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English Essays

R E P R E S E N T A T I V E

English Essays

Selected and Annotated

by

DIWAN CHAND SHARMA, M.A.

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PREFACE

This anthology of English essays, covering a period of about a hundred years, is intended primarily for Indian students. This does not mean, however, that it will be of no interest to students who are not of Indian origin.

In selecting material for the book, the editor has sought to include as wide a variety of styles as possible, and the student is almost certain to find in the collection some author who will make an intimate appeal to him—intimate in the sense that the author will serve him as a kind of guide and exemplar.

After reading the essay which appeals to him most, he may well say “this is the kind of prose I should like to write”. By reading more of that author’s works, he will not consciously imitate but rather unconsciously absorb the style of writing which attracts him. It is in this way that many authors have evolved a style of their own, and it is in this way, too, that students can acquire a mastery of the difficult English language.

In the choice of essays, however, variety of style has not been the only consideration. There are few who read books merely to improve their style, and many who read for enjoyment, for instruction, or for both.

That students will enjoy reading these essays, the editor has no doubt. That they will find instruction

therein, he is equally certain. Some of the essays show how the authors have faced up to the problems of life; others tell about the daily give and take of life; and others again throw light on the fundamental problems of social conduct. In all of these essays it will be found that the accent is on individuality, which is highly refreshing. A. G. Gardiner (*Alpha of the Plough*), for instance, tells us how we should write letters. There is Thoreau who conducted a novel experiment in living. There is Mahatma Gandhi who exhorts us to place the spiritual things above the material.

It is not sufficient, however, that we should understand life and the problems which it raises; we must also seek to learn something about the world in which we live—something about science and religion, humanism and faith, the forces which have made the world what it is to-day. To help to achieve that understanding, some extracts from the writings of scientists and humanists have been included.

Throughout, the emphasis is on the adventurousness of the human spirit. All the victories that man has won, whether in the realm of material things or in the domain of the spirit, have been achieved by those who dared to venture. It is this spirit which must be kept alive in the world to-day, and particularly it must be awakened in the young. In various passages in this book the young student will hear the call to probe the unknown; it is to be hoped that the call will not go unheeded.

A last word of warning to the teacher. If he comes to the classroom intent merely on explaining difficult words

and allusions, he will only be performing a small part of his duty. He should endeavour to explain this book to his students in terms of its relevance to life and living. If he does so successfully, he will be very amply rewarded.

The brief biographical notes, which precede each essay, and the textual notes which follow will be found useful. They are not intended to be exhaustive.

D. C. S.

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JOURNEY TO NIAGARA

Charles Dickens

Charles Dickens (1812-70) is one of the greatest of English novelists. He was the son of a Government clerk, and underwent great trials and tribulations in his early life as a result of his father's poverty. With his wonderfully fertile imagination, his keen power of observation and lively sense of humour, he has created a world of highly interesting characters; names such as Mr. Pickwick and Mr. Micawber have become household words. His immense vitality and originality compensate for a tendency to caricature and to lapse occasionally into sentimentality.

After an American visit in 1842, Dickens wrote *American Notes* (1842) and a novel, *Martin Chuzzlewit* (1843), sharply criticizing American shortcomings. "Journey to Niagara" is an extract from the former book and is a vivid description of the journey undertaken by the author to reach the famous Niagara Falls.

THERE being no stage-coach next day, upon the road we wished to take, I hired an "extra", at a reasonable charge, to carry us to Tiffin; a small town from whence there is a railroad to Sandusky.¹ This extra was an ordinary four-horse stage-coach, such as I have described, changing horses and drivers, as the stage-coach would, but was exclusively our own for the journey. To ensure our having horses at the proper stations, and being incommoded by no strangers, the proprietors sent an agent on the box, who was to accompany us the whole way through; and thus attended, and bearing with us, besides, a hamper full of savoury cold meats, and fruit, and wine, we started off again, in high spirits, at half-past six o'clock

next morning, very much delighted to be by ourselves, and disposed to enjoy even the roughest journey.

It was well for us that we were in this humour, for the road we went over that day was certainly enough to have shaken tempers that were not resolutely at Set Fair,² down to some inches below Stormy. At one time we were all flung together in a heap at the bottom of the coach, and at another we were crushing our heads against the roof. Now, one side was down deep in the mire, and we were holding on to the other. Now, the coach was lying on the tails of the two wheelers; and now it was rearing up in the air, in a frantic state with all four horses standing on the top of an insurmountable eminence, looking coolly back at it, as though they would say: "Unharness us. It can't be done." The drivers on these roads, who certainly get over the ground in a manner which is quite miraculous, so twist and turn the team about in forcing a passage, corkscrew fashion, through the bogs and swamps, that it was quite a common circumstance, on looking out of the window, to see the coachman with the ends of a pair of reins in his hands, apparently driving nothing, or playing at horses, and the leaders staring at one unexpectedly from the back of the coach, as if they had some idea of getting up behind.

A great portion of the way was over what is called a corduroy road, which is made by throwing trunks of trees into a marsh, and leaving them to settle there. The very slightest of the jolts with which the ponderous carriage fell from log to log was enough, it seemed, to have dislocated all the bones in the human body. It would be impossible to experience a similar set of sensations, in any other circumstances, unless perhaps in

attempting to go up to the top of St. Paul's³ in an omnibus. Never, never once, that day, was the coach in any position, attitude, or kind of motion to which we are accustomed in coaches. Never did it make the smallest approach to one's experience of the proceedings of any sort of vehicle that goes on wheels.

Still, it was a fine day, and the temperature was delicious, and though we had left summer behind us in the west, and were fast leaving spring, we were moving towards Niagara, and home. We alighted in a pleasant wood towards the middle of the day, dined on a fallen tree, and leaving our best fragments with a cottager, and our worst with the pigs (who swarm in this part of the country like grains of sand on the seashore, to the great comfort of our commissariat in Canada), we went forward again, gaily.

As night came on, the track grew narrower and narrower, until at last it so lost itself among the trees, that the driver seemed to find his way by instinct. We had the comfort of knowing, at least, that there was no danger of his falling asleep, for every now and then a wheel would strike against an unseen stump with such a jerk, that he was fain to hold on pretty tight and pretty quick, to keep himself upon the box. Nor was there any reason to dread the least danger from furious driving, inasmuch as over that broken ground the horses had enough to do to walk; as to shying, there was no room for that; and a herd of wild elephants could not have run away in such a wood, with such a coach at their heels. So we stumbled along, quite satisfied.

These stumps of trees are a curious feature in American travelling. The varying illusions they present to the

unaccustomed eye as it grows dark, are quite astonishing in their number and reality. Now, there is a Grecian urn erected in the centre of a lonely field; now there is a woman weeping at a tomb; now a very commonplace old gentleman in a white waistcoat, with a thumb thrust into each armhole of his coat; now a student poring on a book; now a crouching negro; now, a horse, a dog, a cannon, an armed man; a hunchback throwing off his cloak and stepping forth into the light. They were often as entertaining to me as so many glasses in a magic lantern, and never took their shapes at my bidding, but seemed to force themselves upon me, whether I would or no; and strange to say, I sometimes recognized in them counterparts of figures once familiar to me in pictures attached to childish books, forgotten long ago.

It soon became too dark, however, even for this amusement, and the trees were so close together that their dry branches rattled against the coach on either side, and obliged us all to keep our heads within. It lightened too, for three whole hours; each flash being very bright, and blue, and long; and as the vivid streaks came darting in among the crowded branches, and the thunder rolled gloomily above the tree-tops, one could scarcely help thinking that there were better neighbourhoods at such a time than thick woods afforded.

At length, between ten and eleven o'clock at night, a few feeble lights appeared in the distance, and Upper Sandusky, an Indian village, where we were to stay till morning, lay before us.

They had gone to bed at the Log Inn, which was the only house of entertainment in the place, but soon answered to our knocking, and got some tea for us in a

sort of kitchen or common room, tapestried with old newspapers, pasted against the wall.

The bedchamber to which my wife and I were shown was a large, low, ghostly room; with a quantity of withered branches on the hearth, and two doors without any fastening, opposite to each other, both opening on the black night and wild country, and so contrived, that one of them always blew the other open; a novelty in domestic architecture, which I do not remember to have seen before, and which I was somewhat disconcerted to have forced on my attention after getting into bed, as I had a considerable sum of gold for our travelling expenses in my dressing-case. Some of the luggage, however, piled against the panels, soon settled this difficulty, and my sleep would not have been very much affected that night, I believe, though it had failed to do so.

My Boston friend climbed up to bed, somewhere in the roof, where another guest was already snoring hugely. But being bitten beyond his power of endurance, he turned out again, and fled for shelter to the coach, which was airing itself in front of the house. This was not a very politic step, as it turned out; for the pigs scenting him, and looking upon the coach as a kind of pie with some manner of meat inside, grunted round it so hideously, that he was afraid to come out again, and lay there shivering, till morning. Nor was it possible to warm him, when he did come out, by means of a glass of brandy; for in Indian villages the Legislature, with a very good and wise intention, forbids the sale of spirits by tavern-keepers. The precaution, however, is quite inefficacious, for the Indians never fail to procure liquor of a worse kind, at a dearer price, from travelling pedlars.

It is a settlement of the Wyandot Indians who inhabit this place. Among the company at breakfast was a mild old gentleman, who had been for many years employed by the United States Government in conducting negotiations with the Indians, and who had just concluded a treaty with these people by which they bound themselves, in consideration of a certain annual sum, to remove next year to some land provided for them, west of the Mississippi, and a little way beyond St. Louis. He gave me a moving account of their strong attachments to the familiar scenes of their infancy, and in particular to the burial-places of their kindred, and of their great reluctance to leave them. He had witnessed many such removals, and always with pain, though he knew that they departed for their own good. The question whether this tribe should go or stay, had been discussed among them a day or two before, in a hut erected for the purpose, the logs of which still lay upon the ground before the inn. When the speaking was done, the ayes and noes were ranged on opposite sides, and every male adult voted in his turn. The moment the result was known, the minority (a large one) cheerfully yielded to the rest, and withdrew all kind of opposition.

We met some of these poor Indians afterwards, riding on shaggy ponies. They were so like the meaner sort of gipsies, that if I could have seen any of them in England, I should have concluded, as a matter of course, that they belonged to that wandering and restless people.

Leaving this town directly after breakfast, we pushed forward again, over a rather worse road than yesterday, if possible, and arrived about noon at Tiffin, where we parted with the extra. At two o'clock, we took the

railroad, the travelling on which was very slow, its construction being indifferent, and the ground wet and marshy; and arrived at Sandusky in time to dine that evening. We put up at a comfortable little hotel on the brink of Lake Erie, lay there that night, and had no choice but to wait there next day, until a steamboat bound for Buffalo appeared. The town, which was sluggish and uninteresting enough, was something like the back of an English watering-place, out of the season.

Our host, who was very attentive and anxious to make us comfortable, was a handsome middle-aged man, who had come to this town from New England, in which part of the country he was "raised". When I say that he constantly walked in and out of the room with his hat on; and stopped to converse in the same free-and-easy state; and lay down on our sofa, and pulled his newspaper out of his pocket, and read it at his ease; I merely mention these traits as characteristic of the country: not at all as being matter of complaint, or as having been disagreeable to me. I should undoubtedly be offended by such proceedings at home, because there they are not the custom, and where they are not, they would be impertinences; but in America, the only desire of a good-natured fellow of this kind, is to treat his guests hospitably and well; and I had no more right, and I can truly say no more disposition, to measure his conduct by our English rule and standard, than I had to quarrel with him for not being of the exact stature which would qualify him for admission into the Queen's Grenadier Guards. As little inclination had I to find fault with a funny old lady who was an upper domestic in this establishment, and who, when she came to wait upon us at any meal, sat herself down comfortably

in the most convenient chair, and producing a large pin to pick her teeth with, remained performing that ceremony, and steadfastly regarding us meanwhile with more gravity and composure (now and then pressing us to eat a little more), until it was time to clear away. It was enough for us that whatever we wished done was done with great civility and readiness, and a desire to oblige, not only here, but everywhere else; and that all wants were, in general, zealously anticipated.

We were taking an early dinner at this house, on the day after our arrival, which was Sunday, when a steam-boat came in sight, and presently touched at the wharf. As she proved to be on her way to Buffalo, we hurried on board with all speed, and soon left Sandusky far behind us.

She was a large vessel of five hundred tons, and handsomely fitted up, though with high-pressure engines; which always conveyed that kind of feeling to me, which I should be likely to experience, I think, if I had lodgings on the first floor of a powder-mill. She was laden with flour, some casks of which commodity were stored upon the deck. The captain coming up to have a little conversation, and to introduce a friend, seated himself astride of one of these barrels, like a Bacchus⁴ of private life; and pulling a great clasp-knife out of his pocket, began to "whittle" it as he talked, by paring thin slices off the edges. And he whittled with such industry and hearty good will, that but for his being called away very soon, it must have disappeared bodily, and left nothing in its place but grist and shavings.

After calling at one or two flat places, with low dams stretching out into the lake, whereon were stumpy light-

houses, like windmills without sails, the whole looking like a Dutch vignette, we came at midnight to Cleveland, where we lay all night, and until nine o'clock next morning.

We called at the town of Erie, at eight o'clock that night, and lay there an hour. Between five and six next morning, we arrived at Buffalo, where we breakfasted; and being too near the Great Falls to wait patiently anywhere else, we set off by the train, the same morning at nine o'clock, to Niagara.

It was a miserable day; chilly and raw; a damp mist falling; and the trees in that northern region quite bare and wintry. Whenever the train halted, I listened for the roar; and was constantly straining my eyes in the direction where I knew the Falls must be, from seeing the river rolling on towards them; every moment expecting to behold the spray. Within a few minutes of our stopping, not before, I saw two white clouds rising up slowly and majestically from the depths of the earth. That was all. At length we alighted: and then for the first time, I heard the mighty rush of water, and felt the ground tremble underneath my feet.

The bank is very steep, and was slippery with rain, and half-melted ice. I hardly know how I got down, but I was soon at the bottom, and climbing, with two English officers who were crossing and had joined me, over some broken rocks, deafened by the noise, half-blinded by the spray, and wet to the skin. We were at the foot of the American Fall. I could see an immense torrent of water tearing headlong down from some great height, but had no idea of shape, or situation, or anything but vague immensity.

When we were seated in the little ferry-boat, and were crossing the swollen river immediately before both cataracts, I began to feel what it was: but I was in a manner stunned, and unable to comprehend the vastness of the scene. It was not until I came on Table Rock, and looked—Great Heavens, on what a fall of bright-green water!—that it came upon me in its full might and majesty.

—From *American Notes*

NOTES

1. *Sandusky*, industrial city on Sandusky Bay in the U.S.A.
2. *Set Fair, Stormy*, reference to a barometer.
3. *St. Paul's*, Saint Paul's Cathedral in London. It stands at the head of Ludgate Hill, where, according to tradition, a Roman temple once stood.
4. *Bacchus*, god of wine in Greek and Roman Mythology. He was also a god of vegetation and fertility.

MY LIFE ★

Rabindranath Tagore

Rabindranath Tagore (1861-1941) was an extremely prolific writer. He was the author of some fifty dramas, almost one hundred books of verse, forty volumes of novels and shorter fiction, and books of essays and philosophy. Tagore wrote in Bengali but translated much of his work into English. It attracted attention in the West and he was awarded the 1913 Nobel Prize in Literature, especially for his book of poems, *Gitanjali* (1912). Tagore was, however, not merely a great poet—one of the greatest poets that the world has produced—but also a great patriot, who in his youth threw himself with zeal into the Indian nationalist movement. His voluminous white robes with his handsome, dignified features and flowing hair and beard, gave him the appearance of an ancient Indian “rishi”.

In *My Life* the author describes the formative influences in his life and tells us how he was drawn towards mysticism.

I WAS born in 1861: that is not an important date of history, but it belongs to a great period of our history in Bengal. You do not know perhaps that we have our places of pilgrimage in those spots where the rivers meet in confluence, the rivers which to us are the symbols of the spirit of life in nature, and which in their meeting present emblems of the meeting of spirits, the meeting of ideals. Just about the time I was born the currents of three movements had met in the life of our country.

One of these movements was religious, introduced by a very great-hearted man of gigantic intelligence, Raja Rammohan Roy. It was revolutionary, for he

★ A lecture delivered in China in 1924.

tried to reopen the channel of spiritual life which had been obstructed for many years by the sands and debris of creeds that were formal and materialistic, fixed in external practices lacking spiritual significance.

There was a great fight between him and the orthodox who suspected every living idea that was dynamic. People who cling to an ancient past have their pride in the antiquity of their accumulations, in the sublimity of time-honoured walls around them. They grow nervous and angry when some great spirit, some lover of truth, breaks open their enclosure and floods it with the sunshine of thought and the breath of life. Ideas cause movement, and all movements forward they consider to be a menace against their warehouse security.

This was happening about the time I was born. I am proud to say that my father was one of the great leaders of that movement, a movement for whose sake he suffered ostracism and braved social indignities. I was born in this atmosphere of the advent of new ideals, which at the same time were old, older than all the things of which that age was proud.

There was a second movement equally important. A certain great man, Bankim Chandra Chatterjee, who, though much older than myself, was my contemporary and lived long enough for me to see him, was the first pioneer in the literary revolution which happened in Bengal about that time.

Our self-expression must find its freedom not only in spiritual ideas but in literary manifestations. But our literature had allowed its creative life to vanish. It lacked movement, and was fettered by a rhetoric rigid as death. This man was brave enough to go against the orthodoxy

which believed in the security of tombstones and in that perfection which can only belong to the lifeless. He lifted the dead weight of ponderous forms from our language and with a touch of his magic wand aroused our literature from her age-long sleep. What a vision of beauty she revealed to us when she awoke in the fullness of her strength and grace.

There was yet another movement started about this time in my country which was called National. It was not fully political, but it began to give voice to the mind of our people trying to assert their own personality. It was a voice of indignation at the humiliation constantly heaped upon us by people who were not oriental, and who had, especially at that time, the habit of sharply dividing the human world into the good and the bad according to what was similar to their life and what was different.

This contemptuous spirit of separateness was perpetually hurting us and causing great damage to our own world of culture. It generated in the young men of our country distrust of all things that had come to them as an inheritance from their past. The old Indian pictures and other works of art were laughed at by our students in imitation of the laughter of their European schoolmasters. The same spirit of rejection, born of utter ignorance, was cultivated in other departments of our culture. It was the result of the hypnotism exercised upon the minds of the younger generation by people who were loud of voice and strong of arm.

The spirit of revolt had just awakened when I was born, and some people were already trying to stem the tide. This movement had its leaders in my own family, in my

brothers and cousins, and they stood up to save the people's mind from being insulted and ignored by the people themselves.

We have to find some basis that is universal, that is eternal, and we have to discover those things which have an everlasting value. The national movement was started to proclaim that we must not be indiscriminate in our rejection of the past. This was not a reactionary movement but a revolutionary one, because it set out with a great courage to deny and to oppose all pride in mere borrowings.

These three movements were on foot, and in all three the members of my family took an active part. We were ostracized because of our heterodox opinions about religion and, therefore, we enjoyed the freedom of the outcaste. We had to build our own world with our own thoughts and energy of mind. We had to build it from the foundation, and therefore had to seek the foundation that was firm.

