓജസ്സും വരുത്തി ഗാനശരീരത്തിനു പുഷ്ടിവരുത്തിയിരിക്കുന്നതിന്റെ രാമണീയകം അവർണ്ണനീയമെന്നേ പറഞ്ഞുകൂടൂ.

സംഗീതമകരന്ദനിഷ്യന്ദികളായ മനോഹരകൃതികളെക്കൊണ്ടു കൈരളീദേവിയെ അനുഗ്രഹിച്ചിട്ടുള്ള അപൂർവ്വം ചില കവികളിൽ പ്രഥമവും പ്രധാനവുമായ സ്ഥാനത്തെ അലങ്കരിക്കുന്ന മറെറാരു കവിയാണു്

ഇരയിമ്മൻ തമ്പി. അദ്ദേഹത്തിന്റെ കീചകവധം, ഉത്തരാസ്വയംവരം, ദക്ഷയാഗം എന്ന കൃതികൾക്കുള്ള പ്രത്യേകത അവയിൽ വിളങ്ങുന്ന സംഗീതലക്ഷ്മിയുടെ വിലാസമാണ്. "ഹരിണാക്ഷി", "കല്യാണി കാണുമമ", "ശശിമുഖി വരിക സുശീലെ", "മാനിനിമാർമൌലിമണെ" തുടങ്ങിയ കൃതികളിൽ വിളങ്ങുന്ന സംഗീതരസം കണ്ണാടകസംഗീതലോകത്തിലെ ഏതൊരു കവിയുടെ കൃതിയോടും കിടപിടിക്കത്തക്കവയാണ്.

ഇങ്ങിനെ കേരളസംഗീതം കണ്ണാടകസംഗീതകലയെ അനുകരിക്കാതെ അതിൽ വന്നുകൊണ്ടിരുന്ന പരിഷ്കാരങ്ങളെ ഗണ്യമാക്കാതെ സ്വതന്ത്രമായ ഒരു പന്ഥാവിൽക്കൂടി പ്രയാണംചെയ്തുകൊണ്ടിരുന്നു. സ്വാതിതിരുനാൾ മഹാരാജാവിന്റെ കേരളസംഗീതത്തെ കണ്ണാടകസംഗീതവുമായി കൂറച്ചുകൂടി അടുപ്പിക്കണമെന്നു തോന്നി. സംഗീതത്രിമൂർത്തികൾ എന്നു അറിയപ്പെട്ടുന്ന ത്യാഗരാജസ്വാമികൾ, ദീക്ഷിതർ, ശ്യാമശാസ്ത്രികൾ എന്നിവരും രാമനാടകകർത്താവായ അരുണാചല കവിരായരും മറ്റും ജീവിച്ചിരുന്ന കാലമായിരുന്നു അതു്. അവരുമായി അടുത്തു പെരുമാറുവാൻ ഇടയായ അദ്ദേഹം കണ്ണാടകസംഗീതത്തിൽ വന്നിരുന്ന പരിഷ്കാരങ്ങളും മറ്റും സശ്രദ്ധം മനസ്സിലാക്കി അവയിൽ ചിലതെല്ലാം സ്വീകരിച്ചു കേരളസംഗീതകലയെ പുഷ്ടിപ്പെടുത്തുന്നതു അഭിലഷണീയമെന്നു അദ്ദേഹത്തിനു തോന്നി. അതുകൊണ്ടായിരിക്കണം അദ്ദേഹത്തിന്റെ സംഗീതവാസന മാമൂൽപ്രിയന്മാരെപ്പോലെ കഥകളിനിമ്മാണത്തിലേക്കു തന്നെ ഉപയോഗിക്കാതെ വിശിഷ്ടങ്ങളായ മറ്റു മാർഗ്ഗങ്ങളിൽക്കൂടി സൈരസഞ്ചാരം ചെയ്തതു്. ക്ഷേത്രീയപദങ്ങളെ അനുകരിച്ചു ഭാഷയിൽ പദങ്ങളും നിർമ്മിക്കുന്നതു് ആശാസ്യമെന്നു അദ്ദേഹത്തിനു തോന്നി. മഹാരാഷ്ട്രരാജ്യങ്ങളിൽ പ്രചാരമുണ്ടായിരുന്ന ഹരികഥാപ്രസ്ഥാനത്തെ കേരളത്തിലേക്കു ഇറക്കുമതിചെയ്തു. കേരളസംഗീതത്തിന്റെ അന്നത്തെ സ്ഥിതിയെ അവധാനപൂർവ്വം വിശകലനം ചെയ്തറിഞ്ഞു ഗുണദോഷാംശങ്ങളെ മനസ്സിലാക്കി അതിന്റെ അഭ്യുദയമാർഗ്ഗങ്ങളെ നിർദ്ദേശിച്ചു് ആവശ്യമെന്നു തോന്നുന്ന ഭാഗ

ങ്ങളിൽ അന്യരാഷ്ട്രങ്ങളിലെ സംഗീതരീതിയിലുള്ള ആശാസ്യങ്ങളായ ഭാഗങ്ങളെ സ്വീകരിച്ചു കേരളഗാനകലയെ പുഷ്ടിപ്പെടുത്തുന്നതിനാണ് അദ്ദേഹം ബദ്ധശ്രദ്ധനായതു്. അനന്തരം കേരളത്തിലുണ്ടായിട്ടുള്ള "സംഗീതനൈഷധം", "ഹരിശ്ചന്ദ്രചരിതം", "ദേവയാനീചരിതം" ഇവയിലെ പാട്ടുകഥകൾക്കൊക്കെ കണ്ണാടകരീതിയോടു കുറച്ചുകൂടി അടുപ്പമുള്ളതായിട്ടു കാണാം.