As I say, I was born and brought up in an atmosphere of the confluence of three movements, all of which were revolutionary. I was born in a family which had to live its own life, which led me from my young days to seek guidance for my own self-expression in my own inner standard of judgment. The medium of expression doubtless was my mother tongue. But the language which belonged to the people had to be modulated according to the urging which I as an individual had.

No poet should borrow his medium ready-made from some shop of respectability. He should not only have his own seeds but prepare his own soil. Each poet has his own distinct medium of language—not because the whole

language is of his own make, but because his individual use of it, having life's magic touch, transforms it into a special vehicle of his own creation.

The races of man have poetry in their heart, and it is necessary for them to give, as far as is possible, a perfect expression to their sentiments. For this they must have a medium, moving and pliant, which can freshly become their very own, age after age. All great languages have undergone and are still undergoing changes. Those languages which resist the spirit of change are doomed and will never produce great harvests of thought and literature. When forms become fixed, the spirit either weakly accepts its imprisonment within them or rebels. All revolutions consist of the fight of the within against invasion by the without.

Revolution must come, and men must risk revilement and misunderstanding, especially from those who want to be comfortable, who put their faith in materialism and convention, and who belong truly to the dead past and not to modern times—the past that had its age in distant antiquity, when physical flesh and size predominated, and not the mind of man.

Purely physical dominance is mechanical, and modern machines are merely exaggerating our bodies, lengthening and multiplying our limbs. The modern child delights in this enormous bodily bulk, representing an inordinate material power, saying, "Let me have the big toy and no sentiment which can disturb it." He does not realize that we are returning to that antediluvian age which revelled in its production of gigantic physical frames, leaving no room for the freedom of the inner spirit.

All great human movements in the world are related

to some great ideal. Some of you say that such a doctrine of spirit has been in its death-throes for over a century and is now moribund, that we have nothing to rely upon but external forces and material foundations. But I say, on my part, that your doctrine was obsolete long ago. It was exploded in the spring-time of life, when mere size was swept off the face of the world, and was replaced by man, brought naked into the heart of creation, man with his helpless body, but with his indomitable mind and spirit.

The impertinence of material things is extremely old. The revelation of spirit in man is truly modern: I am on its side, for I am modern.

When I began my life as a poet, the writers among our educated community took their inspiration from English literature. I suppose it was fortunate for me that I never in my life had what is called an education—that is to say, the kind of school and college training which is considered proper for a boy of respectable family. Though I cannot say I was altogether free from the influence that ruled the young minds of those days, the course of my writings was nevertheless saved from the groove of imitative forms. I believe it was chiefly because I had the good fortune to escape the school training which could set up for me an artificial standard based upon the prescription of the schoolmaster. In my versification, vocabulary and ideas I yielded myself to the vagaries of an untutored fancy which brought castigation upon me from critics who were learned, and uproarious laughter from the witty. My ignorance combined with my heresy turned me into a literary outlaw.

When I began my career I was ridiculously young;

in fact, I was the youngest of the writers of that time who had made themselves articulate. I had neither the protective armour of mature age nor that of a respectable English education. So in my seclusion of contempt and qualified encouragement I had my freedom. Gradually I grew up in years—for which, however, I claim no credit. Gradually I cut my way through derision and occasional patronage into a recognition in which the proportion of praise and blame was very much like that of land and water on our earth.

If you ask me what gave me boldness, when I was young, I should say that one thing was my early acquaintance with the old Vaishnava poems of Bengal, full of the freedom of metre and courage of expression. I think I was only twelve when these poems first began to be reprinted. I surreptitiously got hold of copies from the desks of my elders. For the edification of the young, I must confess that this was not right for a boy of my age. I should have been passing my examinations and not following a path that would lead to failure. I must also admit that the greater part of these lyrics was erotic and not quite suited to a boy just about to reach his teens. But my imagination was fully occupied with the beauty of their forms and the music of their words; and their breath, heavily laden with voluptuousness, passed over my mind without distracting it.

My vagabondage in the path of my literary career had another reason. My father was the leader of a new religious movement, a strict monotheism based upon the teachings of the Upanishads. My countrymen in Bengal thought him almost as bad as a Christian, if not worse. So we were completely ostracized, which probably saved

me from another disaster, that of imitating our own past.

Most of the members of my family had some gift—some were artists, some poets, some musicians—and the whole atmosphere of our home was permeated with the spirit of creation. I had a deep sense, almost from infancy, of the beauty of nature, an intimate feeling of companionship with the trees and the clouds, and felt in tune with the musical touch of the seasons in the air. At the same time I had a peculiar susceptibility to human kindness. All these craved expression, and naturally I wanted to give them my own expression. The very earnestness of my emotions yearned to be true to themselves though I was too immature to give their expression any perfection of form.

Since then I have gained a reputation in my country, but a strong current of antagonism in a large section of my countrymen still persists. Some say that my poems do not spring from the heart of the national traditions; some complain that they are incomprehensible, others that they are unwholesome. In fact, I have never had complete acceptance from my own people, and that too has been a blessing; for nothing is so demoralizing as unqualified success.

This is the history of my career. I wish I could reveal it more clearly through the narration of my own work in my own language. I hope that will be possible some day or other. Languages are jealous. They do not give up their best treasures to those who try to deal with them through an intermediary belonging to an alien rival. You have to court them in person and dance attendance on them. Poems are not like gold or other substantial things that are transferable. You cannot receive the smiles

and glances of your sweetheart through an attorney, however diligent and dutiful he may be.

I myself have tried to get at the wealth of beauty in the literature of the European languages. When I was young I tried to approach Dante,¹ unfortunately through a translation. I failed utterly, and felt it my pious duty to desist. Dante remained a closed book to me.

I also wanted to know German literature, and, by reading Heine² in translation, I thought I had caught a glimpse of the beauty there. Fortunately I met a missionary lady from Germany and asked her help. I worked hard for some months, but being rather quick-witted, which is not a good quality, I was not persevering. I had the dangerous facility which helps one to guess the meaning too easily. My teacher thought I had almost mastered the language—which was not true. I succeeded, however, in getting through Heine, like a man walking in sleep crossing unknown paths with ease, and I found immense pleasure.

Then I tried Goethe.³ But that was too ambitious. With the help of the little German I had learnt, I did go through *Faust*. I believe I found my entrance to the palace, not like one who has keys for all the doors, but as a casual visitor who is tolerated in some general guest room comfortable but not intimate. Properly speaking, I do not know my Goethe; and in the same way many other great luminaries are dark to me.

This is as it should be. Man cannot reach the shrine if he does not make the pilgrimage. I hope that this may make you want to learn Bengali some day.

In regard to music, I claim to be something of a musician myself. I have composed many songs which have defied

the canons of respectable orthodoxy, and good people are disgusted at the impudence of a man who is audacious only because he is untrained. But I persist, and God forgives me because I do not know what I do. Possibly that is the best way of doing things in the sphere of art; for I find that people blame me, but also sing my songs, even if not always correctly.

Please do not think I am vain. I can judge myself objectively and can openly express admiration for my own work, because I am modest. I do not hesitate to say that my songs have found their place in the heart of my land, along with her flowers that are never exhausted, and that the folk of the future, in days of joy or sorrow or festival, will have to sing them. This too is the work of a revolutionist.

I have been asked to let you know something about my own view of religion. One of the reasons why I always feel reluctant to speak about this is that I have not come to my own religion through the portals of passive acceptance of a particular creed owing to some accident of birth. I was born to a family who were pioneers in the revival in our country of a great religion, based upon the utterance of Indian sages in the Upanishads. But owing to my idiosyncrasy of temperament, it was impossible for me to accept any religious teaching on the only ground that people in my surroundings believed it to be true. I could not persuade myself to imagine that I had a religion simply because everybody whom I might trust believed in its value.

Thus my mind was brought up in an atmosphere of freedom, freedom from the dominance of any creed that had its sanction in the definite authority of some scripture

or in the teaching of some organized body of worshippers. And, therefore, when I am questioned about religion, I have no prepared ground on which to take my stand, no training in a systematic approach to the subject.

My religion essentially is a poet's religion. Its touch comes to me through the same unseen trackless channels as does the inspiration of my music. My religious life has followed the same mysterious line of growth as has my poetical life. Somehow they are wedded to each other, and though their betrothal had a long period of ceremony, it was kept secret from me. Then suddenly came a day when their union was revealed to me.

At that time I was living in a village. The day came with all its drifting trivialities of the usual commonplace. The ordinary work of my morning had come to its close, and before going to take my bath I stood for a moment at my window, overlooking a market-place on the bank of a dry river bed. Suddenly I became conscious of a stirring of soul within me. My world of experience in a moment seemed to become lighted, and facts that were detached and dim found a great unity of meaning. The feeling which I had was like what a man, groping through a fog without knowing his destination, might feel when he suddenly discovers that he stands before his own house.

I remember the day in my childhood which, after the painful process of learning my Bengali alphabet, I unexpectedly came to the first simple combination of letters which gave me the words: "it rains, the leaves tremble". I was thrilled with delight of the picture which these words suggested to me. The unmeaning fragments lost their individual isolation and my mind revelled in the

unity of a vision. In a similar manner, on that morning in the village the facts of my life suddenly appeared to me in a luminous unity of truth. All things that had seemed like vagrant waves were revealed to my mind in relation to a boundless sea. From that time I have been able to maintain the faith that, in all my experience of nature or man, there is the fundamental truth of spiritual reality.

You will understand me if I tell you how unconsciously I had been travelling towards the realization which I stumbled upon that day. I hope you will excuse me and not think that I am boasting when I confess to my gift of poesy, an instrument of expression delicately responsive to the breath that comes from depth of feeling. From my infancy I had the keen sensitiveness which always kept my mind tingling with consciousness of the world around me, natural and human.

We had a small garden attached to our house; it was a fairyland to me, where miracles of beauty were of everyday occurrence. Almost every morning in the early hour of the dusk, I would run out from my bed in a hurry to greet the first pink flush of the dawn through the trembling leaves of the cocoanut trees which stood in a line along the garden boundary, while the grass glistened as the dewdrops caught the first tremor of the morning breeze. The sky seemed to bring to me the call of a personal companionship, and all my heart, my whole body in fact, used to drink in at a draught the overflowing light and peace of those silent hours. I was anxious never to miss a single morning, because each one was precious to me, more precious than gold to the miser.

I had been blessed with that sense of wonder which

gives a child his sight of entry into the treasure-house of mystery which is in the heart of existence. I neglected my studies because they rudely summoned me away from the world around me, which was my friend and my companion, and when I was thirteen I freed myself from the clutch of an educational system that tried to keep me imprisoned within the stone walls of lessons.

This perhaps will explain to you the meaning of my religion. This world was living to me, intimately close to my life. I still remember the shock of repulsion I received when some medical student brought to me a piece of human windpipe and tried to excite my admiration for its structure. He tried to convince me that it was the source of the beautiful human voice, and I rejected that information with an intense disgust. I did not want to admire the skill of the workman, but rather to revel in the joy of the artist who concealed the machinery and revealed his creation in its ineffable unity.

God does not care to keep exposed the record of His power written in geological inscriptions, but He is proudly glad of the expression of beauty which He spreads on the green grass, in the flowers, in the play of colours on the clouds, in the murmuring music of running water.

It was a great thing for me that my consciousness was never dull about the facts of the surrounding world. That the cloud was the cloud, that a flower was a flower, was enough, because they directly spoke to me, because I could not be indifferent to them. I still remember the very moment, one afternoon, when coming back from school I alighted from the carriage and suddenly saw in the sky behind the upper terrace of our house, an exuberance of deep dark rain-clouds lavishing rich cool shadows on

the atmosphere. The marvel of it, the very generosity of its presence, gave me a joy which was freedom, the freedom we feel in the love of our dear friend.

That which merely gives us information can be explained in terms of measurement, but that which gives us joy cannot be explained by the facts of a mere grouping of atoms and molecules. Somewhere in the arrangement of this world there seems to be a great concern about giving us delight, which shows that, in the universe, over and above the meaning of matter and force, there is a message conveyed through the magic touch of personality. This touch cannot be analysed, it can only be felt.

Is it merely because the rose is round and pink that it gives me more satisfaction than the gold which could buy me the necessities of life, or any number of slaves. You may, at the outset, deny the truth that a rose gives more delight than a piece of gold. But you must remember that I am not speaking of artificial values. If we had to cross a desert whose sand was made of gold, then the cruel glitter of these dead particles would become a terror for us, and the sight of a rose would bring to us the music of paradise.

The final meaning of the delight which we find in a rose can never be in the roundness of its petals, just as the final meaning of the joy of music cannot be in a gramophone disc. Somehow we feel that through a rose the language of love reaches our heart. Do we not carry a rose to our beloved because in it is already embodied a message which unlike our language of words cannot be analysed. Through this gift of a rose we utilize a universal language of joy for our own purposes of expression.

Mere information of facts, mere discovery of power,

belongs to the outside and not to the inner soul of things.

Gladness is the one criterion of truth, and we know when we have touched Truth by the music it gives, by the joy of the greeting it sends forth to the truth in us. As I have said before, it is not as ether waves that we receive our light: the morning does not wait for some scientist for its introduction to us. In the same way, we touch the infinite reality immediately within us only when we receive the pure truth of love or goodness, not through the explanation of theologians, not through the crude discussion of ethical doctrines.

I have already confessed to you that my religion is a poet's religion; all that I feel about it is from vision and not from knowledge. I frankly say that I cannot satisfactorily answer your questions about evil, or about what happens after death. And yet I am sure that there have come moments when my soul has touched the infinite and has become intensely conscious of it through the illumination of joy. It has been said in our Upanishads that our mind and our words came away baffled from the supreme Truth, but he who knows, *That*, through the immediate joy of his own soul, is saved from all doubts and fears.

In the night we stumble over things and become acutely conscious of their individual separateness, but the day reveals the great unity which embraces them. And the man, whose inner vision is bathed in an illumination of his consciousness, at once realizes the spiritual unity reigning supreme over all differences of race, and his mind no longer awkwardly stumbles over individual facts of separateness in the human world, accepting them

as final; he realizes that peace is in the inner harmony which dwells in truth, and not in any outer adjustments; that beauty carries an eternal assurance of our spiritual relationship to reality, which waits for its perfection in the response of our love.

—From *Lectures and Essays*

NOTES

1. *Dante* (1265–1321), famous Italian poet. Author of *The Divine Comedy*.
2. *Heine* (1797–1856), German poet. He was of Jewish descent but adopted the Christian faith. Heine wrote some of the best-loved German lyrics.
3. *Goethe* (1749–1832), the greatest of the German poets. He was also a dramatist and novelist, and was the author of *Faust*—the tale of a learned doctor who surrendered his soul to the devil in exchange for youth, knowledge, and magical power.

THE BROTHERS

Jim Corbett

Jim Corbett, like Rudyard Kipling before him, is a great writer of jungle stories. While Kipling's *Jungle Books*, however, were fiction based on a wide knowledge of jungle life, Corbett's *Man-eaters of Kumaon* and his other stories are fact, and fact is often stranger than fiction. *The Brothers* relates one of these stories—a story of human courage and sacrifice.

Corbett lived for a long time amongst the highlanders of Garhwal and Kumaon, and his stories describe their manners, customs, and superstitions. They also throw light on the qualities that he possessed as a great Shikari, his love of nature, and his devotion to the cause of suffering humanity.

THE long years of training boys for jungle warfare were over, and we were sitting one morning after breakfast on the veranda of our cottage at Kaladhungi. My sister Maggie was knitting a khaki pullover for me, and I was putting the finishing touches to a favourite fly-rod that suffered from years of disuse, when a man wearing a clean but much-patched cotton suit walked up the steps of the veranda with a broad grin on his face, salaamed, and asked if we remembered him.

Many people, clean and not so clean, old and young, rich and poor (but mostly poor), Hindus, Mohammedans, and Christians, walked up those steps, for our cottage was at a cross-roads at the foot of the hills and on the border line between the cultivated land and the forest. All who were sick or sorry, in want of a helping hand, or in need of a little human companionship and a cup of tea,

whether living on the cultivated land or working in the forest or just passing on their way from one place to another, found their way to our cottage. Had a record been maintained over the years of only the sick and injured treated, it would have had thousands of names in it. And the cases dealt with would have covered every ailment that human flesh is heir to—and subject to, when living in an unhealthy area, working in forests on dangerous jobs among animals who occasionally lose their tempers.

There was the case of the woman who came one morning and complained that her son had great difficulty in eating the linseed poultice that had been given to her the previous evening to apply on a boil: as the poultice did not appear to have done the boy any good, she asked to have the medicine changed. And the case of the old Mohammedan woman who came late one evening, with tears streaming down her face, and begged Maggie to save her husband who was dying of pneumonia. She looked askance at the tablets of M. & B. 693 and asked if that was all that was to be given to a dying man to make him well: but next day she returned with a beaming countenance to report that her husband had recovered, and begged for the same kind of medicine for the four friends she had brought with her, each of whom had husbands as old as hers who might at any time get pneumonia. And there was the case of the girl about eight years old, who, after some difficulty in reaching the latch of the gate, marched up to the veranda firmly holding the hand of a boy some two years younger, and asked for medicine for the boy's sore eyes. She sat herself down on the ground, made the boy lie on his back, and having got his head between her knees said: "Now, Miss Sahib,

you can do anything you like to him.” This girl was the daughter of the headman of a village six miles away. Seeing her class mate suffering from sore eyes, she had taken it upon herself to bring him to Maggie for treatment, and for a whole week, until his eyes were quite well, the young Samaritan¹ brought the boy to the cottage, though in order to do so she had to walk an additional four miles each day.

Then there was the case of the sawyer from Delhi, who limped into the compound one day with his right leg ripped open by the tusk of a pig from his heel to the back of his knee. All the time his leg was being attended to he swore at the unclean beast that had done this terrible thing to him, for he was a follower of the Prophet. His story was that when that morning he had approached the tree he had felled the previous day, to saw it up, a pig which had been sheltering among the branches ran against him and cut his leg. When I suggested that it was his own fault for having got in the way of the pig, he indignantly exclaimed: “With the whole jungle to run about in, what need was there for it to have run against me when I had done nothing to offend it, and in fact before I had even seen it.”

There was another sawyer too. While turning over a log he had been stung on the palm of his hand by a scorpion “as big as this”. After treatment, he rolled on the ground loudly lamenting his fate and asserting that the medicine was doing him no good, but not long after he was observed to be holding his sides and choking with laughter. It was the day of the children’s annual fête, and when the races had been run and the two hundred children and their mothers had been fed on sweets and

fruit, a circle had been formed. A blindfolded boy had been set to break a paper bag containing nuts of all kinds, which was slung between two bamboos held upright by two men; and it was when the boy brought his stick down on the head of one of these men that the scorpion patient was found to be laughing the loudest of all the assembly. When asked how the pain now was, the man replied that it had gone, and that in any case he would not mind how many scorpions stung him provided he could take part in a tamasha like this.