ഈ പാട്ടുകഥകൾക്കൊക്കെ ഓരോകാലത്തു വലിയ പ്രചാരവും ഉണ്ടായിരുന്നു. ഇന്നാവട്ടെ ഒരു പുള്ളുവനോ ഒരു കുറത്തിയോ കണ്ടു ഗതപ്രാണരായിട്ടു വല്ല മുക്കിലോ മൂലയിലോ കിടക്കുന്നുണ്ടെങ്കിൽത്തന്നെ അവരെ ആരും തിരിഞ്ഞുനോക്കുന്നില്ല. മഹാകവി വള്ളത്തോളിന്റെ പരിശ്രമംകൊണ്ടു കഥകളിയെ പുനർജ്ജീവിപ്പിക്കുവാൻ സാധിച്ചുവെങ്കിലും കഥകളിപ്പാട്ടുകഥകൾക്കു അതുകൊണ്ടും വലിയ മെച്ചമൊന്നും ഉണ്ടായിട്ടില്ല. സംഗീതലോകത്തിൽ കേരളസംഗീതം എന്തുകൊണ്ടും ഉന്നതമായ ഒരു സ്ഥാനം അർഹിക്കുന്നുണ്ടെന്നുള്ളതു ഏതൊരു കേരളീയനും അഭിമാനകരമായ ഒരു സംഗതിയാണു്. ഈ പാട്ടുകളെ ധാരാളം പോഷിപ്പിച്ചു സന്മാർഗ്ഗങ്ങളിൽക്കൂടി വേണ്ടപോലെ നയിച്ചു മധുരസനിഷ്യന്ദികളും അനാഘ്രാതങ്ങളുമായ നാനാവർണ്ണങ്ങളിലുള്ള സുരഭിലസുമനിരകളെക്കൊണ്ടു കൈരളിയെ ആരാധിക്കുവാൻ ഭാഷാഭക്തന്മാർ ഉത്സുകരാകുമാറാകട്ടെ. ഈ പുഷ്പങ്ങൾ എന്നും വാടാമലരുകളാകുമാറാകട്ടെ. അവയ്ക്കു വേണ്ട "തണലും തണ്ണീരും" തരുവാൻ രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരെപ്പോലെയുള്ള ഉദാരമതികൾ സദാ സന്നദ്ധരാകുമാറാകട്ടെ.

അതും ഇതും

By C. N. A. RAMAYYA SASTRI, M.A., Trivandrum.

"ഇരുന്നിട്ട വേണ്ടേ കാൽ നീട്ടാൻ" എന്നൊരു ചൊല്ലുണ്ട്. "ഇരിയ്ക്കുന്ന നിലയിൽ പ്രവേശിയ്ക്കുന്നു" എന്നുള്ളതിനു് "ഇരുന്നുകൊണ്ടു് പ്രവേശിയ്ക്കുന്നു" എന്നുള്ള തജ്ജിമയും ഇതിനെ ഓർമ്മപ്പെടുത്തുന്നു. ഇരുന്നിട്ട് കാൽ നീട്ടുന്നതുപോലെ വാ തുറന്നിട്ടവേണം ഉച്ചരിയ്ക്കാൻ. വാ തുറക്കുന്നതിനോട് സ്വഭാവമേ യോജിച്ച വർണ്ണമാണു് 'അ'. അതിന്റെ ദീർഘം 'ആ'. വാ തുറന്നതിൽ ഇടവീതി കുറഞ്ഞുള്ള സ്വരവർണ്ണം 'ഇ'. ദീർഘം 'ഈ'. മദ്ധ്യഗതം പരാമർശിയ്ക്കുന്നതു് 'ഉ'. ദീർഘം 'ഊ'. ഇവയ്ക്കു് 'ചുട്ടു് എഴുത്തു്=ചുട്ടെഴുത്തു്' എന്നു ദ്രാവിഡസങ്കേതം. ഐഹികത്തിൽ ദൂരകല്പമായി 'അണ്ടർ', 'ഉമ്പർ' എന്നപദങ്ങൾ ദേവപര്യായമായി വരുന്നു. നംബർ, നമ്പർ, നമ്പു് എന്ന കണക്കിനു് "അണ്ടർകോൻ തനയനാഗ്ര താതസവിധത്തിൽ വന്ന സമയത്തിൽ മാം" എന്ന പാദത്തിൽ ദ്വിതീയാക്ഷരം പ്രയോഗിച്ചുകണ്ടിട്ടുണ്ടെന്നു് ഇവിടെ പ്രസ്താവിച്ചുകൊള്ളട്ടെ. പദ്ധതങ്ങളിൽ പൊക്കം കുറയാത്തതിനു് വലുതെന്നുമാത്രം അക്ഷരാർത്ഥമായ മലയെന്നും കുറഞ്ഞതിനു് കുറഞ്ഞതെന്നു് അക്ഷരാർത്ഥം വ്യക്തമായ കുൻറു, കുന്നു് എന്നും പേരു് വന്നതുപോലെ (സമുദ്രത്തിൽ) മറഞ്ഞതിനു് 'ഉപ്പു്' എന്നു് പേർ വന്നു എന്നു് പറയേണ്ടിയിരിയ്ക്കുന്നതുപോലെ "അൻപു്" ഈശ്വരലക്ഷണംവരെയായ മഹിതസ്നേഹത്തെ കുറിയ്ക്കുന്നു. "ഇൻപം" ഐഹികതുഷ്ടിയേയും കുറിയ്ക്കുന്നു. "ഇൻപം" ചിറിൻപം എന്ന കണക്കിനു് അല്പമാക്കി "പേരിൻപം" (പെരുകിയ സുഖം) തമിഴിലുണ്ടു്. "നല്ലപോലെ" എന്നു് അർത്ഥമായിത്തീർന്നു് 'അൻപു്' മലയാളത്തിൽ 'അമ്പു്' എന്ന വേഷത്തിലായിട്ടുണ്ടു്. ശരാർത്ഥത്തിലുള്ള 'അമ്പു്' സ്വഭാവമേ ഉള്ള വേഷത്തിൽ 'ഉമ്പർ' എന്നതുപോലെ ഇരിയ്ക്കുന്നുവെങ്കിലും ദേവാശയം ഉറപ്പിലില്ലാത്തതുപോലെ ഇതിലുമില്ല. "ഇഹ" എന്ന സംസ്കൃതാവ്യയത്തിൽ "ചുട്ടെഴുത്തു്" ഉണ്ടെന്നു് ബിഷപ്പു്,

ഡാക്ടർ, റോബട്ട്, കാഡ്വെൽ തെളിയിച്ചു പറഞ്ഞിട്ടുണ്ടെങ്കിലും "മൂരുത്തു പായുന്നു" അമ്പിനെപ്പറ്റിയും അൻപുശബ്ദത്തെപ്പറ്റിയും പറയേണ്ടതു പറയാത്തതുകൊണ്ടും ജാഫെറിക് (Japhetic) സ്റ്റേജ് (Stage) എന്ന ഘട്ടത്തിൽ ദ്രാവിഡഭാഷാവർഗ്ഗത്തിനും, സിതിയൻ എന്നു് അദ്ദേഹം പരാമർശിയ്ക്കുന്ന വർഗ്ഗത്തിനും, സെമിറിക് എന്ന വർഗ്ഗത്തിനും ആര്യ Indo-European, Indo-Germanic, വർഗ്ഗത്തിനും പൊതുവെയുള്ള പൂർവ്വസ്ഥിതിയിൽ ഉള്ളവയായി അദ്ദേഹം കാണിയ്ക്കുന്ന ദൃഷ്ടാന്തങ്ങൾകൊണ്ടും, നമുക്കു് അതു് ഊഹിയ്ക്കാവുന്നതാണു്. വിശേഷിച്ചു് "ഇഹ" എന്നതിനോടു് ഉച്ചാരണസാമ്യമുള്ള പദം അപരിഷ്കൃത ദ്രാവിഡഭാഷയൊന്നിൽനിന്നു് അദ്ദേഹംതന്നെ യഥാർത്ഥമായി കാണിച്ചിട്ടും ഉണ്ടു്. ഇങ്കു (ഇങ്ങു്) എന്ന പദവും നോക്കുക. സാധാരണത്തമിഴിൽ "ഏ" ചേർത്തു് ഉച്ചരിയ്ക്കുമ്പോൾമാത്രം മുക്കാലും ഹ്രസ്വമാക്കി "ഇങ്കേ" എന്നാക്കുന്നു എന്നേയുള്ളു. മലയാളത്തിലോ "പൊൻകാരം" ഉണ്ടെങ്കിലും "തങ്കം" ഉള്ളതുപോലെ ഓങ്കാരവും, അഹങ്കാരവും ഉണ്ടു്.

ദ്രാവിഡഭാഷകളിൽ ഓരോന്നിൽ ഓരോവിധമായി "ഉ" കാരവും, വിശേഷിച്ചും അതിന്റെ ദീർഘവും കുറഞ്ഞും, മറഞ്ഞും പോയിരിയ്ക്കുന്നു. ആര്യ (Aryan, Ayran) ഭാഷകളിൽ ജാഫറിക്സ്റ്റേജിലെ "ഉത്" എന്ന ഉപസർഗ്ഗം ഉൽസർഗ്ഗാദിശബ്ദങ്ങളിൽ സർവ്വോപരിയായി അവശേഷിച്ചു കാണുന്നു. സംസ്കൃതത്തിൽ ഇദം ശബ്ദത്തിന്റെ പുല്ലിംഗം അയം എന്നും, സ്ത്രീലിംഗം ഇയം എന്നും, നപുംസകം ഇദം എന്നും തരംതിരിയ്ക്കുന്നതുകൊണ്ടുതന്നെ "ഇതു്, അതു്" എന്നാദ്യരൂപങ്ങളുടെ "രൂപഗുണം" എത്രത്തോളം മാറിയിട്ടുണ്ടെന്നു കാണാം. കന്നാടകത്തിൽ ഇദു എന്നുള്ളതും ഒരുപരിഷ്കൃതദ്രാവിഡഭാഷയിൽ "ഇദം" എന്നുള്ളേടത്തോളം ഉച്ചാരണമുള്ളതും ഇവിടെ സ്മരണീയമാണു്. തെലുങ്കിൽ "ഇദി" എന്നായി സ്ത്രീലിംഗരൂപവും അതുതന്നെയായിരിയ്ക്കുന്നതിനെപ്പറ്റി ഇവിടെ കുറിയ്ക്കുക മാത്രമേ ചെയ്യാൻ പ്രസക്തിയുള്ളൂ.

സംസ്കൃതത്തിൽ "അദസ്" ശബ്ദത്തിന്റെ വിശേഷവിധി കഥം പറകയാണെങ്കിൽ "മറിമായമിതാക്കറിയാം?" എന്ന ഉണ്ണായി വാരിയരുടെ വാക്ക് ഓർമ്മവരും. അതഃ, ഇതഃ എന്ന സംസ്കൃതാവ്യയങ്ങളുടെ നില നോക്കുക. അഥ എന്ന അവ്യയവുമങ്ങിനെ! യൂറോപ്പിലുള്ള ആര്യഭാഷാപദങ്ങളിൽ ചോദ്യസർവ്വനാമങ്ങളിലും, ചോദ്യസാർവ്വനാമിക "ഭേദക"ങ്ങളിലും "കിം" ശബ്ദത്തോട് ചേർച്ചയുള്ള വ്യഞ്ജനം മാത്രം കാണുമാറായിരിയ്ക്കെ സംസ്കൃതത്തിൽ "യഥാ കഥഞ്ചിദപേക്ഷ്യാമി"; "യത് കിഞ്ചിദിദിയംവോ ദക്ഷിണാ"; "ഏനമേനപ്രകാരേണ" എന്നവയിലെ ശൈലികളും മറ്റും പരിശോധിച്ചാൽ "കണ്ണീരൊഴുക്കുകിലതും മതിയാകയില്ല" "too deep for tears" എന്നു പറയുന്നതുപോലെ അതികോമളതീക്ഷ്ണം" ആണ് ഭാഷാതത്വപ്രകടനവും അതിൽനിന്നുണ്ടാവുന്ന ചരിത്രാടിവിളവുകളുമെന്നു പറഞ്ഞു മുഴുക്കാനേ ഇവിടെ സ്ഥലമുള്ളൂ. "യൽ", "എയ്", "ഏയ്" എന്നിവയുടെ ബന്ധുവും രോമാഞ്ചപ്രദംതന്നെയല്ലെ?