The members of our family have been amateur physicians for more years than I can remember, and as Indians, especially the poorer ones, have long memories, and never forget a kindness no matter how trivial it may have been, not all the people who walked up the steps of our cottage at Kaladhungi were patients. Many there were who had marched for days over rough tracks in all weathers to thank us for small kindnesses shown to them, maybe the previous year, or maybe many years previously. One of these was a sixteen-year-old boy, who with his mother had been housed for some days in our village while Maggie treated his mother for influenza and badly inflamed eyes; now he had done a march of many days to bring Maggie his mother's thanks and a present of a few pomegranates which his mother had picked for her "with her own hand". And only that day, an hour before the man wearing the patched suit had arrived, an old man had walked up the steps and seated himself on the veranda with his back to one of the pillars and, after looking at me for some time, had shaken his head in a disapproving manner and said: "You are looking much older, Sahib, than you were when I last saw you." "Yes," I replied,

“all of us are apt to look older after ten years.” “Not all of us, Sahib,” he rejoined, “for I look and feel no older than when I last sat in your veranda not ten, but twelve years ago. On that occasion I was returning on foot from a pilgrimage to Badrinath, and seeing your gate open, and being tired and in urgent need of ten rupees, I asked you to let me rest for a while, and appealed to you for help. I am now returning from another pilgrimage, this time to the sacred city of Benares. I am in no need of money and have only come to thank you for the help you gave me before and to tell you that I got home safely. After this smoke, and a little rest, I shall return to rejoin my family, whom I left at Haldwani.” A fourteen-mile walk each way. And in spite of his assertion that twelve years had not made him look or feel any older, he was a frail old man.

Though the face of the man in the patched cotton suit who now stood before us on the veranda was vaguely familiar, we could not remember his name or the circumstances in which we had last seen him. Seeing that he was not recognized, the man removed his coat, opened his shirt, and exposed his chest and right shoulder. That shoulder brought him to instant memory. He was Narwa. Narwa was the basket-maker, and there was some excuse for our not having recognized him, for when we had last seen him, six years previously, he was mere skin and bone; only with great difficulty had he been able to put one foot before another, and he had needed a stick to support himself. Looking now at his misshapen shoulder, the crushed and broken bones of which had calloused without being set, the puckered and discoloured skin of his chest and back, and his partially withered right arm, we who

for three months had watched his gallant fight for life marvelled how well he had survived his ordeal. Moving his arm up and down, and closing and opening his hand, Narwa said that his arm was getting stronger every day. His fingers had not got stiff, as we feared they would, so he had been able to resume his trade. His object now, he said, was to show us that he was quite well and to thank Maggie—which he proceeded to do by putting his head on her feet—for having supplied all his wants, and the wants of his wife and child, during the months he had lain between life and death.

Narwa's Ordeal

Narwa and Haria were not blood brothers, though they so described themselves. They had been born and had grown up in the same village near Almora, and when old enough to work had adopted the same profession, basket-making—which means that they were untouchables, for in the United Provinces baskets are only made by untouchables. During the summer months Narwa and Haria worked at their trade in their village near Almora, and in the winter months they came down to Kaladhungi where there was a great demand for the huge baskets, measuring up to fifteen feet in diameter, which they made for our villagers for the storage of grain. In their hill village near Almora they made their baskets of ringals—thin bamboo an inch thick and up to twenty feet long, which grows at an altitude of four to ten thousand feet, and which incidentally makes the most perfect of fly-rods—and in Kaladhungi they made them of bamboos.

The bamboos in Kaladhungi grow in the Government Reserved Forests, and we who cultivate land near the Reserved Forests are permitted to cut a certain number each year for our personal use. But people who use the bamboos for commercial purposes have to take out a licence from the forest guard of the area, paying two annas per headload, and a small consideration to the forest guard for his trouble in filling in the licence. As the licence is a personal one and covers an individual headload it is safe to assume that as many lengths of two-year old bamboos—the age when a bamboo is best for basket-making—were included in the load as a man could carry.

At daybreak on the morning of 26 December 1939 Narwa and Haria set out from their communal hut near the bazaar at Kaladhungi to walk eight miles to Nalni village, obtain a licence from the forest guard, cut two headloads of bamboos in the Nalni Reserved Forests, and return to Kaladhungi the same evening. It was bitterly cold when they started, so the two men wrapped coarse cotton sheets round their shoulders to keep out the cold. For a mile their way ran along the canal bank. Then, after negotiating the series of high walls which form the headworks of the canal, they took a footpath which runs alternately through patches of dense scrub jungle and over long stretches of the boulder-strewn bank of the Boar river, stretches where a pair of otters are usually to be seen in the early morning, and where, when the sun is on the water, mahseer up to three or four pounds can be taken on a fly-rod. Two miles up they crossed by a shallow ford from the right to the left bank of the river and entered a tree and grass jungle, where morning and evening are to be seen several small herds of chital and sambhar, and

an occasional kakar, leopard, or tiger. A mile through this jungle, they came to where the hills converge, and where some years previously Robin² picked up the tracks of the Bachelor of Powalgarh. From this point onwards the valley opens out and is known to all who graze cattle, or who poach or shoot in the area, as Samal Chour. In this valley one had to walk warily, for the footpath is used almost as much by tigers as it is by human beings.

At the upper end of the valley the footpath, before going steeply up the hill for two miles to Nalni village, passes through a strip of grass. This strip of eight-foot grass is thirty yards wide and extends for about fifty yards on either side of the path. In anticipation of the stiff climb up the Nalni hill, shortly before reaching the grass Narwa divested himself of his cotton sheet, folded it small and placed it on his right shoulder. Haria was leading, with Narwa following a few steps behind, and he had only gone three or four yards into the grass when he heard the angry roar of a tiger, and simultaneously a shriek from Narwa. Haria turned and dashed back, and on the open ground at the edge of the grass he saw Narwa on his back with a tiger lying diagonally across him. Narwa's feet were nearest to him, and grasping an ankle in each hand he started to pull him away from under the tiger. As he did this the tiger stood up, turned towards him and started to growl. After dragging Narwa along on his back for a short distance Haria got his arms round him and set him on his feet. But Narwa was too badly injured and shaken to stand or walk, so Haria put his arms round him, and alternately dragged and carried him—while the tiger continued to growl—through the open ground skirting the grass, and so regained the path to Nalni village. By

superhuman efforts Haria eventually got Narwa to Nalni, where it was found that in spite of the folded sheet which he had been carrying on his right shoulder, and which Haria had retrieved while pulling him away, the tiger had crushed the bones of the shoulder, lacerated the flesh, and exposed the bones on the right side of the chest and back. All four of the tiger's canine teeth had penetrated some eight folds of the sheet, and but for this obstruction they would have met in Narwa's chest and inflicted a fatal wound.

The forest guard and the people of Nalni were unable to do anything for Narwa, so Haria hired a pack pony for two rupees, mounted Narwa on it, and set out for Kaladhungi. The distance, as I have already said, was eight miles, but Haria was unwilling to face the tiger a second time so he made a wide detour through Musabanga village, adding ten miles to Narwa's agonizing journey. There were no saddles at Nalni and he had been mounted on a hard pack used for carrying grain, and the first nine miles of his ride was over incredibly steep and rough ground.

Maggie was having tea on the veranda of our cottage when Narwa, soaked in blood and being held on the pony by Haria, arrived at the steps. A glance was enough to show that the case was one she could not deal with, so she quickly gave Narwa a stiff dose of sal volatile—for he was on the point of fainting—and made a sling for his arm. Then she tore up a bed sheet to be used for bandages and wrote to the Assistant Surgeon in charge of the Kaladhungi hospital, begging him to attend to Narwa immediately, and do all he could for him. She gave the note to our head boy and sent him to the hospital with the two men.

I was out bird shooting that day with a party of friends who were spending their Christmas holiday at Kaladhungi, and when I returned in the late evening Maggie told me about Narwa. Early next morning I was at the hospital, where I was informed by a very young and very inexperienced doctor that he had done all he could for Narwa, but as he had little hope of his recovery, and no arrangements for in-patients, he had sent Narwa home after treating him. In the large communal hut, which housed about twenty families, each of which appeared to have a record number of small children, I found Narwa lying in a corner on a bed of straw and leaves. It was the last place for a man in his terrible condition to be in, for his wounds were showing signs of getting septic. For a week Narwa lay in the corner of the noisy and insanitary hut, at times raving in high fever, at times in a state of coma, watched over by his weeping wife, and his devoted "brother" Haria, and by other friends. It was now apparent, even to my inexperienced eyes, that if Narwa's septic wounds were not opened up, drained, and cleaned, there was a certainty of the doctor's predictions being fulfilled, so, after making arrangements for his care while under treatment, I removed him to the hospital. To give the young doctor credit, when he undertook to do a job he did it thoroughly, and many of the long scars on his chest and back that Narwa will carry to the burning-ghat were made not by the tiger but by the doctor's lancet, which he used very freely.

With the exception of professional beggars, the poor in India can only eat when they work, and as Narwa's wife's days were fully occupied visiting him at the hospital and later in nursing him when he returned to the communal

hut, and in caring for her three-year-old girl and her young baby, Maggie supplied all Narwa's wants,* and the wants of his family. Three months later, reduced to skin and bone and with a right arm that looked as though it could never be used again, Narwa crawled from the hut to our cottage to bid us good-bye and the next day he and Haria and their families set out for their village near Almora.

After visiting Narwa in the communal hut that first morning, and getting a first-hand account of the incident from Haria, I was convinced that the tiger's encounter with Narwa was accidental. However, to satisfy myself that my reconstruction of the event was right—and to shoot the tiger if I was wrong—I followed, foot by foot, the track the brothers had taken the previous day when on their way to Nalni village. For a few yards the track runs along the edge of the strip of high grass at the foot of the Nalni hill, before turning at right angles to cross the grass. Shortly before the two men arrived at this spot, the tiger had killed a sambhar stag and carried it into the grass close to the right-hand side of the track. When Haria entered the grass the tiger heard the rustling, and coming out, ran into Narwa, who was a few yards behind Haria and a yard or two from the turning. The encounter was accidental, for the grass was too thick and too high for the tiger to have seen Narwa before he bumped into him. Furthermore it had made no attempt to savage Narwa, and had even allowed Haria to drag the man on whom it was lying away from under it. So the tiger was allowed to live, and was later induced to join the party of tigers that are mentioned in the chapter "Just Tigers" in *Man-eaters of Kumaon*.

* Small hospitals in India do not provide either attendants or food for patients.

Of all the brave deeds that I have witnessed, or that I have read or heard about, I count Haria's rescue of Narwa the greatest. Unarmed and alone in a great expanse of jungle, to respond to the cry of a companion in distress and to pull that companion away from an angry tiger that was lying on him, and then to drag and carry that companion for two miles up a steep hill to a place of safety, not knowing but that the tiger was following, needed a degree of courage that is given to few, and that any man could envy. When I took down Haria's statement—which was later corroborated in every detail by Narwa—with the object, unknown to him, of his act receiving recognition, so far from thinking that he had done anything deserving of commendation, after I had finished questioning him he said: "I have not done anything, Sahib, have I, that is likely to bring trouble on me or on my brother Narwa." And Narwa, a few days later, when I took down what I feared would be his dying declaration, said in a voice racked with pain and little above a whisper: "Don't let my brother get into any trouble, Sahib, for it was not his fault that the tiger attacked me, and he risked his life to save mine."

I should have liked to have been able to end my story by telling you that Haria's brave act, and Narwa's heroic fight for life against great odds, had been acknowledged by a certificate of merit, or some other small token of award, for both were poor men. Unfortunately red tape proved too much for me, for the Government were not willing to make any award in a case of which the truth could not be sworn to by independent and unbiased witnesses.

So one of the bravest deeds ever performed has gone

unrecognized because there were no "independent and unbiased witnesses", and of the brothers Haria is the poorer of the two, for he has nothing to show for the part he played, while Narwa has his scars and the sheet with many holes, stained with his blood.

For many days I toyed with the idea of appealing to His Majesty the King, but with a world war starting and all it implied I very reluctantly abandoned the idea.

—From *My India*

NOTES

1. *Samaritan*, a charitable person.
2. *Robin*, the name of Jim Corbett's dog who helped him in many of his adventures with the man-eaters.

THE MOWING OF A FIELD

Hilaire Belloc

Hilaire Belloc (1870-1953) was born in France and was educated at Balliol College, Oxford. He was a versatile writer of essays, novels, verse, travels, history, biography, etc. One of his best works is *The Path to Rome*, the description of a tramp from the north of France through Switzerland and Italy to Rome, with interesting digressions on innumerable subjects. His other best-known writings include *The Bad Child's Book of Beasts*, *More Beasts for Worse Children*, *The Green Overcoat*, *A Change in the Cabinet*, *The Four Men*, and books of essays on *Something*, *Nothing*, *Everything*, etc.

The Mowing of a Field is a delightful, vivid, and intimate description of a familiar sight.

THERE is a valley in South England remote from ambition and from fear, where the passage of strangers is rare and unperceived, and where the scent of the grass in summer is breathed only by those who are native to that unvisited land. The roads to the Channel do not traverse it; they choose upon either side easier passes over the range. One track alone leads up through it to the hills, and this is changeable: now green, where men have little occasion to go, now a good road where it nears the homesteads and the barns. The woods grow steep above the slopes; they reach sometimes the very summit of the heights, or, when they cannot attain them, fill in and clothe the coombes. And, in between, along the floor of the valley, deep pastures and their silence are bordered by lawns of chalky grass and the small yew trees of the Downs.

The clouds that visit its sky reveal themselves beyond the one great rise, and sail, white and enormous, to the other, and sink beyond that other. But the plains above which they have travelled and the Weald ¹ to which they go, the people of the valley cannot see and hardly recall. The wind, when it reaches such fields, is no longer a gale from the salt, but fruitful and soft, an inland breeze; and those whose blood was nourished here feel in that wind the fruitfulness of our orchards and all the life that all things draw from the air.

In this place, when I was a boy, I pushed through a fringe of beeches that made a complete screen between me and the world, and I came to a glade called No Man's Land. I climbed it, and I was surprised and glad, because from the ridge of that glade I saw the sea. To this place very lately I returned.

The many things that I recovered as I came up the countryside were not less charming than when a distant memory had enshrined them, but much more. Whatever veil is thrown by a longing recollection had not intensified nor even made more mysterious the beauty of that happy ground; not in my very dreams of morning had I, in exile, seen it more beloved or more rare. Much also that I had forgotten now returned to me as I approached—a group of elms, a little turn of the parson's wall, a small paddock beyond the graveyard close, cherished by one man, with a low wall of very old stone guarding it all round. And all these things fulfilled and amplified my delight, till even the good vision of the place, which I had kept so many years, left me and was replaced by its better reality. "Here," I said to myself, "is a symbol of what some say is reserved for the soul; pleasure of a

kind which cannot be imagined save in a moment when at last it is attained."

When I came to my own gate and my own field, and had now before me the house I knew, I looked round a little (though it was already evening), and I saw that the grass was standing as it should stand when it is ready for the scythe. For in this, as in everything that a man can do—of those things at least which are very old—there is an exact moment when they are done best. And it has been remarked of whatever rules us that it works blunderingly, seeing that the good things given to a man are not given at the precise moment when they would have filled him with delight. But, whether this be true or false, we can choose the just turn of the seasons in everything we do of our own will, and especially in the making of hay. Many think that hay is best made when the grass is thickest; and so they delay until it is rank and in flower, and has already heavily pulled the ground. And there is another false reason for delay, which is wet weather. For very few will understand (though it comes year after year) that we have rain always in South England between the sickle and the scythe, or say just after the weeks of east wind are over. First we have a week of sudden warmth, as though the south had come to see us all; then we have the weeks of east and south-east wind; and then we have more or less of that rain of which I spoke, and which always astonishes the world. Now it is just before, or during, or at the very end of that rain—but not later—that grass should be cut for hay. True, upland grass, which is always thin, should be cut earlier than the grass in the bottoms and along the water meadows; but not even the latest, even in the wettest seasons, should be left, as it is,

to flower and even to seed. For what we get when we store our grass is not a harvest of something ripe, but a thing just caught in its prime before maturity: as witness that our corn and straw are best yellow, but our hay is best green. So also Death should be represented with a scythe and Time with a sickle; for Time can take only what is ripe, but Death comes always too soon. In a word, then, it is always much easier to cut grass too late than too early; and I, under that evening and come back to these pleasant fields, looked at the grass and knew that it was time. June was in full advance; it was the beginning of that season when the night has already lost her foothold of the earth and hovers over it, never quite descending, but mixing sunset with the dawn.

Next morning, before it was yet broad day, I awoke, and thought of the mowing. The birds were already chattering in the trees beside my window, all except the nightingale, which had left and flown away to the Weald, where he sings all summer by day as well as by night in the oaks and the hazel spinneys, and especially along the little river Adur, one of the rivers of the Weald. The birds and the thought of the mowing had awakened me, and I went down the stairs and along the stone floors to where I could find a scythe; and when I took it from its nail, I remembered how, fourteen years ago, I had last gone out with my scythe, just so, into the fields at morning. In between that day and this were many things, cities and armies, and a confusion of books, mountains and the desert, and horrible great breadths of sea.

When I got out into the long grass the sun was not yet risen, but there were already many colours in the eastern sky, and I made haste to sharpen my scythe, so that I

might get to the cutting before the dew should dry. Some say that it is best to wait till all the dew has risen, so as to get the grass quite dry from the very first. But, though it is an advantage to get the grass quite dry, yet it is not worth while to wait till the dew has risen. For, in the first place, you lose many hours of work (and those the coolest), and next—which is more important—you lose that great ease and thickness in cutting which comes of the dew. So I at once began to sharpen my scythe.

There is an art also in the sharpening of a scythe, and it is worth describing carefully. Your blade must be dry, and that is why you will see men rubbing the scythe-blade with grass before they whet it. Then also your rubber must be quite dry, and on this account it is a good thing to lay it on your coat and keep it there during all your day's mowing. The scythe you stand upright, with the blade pointing away from you, and you put your left hand firmly on the back of the blade, grasping it; then you pass the rubber first down one side of the blade-edge and then down the other, beginning near the handle and going on to the point and working quickly and hard. When you first do this you will, perhaps, cut your hand; but it is only at first that such an accident will happen to you.

To tell when the scythe is sharp enough this is the rule. First the stone clangs and grinds against the iron harshly; then it rings musically to one note; then, at last, it purrs as though the iron and stone were exactly suited. When you hear this, your scythe is sharp enough; and I, when I heard it that June dawn, with everything quite silent except the birds, let down the scythe and bent myself to mow.

When one does anything anew, after so many years, one fears very much for one's trick or habit. But all things once learnt are easily recoverable, and I very soon recovered the swing and power of the mower. Mowing well and mowing badly—or rather, not mowing at all—are separated by very little; as is also true of writing verse, of playing the fiddle, and of dozens of other things, but of nothing more than of believing. For the bad or young or untaught mower without tradition, the mower Promethean,² the mower original and contemptuous of the past, does all these things. He leaves great crescents of grass uncut. He digs the point of the scythe hard into the ground with a jerk. He loosens the handles and even the fastening of the blade. He twists the blade with his blunders, he blunts the blade, he chips it, dulls it, or breaks it clean off at the tip. If any one is standing by he cuts him in the ankle. He sweeps up into the air wildly, with nothing to resist his stroke. He drags up earth with the grass, which is like making the meadow bleed. But the good mower who does things just as they should be done and have been for a hundred thousand years, falls into none of these fooleries. He goes forward very steadily, his scythe blade just barely missing the ground, every grass falling; the swish and rhythm of his mowing are always the same.