"എന്നു പറഞ്ഞൊരു സീമയിട്ടീടിനാൾ!
എന്നയ ചില്ലിയായ് ക്കണ്ടതിപ്പോൾ!"

എന്ന് ചെറുശ്ശേരി നമ്പൂതിരി "അലങ്കാരാസ്ഥലങ്കാരം" എന്ന തത്വത്തിന്റെ വികസനമായി കാണിച്ചിട്ടുണ്ടല്ലോ. അതിൽ സംസ്കൃതത്തിലെ ചില്ലീശബ്ദമാണല്ലോ ഉള്ളത്. പാരസീകസംസ്കൃതഭാഷകളുടെ ബന്ധം മനസ്സിലാക്കുകയും ദ്രാവിഡഭാഷകളെല്ലാം അവയ്ക്കുമാത്രം പൊതുവായ ഒരു മാതൃഭാഷയിൽനിന്ന് ഉണ്ടായവയാണെന്നുള്ള അബദ്ധവാദത്തിൽ ചാടാതിരിയ്ക്കുകയും ചെയ്യുന്നതിലേയ്ക്കുള്ള ദ്രാവിഡശബ്ദമായ "ചില്ലി"യായിരിയ്ക്കട്ടെ, Relative Pronoun എന്നിങ്ങിനേയും Interrogatives എന്നിങ്ങിനേയും പേരുള്ള പദങ്ങൾക്ക് സംസ്കൃതത്തിലുള്ള വ്യവച്ഛേദവും, ദ്രാവിഡഭാഷകളിൽ Relative Pronouns എന്നുപറയുന്ന വകതന്നെ സ്വയമേ ഇല്ലാതിരിയ്ക്കുന്നു എന്നുള്ള സ്ഥിതിയേയും ചോദ്യസർവ്വനാമസാർവ്വനാമികങ്ങളുടെ രൂപങ്ങളിൽ (ഉദാഹരണം who, whom, whose, which) യൂറോപ്പിലെ ആര്യഭാഷകളിലെ

Relative Pronouns വേഷത്തിൽമാത്രം ലയിച്ചുതും ദ്രാവിഡഭാഷക ളുടെ പ്രാചീനത്തിൽ അതിപ്രാചീനദശാസന്ധിയുടെ ഈ ലേശപ്രകട നവും എന്ന് ആശംസിച്ചു കൊള്ളുന്നു.

അതുവും ഇതുവും എന്നൊഴുന്നതു് തെറ്റാണെന്നു തോന്നാം. അതു്, ഇതു്, ഉതു്, എതു് എന്നിവ "പൊതു" എന്നതുപോലെ "മുറിയൽ" ഉകാരംകൊണ്ടു് അവസാനിയ്ക്കുകയാൽ തമിഴ്വ്യാകര ണപ്രകാരം "അതുവും" എന്നു് തുടങ്ങിയ നാലു ക്രുത്തിന്നും ധാരാളം സാധുത്വമുണ്ടു്. അതും ഇതും എന്നിവയാണു് "ഭജനംമൂന്നു് ഉറാ ണ്മ" എന്ന കണക്കിനു് നടപ്പായിവന്നു് അതുവും, ഇതുവും എന്നിവയെ ബഹിഷ്കരിയ്ക്കുന്നതു്. മലയാളത്തിൽ "അതുവും ഇതുവും" ഇല്ലാ തായിവന്നവെന്നുകൂടി പറയാം; വടക്കെ മലബാറിൽ ഇല്ലാതായിത്തീ ന്നിട്ടില്ലെന്നു് കൌതുകപൂർവ്വം പറയേണ്ടിയിരിയ്ക്കുന്നു. ഗുണ്ടർട്ടും, ഗാർത്വേറും, അവിടെയായിരുന്നതുകൊണ്ടു് "അതും, അതുവും ഈ രണ്ടും സാധു" എന്നു് വ്യാകരണചോദ്യോത്തരത്തിൽ കാണാം.

ധർമ്മാർത്ഥകാമമോക്ഷശബ്ദങ്ങളെ "അറംപൊരുളിൻപം വീ ടു്" എന്നും, വിഭക്തിയെ "വേറുമൈ" എന്നും തർജ്ജിമചെയ്യാനും അരുണാചലശബ്ദത്തെ "അണ്ണാമല" എന്നീ ഭംഗിനോക്കിയെടുക്കാനും മടിയ്ക്കാത്ത ദ്രാവിഡഭാഷാവൃക്ഷത്തിന്റെ താങ്ങായ മഹാമഹാന്റെ ഷഷ്ട്യബ്ദപൂർത്തിദിനം (അപ് +ദം, വർഷം) ആണ്ടുതോറും ഇനി കൊ ണ്ടാടുമാറാകട്ടെ!

മനോരോഗം

By H. H. RAMA VARMA APPAN THAMPURAN, Trichur.

"രാഗാദിരോഗാൻ സതതാനുഷക്താ-
നശേഷകായപ്രസൃതാനശേഷാൻ,
ഔത്സുക്യമോഹാരതിദാൻ ജഘാന
യോടപൂവ്വൈദ്യായ നമോസ്തു തസ്മൈ."

രാഗാദിമാനസികരോഗങ്ങൾക്ക സവ്വപ്രാധാന്യം കല്പിച്ച് തദ്രോഗനിവൃത്തിവിഷയത്തിൽ അനന്യശരണനായി ശരീരാമയങ്ങളുടെ നിദാനങ്ങൾക്ക നിദാനമായ മനോരോഗചികിത്സ 'അപൂവ്വവൈദ്യ'നായ സവ്വേശ്വരനിൽ സമർപ്പിച്ചുകൊണ്ട് ധമ്മാത്ഥസുഖസാധനമാത്രമായ ശരീരത്തിന്റെ സാധാരണത്തിനും ആയുരാരോഗ്യരക്ഷയ്ക്കുമായി തന്റെ ആയുവ്വേദോപദേശരൂപമായ "അഷ്ടാംഗഹൃദയം" എന്ന വിശിഷ്ടവൈദ്യഗ്രന്ഥം വാഗ്ഭടാചാര്യർ ആരംഭിച്ചിരിക്കുന്നു.

പ്രത്യക്ഷലക്ഷണങ്ങളെക്കൊണ്ടു ദേഹത്തിൽ പ്രകടങ്ങളായി കാണാവുന്ന മനോരോഗങ്ങളുടെ ചേഷ്ടാവിധങ്ങളും ഔതികവും ദൈവികവും ആയ ചികിത്സാവിധികളും 'ഉത്തരസ്ഥാനത്തിൽ ബാലഗ്രഹപ്രതിഷേധം' എന്ന മൂന്നാമദ്ധ്യായംമുതൽ 'അപസ്മാരപ്രതിഷേധം' എന്ന ഏഴാമദ്ധ്യായമുൾപ്പടെ ആറദ്ധ്യായങ്ങളിൽ സംഗ്രഹിച്ചുതല്ലാതെ സൂക്ഷ്മസൂക്ഷ്മതരങ്ങളായ മറവു മനോരോഗങ്ങളെ അദ്ദേഹം സ്പർശിക്കുന്നില്ല. ശരീരത്തിനും മനസ്സിനും അന്യോന്യം ബാധ്യബാധകഭാവം പ്രകൃതിസിദ്ധവും അനുഭവഗോചരവും ആയ സ്ഥിതിക്ക് ആരോഗ്യചിന്തയിൽ മനസ്സിന്റെ പ്രാധാന്യവും അദ്ദേഹം സ്മരിക്കാതിരുന്നില്ലെന്നു മാത്രം.

"ഉന്മാദോ നാമ മനസോ ദോഷൈരുന്മാർഗഗൈർമതഃ
ശാരീരമാനസൈർഭൂയ്യൈ രഹിതാദന്നപാനതഃ"

എന്ന് ഉന്മാദത്തെ നിർവചിച്ച് അതിന്റെ നിദാനം പറഞ്ഞിരിക്കുന്നതിൽനിന്ന് ആചാര്യന്റെ ഉദ്ദേശം സ്പഷ്ടമാകുന്നുണ്ടല്ലോ.

ഈ മനസ്സെന്തു്, അതിന്റെ സ്വരൂപമെന്തു്, അതിന്റെ പ്രകൃതി വികൃതികൾ എന്തു്, രോഗാരോഗ്യകാരണങ്ങളെന്തു്, രോഗ നിവൃത്തിക്കും ആരോഗ്യലാഭത്തിനും ഉള്ള മാർഗ്ഗങ്ങളേവ, ഇത്യാദി ചിന്തകൾ ജീവികൾക്കെല്ലാം ആദരണീയങ്ങളല്ലാതെ വരുവാൻ തരമില്ല.

ജീവോപാധിയായ ശരീരത്തോടുകൂടി മനസ്സും ആവിർഭവിക്കുന്നു. പഞ്ചകോശാത്മകമായ ശരീരത്തിൽ സ്ഥൂലങ്ങളും അന്നപ്രാണമയങ്ങളുമായ കോശങ്ങൾ ഭൌതികവും മനോമയം ദൈവികവും വിജ്ഞാനാനന്ദമയങ്ങൾ ആധ്യാത്മവും ആകുന്നു. ആദ്യത്തെ രണ്ടുകോശങ്ങൾ പൃഥിവ്യാദിപാഞ്ചഭൌതികവും മൂന്നാമത്തേതു് ഗന്ധാദിതാന്മാത്രികവും വിജ്ഞാനാനന്ദമയകോശങ്ങൾ അതിമാത്രങ്ങളും ആകുന്നു. അചേതനമായ ഭൌതികം സ്ഥൂലവും പ്രത്യക്ഷവും മനസ്സിന്റെ ഉപാധിയായ താന്മാത്രികം സൂക്ഷ്മവും പരോക്ഷവും ഉദാസീനവും ജീവോപാധിചേതനവും സ്വതന്ത്രവും പഞ്ചീകൃതമായാമയവും പഞ്ചകോശാന്തർഗതവും ആകുന്നു.

ഇങ്ങിനെ ചേതനാചേതനങ്ങളുടെ മദ്ധ്യവർത്തിയായ മനസ്സു് കാലാത്മകർമ്മങ്ങളുടെ ഹിനമിശ്രാതിമാത്രായോഗംകൊണ്ടു് രോഗഗ്രസ്തമായ ശരീരത്താലും പ്രാരബ്ധവും സഞ്ചിതവുമായ കർമ്മങ്ങൾക്കു് അനുഗുണമായ വാസനാസംസ്കാരങ്ങളാൽ അഭിഭ്രുതനായ ജീവനാലും ബാധിക്കപ്പെടുന്നു. ബാധിതമായ മനസ്സു് ദേഹത്തേയും ജീവനേയും പ്രതിബാധിക്കുകയും ചെയ്യുന്നു.

മനസ്സിന്നു് പ്രത്യേകിച്ചൊരു സ്വരൂപമില്ല. ഇന്ദ്രിയങ്ങളാലും വാസനാസംസ്കാരങ്ങളാലും ഏതേതു വിഷയത്തിൽ പ്രേരിപ്പിക്കപ്പെടുന്നുവോ അതാതിന്റെ സ്വരൂപംതന്നെ മനസ്സിന്റെ സ്വരൂപവും. വിചാരങ്ങളും വികാരങ്ങളും തന്നെയാകുന്നു മനസ്സു്. ശരീരത്തിൽ വാതാദിദോഷവൈഷമ്യം രോഗവും ദോഷസാമ്യം ആരോഗതയും ആകുന്നതുപോലെ സത്വാദിഗുണവൈഷമ്യവും ഗുണസാമ്യവും മനസ്സിന്റെ രോഗാരോഗ്യങ്ങൾക്കും മൂലകാരണങ്ങളാകുന്നു. രോഗാരോഗ്യങ്ങൾ തന്നെ ദുഃഖസുഖങ്ങൾ.