So great an art can only be learnt by continual practice; but this much is worth writing down, that, as in all good work, to know the thing with which you work is the core of the affair. Good verse is best written on good paper with an easy pen, not with a lump of coal on a whitewashed wall. The pen thinks for you; and so does the scythe mow for you if you treat it honourably and in

a manner that makes it recognize its service. The manner is this. You must regard the scythe as a pendulum that swings, not as a knife that cuts. A good mower puts no more strength into his stroke than into his lifting. Again, stand up to your work. The bad mower, eager and full of pain, leans forward and tries to force the scythe through the grass. The good mower, serene and able, stands as nearly straight as the shape of the scythe will let him, and follows up every stroke closely, moving his left foot forward. Then also let every stroke get well away. Mowing is a thing of ample gestures, like drawing a cartoon. Then, again, get yourself into a mechanical and repetitive mood: be thinking of anything at all but your mowing, and be anxious only when there seems some interruption to the monotony of the sound. In this mowing should be like one's prayers—all of a sort and always the same, and so made that you can establish a monotony and work them, as it were, with half your mind: that happier half, the half that does not bother.

In this way, when I had recovered the art after so many years, I went forward over the field, cutting lane after lane through the grass, and bringing out its most secret essences with the sweep of the scythe until the air was full of odours. At the end of every lane I sharpened my scythe and looked back at the work done and carried my scythe down again upon my shoulder to begin another. So, long before the bell rang in the chapel above me—that is, long before six o'clock which is the time for the *Angelus*³—I had many swathes already lying in order parallel like soldiery; and the high grass yet standing making a great contrast with the shaven part looked dense and high. As it says in the *Ballad of Val-es-Dunes*, where—

"The tall son of the Seven Winds
Came riding out of Hither-hythc,"

and his horse-hoofs (you will remember) trampled into the press and made a gap in it, and his sword (as you know)—

"... was like a scythe
In Arcus when the grass is high
And all the swathes in order lie,
And there's the bailiff standing by
A-gathering of the tithc."

So I mowed all that morning, till the houses awoke in the valley, and from some of them rose a little fragrant smoke, and men began to be seen.

I stood still and rested on my scythe to watch the awakening of the village, when I saw coming up to my field a man whom I had known in older times, before I had left the Valley.

He was of that dark, silent race upon which all the learned quarrel, but which, by whatever meaningless name it may be called—Iberian, or Celtic, or what you will—is the permanent root of all England, and makes England wealthy and preserves it everywhere, except perhaps in the Fens and in a part of Yorkshire. Everywhere else you will find it active and strong. These people are intensive; their thoughts and their labours turn inward. It is on account of their presence in these islands that our gardens are the richest in the world. They also love low rooms and ample fires and great warm slopes of thatch. They have, as I believe, an older acquaintance with the English air than any other of all the strains that make up England. They hunted in the Weald with stones, and camped in the pines of the green-sand. They lurked under the oaks of the upper rivers, and saw the legionaries go up, up

the straight, paved road from the sea. They helped the few pirates to destroy the towns, and mixed with those pirates and shared the spoils of the Roman villas, and were glad to see the captains and the priests destroyed. They remain; and no admixture of the Frisian pirates, or the Breton, or the Angevin and Norman conquerors, has very much affected their cunning eyes.

To this race, I say, belonged the man who now approached me. And he said to me: "Mowing?" And I answered: "Ar." Then he also said: "Ar," as in duty bound; for so we speak to each other in the Stenes of the Downs.

Next he told me that, as he had nothing to do, he would lend me a hand; and I thanked him warmly, or as we say: "kindly". For it is a good custom of ours always to treat bargaining as though it were a courteous pastime; and though what he was after was money, and what I wanted was his labour at the least pay, yet we both played the comedy that we were free men, the one granting a grace and the other accepting it. For the dry bones of commerce, avarice and method and need, are odious to the Valley; and we cover them up with a pretty body of fiction and observances. Thus, when it comes to buying pigs, the buyer does not begin to decry the pig and the vendor to praise it, as is the custom with lesser men; but tradition makes them do business in this fashion:—

First the buyer will go up to the seller when he sees him in his own stading, and, looking at the animal with admiration, the buyer will say that rain may or may not fall, or that we shall have snow or thunder, according to the time of year. Then the seller, looking critically

at the animal, will agree that the weather is as his friend maintains. There is no haste at all; great leisure marks the dignity of their exchange. And the next step is, that the buyer says: "That's a fine animal you have there, Mr. —" (giving the seller's name). "Ar, powerful fine animal." Then the seller, saying also "Mr." (for twin brothers rocked in one cradle give each other ceremonious observance here), the seller, I say, admits, as though with reluctance, the strength and beauty of the animal, and falls into deep thought. Then the buyer says, as though moved by a great desire, that he is ready to give so much for the animal, naming half the proper price, or a little less. Then the seller remains in silence for some moments; and at last begins to shake his head slowly, till he says: "I don't be thinking of selling the animal, anyways." He will also add that a party only Wednesday offered him so much for the animal—and he names about double the proper price. Thus all ritual is duly accomplished; and the solemn act is entered upon with reverence and in a spirit of truth. For when the buyer uses this phrase: "I'll tell you what I *will* do," and offers within half a crown of the animal's value, the seller replies that he can refuse him nothing, and names half a crown above its value; the difference is split, the animal is sold, and in the quiet soul of each runs the peace of something accomplished.

Thus do we buy an animal or land or labour or malt lime, always with elaboration and set forms; and many a London man has paid double and more for his violence and his greedy haste and very unchivalrous higgling. As happened with the land at Underwaltham, which the mortgagees had begged and implored the estate to take

at twelve hundred, and had privately offered to all the world at a thousand, but which a sharp direct man, of the kind that makes great fortunes, a man in a motor-car, a man in a fur coat, a man of few words, bought for two thousand three hundred before my very eyes, protesting that they might take his offer or leave it; and all because he did not begin by praising the land.

Well then, this man I spoke of offered to help me, and he went to get his scythe. But I went into the house and brought out a gallon jar of small ale for him and for me; for the sun was now very warm, and small ale goes well with mowing. When we had drunk some of this ale in mugs called "I see you", we took each a swathe, he a little behind me because he was the better mower; and so for many hours we swung, one before the other, mowing and mowing at the tall grass of the field. And the sun rose to noon and we were still at our mowing; and we ate food, but only for a little while, and we took again to our mowing. And at last there was nothing left but a small square of grass, standing like a square of linesmen who keep their formation, tall and unbroken, with all the dead lying around them when the battle is over and done.

Then for some little time I rested after all those hours; and the man and I talked together, and a long way off we heard in another field the musical sharpening of a scythe.

The sunlight slanted powdered and mellow over the breadth of the valley; for day was nearing its end. I went to fetch rakes from the steading; and when I had come back the last of the grass had fallen, and all the field lay flat and smooth, with the very green short grass in lanes between the dead and yellow swathes.

These swathes we raked into cocks to keep them from

the dew against our return at daybreak; and we made the cocks as tall and steep as we could, for in that shape they best keep off the dew, and it is easier also to spread them after the sun has risen. Then we raked up every straggling blade, till the whole field was a clean floor for the tedding and the carrying of the hay next morning. The grass we had mown was but a little over two acres; for that is all the pasture on my little tiny farm.

When we had done all this, there fell upon us the beneficent and deliberate evening; so that as we sat a little while longer near the rakes, we saw the valley more solemn and dim around us, and all the trees and hedgerows quite still, and held by a complete silence. Then I paid my companion his wage, and bade him a good night, till we should meet in the same place before sunrise.

He went off with a slow and steady progress, as all our peasants do, making their walking a part of the easy but continual labour of their lives. But I sat on, watching the light creep around towards the north and change, and the waning moon coming up as though by stealth behind the woods of No Man's Land.

—From *Hills and the Sea*

NOTES

1. *Weald*, an area forming a part of the counties of Sussex, Surrey, and Kent in England. Formerly forested, the Weald is now largely an agricultural district.

2. *Promethean*, like Prometheus in skill. Prometheus was a demi-god in Greek mythology who stole fire from heaven and taught men the use of it and other arts.

3. *Angelus*, daily prayer said by Roman Catholics, usually three times daily, as announced by a bell traditionally at six in the morning, at noon, and at six in the evening.

GAUTAMA THE BUDDHA

Dr. S. Radhakrishnan

Sir Sarvepalli Radhakrishnan, the present Vice-President of India, is one of the greatest living philosophers and is a powerful exponent of the ancient Indian philosophy. To the materialistic West, he offers the message of spiritualism—the message which was preached by Lord Buddha and other ancient sages and prophets. He is a great orator and both his speeches and writings are marked by profundity of thought and forcefulness of expression.

THE stories of Gautama's childhood and youth have undoubtedly a mythical air, but there is no reason to distrust the traditional accounts of his lineage. He was born in the year 563 B.C., the son of Suddhodana of the Kshatriya clan known as Sakya of Kapilavastu, on the Nepalese border one hundred miles north of Benares. The spot was afterwards marked by the emperor Asoka with a column which is still standing. His own name is Siddhartha, Gautama being his family name. The priests who were present at his birth said that he would be an emperor (*cakravartin*) if he would consent to reign; he would become a Buddha if he adopted the life of a wandering ascetic. Evidently the same individual could not be both an emperor and a Buddha, for renunciation of a worldly career was regarded as an indispensable preliminary for serious religion. There is a story of an aged seer named Asita who came to see the child, and more or less in the manner of Simeon ¹ prophesied the future

greatness of the child and wept at the thought that he himself would not live to see it and hear the new gospel.

The mother died seven days after the birth of the child, and her sister Mahaprajapati, Suddhodana's second wife, brought up the baby. In due course Gautama married his cousin Yasodhara and had a son Rahula. The story that Gautama's father was particular that his son should be spared depressing experiences, and that chance or the will of the gods set in his path an old man, broken and decrepit, a sick man, a dead man, and a wandering ascetic, which last inspired him with the desire to seek in religious life peace and serenity, indicates that Gautama was of a religious temperament and found the pleasures and ambitions of the world unsatisfying. The ideal of the mendicant life attracted him, and we hear frequently in his discourses of the "highest goal of the holy life for the sake of which clansmen leave their homes and go forth into homelessness". The efforts of his father to turn his mind to secular interests failed, and at the age of twenty-nine he left his home, put on the ascetic's garb, and started his career as a wandering seeker of truth. This was the great renunciation.

It is difficult for us in this secular age to realize the obsession of religion for the Indian mind and the ardours and agonies which it was willing to face for gaining the religious end. Gautama's search led him to become the disciple of the Brahmin ascetics Alara Kalama and Uddaka Ramaputta, who instructed him in their own doctrine (*dharma*) and discipline (*vinaya*). He possibly learnt from them the need for belief, good conduct, and the practice of meditation, though the content of their teaching seemed to him unsound. The cure for the sorrows of the world

was not to be found in the endless logomachies of the speculative thinkers. Determined to attain illumination by the practice of asceticism, he withdrew with five disciples to Uruvela, "a pleasant spot and a beautiful forest", soothing to the senses and stimulating to the mind. It is a general assumption in India that a holy life is led most easily in peaceful and beautiful landscapes which give the sense of repose and inspiration. Her temples and monasteries are on the banks of rivers or tops of hills, and all her emphasis on piety never made her forget the importance of scenery and climate for a religious life.

In this beautiful site Gautama chose to devote himself to the severest forms of asceticism. Just as fire can be produced by friction not from damp but only from dry wood, seekers, he thought, whose passions are calmed can alone attain enlightenment. He accordingly started a series of severe fasts, practised exercises in meditation, and inflicted on himself terrible austerities. Weakness of body brought lassitude of spirit. Though during this period he often found himself at death's door, he got no glimpse into the riddle of life. He therefore decided that asceticism was not the way to enlightenment and tried to think out another way to it. He remembered how once in his youth he had an experience of mystic contemplation, and now tried to pursue that line. Legend tells us that, at this crisis, Gautama was assailed by Mara, the tempter, who sought in vain, by all manner of terrors and temptations, to shake him from his purpose. This indicates that his inner life was not undisturbed and continuous, and it was with a mental struggle that he broke away from old beliefs to try new methods. He persisted in his meditations and passed through the four stages of contemplation culminat-

ing in pure self-possession and equanimity. He saw the whole universe as a system of law, composed of striving creatures, happy or unhappy, noble or mean, continually passing away from one form of existence and taking shape in another. In the last watch of the night "ignorance was destroyed, knowledge had arisen . . . as I sat there, earnest, strenuous, resolute". Gautama had attained *bodhi* or illumination and become the Buddha, the enlightened one.

While the Buddha was hesitating whether he should attempt to proclaim his teaching, the Scriptures say that the deity Brahma besought him to preach the truth. This means, perhaps, that as he was debating within himself as to what he should do, he received a warning somewhat similar to that delivered by the demon of Socrates² against withdrawal from life. He concludes that "the doors of immortality are open. Let them that have ears to hear show faith", and starts on his ministry. He not merely preached, which is easy, but lived the kind of life which he thought men should live. He adopted a mendicant missionary's life with all its dangers of poverty, unpopularity, and opposition. He converted in the first place the five disciples who had borne him company in the years of his asceticism, and in the deer park, "where ascetics were allowed to dwell and animals might not be killed", at the modern Sarnath, he preached his first sermon. Disciples began to flock to him. At the end of three months there were sixty, including the beloved Ananda, the companion of all his wanderings. He said to them one day: "Go now and wander for the gain of many, for the welfare of many, out of compassion for the world, for the good, for the gain and for the welfare of gods and men. Let not two of you go the same way. Preach the doctrine which is

glorious in the beginning, glorious in the middle and glorious in the end in the spirit and in the letter: proclaim a consummate, perfect and pure life of holiness."

● The Buddha himself travelled far and wide for forty-five years and gathered many followers. Brahmins and monks, hermits and outcasts, noble ladies and repentant sinners joined the community. Much of the Buddha's activity was concerned with the instruction of his disciples and the organization of the order. In our times, he would be taken for an intellectual. When we read his discourses, we are impressed by his spirit of reason. His ethical path has for its first step right views, a rational outlook. He endeavours to brush aside all cobwebs that interfere with mankind's vision of itself and its destiny. He questions his hearers who appear full of wisdom, though really without it, challenges them to relate their empty words of vague piety to facts. It was a period when many professed to have direct knowledge of God and said with assurance not only whether He is or is not, but also what He thinks, wills, and does. The Buddha convicts many of them of putting on spiritual airs. He declares that the teachers who talk about Brahma have not seen him face to face. They are like a man in love who cannot say who the lady is, or like one who builds a staircase without knowing where the palace is to be, or like one wishing to cross a river who should call the other side to come to him. Many of us have the religious sense and disposition but are not clear as to the object to which this sense is directed. Devotion, to be reasonable, must be founded on truth. The Buddha explains to them the significance of *brahmavihara*, or dwelling with Brahma, as a certain kind of meditation, a state of mind where love, utterly free from hatred and

malice, obtains for all. It is not, of course, *Nirvana* to which the eight-fold path is the means.

In view of the variety of counsel he advised his disciples to test by logic and life the different programmes submitted to them and not to accept anything out of regard for their authors. He did not make an exception of himself. He says: "Accept not what you hear by report, accept not tradition: do not hastily conclude that 'it must be so'. Do not accept a statement on the ground that it is found in our books, nor on the supposition that 'this is acceptable', nor because it is the saying of your teacher." With a touching solicitude he begs his followers not to be hampered in their thought by the prestige of his name. "Such faith have I, Lord," said Sariputta, "that methinks there never has been nor will be nor is now any other greater or wiser than the Blessed one." "Of course, Sariputta," is the reply, "you have known all the Buddhas of the past?" "No, Lord." "Well, then you know those of the future?" "No, Lord." "Then at least you know me and have penetrated my mind thoroughly?" "Not even that, Lord." "Then why, Sariputta, are your words so grand and bold?" There is nothing esoteric about his teaching. He speaks with scorn of those who profess to have secret truths. "O disciples, there are three to whom secrecy belongs and not openness. Who are they? Secrecy belongs to women, not openness; secrecy belongs to priestly wisdom, not openness; secrecy belongs to false doctrine, not openness . . . The doctrines and the rules proclaimed by the perfect Buddha shine before all the world and not in secret." Speaking to his disciple Ananda shortly before his death, the Buddha says: "I have preached the truth without

making any distinction between exoteric and esoteric doctrine; for in respect of the truths, Ananda, the Tathagata has no such thing as the closed fist of a teacher who keeps some things back." In many of his discourses he is represented as arguing with his interlocutors in a more or less Socratic manner, and persuading them insensibly to accept positions different from those from which they started. He would not let his adherents refuse the burden of spiritual liberty. They must not abandon the search for truth by accepting an authority. They must be free men able to be a light and a help to themselves. He continues: "Be ye as those who have the self as their light. Be ye as those who have the self as their refuge. Betake yourselves to no external refuge. Hold fast to the truth as to a refuge." The highest seat of authority is the voice of the spirit in us.

There is little of what we call dogma in the Buddha's teaching. With a breadth of view rare in that age and not common in ours, he refuses to stifle criticism. Intolerance seemed to him the greatest enemy of religion. Once he entered a public hall and found some of his disciples talking of a Brahmin who had just been accusing Gautama of impiety and finding fault with the order of mendicants he had founded. "Brethren," said Gautama, "if others speak against me, or against my religion, or against the Order, there is no reason why you should be angry, discontented or displeased with them. If you are so, you will not only bring yourselves into danger of spiritual loss, but you will not be able to judge whether what they say is correct or not"—a most enlightened sentiment, even after 2,500 years of energetic enlightenment. Doctrines are not more or less true simply because they happen

to flatter or wound our prejudices. There was no paradox however strange, no heresy however extreme, that the Buddha was unwilling or afraid to consider. He was sure that the only way to meet the confusion and extravagance of the age was by patient sifting of opinions and by helping men to rebuild their lives on a foundation of reason. He denounced unfair criticism of other creeds. "It is", he said, "as a man who looks up and spits at heaven; the spittle does not soil the heaven, but comes back and defiles his own person."

There was never an occasion when the Buddha flamed forth in anger, never an incident when an unkind word escaped his lips. He had vast tolerance for his kind. He thought of the world as ignorant rather than wicked, as unsatisfactory rather than rebellious. He meets opposition with calm and confidence. There is no nervous irritability or fierce anger about him. His conduct is the perfect expression of courtesy and good feeling with a spice of irony in it. On one of his rounds he was repulsed by a householder with bitter words of abuse. He replied: "Friend, if a householder sets food before a beggar, but the beggar refuses to accept the food, to whom does the food then belong?" The man replied: "Why, to the householder of course." The Buddha said: "Then, if I refuse to accept your abuse and ill will, it returns to you, does it not? But I must go away the poorer because I have lost a friend." Conversion by compulsion was unknown to him. Practice, not belief, is the foundation of his system. He wished to create a temper and a habit. We are unhappy because of our foolish desires. To make ourselves happy all that is necessary is to make ourselves a new heart and see with new eyes. If we suppress evil thoughts and cultivate good

ones, a bad and unhappy mind can be made into a good and happy one. The Buddha is not concerned with changes of creed. He sits by the sacred fire of a Brahmin and gives a discourse on his views without denouncing his worship. When Siha, the Jain, becomes a Buddhist, he is required to give food and gifts as before to the Jain monks who frequent his house. With a singular gentleness he presents his views and leaves the rest to the persuasive power of truth.