മനസ്സിന്റെ തൈർഗുണ്യം ശരീരത്തിൽ ത്രിദോഷംപോലെയും വിഷകൃമിയുടെ വിഷംപോലെയും ജന്മസിദ്ധമാണ്. തൈർഗുണ്യത്തിന്റെ മൂലസ്വഭാവം ജീവപ്രകൃതിക്കനുസരിച്ചിരിക്കും. വികാരങ്ങളും വാസനകളാലും കർമ്മങ്ങളാലും നിയന്ത്രിക്കപ്പെടുന്നു. ഇപ്രകാരം സത്വ രജസ്തമോഗുണങ്ങളും വികൃതാവികൃതങ്ങളായിട്ട് മനസ്സിനു ദുഃഖത്തേയോ സുഖത്തേയോ ആരോഗ്യത്തേയോ രോഗത്തേയോ ഉളവാക്കുന്നു.

മനോരോഗങ്ങളിൽ വാസനാജന്യങ്ങളും നിജങ്ങളും കർമ്മജങ്ങളും ആഗന്തുകങ്ങളും ആണെന്നു പറയാം. നിജം യാപ്യവും കൃച്ഛ്രസാദ്ധ്യവും ആഗന്തുകം ചികിത്സകൊണ്ടു മാറാവുന്നതും മാറിക്കൊണ്ടിരിക്കുന്നതും ആകുന്നു.

മനസ്സിന്റെ രോഗങ്ങളും രാഗാദികളാണെന്നു പറഞ്ഞുവല്ലോ. മമതാഹങ്കാരാദികളെക്കൊണ്ടു തൈർഗുണ്യസ്വഭാവത്തിനു വരുന്ന വികാരമാണ് രോഗനിദാനം; സംഗമാകുന്നു പ്രാഗ്രൂപം; കാമക്രോധാദിഷഡ്‌വർഗ്ഗം ലക്ഷണവും യമശമാദികൾ ഉപചയവും സമ്മോഹാദി പ്രണാശാന്തം ആപത്തിയും ആകുന്നു.

"സംഗാൽ സഞ്ജായതേ കാമഃ
കാമാൽ ക്രോധോഭിജായതെ
ക്രോധാൽ ഭവതി സമ്മോഹഃ
സമ്മോഹാൽ സ്മൃതിവിഭ്രമഃ
സ്മൃതിഭ്രംശാൽ ബുദ്ധിനാശഃ
ബുദ്ധിനാശാൽ പ്രണശ്യതി." (ഗീത)

നിജാഗന്തുവിഭാഗേന തത്ര രോഗാ ദ്വിധാ സ്മൃതാഃ
തേഷാം കായമനോദ്വൈദ്യാ-ദ്ധിഷ്ണ്യാനമപി ദ്വിധാ
രജസ്തമശ്ച മനസോ ദ്വൌച ദോഷാവുദാഹൃതൌ.

എന്നാണ് വാഗ്ഭടാചാര്യർ പറയുന്നതു്. ഇവിടെ രജസ്തമസ്സുകളെ മാത്രമേ മനോദോഷങ്ങളായി ആചാര്യർ ഗണിക്കുന്നുള്ളൂ. എന്നാൽ, സുകൃതദുഷ്കൃതങ്ങളും രണ്ടും ജന്മത്തിനു കാരണമാകകൊണ്ടും വൈരോഗത്തിന്റെ മൂലഭേദംകൊണ്ടല്ലാതെ ജന്മനാശം സംഭവിക്കാത്തതു

കൊണ്ടും മുക്തിപര്യന്തം മനോരോഗത്തിനു പരമശാന്തിവരാത്തതു കൊണ്ടും മനോരോഗചികിത്സയുടെ പരമാവധി മനസ്സിന്റെ നാശം തന്നെ ആയതുകൊണ്ടും സത്പഥത്തെക്കുടി ആധ്യാത്മികദൃഷ്ട്യാ കാരണമായി ഗണിക്കേണ്ടിയിരിക്കുന്നു. എന്നാൽ ശരീരചികിത്സയിൽ ദേഹോപായമല്ല ദേഹസംരക്ഷണമാണ് ഇഷ്ടവും സാധ്യവും. അതു കൊണ്ടു മനസ്സിനെ ശരീരത്തിന്റെ ആരോഗ്യത്തിനു സഹകാരിയായി വിചാരിക്കുമ്പോൾ സത്പഥത്തെ ദോഷകോടിയിൽനിന്ന് നീക്കംചെയ്യുക തന്നെവേണം. അതുതോളമെ ആചാര്യന്റെ ഉദ്ദേശമുള്ളുവെന്നും കരുതണം.

രോഗാഃ സർവ്വേപി ജായന്തേ
വേഗോദീരണധാരണൈഃ

എന്ന വാക്യത്തിലുള്ള 'വേഗ'ശബ്ദത്തിൽ മനോരോഗത്തെ സംബന്ധിച്ചിടത്തോളം ഭയക്രോധാദി ആവേഗങ്ങളും ഉൾപ്പെടുന്നതാണ്. വെറുതെ വ്യസനിക്കുക, ദുഃഖം അടക്കുക, സത്യം മറയ്ക്കുക, വ്യാജം പറയുക മുതലായവ ആവേഗങ്ങളുടെ ഉദീരണധാരങ്ങളാകുന്നു.