The great hero of moral achievement is frequently called upon to decide trivial matters of monastic discipline. To found an organization is to come to terms with the world and concede to social needs. It is to provide a refuge for those who are not quite at home in the ordinary life of society. There were troubles within the Order. Gautama's cousin, Devadatta, wished to supersede him as the head of the Order and plotted against him, but he was forgiven. On one occasion the Buddha found a monk suffering from dysentery and lying in filth. He washed him and changed his bed with the help of his companion Ananda and said to his disciples: "Whoever, O monks, would nurse me should nurse the sick man." There were no distinctions of caste in the Buddhist Order. "Just as, O monks, the great rivers such as the Ganges, the Sindhu and the Yamuna, when they fall into the ocean lose their former names and are known as the ocean, even so do the four castes of Ksatriyas, Brahmins, Vaisyas, and Sudras, when they had gone forth in the doctrine and Discipline taught by the Tathagata from a home to a homeless life, lose their former names and clans (*nama-gotra*) and are known as ascetics."

In his time women were not secluded in India, and he

declared they they were quite capable of attaining sanctity and holiness. In the last year of his life he dined with the courtesan Ambapali. But he had considerable hesitation in admitting women to the Order. "How, Lord, are we to conduct ourselves with regard to womankind?" "Don't see them, Ananda." "But if we see them, what are we to do?" "Abstain from speech." "But if they should speak to us, what are we to do?" "Keep wide awake." Ananda was quite chivalrous, pleaded the cause of women for admission into the Order, and won the consent of the master. It was the right course but perhaps not quite expedient. "If, Ananda, women had not received permission to enter the Order, the pure religion would have lasted long, the good law would have stood fast a thousand years. But since they have received that permission, it will now stand fast for only five hundred years." For a woman entry into the religious Order required the assent of the relatives, while a man was, at least in theory, at his own disposal. But the rules of the Order were by no means final. The Buddha says: "When I am gone, let the Order, if it should so wish, abolish all the lesser and minor precepts."

The story of his death is told with great pathos and simplicity. The Buddha was now eighty years old, worn out with toil and travel. At a village near the little town of Kusinagara, about 120 miles north-east of Benares, in 483 B.C., he passed away. The quiet end of the Buddha contrasts vividly with the martyrs' deaths of Socrates and Jesus. All three undermined, in different degrees, the orthodoxies of their time. As a matter of fact, the Buddha was more definitely opposed to Vedic orthodoxy and ceremonialism than was Socrates to the State religion of

Athens * or Jesus to Judaism,³ and yet he lived till eighty, gathered a large number of disciples, and founded a religious Order in his own lifetime. Perhaps the Indian temper of religion is responsible for the difference in the treatment of unorthodoxies.

—From *Gautama the Buddha*

* Xenophon says that Socrates “was frequently seen sacrificing at home and on the public altars of the city”.

NOTES

1. *Simeon*, devout man who blessed the infant Jesus.
2. *Socrates* (469–399 B.C.), Greek philosopher of Athens. His life and teachings have been recorded in some of the dialogues of his great disciple, *Plato*.
3. *Judaism*, religion of the Jews.

WHAT I LIVED FOR

Henry David Thoreau

Henry David Thoreau (1817-62) was an American writer and naturalist. He lived for two years (1845-47) in a small cabin which he built on the shores of Walden Pond. His best-known book is the classic, *Walden* (1854), an account of his life at Walden Pond. He has been recognized as a devoted non-scientific naturalist and a powerful social critic who championed the individual against social organization and materialistic civilization. Mahatma Gandhi was influenced by his essay, *On the Duty of Civil Disobedience*.

What I Lived For is a plea for simple living and high thinking.

EVERY morning was a cheerful invitation to make my life of equal simplicity, and I may say innocence, with Nature herself. I have been as sincere a worshipper of Aurora ¹ as the Greeks. I got up early and bathed in the pond; that was a religious exercise, and one of the best things which I did. They say that characters were engraven on the bathing tub of King Tching-thang to this effect: "Renew thyself completely each day; do it again and again, and forever again." I can understand that. Morning brings back the heroic ages. I was as much affected by the faint hum of a mosquito making its invisible and unimaginable tour through my apartment at earliest dawn, when I was sitting with door and windows open, as I could be by any trumpet that ever sang of fame. It was Homer's ² requiem, itself an Iliad and Odyssey in the air, singing its own wrath and wanderings. There was something cosmical about it; a standing advertisement, till forbidden,

of the ever-lasting vigour and fertility of the world. The morning, which is the most memorable season of the day, is the awakening hour. Then there is least somnolence in us; and for an hour, at least, some part of us awakes which slumbers all the rest of the day and night. Little is to be expected of that day, if it can be called a day, to which we are not awakened by our Genius, but by the mechanical nudgings of some servitor, are not awakened by our own newly acquired force and aspirations from within, accompanied by the undulations of celestial music, instead of factory bells, and a fragrance filling the air—to a higher life than we fell asleep from; and thus the darkness bears its fruit, and proves itself to be good, no less than the light. That man who does not believe that each day contains an earlier, more sacred, and auroral hour than he has yet profaned, has despaired of life, and is pursuing a descending and darkening way. After a partial cessation of his sensuous life, the soul of man, or its organs rather, are reinvigorated each day, and his Genius tries again what noble life it can make. All memorable events, I should say, transpire in morning time and in a morning atmosphere. The Vedas say, “All intelligences awake with the morning.” Poetry and art, and the fairest and most memorable of the actions of men, date from such an hour. All poets and heroes, like Memnon, are the children of Aurora, and emit their music at sunrise. To him whose elastic and vigorous thought keeps pace with the sun, the day is a perpetual morning. It matters not what the clocks say or the attitudes and labours of men. Morning is when I am awake and there is a dawn in me. Moral reform is the effort to throw off sleep. Why is it that men give so poor an

account of their day if they have not been slumbering? They are not such poor calculators. If they had not been overcome with drowsiness, they would have performed something. The millions are awake enough for physical labour; but only one in a million is awake enough for effective intellectual exertion, only one in a hundred millions to a poetic or divine life. To be awake is to be alive. I have never yet met a man who was quite awake. How could I have looked him in the face?

We must learn to reawaken and keep ourselves awake, not by mechanical aids, but by an infinite expectation of the dawn, which does not forsake us in our soundest sleep. I know of no more encouraging fact than the unquestionable ability of man to elevate his life by a conscious endeavour. It is something to be able to paint a particular picture, or to carve a statue, and so to make a few objects beautiful; but it is far more glorious to carve and paint the very atmosphere and medium through which we look, which morally we can do. To affect the quality of the day, that is the highest of arts. Every man is tasked to make his life, even in its details, worthy of the contemplation of his most elevated and critical hour. If we refused, or rather used up, such paltry information as we get, the oracles would distinctly inform us how this might be done.

I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practise resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life,

to live so sturdily and Spartan-like³ as to put to rout all that was not life, to cut a broad swath and shave close, to drive life into a corner, and reduce it to its lowest terms, and, if it proved to be mean, why then to get the whole and genuine meanness of it, and publish its meanness to the world; or if it were sublime, to know it by experience, and be able to give a true account of it in my next excursion. For most men, it appears to me, are in a strange uncertainty about it, whether it is of the devil or of God, and have *somewhat hastily* concluded that it is the chief end of man here to "glorify God and enjoy him forever".

Still we live meanly, like ants; though the fable tells us that we were long ago changed into men; like pygmies we fight with cranes; it is error upon error, and clout upon clout, and our best virtue has for its occasion a superfluous and evitable wretchedness. Our life is frittered away by detail. An honest man has hardly need to count more than his ten fingers, or in extreme cases he may add his ten toes, and lump the rest. Simplicity, simplicity, simplicity! I say, let your affairs be as two or three, and not a hundred or a thousand; instead of a million count half a dozen, and keep your accounts on your thumb-nail. In the midst of this chopping sea of civilized life, such are the clouds and storms and quicksands and thousand-and-one items to be allowed for, that a man has to live, if he would not founder and go to the bottom and not make his port at all, by dead reckoning, and he must be a great calculator indeed who succeeds. Simplify, simplify. Instead of three meals a day, if it be necessary eat but one; instead of a hundred dishes, five; and reduce other things in proportion. Our life is like a German Confederacy, made up of petty states, with its boundary

forever fluctuating, so that even a German cannot tell you how it is bounded at any moment. The nation itself, with all its so-called internal improvements, which, by the way are all external and superficial, is just such an unwieldy and overgrown establishment, cluttered with furniture and tripped up by its own traps, ruined by luxury and heedless expense, by want of calculation and a worthy aim, as the million households in the land; and the only cure for it, as for them, is in a rigid economy, a stern and more than Spartan simplicity of life and elevation of purpose. It lives too fast. Men think that it is essential that the Nation have commerce, and export ice, and talk through a telegraph, and ride thirty miles an hour, without a doubt, whether *they* do or not; but whether we should live like baboons or like men, is a little uncertain. If we do not get out sleepers, and forge rails, and devote days and nights to the work, but go to tinkering upon our *lives* to improve *them*, who will build railroads? And if railroads are not built, how shall we get to heaven in season? But if we stay at home and mind our business, who will want railroads? We do not ride on the railroad; it rides upon us.

Why should we live with such hurry and waste of life? We are determined to be starved before we are hungry. Men say that a stitch in time saves nine, and so they take a thousand stitches to-day to save nine to-morrow. As for *work*, we haven't any of any consequence. We have the Saint Vitus' ⁴ dance, and cannot possibly keep our heads still. If I should only give a few pulls at the parish bell-rope, as for a fire, that is, without setting the bell, there is hardly a man on his farm in the outskirts of Concord,⁵ notwithstanding that press of engagements which

was his excuse so many times this morning, nor a boy, nor a woman, I might almost say, but would forsake all and follow that sound, not mainly to save property from the flames, but, if we will confess the truth, much more to see it burn, since burn it must, and we, be it known, did not set it on fire—or to see it put out, and have a hand in it, if that is done as handsomely; yes, even if it were the parish church itself. Hardly a man takes a half-hour's nap after dinner, but when he wakes he holds up his head and asks: "what's the news?" as if the rest of mankind had stood his sentinels. Some give directions to be waked every half-hour, doubtless for no other purpose; and then to pay for it, they tell what they have dreamed. After a night's sleep the news is as indispensable as the breakfast. "Pray tell me anything new that has happened to a man anywhere on this globe,"—and he reads it over his coffee and rolls, that a man has had his eyes gouged out this morning on the Wachito River; never dreaming the while that he lives in the dark unfathomed mammoth cave of this world, and has but the rudiment of an eye himself.

For my part, I could easily do without the post office. I think that there are very few important communications made through it. To speak critically, I never received more than one or two letters in my life—I wrote this some years ago—that were worth the postage. The penny-post is, commonly, an institution through which you seriously offer a man that penny for his thoughts which is so often safely offered in jest. And I am sure that I never read any memorable news in a newspaper. If we read of one man robbed, or murdered, or killed by accident, or one house burned, or one vessel wrecked, or one

steamboat blown up, or one cow run over on the Western Railroad, or one mad dog killed, or of one lot of grasshoppers in the winter—we never need read of another. One is enough. If you are acquainted with the principle, what do you care for a myriad instances and applications? To a philosopher all *news*, as it is called, is gossip, and they who edit and read it are old women over their tea. Yet not a few are greedy after this gossip. There was such a rush, as I hear, the other day at one of the offices to learn the foreign news by the last arrival, that several large squares of plate glass belonging to the establishment were broken by the pressure—news which I seriously think a ready wit might write a twelvemonth, or twelve years, beforehand with sufficient accuracy. As for Spain, for instance, if you know how to throw in Don Carlos and the Infanta, and Don Pedro and Seville and Granada, from time to time in the right proportions—they may have changed the names a little since I saw the papers—and serve up a bullfight when other entertainments fail, it will be true to the letter, and give us as good an idea of the exact state of ruin of things in Spain as the most succinct and lucid reports under this head in the newspapers: and as for England, almost the last significant scrap of news from that quarter was the revolution of 1649; and if you have learned the history of her crops for an average year, you never need attend to that thing again, unless your speculations are of a merely pecuniary character. If one may judge who rarely looks into the newspapers, nothing new does ever happen in foreign parts, a French revolution not excepted.

What news! how much more important to know what that is which was never old! “Kieou—he—yu (great

dignitary of the state of Wei) sent a man to Khoung-tseu to know his news. Khoung-tseu caused the messenger to be seated near him, and questioned him in these terms: What is your master doing? The messenger answered with respect: My master desires to diminish the number of his faults, but he cannot come to the end of them. The messenger being gone, the philosopher remarked: "What a worthy messenger! What a worthy messenger!" The preacher, instead of vexing the ears of drowsy farmers on their day of rest at the end of the week—for Sunday is the fit conclusion of an ill-spent week, and not the fresh and brave beginning of a new one—with this one other drizzle-tail of a sermon, should shout with thundering voice: "Pause! Avast! Why so seeming fast, but deadly slow?"

Shams and delusions are esteemed for soundest truths, while reality is fabulous. If men would steadily observe realities only, and not allow themselves to be deluded, life, to compare it with such things as we know, would be like a fairy tale and the Arabian Nights' Entertainments. If we respected only what is inevitable and has a right to be, music and poetry would resound along the streets. When we are unhurried and wise, we perceive that only great and worthy things have any permanent and absolute existence, that petty fears and petty pleasures are but the shadow of the reality. This is always exhilarating and sublime. By closing the eyes and slumbering, and consenting to be deceived by shows, men establish and confirm their daily life of routine and habit everywhere, which still is built on purely illusory foundations. Children who play life, discern its true law and relations more clearly than men, who fail to live it worthily,

but who think that they are wiser by experience, that is, by failure. I have read in a Hindoo book, that "there was a king's son, who, being expelled in infancy from his native city, was brought up by a forester, and, growing up to maturity in that state, imagined himself to belong to the barbarous race with which he lived. One of his father's ministers having discovered him, revealed to him what he was, and the misconception of his character was removed, and he knew himself to be a prince. So soul," continues the Hindoo philosopher, "from the circumstances in which it is placed, mistakes its own character, until the truth is revealed to it by some holy teacher, and then it knows itself to be *Brahme*." I perceive that we inhabitants of New England live this mean life that we do because our vision does not penetrate the surface of things. We think that that is which *appears* to be. If a man should walk through this town and see only the reality, where, think you, would the "Mill-dam" go to? If he should give us an account of the realities he beheld there, we should not recognize the place in his description. Look at a meeting-house, or a court-house, or a jail, or a shop, or a dwelling house, and say what that thing really is before a true gaze, and they would all go to pieces in your account of them. Men esteem truth remote, in the outskirts of the system, behind the farthest star, before Adam and after the last man. In eternity there is indeed something true and sublime. But all these times and places and occasions are now and here. God himself culminates in the present moment, and will never be more divine in the lapse of all the ages. And we are enabled to apprehend at all what is sublime and noble only by the perpetual instilling and drenching of the reality that

surrounds us. The universe constantly and obediently answers to our conceptions; whether we travel fast or slow, the track is laid for us. Let us spend our lives in conceiving then. The poet or the artist never yet had so fair and noble a design but some of his posterity at least could accomplish it.

—From *Walden*

NOTES

1. *Aurora*, goddess of dawn in Roman mythology.
2. *Homer*, principal literary figure of ancient Greek literature. He wrote the *Iliad* and the *Odyssey*.
3. *Spartan*, a native of Sparta in ancient Greece, known for his simplicity, courage, and endurance.
4. *Saint Vitus*, fourth-century Sicilian martyr. As one of the Saints called the Fourteen Holy Helpers, he is invoked against many diseases including St. Vitus' dance.
5. *Concord*, the town in Massachusetts, U.S.A., where Thoreau was born.

ON LIBERTY
OF THE LIBERTY OF THOUGHT AND DISCUSSION

John Stuart Mill

John Stuart Mill (1806-73), an English philosopher and economist, contributed to various periodicals and discussed with various groups the problems of political theory. From 1865 to 1868 he served as a member of Parliament. In the year of his death, appeared his famous *Autobiography*. John Stuart Mill's philosophy followed the doctrines of his father, John Mill, and Bentham, but he sought to temper them with humanitarianism. He constantly advocated political and social reforms such as proportional representation, the emancipation of women, and the development of labour organizations. His influence has been strong in economics, politics, and philosophy.

On Liberty, perhaps the best-known of Mill's essays, appeared in 1859. Here we find Mill as a staunch champion of the liberty of the individual.

THE time, it is to be hoped, is gone by when any defence would be necessary of the "liberty of the press" as one of the securities against corrupt or tyrannical government. No argument, we may suppose, can now be needed against permitting a legislature or an executive, not identified in interest with the people, to prescribe opinions to them, and determine what doctrines or what arguments they shall be allowed to hear. This aspect of the question, besides, has been so often and so triumphantly enforced by preceding writers that it need not be especially insisted on in this place. Though the law of England, on the subject of the press, is as servile to this day as it was

in the time of the Tudors, there is little danger of its being actually put in force against political discussion, except during some temporary panic, when fear of insurrection drives ministers and judges from their propriety and, speaking generally, it is not, in constitutional countries, to be apprehended that the Government, whether completely responsible to the people or not, will often attempt to control the expression of opinion, except when in doing so it makes itself the organ of the general intolerance of the public. Let us suppose, therefore, that the Government is entirely at one with the people, and never thinks of exerting any power of coercion unless in agreement with what it conceives to be their voice. But I deny the right of the people to exercise such coercion, either by themselves or by their Government. The power itself is illegitimate. The best Government has no more title to it than the worst. It is as noxious, or more noxious, when exerted in accordance with public opinion than when in opposition to it. If all mankind minus one were of one opinion, and only one person were of the contrary opinion, mankind would be no more justified in silencing that one person than he, if he had the power, would be justified in silencing mankind. Were an opinion a personal possession of no value except to the owner; if to be obstructed in the enjoyment of it were simply a private injury, it would make some difference whether the injury was inflicted only on a few persons or on many. But the peculiar evil of silencing the expression of an opinion is that it is robbing the human race; posterity as well as the existing generation; those who dissent from the opinion, still more than those who hold it. If the opinion is right, they are deprived of the opportunity of exchanging error

for truth; if wrong, they lose, what is almost as great a benefit, the clearer perception and livelier impression of truth, produced by its collision with error

It is necessary to consider separately these two hypotheses, each of which has a distinct branch of the argument corresponding to it. We can never be sure that the opinion we are endeavouring to stifle is a false opinion; and if we were sure, stifling it would be an evil still.

First, the opinion which it is attempted to suppress by authority may possibly be true. Those who desire to suppress it of course deny its truth; but they are not infallible. They have no authority to decide the question for all mankind, and exclude every other person from the means of judging. To refuse a hearing to an opinion because they are sure that it is false is to assume that *their* certainty is the same thing as *absolute* certainty. All silencing of discussion is an assumption of infallibility. Its condemnation may be allowed to rest on this common argument, not the worse for being common.

Unfortunately for the good sense of mankind, the fact of their fallibility is far from carrying the weight in their practical judgment which is always allowed to it in theory; for, while every one well knows himself to be fallible, few think it necessary to take any precautions against their own fallibility or admit the supposition that any opinion of which they feel very certain may be one of the examples of the error to which they acknowledge themselves to be liable. Absolute princes, or others who are accustomed to unlimited deference, usually feel this complete confidence in their own opinions on nearly all subjects. People more happily situated, who sometimes hear their opinions disputed and are not wholly unused to

be set right when they are wrong, place the same unbounded reliance only on such of their opinions as are shared by all who surround them, or to whom they habitually defer; for in proportion to a man's want of confidence in his own solitary judgment does he usually repose, with implicit trust, on the infallibility of "the world" in general. And the world, to each individual, means the part of it with which he comes in contact—his party, his sect, his church, his class of society: the man may be called, by comparison, almost liberal and large-minded to whom it means anything so comprehensive as his own country or his own age. Nor is his faith in this collective authority at all shaken by his being aware that other ages, countries, sects, churches, classes, and parties have thought, and even now think, the exact reverse. He devolves upon his own world the responsibility of being in the right against the dissentient worlds of other people; and it never troubles him that mere accident has decided which of these numerous worlds is the object of his reliance, and that the same causes which make him a Churchman in London would have made him a Buddhist or a Confucian¹ in Pekin. Yet it is as evident in itself as any amount of argument can make it that ages are no more infallible than individuals—every age having held many opinions which subsequent ages have deemed not only false but absurd; and it is as certain that many opinions, now general, will be rejected by future ages as it is that many, once general, are rejected by the present.

The objection likely to be made to this argument would probably take some such form as the following. There is no greater assumption of infallibility in forbidding the propagation of error than in any other thing

which is done by public authority on its own judgment and responsibility. Judgment is given to men that they may use it. Because it may be used erroneously, are men to be told that they ought not to use it at all. To prohibit what they think pernicious is not claiming exemption from error, but fulfilling the duty incumbent on them, although fallible, of acting on their conscientious conviction. If we were never to act on our opinions because those opinions may be wrong, we should leave all our interests uncared for and all our duties unperformed. An objection which applies to all conduct can be no valid objection to any conduct in particular. It is the duty of Governments, and of individuals, to form the truest opinions they can; to form them carefully, and never impose them upon others unless they are quite sure of being right. But when they are sure (such reasoners may say), it is not conscientiousness, but cowardice, to shrink from acting on their opinions, and allow doctrines which they honestly think dangerous to the welfare of mankind, either in this life or in another, to be scattered abroad without restraint, because other people, in less enlightened times, have persecuted opinions now believed to be true. Let us take care, it may be said, not to make the same mistake; but Governments and nations have made mistakes in other things which are not denied to be fit subjects for the exercise of authority; they have laid on bad taxes, made unjust wars. Ought we, therefore, to lay on no taxes, and, under whatever provocation, make no wars. Men and Governments must act to the best of their ability. There is no such thing as absolute certainty, but there is assurance sufficient for the purposes of human life. We may, and must, assume our opinion

to be true for the guidance of our conduct; and it is assuming no more when we forbid bad men to pervert society by the propagation of opinions which we regard as false and pernicious.

I answer, that it is assuming very much more. There is the greatest difference between presuming an opinion to be true, because, with every opportunity for contesting it, it has not been refuted, and assuming its truth for the purpose of not permitting its refutation. Complete liberty of contradicting and disproving our opinion is the very condition which justifies us in assuming its truth for purposes of action; and on no other terms can a being with human faculties have any rational assurance of being right.

Let us now pass to the second division of the argument, and, dismissing the supposition that any of the received opinions may be false, let us assume them to be true, and examine into the worth of the manner in which they are likely to be held when their truth is not freely and openly canvassed. However unwillingly a person who has a strong opinion may admit the possibility that his opinion may be false, he ought to be moved by the consideration that, however true it may be, if it is not fully, frequently, and fearlessly discussed, it will be held as a dead dogma, not a living truth.

There is a class of persons (happily not quite so numerous as formerly) who think it enough if a parson assents undoubtingly to what they think true, though he has no knowledge whatever of the grounds of the opinion, and could not make a tenable defence of it against the most superficial objections. Such persons if they can once get their creed taught from authority, naturally think that

no good, and some harm, comes of its being allowed to be questioned. Where their influence prevails, they make it nearly impossible for the received opinion to be rejected wisely and considerately, though it may still be rejected rashly and ignorantly; for to shut out discussion entirely is seldom possible, and, when it once gets in, beliefs not grounded on conviction are apt to give way before the slightest semblance of an argument. Waiving, however, this possibility—assuming that the true opinion abides in the mind, but abides as a prejudice, a belief independent of, and proof against, argument—this is not the way in which truth ought to be held by a rational being. This is not knowing the truth. Truth, thus held, is but one superstition the more, accidentally clinging to the words which enunciate a truth.

If the intellect and judgment of mankind ought to be cultivated, a thing which Protestants at least do not deny, on what can these faculties be more appropriately exercised by anyone than on the things which concern him so much that it is considered necessary for him to hold opinions on them. If the cultivation of the understanding consists in one thing more than in another, it is surely in learning the grounds of one's own opinions. Whatever people believe, on subjects on which it is of the first importance to believe rightly, they ought to be able to defend against at least the common objections. But some one may say: "Let them be *taught* the grounds of their opinions. It does not follow that opinions must be merely parroted because they are never heard controverted. Persons who learn geometry do not simply commit the theorems to memory, but understand and learn likewise the demonstrations; and it would be absurd to say that they remain

ignorant of the grounds of geometrical truths because they never hear anyone deny and attempt to disprove them." Undoubtedly; and such teaching suffices on a subject like mathematics, where there is nothing at all to be said on the wrong side of the question. The peculiarity of the evidence of mathematical truths is that all the argument is on one side. There are no objections, and no answers to objections. But on every subject on which difference of opinion is possible the truth depends on a balance to be struck between two sets of conflicting reasons. Even in natural philosophy there is always some other explanation possible of the same facts; some geocentric theory instead of heliocentric, some phlogiston instead of oxygen; and it has to be shown why that other theory cannot be the true one; and until this is shown, and until we know how it is shown, we do not understand the grounds of our opinion. But when we turn to subjects infinitely more complicated, to morals, religion, politics, social relations, and the business of life, three-fourths of the arguments for every disputed opinion consist in dispelling the appearances which favour some opinion different from it. The greatest orator save one of antiquity has left it on record that he always studied his adversary's case with as great, if not still greater intensity than even his own. What Cicero² practised as the means of forensic success requires to be imitated by all who study any subject, in order to arrive at the truth. He who knows only his own side of the case knows little of that. His reasons may be good, and no one may have been able to refute them. But if he is equally unable to refute the reasons on the opposite side, if he does not so much as know what they are, he has no ground for preferring

either opinion. The rational position for him would be suspension of judgment; and, unless he contents himself with that, he is either led by authority, or adopts, like the generality of the world, the side to which he feels most inclination. Nor is it enough that he should hear the arguments of adversaries from his own teachers presented as they state them, and accompanied by what they offer as refutations. That is not the way to do justice to the arguments or bring them into real contact with his own mind. He must be able to hear them from persons who actually believe them, who defend them in earnest, and do their very utmost for them. He must know them in their most plausible and persuasive form; he must feel the whole force of the difficulty which the true view of the subject has to encounter and dispose of; else he will never really possess himself of the portion of truth which meets and removes that difficulty. Ninety-nine in a hundred of what are called educated men are in this condition—even of those who can argue fluently for their opinions. Their conclusion may be true, but it might be false for anything they know; they have never thrown themselves into the mental position of those who think differently from them, and considered what such persons may have to say; and consequently they do not, in any proper sense of the word, know the doctrine which they themselves profess. They do not know those parts of it which explain and justify the remainder; the considerations which show that a fact which seemingly conflicts with another is reconcilable with it, or that, of two apparently strong reasons, one and not the other ought to be preferred. All that part of the truth which turns the scale, and decides the judgment of a completely informed mind,

they are strangers to; nor is it ever really known but to those who have attended equally and impartially to both sides, and endeavoured to see the reasons of both in the strongest light. So essential is this discipline to a real understanding of moral and human subjects that, if opponents of all important truths do not exist, it is indispensable to imagine them, and supply them with the strongest arguments which the most skilful devil's advocate can conjure up.

NOTES

1. *Confucian*, follower of the Chinese sage, Confucius (551-479 B.C.).
2. *Cicero* (106-43 B.C.), great Roman orator. He was famed also as a politician and philosopher.

INDIAN VIEW OF LIFE

Max Müller

Max Müller (1823–1900), philologist and orientalist, was born in Germany, but after studying there he went to Oxford where he lived the remainder of his life. Müller became a naturalized British subject. He did more than any other scholar to popularize philology and mythology. About 1875, he began his greatest work, the editing of *Sacred Books of the East* (in 51 volumes). These were translations of important oriental non-Christian religious writings. He was engaged in this task until his death.

Indian View of Life is a beautiful analysis of the Indian beliefs as found in the *Vedas* and other volumes of ancient Sanskrit literature.

WHAT then, you may ask, do we find in that ancient Sanskrit literature and cannot find anywhere else? My answer is, We find there the Aryan man, whom we know in his various characters, as Greek, Roman, German, Celt, and Slav, in an entirely new character. Whereas in his migrations northward his active and political energies are called out and brought to their highest perfection, we find the other side of the human character, the passive and meditative, carried to its fullest growth in India. In some of the hymns of the Rig Veda we can still watch an earlier phase. We see the Aryan tribes taking possession of the land, and under the guidance of such warlike gods as Indra and the Maruts, defending their new homes against the assaults of the black-skinned aborigines as well as against the inroads of later Aryan colonists. But that period of war soon came to an end.

and when the great mass of the people had once settled down in their homesteads, the military and political duties seem to have been monopolized by what we call a *caste*, that is by a small aristocracy, while the great majority of the people were satisfied with spending their days within the narrow spheres of their villages, little concerned about the outside world, and content with the gifts that nature bestowed on them without much labour. Bhartrihari ¹ says:

“There is fruit on the trees in every forest, which every one who likes may pluck without trouble. There is cool and sweet water in the pure rivers here and there. There is a soft bed made of the twigs of beautiful creepers. And yet wretched people suffer pain at the door of the rich!”

At first sight we may feel inclined to call this quiet enjoyment of life, this mere looking on, a degeneracy rather than a growth. It seems so different from what *we* think life ought to be. Yet, from a higher point of view, it may appear that those Southern Aryans have chosen the good part, or at least the part good for them, while we, Northern Aryans, have been careful and troubled about many things.

It is at all events a problem worth considering whether, as there is in nature a South and a North, there are not two hemispheres also in human nature, both worth developing—the active, combative, and political on one side, the passive, meditative, and philosophical on the other; and for the solution of that problem no literature furnishes such ample materials as that of the Veda, beginning with the Hymns and ending with the Upanishads. We enter into a new world—not always an attractive one, least of all to us; but it possesses one charm, it is real, it

is of natural growth, and like everything of natural growth, I believe it had a hidden purpose, and was intended to teach us some kind of lesson that is worth learning, and that certainly we could learn nowhere else. We are not called upon either to admire or to despise that ancient Vedic literature; we have simply to study and to try to understand it.

There have been silly persons who have represented the development of the Indian mind as superior to any other, nay, who would make us go back to the Veda or to the sacred writings of the Buddhists in order to find there a truer religion, a purer morality, and a more sublime philosophy than our own. I shall not even mention the names of these writers or the titles of their works. But I feel equally impatient when I see other scholars criticizing the ancient literature of India as if it were the work of the nineteenth century, as if it represented an enemy that must be defeated, and that can claim no mercy at our hands. That the Veda is full of childish, silly, even to our minds monstrous conceptions, who would deny? But even these monstrosities are interesting and instructive; nay, many of them, if we can but make allowance for different ways of thought and language, contain germs of truth and rays of light, all the more striking, because of breaking upon us through the veil of the darkest night.

Here lies the general, the truly human interest which the *ancient* literature of India possesses, and which gives it a claim on the attention, not only of oriental scholars or of students of ancient history, but of every educated man and woman.

There are problems which we may put aside for a time,

aye, which we must put aside while engaged each in our own hard struggle for life, but which will recur for all that, and which, whenever they do recur, will stir us more deeply than we like to confess to others, or even to ourselves. It is true that with us one day only out of seven is set apart for rest and meditation, and for the consideration of what the Greeks called *ta megista*—"the greatest things". It is true that that seventh day also is passed by many of us either in mere church-going routine or in thoughtless rest. But whether on week-days, or on Sundays, whether in youth or in old age, there are moments rare though they be, yet for all that the most critical moments of our life, when the old simple questions of humanity return to us in all their intensity, and we ask ourselves, What are we? What is this life on earth meant for? Are we to have no rest here, but to be always toiling and building up our own happiness out of the ruins of the happiness of our neighbours? And when we have made our home on earth as comfortable as it can be made with steam and gas and electricity, are we really so much happier than the Hindu in his primitive homestead?

With us, as I said just now, in these Northern climates, where life is and always must be a struggle, and a hard struggle too, and where accumulation of wealth has become almost a necessity to guard against the uncertainties of old age or the accidents inevitable in our complicated social life, with us, I say, and in our society, hours of rest and meditation are but few and far between. It was the same as long as we know the history of the Teutonic races; it was the same even with Romans and Greeks. The European climate with its long cold winters, in many places also the difficulty of cultivating the soil, the conflict

of interests between small communities, has developed the instinct of self-preservation (not to say, self-indulgence) to such an extent that most of the virtues and most of the vices of European society can be traced back to that source. Our own character was formed under these influences, by inheritance, by education, by necessity. We all lead a fighting-life; our highest ideal of life is a fighting-life. We work till we can work no longer, and are proud, like old horses, to die in harness. We point with inward satisfaction to what we and our ancestors have achieved by hard work, in founding a family or a business, a town or a state. We point to the marvels of what we call civilization—our splendid cities, our high-roads and bridges, our ships, our railways, our telegraphs, our electric light, our pictures, our statues, our music, our theatres. We imagine we have made life on earth quite perfect; in some cases so perfect that we are almost sorry to leave it again. But the lesson which both Brahmans and Buddhists are never tired of teaching is that this life is but a journey from one village to another, and not a resting-place. Thus we read:

“As a man journeying to another village may enjoy a night’s rest in the open air, but, after leaving his resting-place, proceeds again on his journey the next day, thus father, mother, wife, and wealth are all but like a night’s rest to us—wise people do not cling to them for ever.”

Instead of simply despising this Indian view of life, might we not pause for a moment and consider whether their philosophy of life is entirely wrong, and ours entirely right; whether this earth was really meant for work only (for with us pleasure also has been changed into work), for constant hurry and flurry; or whether we, sturdy

Northern Aryans, might not have been satisfied with a little less of work, and a little less of so-called pleasure but with a little more of thought, and a little more of rest. For, short as our life is, we are not mere Mayflies that are born in the morning to die at night. We have a past to look back to and a future to look forward to, and it may be that some of the riddles of the future find their solution in the wisdom of the past.

Then why should we always fix our eyes on the present only? Why should we always be racing, whether for wealth or for power or for fame? Why should we never rest and be thankful?

I do not deny that the manly vigour, the silent endurance, the public spirit, and the private virtues too of the citizens of European states represent one side, it may be a very important side, of the destiny which man has to fulfil on earth.

But there is surely another side of our nature, and possibly another destiny open to man in his journey across this life, which should not be entirely ignored. If we turn our eyes to the East, and particularly to India, where life is, or at all events was, no very severe struggle, where the climate was mild, the soil fertile, where vegetable food in small quantities sufficed to keep the body in health and strength, where the simplest hut or cave in a forest was all the shelter required, and where social life never assumed the gigantic, aye monstrous proportions of a London or Paris, but fulfilled itself within the narrow boundaries of village communities—was it not, I say, natural there, or, if you like, was it not *intended* there, that another side of human nature should be developed—not the active, the combative and acquisitive, but the

passive, the meditative and reflective? Can we wonder that the Aryans who stepped as strangers to some of the happy fields and valleys along the Indus or the Ganges should have looked upon life as a perpetual Sunday or Holyday, or a kind of Long Vacation, delightful so long as it lasts, but which must come to an end sooner or later? Why should they have accumulated wealth? Why should they have built palaces? Why should they have toiled day and night? After having provided from day to day for the small necessities of the body, they thought they had the right, it may be the duty, to look round upon this strange exile, to look inward upon themselves, upward to something not themselves, and to see whether they could not understand a little of the true purport of that mystery which we call life on earth.

Of course *we* should call such notions of life dreamy, unreal, unpractical, but may not *they* look upon our notions of life as short-sighted, fussy, and, in the end, most unpractical, because involving a sacrifice of life for the sake of life?

No doubt these are both extreme views, and they have hardly ever been held or realized in that extreme form, by any nation, whether in the East or in the West. We are not always plodding—we sometimes allow ourselves an hour of rest and peace and thought—nor were the ancient people of India always dreaming and meditating on *ta megista*, on the great problems of life, but, when called upon, we know that they too could fight like heroes, and that, without machinery, they could by patient toil raise even the meanest handiwork into a work of art, a real joy to the maker and to the buyer.

All then that I wish to put clearly before you is this,

that the Aryan man, who had to fulfil his mission in India, might naturally be deficient in many of the practical and fighting virtues, which were developed in the Northern Aryans by the very struggle without which they could not have survived, but that his life on earth had not therefore been entirely wasted. His very view of life, though we cannot adopt it in this Northern climate, may yet act as a lesson and a warning to us, not, for the sake of life, to sacrifice the highest objects of life.

The greatest conqueror of antiquity² stood in silent wonderment before the Indian Gymnosophists,³ regretting that he could not communicate with them in their own language, and that their wisdom could not reach him except through the contaminating channels of sundry interpreters.

That need not be so at present. Sanskrit is no longer a difficult language, and I can assure every young Indian Civil Servant that if he will but go to the fountain-head of Indian wisdom, he will find there, among much that is strange and useless, some lessons of life which are worth learning, and which we in our haste are too apt to forget or to despise.

Let me read you a few sayings only, which you may still hear repeated in India, when, after the heat of the day, the old and the young assemble together under the shadow of their village tree—sayings which to them seem truth, to us, I fear, mere truism!

“As all have to sleep together, laid low in the earth, why do foolish people wish to injure one another?”

“A man seeking for eternal happiness (*moksha*) might obtain it by a hundredth part of the sufferings which a foolish man endures in the pursuit of riches.”

“Poor men eat more excellent bread than the rich, for hunger giveth it sweetness.”

“Our body is like the foam of the sea, our life like a bird, our company with those whom we love does not last for ever; why then sleepest thou, my son?”

“As two logs of wood meet upon the ocean and then separate again, thus do living creatures meet.”

“Family, wife, children, our very body and our wealth, they all pass away. They do not belong to us. What then is ours?—Our good and our evil deeds.”