ധീധൈര്യാത്മാദിവിജ്ഞാനം
മനോദോഷൌഷധം പരം

എന്നാണ് മനോരോഗത്തിന്ന് അഷ്ടാംഗഹൃദയപ്രകാരമുള്ള സാമാന്യചികിത്സ. എന്നാൽ സകല ധർമ്മശാസ്ത്രങ്ങളിലും കർമ്മവിധികളിലും യോഗശാസ്ത്രങ്ങളിലും ആധ്യാത്മഗ്രന്ഥങ്ങളിലും മനോദോഷൌഷധങ്ങളെത്തന്നെയാണ് പരാമർശിക്കുന്നതു്. മനോരോഗനിവൃത്തിതന്നെയാണ് ലക്ഷ്യം. ആ ചികിത്സയെ പോഷിപ്പിക്കുവാനും പ്രചാരത്തിൽ വരുത്തുവാനുമാണ് നമ്മുടെ ഋഷീശ്വരന്മാരും യതീശ്വരന്മാരും യത്നിച്ചിട്ടുള്ളതു്.

മനോരോഗചികിത്സാവിധിയിൽ ദിനചര്യ പ്രധാനമായ ഒരംശമാകുന്നു. മനഃശുദ്ധിക്കു വേണ്ടതായ കർമ്മങ്ങളും ചെയ്യണം. ഈ കർമ്മകാണ്ഡം ദ്രവ്യയജ്ഞാദിപഞ്ചയജ്ഞപ്രകരണവിവരണത്തിൽ

അടങ്ങിയിരിക്കുന്നു. സാത്മ്യമായ ആഹാരം ത്രൈഗുണ്യപ്രകൃതിക്ക് അനുസരിച്ച് മൂന്നു വിധത്തിൽ വിഭജിക്കപ്പെട്ടിരിക്കുന്നു.

"ആഹാരസ്ത്വപി സർവ്വസ്യ ത്രിവിധോ ഭവതി പ്രിയഃ
.....
ആയുഃ സത്ത്വബലാരോഗ്യ സുഖപ്രീതിവിവർദ്ധനാഃ
രസ്യാഃ സ്നിഗ്ധാ സ്ഥിരാ ഹൃദ്യാ ആഹാരാഃ സാത്ത്വികപ്രിയാഃ
കടപ്ലുലവണാത്യുഷ്ണ തീക്ഷ്ണരൂക്ഷവിദാഹിനഃ
ആഹാരാ രാജസസ്യേഷ്ടാ ദുഃഖശോകാമയപ്രദാഃ
യാതയാമം ഗതരസം പൂതി പര്യുഷിതഞ്ചയൽ
ഉച്ഛിഷ്ടമപിചാമേധ്യം ഭോജനം താമസപ്രിയം." (ഗീത)

അവരവരുടെ സ്വഭാവത്തിനു അനുസരിച്ച ആഹാരം ഏതെന്നറിയുവാൻ സ്വസ്വഭാവത്തേയും അറിയണമല്ലോ. 'തത്ര സത്ത്വം നിർമ്മലത്വാൽ പ്രകാശകമനാമയം സുഖസംഗേന ബധ്നാതി.....', 'രജോ രാഗാത്മകം വിദ്ധി തൃഷ്ണാസംഗസമുൽഭവം.....', 'തമസ്ത്വ ജ്ഞാനജം വിദ്ധി മോഹനം.....' ഇത്യാദി വചനസഹസ്രങ്ങളെക്കൊണ്ട് ഗുണങ്ങളുടെ സ്വരൂപചേഷ്ടകളെ അറിവാൻ സാധിക്കാവുന്നതാണ്.

മനോരോഗചികിത്സയിലും ഔഷധങ്ങൾ ശമനമെന്നും ശോധനമെന്നും രണ്ടു പ്രകാരത്തിലുണ്ട്. തമസ്സിനെ അല്പ്യയനാദിശോധകങ്ങളായ ഔഷധങ്ങളെക്കൊണ്ടിളക്കിക്കളഞ്ഞു രജസ്സിനെ നിഷ്കാമകർമ്മങ്ങളിൽ മഹിപ്പിച്ചു യോഗംകൊണ്ടു സത്വശോധന വരുത്തി ത്രിഗുണങ്ങളേയും ആത്മവിജ്ഞാനംകൊണ്ട് ശമിപ്പിക്കുകയാണ് മനോരോഗൌഷധങ്ങളുടെ വിധ്യുപരിപാകഫലവും മനശ്ചികിത്സയുടെ പരമപ്രയോജനവും.

മനസ്സിനു മൂഢം, ക്ഷോഭം, ശാന്തം, എന്നു മൂന്നു വൃത്തികളുണ്ട്. ആർദ്രേന്ധനത്തിലെ ജലാംശം സൂര്യരശ്മികൊണ്ടോ അഗ്നിസംപർക്കംകൊണ്ടോ ആവിയാക്കിക്കളഞ്ഞു് ശുഷ്കമാക്കി അഗ്നിയിൽ ആഹുതി ചെയ്തു മഹിപ്പിച്ചു വെണ്ണീറാക്കിത്തള്ളുന്നതുപോലെ മനസ്സിന്റെ മൂഢ

വൃത്തി വിട്ടുകൊണ്ടു കളഞ്ഞു് ഘോരവൃത്തി നിഷ്കാമകർമ്മംകൊണ്ടു ശമിപ്പിച്ചു രണ്ടും ശാന്തവൃത്തിയിൽ പര്യവസിപ്പിച്ചു് അതു പരമാത്മാവിൽ സമർപ്പിച്ചാൽ മനസ്സു സ്വസ്ഥമായി; സംസാരമാകുന്ന മായാമയത്തിൽനിന്നു നിത്യമുക്തവുമായി. ഈ പരമാനന്ദപ്രാപ്തിക്കുള്ള ചികിത്സയാണു് യമനിയമാദി അഷ്ടാംഗയോഗം; അതിനുള്ള സിദ്ധൗഷധങ്ങളാണു് കർമ്മയോഗവും ജ്ഞാനയോഗവും ഭക്തിയോഗവും.

ഓം ശാന്തിഃ ശാന്തിഃ ശാന്തിഃ

നത്തമാടരുട്ട!

By VALLATHOL

(കാകളി)

ഉച്ചരിതാത്ഥത കണ്ണിനു കിട്ടുമാ-
റ്'ച്ചമലരി'തൻ പുഷ്പം പ്രഫുല്ലമായ്;
അച്ഛന്നശോഭം നഭസ്സിൻ നടുക്കിലായ്,
സച്ഛനാം ശാരദരാകാസുധാകരൻ:
സച്ഛന്നാചലംപോലഖണ്ഡവിഭ്രതിയാ-
മണ്ണാമലയെന്ന ചെട്ടിരാജാവിതാ,
മാനുഷായുസ്സിനെറ മധ്യമണഞ്ഞു നി-
ന്നാ,നന്ദയുന്തിലരാക്കുന്നു ലോകരെ.
വെച്ചേറെ ചൊല്ലുന്ന മംഗളം ഭാഷകഠം;
നിവ്വഹിയ്ക്കുന്ന നവോത്സവ മൂരുകഠം;
നിർവ്യാജമോദത്തിലാണ്ടു വിശേഷണ
നിർവൃതിക്കൊഠംവൂ തമിഴ്നാടൊക്കെയും.

പാടെ തെളിയട്ടെ പേത്തും തടാകങ്ങഠം
പാടിപ്പുറക്കട്ടെ നെല്ലുതിർ ത്തത്തകഠം;
കാറിൻകറപ്പു കളഞ്ഞു വിമലമായ്-
ത്തീരട്ടെ നമ്മഠംതന്നാംബരമണ്ഡലം:
വൃഷ്ടഭ്രവിണയാം ദ്രാവിഡരാജൻെറ
ഷഷ്ട്യബ്ദപൂത്തിതൻ പുഷ്ടയശസ്സിതാ,
പാരിപ്പുരക്കുന്നു കേരളഭ്രവിലും,
കൈരവാംഭോജ സുഗന്ധിയാംകാറിനാൽ.
ഹേ തമിഠംനാടേ, ഭവത്സുഖദുഃഖങ്ങഠം
വീതിച്ചെടുക്കുന്നു തോഴിയല്ലോ ചിരാൽ,
ഭിന്നത കാഴ്ചയിൽ തോന്നിയ്ക്കുമെങ്കിലും,
നിന്നയൽക്കാരിയാം ജാമദഗ്ന്യക്ഷിതി.

കൺമിഴിയ്ക്കാറില്ല ലോകോപകാരക-
കർമ്മങ്ങളിൽ, മിക്ക വമ്പണപ്പെട്ടിയും;
അത്ഥവ്യവസായപണ്ഡിതനങ്ങനേ
ബുദ്ധിവെച്ചാജ്ഞിച്ച ഭ്രരിധനങ്ങളോ,
എത്ര യുവാക്കൾക്ക നല്കിവരുന്നതി-
ല്ല,ത്തുംഗ വിദ്യാധനത്തെ ദയാനിധേ?
ക്ഷേത്രങ്ങൾ, വിദ്യാലയങ്ങൾ, വിശ്രമങ്ങൾ
തീത്ഥാടനക്കാക്ക വിശ്രാന്തിമേടകൾ;
മൂഢാവൃയത്തിനിപ്പീലിവയെങ്ങെങ്ങ
മൂത്തങ്ങളാം ഭവൽക്കീർത്തിപുഞ്ജങ്ങളായ് ?

കല്യരാം തദ്ഭൃത്യരെണ്ണിനോക്കുന്ന പൊൻ-
വെള്ളിപ്പണങ്ങൾ തൻ നിസ്വനമല്ലയോ-
തദ്ഭവനത്തിലുലാത്തുന്ന ലക്ഷ്മിതൻ
തുപ്പാദമഞ്ജീരശിഞ്ജിതമല്ലയോ-
ഗാനമായ് നിശ്ശ്വസിയ്ക്കുന്നു, ചിദംബര-
സ്ഥാനേ ഭവാൻ തീർത്ത ഗീതവിദ്യാലയേ!
ആ മഹാപാഠാലയത്തിൽ നിന്നോലുന്ന
കോമള വേണുവീണാദിഗാനങ്ങളിൽ
കേൾക്കപ്പെട്ടുന്നതു, തൽപ്രണേതാവിന്റെ
വായ്ക്കും കലാപ്രേമമല്ലോ ദിനേ ദിനേ!
ശ്രേയ്സ്സർ പഠിപ്പിയ്ക്കുമിശ്ശീതവാദ്യാദി
കേട്ടിട്ട,തിനൊത്തു സ്വതം മുതിർവാൻ
തുക്കഴൽപൊക്കി നിലക്കൊൾവു സർവ്വരാ,
തൽക്കലൈവതമായ നടേശ്വരൻ!

രാജരേഖാങ്കിതമൌലിയാം ശ്രീനട-
രാജനു, കൈതവരാജരാജൻ ഭവാൻ
രാജതരാശിയാൽ കോഴ്ച്ചവെച്ചീലയോ,
രാജമാനമൊരു കൈലാസപർവ്വതം!

വിദ്യാലയാംതോറു മമ്പലംതോറുമേ
കത്തിച്ചു ദീപങ്ങളം, തേജസ്വിയാം ഭവാൻ;
തൽപ്രഭാവത്തിലോരോരോ ബിരുദമാം
സുപ്രദീപത്തെക്കൊളുത്തി മേൽക്കോയ്മയും.
താങ്കളംതന്നാജന്മരങ്ങനശൈലിതാൻ
താങ്കളെ ചൂടിച്ച 'രാജ'ശബ്ദമിതോ,
തൽപുത്രപൌത്രാദികൾക്കു മെന്നെന്നെയ്ക്കു-
മൊപ്പം ധരിയ്ക്കാവു മത്ഭുതരത്നമായ്!

ഹാ, തവ ജീവിത മൌദാര്യദീപിതം,
പ്രീതമാം വിദ്വജ്ജനത്താൽ നിരൂപിതം;
സ്തുത്യമാടട്ടെയീ രമ്യമാം രംഗത്തിൽ
നിത്യം, നടേശന്റെ കാരുണ്യധോരണി!