“When thou goest away from here, no one will follow thee. Only thy good and thy evil deeds, they will follow thee wherever thou goest.”

“According to the Veda the soul (life) is eternal, but the body of all creatures is perishable. When the body is destroyed, the soul departs elsewhere, fettered by the bounds of our works.”

“As a man puts on new garments in this world, throwing aside those which he formerly wore, even so the Self of man puts on new bodies which are in accordance with his acts.”

“No weapons will hurt the Self of man, no fire will burn it, no water moisten it, no wind will dry it up.”

“It is not to be hurt, not to be burnt, not to be moistened, not to be dried up. It is imperishable, unchanging, immovable, without beginning.”

“It is said to be immaterial, passing all understanding, and unchangeable. If you know the Self of man to be all this, grieve not.”

“There is nothing higher than the attainment of the knowledge of the Self.”

“All living creatures are the dwelling of the Self who

lies enveloped in matter, who is immortal, and spotless. Those who worship the Self, the immovable, living in a movable dwelling, become immortal."

"Despising everything else, a wise man should strive after the knowledge of the Self."

We shall have to return to this subject again, for this knowledge of the Self is really the *Vedanta*, that is, the end, the highest goal of the Veda. The highest wisdom of Greece was "to know ourselves"; the highest wisdom of India is "to know our Self".

If I were asked to indicate by one word the distinguishing feature of the Indian character, as I have here tried to sketch it, I should say it was *transcendent*, using that word, not in its strict technical sense, as fixed by Kant, but in its more general acceptation, as denoting a mind bent on transcending the limits of empirical knowledge. There are minds perfectly satisfied with empirical knowledge, a knowledge of facts, well ascertained, well classified, and well labelled. Such knowledge may assume very vast proportions, and, if knowledge is power, it may impart great power, real intellectual power to the man who can wield and utilize it. Our own age is proud of that kind of knowledge, and to be content with it, and never to attempt to look beyond it, is, I believe, one of the happiest states of mind to be in.

But, for all that, there is a Beyond, and he who has once caught a glance of it, is like a man who has gazed at the sun—wherever he looks, everywhere he sees the image of the sun. Speak to him of finite things, and he will tell you that the Finite is impossible and meaningless without the Infinite. Speak to him of death, and he will call it birth; speak to him of time, and he will call it the

mere shadow of eternity. To us the senses seem to be the organs, the tools, the most powerful engines of knowledge; to him they are, if not actually deceivers, at all events heavy fetters, checking the flight of the spirit. To us this earth, this life, all that we see, and hear, and touch is certain. Here, we feel, is our home, here lie our duties, here our pleasures. To him this earth is a thing that once was not, and that again will cease to be; this life is a short dream from which we shall soon awake. Of nothing he professes greater ignorance than of what to others seems to be most certain, namely what we see, and hear, and touch; and as to our home, wherever that may be, he knows that certainly it is not here.

Do not suppose that such men are mere dreamers. Far from it! And if we can only bring ourselves to be quite honest to ourselves, we shall have to confess that at times we all have been visited by these transcendental aspirations, and have been able to understand what Wordsworth meant when he spoke of those

“Obstinate questionings
Of sense and outward things,
Fallings from us, vanishings;
Blank misgivings of a creature
Moving about in worlds not realized.”

The transcendent temperament acquired no doubt a more complete supremacy in the Indian character than anywhere else: but no nation, and no individual, is entirely without that “yearning beyond”; indeed we all know it under a more familiar name—namely, *Religion*.

It is necessary, however, to distinguish between a religion and *a* religion, quite as much as in another

branch of philosophy we have to distinguish between language and *a* language or many languages. A man may accept *a* religion, he may be converted to the Christian religion, and he may change his own particular religion from time to time, just as he may speak different languages. But in order to have *a* religion a man must have religion. He must once *at least* in his life have looked beyond the horizon of this world, and carried away in his mind an impression of the Infinite, which will never leave him again. A being satisfied with the world of sense, unconscious of its finite nature, undisturbed by the limited or negative character of all perceptions of the senses, would be incapable of any religious concepts. Only when the finite character of all human knowledge has been perceived, is it capable for the human mind to conceive that which is beyond the Finite, call it what you like, the Beyond, the Unseen, the Infinite, the Supernatural, or the Divine. That step must have been taken before religion of any kind becomes possible. What kind of religion it will be, depends on the character of the race which elaborates it, its surroundings in nature, and its experience in history.

—From *India: What Can It Teach Us?*

NOTES

1. *Bhartrihari*, an ancient king and a great Sanskrit poet.
2. *the greatest conqueror of antiquity*, Alexander the Great.
3. *Gymnosophists*, a sect of philosophers said to have been found in India by Alexander the Great.

THE CIVILIZATION OF TO-DAY

C. E. M. Joad

C. E. M. Joad, a popular English philosopher, was born in 1891 and died in 1953. He became head of the department of philosophy at Birkbeck College, University of London, in 1930. As a rationalist, he was a successful lecturer and writer. His works include *Common Sense Ethics*, *Common Sense Theology* and *Return to Philosophy*.

Praise of our Civilization: Order and Safety.—First and foremost there are order and safety. If to-day I have a quarrel with another man, I do not get beaten merely because I am physically weaker and he can knock me down. I go to law, and the law will decide as fairly as it can between the two of us. Thus in disputes between man and man right has taken the place of might. Moreover, the law protects me from robbery and violence. Nobody may come and break into my house, steal my goods or run off with my children. Of course there are burglars, but they are very rare, and the law punishes them whenever it catches them.

It is difficult for us to realize how much this safety means. Without safety those higher activities of mankind which make up civilization could not go on. The inventor could not invent, the scientist find out or the artist make beautiful things. Hence order and safety, although they are not themselves civilization, are things without which civilization would be impossible. They are as necessary to our civilization as the air we breathe is to us;

and we have grown so used to them that we do not notice them any more than we notice the air.

For all that, they are both new things and rare things. Except for a short period under the Roman Empire, there have been order and safety in Europe only during the last two hundred years, and even during that time there have been two revolutions and a great many wars; thus it is a great achievement of our civilization that to-day civilized men should in their ordinary daily lives be practically free from the fear of violence.

Health.—They are also largely free from the fear of pain. They still feel ill, but, since the use of anæsthetics became common, illness is no longer the terrible thing it used to be. And people are ill much less often. To be healthy, is not to be civilized—savages are often healthy, although not so often as is usually supposed—but unless you have good health, you cannot enjoy anything or achieve anything. There have, it is true, been great men who have been invalids, but their work was done in spite of their ill-health, and, good as it was, it would have been better had they been well. Not only do men and women enjoy better health; they live longer than they ever did before, and they have a much better chance of growing up.

It spreads Everywhere.—Thirdly, our civilization is more secure than any that have gone before it. This is because it is much more widely spread. Most of the previous civilizations known to history came to an end because vigorous but uncivilized peoples broke in upon them and destroyed them. This was the fate of Babylon and Assyria; it has happened over and over again in India and China; it brought about the end of Greece and the fall of Rome.

Now, whatever the dangers which threaten our civilization, and they are many, it seems likely to escape this one. Previous civilizations, as I have said before, were specialized and limited; they were like an oasis in a surrounding desert of savagery. Sooner or later the desert closed in and the oasis was no more. But to-day it is the oasis which is spreading over the desert. Modern civilization is a far-flung thing, it spreads over Europe and America and parts of Asia and Africa. Practically no part of the world is untouched by it. And, owing to the powers of destruction with which science has armed it, it is exceedingly unlikely that such savages or uncivilized peoples as are left in the world could prevail against it.

The World as One.—Thus the world has now for the first time a chance of becoming a single whole, a unity. So far as buying and selling and the exchange of goods are concerned, it is a unity already. I did not mention my meals when I described my ordinary day; if I had done so, I might have taken note of the fact that the food I eat comes from all over the world. The things in a grocer's shop, for instance, are from the ends of the earth; they come out of strange countries and over far-off seas. There are oranges from Brazil, dates from Africa, rice from India, tea from China, sugar from Demerara. No great Caliph, no Eastern king, not even Solomon¹ in all his glory, could draw on such rich stores of varied produce as the housewife who does her shopping at the grocer's. The fact that these things come to us from all over the world means that for the first time the world is becoming a single place, instead of a lot of separate places shut off from one another.

Until quite recently the nations of mankind lived in

a number of separate boxes holding no communication with each other except when the people in one box invaded those in the next, and some of the boxes were never opened at all. To-day there is constant coming and going between the boxes, so much so that the sides of the boxes are breaking down, and the world is beginning to look more like one enormous box. And by now all the boxes have been opened, so that there is little danger of unknown people breaking in upon our civilization from outside and destroying it. The danger comes rather from within; it is a danger from among ourselves. This brings me to other defects.

Defects of our Civilization.—To-day, with certain exceptions, there is little political oppression; men are equal before the law and in many countries have a voice in deciding how and by whom they shall be governed. But the sharing-out of money—which means the sharing-out of food and clothing and houses and books and so on—is still very unfair. In England alone one half of all the money which is divided every year (called the national income) is received by one-seventh of the population; which means that one half is divided among every sixteen people, and the seventeenth person gets the other half. So, while some few people live in luxury, many have not even enough to eat and drink and wear. Again, in England to-day thousands of people live in dreadful surroundings. There are many families of five or six persons who live in a single room; in this room they sleep and dress and eat their meals; in this same room they are born, and in this same room they die. And they live like this not for fun, but because they are too poor to afford another room.

It is, I think, clear that until everyone gets his proper

share of necessary and delightful things, our civilization will be far from perfect.

The Danger of War.—A still greater danger comes from war. Although the world is, so far as the buying and selling and exchanging of goods are concerned, a single whole, there are still barriers between nation and nation, barriers erected by the governments. For four years, from 1914 to 1918, the most destructive war that the world has known took place between the great nations of Western Europe. The causes of that war were very many, but chief among them were fear and pride. Each nation was afraid of the power of the other nations, and each nation was too proud to admit it. And because of this fear the nations spent great quantities of money in making rifles and cannons, in building battleships and in training soldiers, until Europe was like a big armed camp. A single match will set a hayrick ablaze, and, with all this war material lying about, Europe was like a hayrick waiting for its match. Almost any match would do; presently somebody struck one, and Europe blew up.

In spite of this last explosion there are to-day many more trained soldiers in the world than there were before the last war, and the nations are spending still more money on war preparation. They still pride themselves on being good at fighting more than on anything else, and each nation always thinks that it is going to win.

A little while ago an Eastern king, friendly to England, King Amanullah of Afghanistan, paid a visit to London to see what Western civilization was like. He was taken to see tanks at Lulworth Cove and bombing aeroplanes at Hendon;² he was given a trip in a submarine and allowed to fire a torpedo off Spithead,³ but nobody took

him to see the leading English poet, or indeed any poets or painters or musicians or makers of beautiful things. Nor was he taken to visit any scientists or philosophers. Three hundred years from now the Afghans reading about his visit in their history books will think the English must have been a very warlike nation who were not interested in the things of peace, and did not care enough about their civilization to want to show it off to visitors. It is, in fact, true that we are prouder of our battleships than of our poets, and spend far more money on destroying people in war than in making them happier and wiser in peace.* And what is true of England is just as true of the other countries. So long as the nations go on like this, it only wants another match to set the hayrick alight and it will blaze again. And so destructive has modern war become, that another blaze will probably burn up civilization altogether.†

What may prevent this is a body called the League of Nations. This was set up after the last war in order to provide a sort of law court for nations, to which they could bring their disputes for settlement. Just as private persons who quarrel no longer fight in the street but go to law, so, it was hoped, quarrelling nations who would previously have gone to war to settle their disputes would now go to the League of Nations instead. The League represents all the important nations of the world, and, although it is not yet strong enough to prevent wars, it may one day become so, especially if it has an international army and navy at its back which have been con-

* For example, England spends about 116 million pounds a year on preparations for war, whereas before the last war she spent only 40 millions.

† It has to be remembered that Mr. Joad wrote this in 1931.

tributed by all the different nations who belong to it. Thus, in the League of Nations lies one of the chief hopes for the world.

The Danger from Machines.—The third great defect of our civilization is that it does not know what to do with its knowledge. Science, as we have seen, has given us powers fit for the gods, yet we use them like small children.

For example, we do not know how to manage our machines. Machines, as I have already explained, were made to be man's servants; yet he has grown so dependent on them that they are in a fair way to become his masters. Already most men spend most of their lives looking after and waiting upon machines. And the machines are very stern masters. They must be fed with coal, and given petrol to drink, and oil to wash with, and they must be kept at the right temperature. And if they do not get their meals when they expect them, they grow sulky and refuse to work, or burst with rage, and blow up, and spread ruin and destruction all round them. So we have to wait upon them very attentively and do all that we can to keep them in a good temper. Already we find it difficult either to work or play without the machines, and a time may come when they will rule us altogether, just as we rule the animals.

What are we to do with our Time?—And this brings me back to the point at which I asked, a page or two back, "What do we do with all the time which the machines have saved for us, and the new energy they have given us?" On the whole, it must be admitted, we do very little. For the most part we use our time and energy to make more and better machines; but more

and better machines will only give us still more time and still more energy, and what are we to do with them?

The answer, I think, is that we should try to become more civilized. For the machines themselves, and the power which the machines have given us, are not civilization but aids to civilization. As I said at the beginning, there is nothing particularly civilized in getting into a train. But you will remember that we agreed at the beginning that being civilized meant making and liking beautiful things, thinking freely, and living rightly and maintaining justice equally between man and man. Man has a better chance to-day to do these things than he ever had before; he has more time, more energy, less to fear and less to fight against. If he will give this time and energy which his machines have won for him to making more beautiful things, to finding out more and more about the universe, to removing the causes of quarrels between nations, to discovering how to prevent poverty, then I think our civilization would undoubtedly be the greatest as it would be the most lasting that there has ever been.

—From *The Story of Civilization*

NOTES

1. *Solomon*, a great and wealthy king of the Jews. His wisdom has become proverbial.

2. *Hendon*, a town in Middlesex, England. It is part of Greater London and is an important air base.

3. *Spithead*, a roadstead on the south coast of England, off Portsmouth harbour, between Portsea Island and the north-east coast of the Isle of Wight. It is frequently an assembly point for the British fleet.

SELF-CULTURE

Samuel Smiles

"Every person has two educations, one which he receives from others, and one, more important, which he gives to himself."—*Gibbon*.

"These two things, contradictory as they seem, must go together—manly dependence and manly independence, manly reliance, and manly self-reliance."
—*Wordsworth*

Samuel Smiles (1812-1904) was a Scottish author who received his education at Haddington Grammar School and Edinburgh University. He devoted the leisure of a varied career to the advocacy of political and social reform and to the writing of the biographies of industrial leaders and humble self-taught students. His very popular books devoted to moral education and illustrated with biographical material include *Self-help*, *Character*, *Thrift*, and *Duty*. Besides these, he wrote the biography of George Stephenson and *Lives of the Engineers*.

"THE best part of every man's education," said Sir Walter Scott, "is that which he gives to himself." The education received at school or college is but a beginning, and is valuable chiefly because it trains the mind and makes it accustomed to continuous application and study. That which is put into us by others is always far less ours than that which we acquire by our own efforts. Knowledge conquered by labour becomes a possession—a property entirely our own. Our own active effort is the essential thing; and no facilities, no books, no teachers, no amount of lessons learnt by rote will enable us to do without it.

The best teachers have always emphasized the import-

ance of self-culture, and of stimulating the student to gain knowledge by the exercise of his own faculties. They have relied more upon *training* than upon *telling*, and have tried to make their pupils active partners in the work of their own education, but not mere passive receivers of information. This was the spirit in which Dr. Arnold, the great Headmaster of Rugby,¹ worked; he strove to teach his pupils to rely on themselves and develop their powers by their own active efforts, he himself mere guiding, directing, stimulating and encouraging them.

However poor a man may be, however lowly his station, he can, if he will, always do something towards educating himself. The number of men of humble station who have risen to distinction in science and literature, proves that labour can go along with the highest intellectual culture. Work in moderation is healthy, as well as agreeable to the human constitution. Work educates the body, as study educates the mind; and this is the best state of society in which there is some work for every man's leisure, and some leisure for every man's work. This is an advantage which the working class, strictly so called, certainly possess over the leisured class, that in early life they have to apply themselves laboriously to some mechanical pursuit or other, thus acquiring manual dexterity and the use of their physical power. The chief disadvantage of the labouring classes is, not that they are employed in physical work, but they are too exclusively so employed, often to the neglect of the moral and intellectual faculties. While the youths of the leisured classes, having been taught to regard labour as servile, grow up ignorant in practical affairs, the low classes, confining themselves to manual labour, have be-

allowed to grow up illiterate. It seems possible, however, to avoid both these evils by combining physical work or physical training with intellectual culture; and there are signs that a healthier system of education of this sort will be adopted. The training of young men in the use of tools would not only educate them in "common things", but would also teach them the use of their hands and arms, familiarize them with healthy work, give them some practical acquaintance with mechanics, and train them in the habit of persevering physical effort.

The use of early labour in self-imposed mechanical employments is illustrated by the boyhood of Sir Isaac Newton. Though a comparatively dull scholar, he was most assiduous in the use of his saw, hammer, and hatchet—"knocking and hammering in his lodging-room"—making models of windmills, carriages, and machines of all sorts; and as he grew older, he took delight in making little tables and cupboards for his friends. Smeaton,² Watt,³ and Stephenson,⁴ were equally handy with tools when mere boys: and but for such kind of self-culture in their youth, it is doubtful whether they would have accomplished so much in their manhood. Such was also the early training of the great inventors and mechanics whose contrivance and intelligence were practically trained by the constant use of their hands in early life. Even where men belonging to the manual labour class have risen above it, and become more purely intellectual labourers, they have found the advantages of their early training in their later pursuits. Elihu Burritt⁵ even found hard labour *necessary* to enable him to study with effect; and more than once he gave up school-keeping and study, and, taking to his leather apron again, went back to his

blacksmith's forge and anvil, for his health of body and mind's sake.

The same view was well urged by Mr. R. M. Milnes,⁶ M.P., at a recent meeting of a mechanics' institute. "He believed," he said, "that the habit of mechanical work—precise, earnest, industrious, good, mechanical work—would best lead men on to good mental and intellectual work. A good workman in the materials of life would, if he had the talent, be a good workman in the materials of the mind; and thus it was that they found that the most remarkable men who had risen from the lower ranks of society, had not risen from those who had abstained from work, but from those who had been the most industrious, the most active, and the most intelligent in their own mechanical occupations. There were two things which operated against young men advancing in intellectual progress—over-work and under-work. He thought it no disadvantage whatever to a man's intellectual progress to have something else to do; and if they looked at the upper classes of society they would find it was equally true in their case as it was in their own namely, that the man who had the most active occupation was the man who in public life the most distinguished himself, and became the most useful to his country."

Mental self-culture always means hard work and sustained application. It is as foolish to expect to acquire self-culture without labour, as to look for a harvest where the seed has not been sown. The road into knowledge is free to all who will give the labour and study necessary; and there are no difficulties so great that the student of resolute purpose cannot overcome. Sir Joshua Reynolds,⁷ as we have already pointed out, was so earnest a believer

in the power of industry, that he held that all men might achieve excellence by earnest and patient working. He held that drudgery was on the road of genius, and there were no limits to the proficiency of an artist except the limits of his own painstaking. He would not believe in what is called inspiration, but only in study and labour. "Excellence," he said, "is never granted to man but as the reward of labour." "If you have great talents, industry will improve them; if you have but moderate abilities, industry will supply their deficiency. Nothing is denied to well-directed labour; nothing is to be obtained without it."

There is no want of desire on the part of most persons at this day to arrive at the results of self-culture, but there is a great aversion to pay the necessary price for it, namely, hard work. Dr. Johnson held that "impatience of study was the mental disease of the present generation"; and the remark still holds true. We may not believe that there is a royal road to learning, but we seem to believe very firmly in a "popular" one. In education, we invent labour-saving processes, seek short cuts to science, learn French and Latin "in twelve lessons", or "without a master". We resemble the lady of fashion, who engaged a master to teach her a language on condition that he did not plague her with verbs and participles. We get our smattering of science in the same way; we learn chemistry by listening to a short course of lectures enlivened by experiments, and when we have inhaled laughing gas, seen green water turned to red, and phosphorus burnt in oxygen, we have got our smattering, of which the most that can be said is that, though it may be better than nothing, it is yet good for nothing. Thus we often

imagine we are being educated while we are only being amused.

But it will not do; all such labour-saving processes—indeed, all pretended methods of insinuating knowledge into the mind without study and labour—are delusive, and end only in disappointment. To be wise we must diligently apply ourselves, and use the same continuous application which our forefathers did; for labour is still, and ever will be, the price set upon everything which is valuable. We must be satisfied to work energetically with a purpose, and wait the results with patience. Buffon ⁸ has even said of patience, that it is genius; the power of great men, in his opinion, consisting mainly in their power of continuous working and waiting. All progress, of the best kind, is slow; but to him who works faithfully and in a right spirit, be sure that the reward will be given in its own good time. “Courage and industry,” says Sharpe,⁹ “must have sunk in despair, and the world must have remained unimproved, if men had merely compared the effect of a single stroke of the chisel with the pyramid to be raised, or of a single impression of the spade with the mountain to be levelled.” We must continuously apply ourselves to right pursuits, and we cannot fail to advance steadily, though it may be unconsciously. By degrees, the spirit of industry, exercised in the common forms of education, will be transferred to objects of greater dignity and more extensive usefulness. And still we must work on; for the work of self-culture is never finished. “To be employed,” said the poet Gray, “is to be happy.” “It is better to wear out than rust out,” said Bishop Cumberland.¹⁰ “Have we not all eternity to rest in?” exclaimed Arnauld.¹¹

Thoroughness and accuracy are two principal points to be aimed at in study. Francis Horner, in laying down rules for the cultivation of his mind and character, placed great stress upon the habit of continuous application to one subject for the sake of mastering it thoroughly; confining himself, with this object, to but a few books, and resisting with the greatest firmness "every approach to a habit of desultory reading". The value of knowledge to any man certainly does not consist in its quantity, but mainly in the good uses to which he may apply it. Hence a little knowledge of an exact and perfect character, is always found more valuable for practical purposes than any extent of superficial learning. We talk of "the *spread* of knowledge" in these days, but I fear the knowledge is spread so widely, and in such thin layers, that it only serves to reveal the mass of ignorance lying beneath. Never perhaps were books more extensively read, or less studied: and the number is rapidly increasing of those who know a little of everything, but nothing well. Such readers have been likened to a certain sort of pocket-knife which some people carry about with them, which in addition to a common knife, contains a file, a chisel, a saw, a gimlet, a screw-driver, and a pair of scissors, but all so small that the moment they are needed for use, they are found useless.

One of Ignatius Loyola's¹² maxims was, "He who does well one work at a time, does more than all." By spreading our efforts over too large a surface we weaken our force, hinder our progress, and form a habit of fitfulness and ineffective working. Whatever a youth undertakes to learn, he should not leave it until he can reach his arms round it and clench his hands on the other side. Thus he

will learn the habit of thoroughness. Lord St. Leonards¹³ once explained to Sir Foxwell Buxton¹⁴ the way in which he had conducted his studies. "I resolved," said he, "when beginning to read law, to make everything I acquired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but, at the end of twelve months, my knowledge was as fresh as the day it was acquired, while theirs had glided away from recollection." Sir E. B. Lytton,¹⁵ once explaining how it was that, whilst so fully engaged in active life, he had written so many books, said, "I contrive to do so much by never doing too much at a time. As a general rule, I have devoted to study not more than three hours a day; and, when Parliament is sitting, not always that. But then, during those hours, I have given my whole attention to what I was about."

It is not the quantity of study that one gets through, or the amount of reading, that makes a wise man; but the suitableness of the study to the purpose for which it is pursued; the concentration of the mind for the time being upon the subject under consideration; and the habit of mental discipline. Abernethy was even of opinion that there was a point of saturation in his own mind, and that if he took into it something more than it could hold, it only had the effect of pushing something else out. Speaking of the study of medicine, he said, "If a man has a clear idea of what he desires to do, he will seldom fail in selecting the proper means of accomplishing it." The most profitable study is that which is conducted with a definite and specific object—all observation, reflection, and reading being directed upon it for the time being.

By thoroughly mastering any given branch of knowledge, we render it much more available for use at any moment. Hence it is not enough merely to have books, or to know where to read up for information as we want it. Practical wisdom, for the purposes of life, must be carried about with us, and be ready for use at call. It is not sufficient that we have a fund laid up at home, but not a farthing in the pocket: we must carry about with us a store of the current coin of knowledge ready for exchange on all occasions, else we are comparatively helpless when the opportunity for action occurs.

An often quoted expression is that "Knowledge is power"; but so also are fanaticism, despotism, and ambition. Knowledge of itself, unless wisely directed, may merely make bad men more dangerous. Knowledge must be allied to goodness and wisdom, and embodied in upright character, else it is naught. Pestalozzi¹⁶ even held intellectual training by itself to be pernicious; insisting that the roots of knowledge must strike and feed in the soil of the religious rightly-governed will. The acquisition of knowledge may, it is true, protect a man against the meaner felonies of life; but not in any degree against its selfish vices, unless fortified by sound principles and habits. Hence do we find in daily life so many instances of men who are well-informed in intellect, but utterly deformed in character; filled with the learning of the schools, yet possessing little practical wisdom, and offering examples rather for warning than imitation.

It is possible that at this day we may even exaggerate the importance of literary culture. We are apt to imagine that because we possess many libraries, institutes, and museums, we are making great progress. But such

facilities may as often be a hindrance as a help to individual self-culture of the highest kind. The possession of a library, or the free use of it, no more constitutes learning, than the possession of wealth constitutes generosity. Though we undoubtedly possess great facilities, it is nevertheless true, as of old, that wisdom and understanding can only become the possession of individual men by travelling the old road of observation, attention, perseverance, and industry. The possession of the mere materials of knowledge is something very different from wisdom and understanding, which are reached through a higher kind of discipline than that of reading.

The multitude of books which modern readers wade through, may produce distinction as much as culture. Reading is often but a mere passive reception of other men's thoughts; there being little or no active effort of the mind in the transaction. Then how much of our reading is but a sort of indulgence, an intellectual dram-drinking, creating a grateful excitement for the moment, without the slightest effect in improving and enriching the mind or building up the character. Thus many think that they are cultivating their minds, when they are only killing time; of which perhaps the best that can be said is, that it merely keeps them from doing worse things.

It is also to be borne in mind that the experience gathered from books, though often valuable, is but of the nature of *learning*; whereas the experience gained from actual life is of the nature of *wisdom*; and a small store of the latter is worth vastly more than any stock of the former. Lord Bolingbroke¹⁷ truly said that "Whatever study tends neither directly nor indirectly to make us better men and citizens, is at best but a specious and

ingenious sort of idleness, and the knowledge we acquire by it, only a creditable kind of ignorance—nothing more.”

Useful though good reading may be, it is yet only one mode of cultivating the mind; and is much less influential than practical experience and good example in the formation of character. There were wise, valiant, and true-hearted men bred in England, long before the existence of a reading public. Magna Carta was secured by men who signed the deed with their marks. Thus the foundations of English liberty were laid by men, who, though illiterate, were nevertheless of the very highest stamp of character. And it must be admitted that the chief object of culture is, not merely to fill the mind with other men's thoughts, but to enlarge our intelligence, and render us more efficient workers in the sphere of life to which we may be called.

It is not how much a man may know that is of so much importance, as the end and purpose for which he knows it. The object of knowledge should be, to mature wisdom and improve character, to render us better, happier and more useful; more benevolent, more energetic, and more efficient in the pursuit of every high purpose in life. We must ourselves *be* and *do*, and not rest satisfied merely with reading and meditating over what other men have been and done. Our best light must be made life, and our best thought, action. The humblest and least literate must train his sense of duty, and accustom himself to an orderly and diligent life. Though talents are the gift of nature, the highest virtue may be acquired by men of the humblest abilities, through careful self-discipline. At least we ought to be

able to say, as Richter¹⁸ did, "I have made as much out of myself as could be made of the stuff, and no man should require more."

Self-respect is the noblest garment with which a man may clothe himself—the most elevating feeling with which the mind can be inspired. One of Pythagoras's¹⁹ wisest maxims, in his Golden Verses, is that in which he enjoins the pupil to "reverence himself". Borne up by this high idea, he will not defile his body by sensuality, nor his mind by servile thoughts. Self-respect, carried into daily life, will be found at the root of all the virtues—cleanliness, sobriety, chastity, morality, and religion. To think meanly of oneself is to sink in one's own estimation as well as in the estimation of others. And as the thoughts are, so will the acts be. A man cannot live a high life who grovels in a moral sewer of his own thoughts. He cannot aspire if he look down; if he will rise, he must look up. The very humblest may be sustained by the proper indulgence of this feeling; and poverty itself may be lifted and lighted up by self-respect. It is truly a noble sight to see a poor man hold himself upright amidst all his temptations, and refuse to demean himself by low actions.

It is not necessary that we should insist on the uses of knowledge as a means of "getting on" in life. This is already sufficiently taught by obvious self-interest; and it is beginning to be pretty generally understood, that self-culture is one of the best possible investments of time and labour. In any line of life, intelligence will enable a man to adapt himself more readily to circumstances, suggest to him improved methods of work, and render him more apt, skilled, and effective in all respects. He

who works with his head as well as his hands, will come to look at his business with a clearer eye; and he will become conscious of increasing power. The power of self-help will gradually grow; and in proportion to a man's self-respect, will he be armed against the temptation of low indulgences. Society and its action will be regarded with quite a new interest, his sympathies will widen and enlarge, and he will be attached to work for others as well as for himself.

Self-culture may not, however, end in eminence, such as we have briefly described in the numerous instances of self-raised individuals above cited. The great majority of men, in all times, however enlightened, must necessarily be engaged in the ordinary callings of industry; and no degree of culture which can be conferred upon the community will ever enable them to get rid of the daily work of society, which must be done. But this, we think, may also be accomplished. We can elevate the condition of labour by allying it to noble thoughts, which confer a grace upon the lowliest as well as the highest rank. For no matter how poor or humble a man may be, the great thinker of this and other days may come in and sit down with him, and be his companion for the time, though his dwelling be the meanest hut. It is thus that the habit of well-directed reading may become a source of the greatest pleasure and self-improvement. And even though self-culture may not bring wealth, it will at all events give us the good company of elevated thoughts. A nobleman once contemptuously asked of a sage, "What have you got by all your philosophy?" "At least I have got society in myself," was the wise man's reply.

—From *Self-help*

NOTES

1. *Rugby*, Rugby school was founded in England in 1567. Dr. Thomas Arnold was its headmaster from 1828 to 1842.
2. *John Smeaton* (1724-92), an English civil engineer.
3. *James Watt* (1736-1819), a Scottish inventor, who invented the modern condensing steam engine. The watt, a unit of power, is named after him.
4. *George Stephenson* (1781-1848), English engineer and inventor, noted as a locomotive-builder. He was the founder of railways.
5. *Elihu Burritt* (1810-79), American worker for world peace. Popularly called "the Learned Blacksmith".
6. *R. M. Milnes* (1809-85), 1st Baron Houghton, English author, philanthropist, and patron of letters.
7. *Sir Joshua Reynolds* (1723-92), English portrait painter.
8. *Buffon* (1707-88), French naturalist and author.
9. *William Sharpe* (1855-1905), Scottish poet and man of letters.
10. *Bishop Cumberland* (1631-1718), English philosopher. He was the bishop of Peterborough.
11. *Arnauld* (1612-94), a French priest, philosopher, and theologian.
12. *Ignatius of Loyola* (1491-1556), Spanish founder of the Jesuits.
13. *Lord St. Leonards* (1781-1875), English jurist. He was Solicitor-General and later Lord Chancellor of Great Britain.
14. *Sir Foxwell Buxton* (1786-1845), English social reformer and Member of Parliament.
15. *Sir E. B. Lytton* (1803-73), English novelist, poet, and dramatist. He was also a Member of Parliament and was Colonial Secretary from 1858 to 1859.
16. *Pestalozzi* (1746-1827), Swiss educational reformer.
17. *Lord Bolingbroke* (1678-1751), English statesman and orator. He was in charge of negotiations that led to the treaty of Utrecht in 1713.
18. *Richter* (1763-1825), German author.
19. *Pythagoras* (6th century B.C.), Greek philosopher and mathematician, famed for the theorem that bears his name.

ECONOMIC *VERSUS* MORAL PROGRESS *

Mahatma Gandhi

Mahatma Gandhi (1869-1948) will go down in history as the Father of the Indian Nation. In fact the history of India's struggle for Independence is the story of Mahatma Gandhi's life. He has been called a saint among politicians and a politician among saints. He placed before the world new ideals and taught his generation never to lose sight of moral values in the glamour of economic progress. As an apostle of Truth and Non-violence his way of life offers the East and the West a cure for ancient and current ills. He has a message for every individual struggling for Human Freedom.

DOES economic progress clash with real progress? By economic progress, I take it, we mean material advancement without limit, and by real progress we mean moral progress, which again is the same thing as progress of the permanent element in us. The subject may therefore be stated thus: Does not moral progress increase in the same proportion as material progress? I know that this is a wider proposition than the one before us. But I venture to think that we always mean the large one even when we lay down the smaller. For we know enough of science to realize that there is no such thing as perfect rest or repose in this visible universe of ours. If, therefore, material progress does not clash with moral progress, it must necessarily advance the latter. Nor can we be satisfied with the clumsy way in which sometimes those

* Address delivered at a meeting of the Muir Central College Economic Society, held at Allahabad on the 22nd December, 1916.

who cannot defend the large proposition put their case. They seem to be obsessed with the concrete case of thirty millions of Indians, stated by the late Sir William Wilson Hunter ¹ to be living on one meal a day. They say that, before we can think or talk of their moral welfare, we must satisfy their daily wants. With these, they say, material progress spells moral progress. And then is taken a sudden jump; what is true of thirty millions is true of the universe. They forget that hard cases make bad law. I need hardly say to you how ludicrously absurd this deduction would be. No one has ever suggested that grinding pauperism can lead to anything else than moral degradation. Every human being has a right to live and therefore to find the wherewithal to feed himself and where necessary to clothe and house himself. But for this very simple performance we need no assistance from economists or their laws.

“Take no thought for the morrow” is an injunction which finds an echo in almost all the religious scriptures of the world. In a well-ordered society the securing of one’s livelihood should be and is found to be the easiest thing in the world. Indeed, the test of orderliness in a country is not the number of millionaires it owns, but the absence of starvation among its masses. The only statement that has to be examined is, whether it can be laid down as a law of universal application that material advancement means moral progress.

Now let us take a few illustrations. Rome suffered moral fall when it attained high material affluence. So did Egypt and perhaps most countries of which we have any historical record. The descendants and kinsmen of the royal and divine Krishna too fell when they were rolling

in riches. We do not deny to the Rockefellers and the Carnegies ² possession of an ordinary measure of morality, but we gladly judge them indulgently. I mean that we do not even expect them to satisfy the highest standard of morality. With them material gain has not necessarily meant moral gain. In South Africa, where I had the privilege of associating with thousands of our countrymen on most intimate terms, I observed almost invariably that the greater the possession of riches, the greater was their moral turpitude. Our rich men, to say the least, did not advance the moral struggle of passive resistance as did the poor. The rich men's sense of self-respect was not so much injured as that of the poorest. If I were not afraid of treading on dangerous ground, I would even come nearer home and show how possession of riches has been a hindrance to real growth. I venture to think that the scriptures of the world are far safer and sounder treatises on laws of economics than many of the modern textbooks. The question we are asking ourselves this evening is not a new one. It was addressed to Jesus two thousand years ago. St. Mark ³ has vividly described the scene. Jesus is in his solemn mood. He is earnest. He talks of eternity. He knows the world about him. He is himself the greatest economist of his time. He succeeded in economizing time and space—he transcended them. It is to him at his best that one comes running, kneels down, and asks: "Good Master, what shall I do that I may inherit eternal life? And Jesus said unto him: Why callest thou me good? *there is none good but one, that is, God.* Thou knowest the commandments, Do not commit adultery, Do not kill, Do not steal, Do not bear false witness, Defraud not, Honour thy father and mother.

And he answered and said unto him, Master, all these have I observed from my youth. Then Jesus beholding him loved him, and said unto him, One thing thou lackest: go thy way, sell whatsoever thou hast, and give to the poor, and thou shalt have treasure in heaven: and come, take up the cross, and follow me. And he was sad at that saying, and went away grieved: for he had great possessions. And Jesus looked round about, and saith unto his disciples, How hardly shall they that have riches enter into the kingdom of God! And the disciples were astonished at his words. But Jesus answereth again, and saith unto them, Children, how hard is it for them that trust in riches to enter into the kingdom of God! It is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God." Here you have an eternal rule of life stated in the noblest words. But the disciples nodded unbelief as we do even to this day. To him they said as we say to-day: "But look how the law fails in practice. If we sell all and have nothing, we shall have nothing to eat. We must have money or we cannot even be reasonably moral." So they state their case thus: "And they were astonished out of measure, saying among themselves, Who then can be saved? And Jesus looking upon them saith, With men *it is impossible*, but not with God: for with God all things are possible. Then Peter ⁴ began to say unto him, Lo, we have left all, and have followed thee. And Jesus answered and said, Verily I say unto you, There is no man that hath left house, or brethren, or sisters, or father, or mother, or wife, or children, or lands, for my sake, and the gospel's. But he shall receive an hundredfold now in this time, houses, and brethren, and sisters, and

mothers, and children, and lands, with persecutions; and in the world to come eternal life. But many *that are* first shall be last; and the last first." You have here the result or reward, if you prefer the term, of following the law. I have not taken the trouble of copying similar passages from the other non-Hindu scriptures, and I will not insult you by quoting, in support of the law stated by Jesus, passages from the writings and sayings of our own sages, passages even stronger, if possible, than the Biblical extracts I have drawn your attention to. Perhaps the strongest of all the testimonies in favour of the affirmative answer to the question before us are the lives of the greatest teachers of the world. Jesus, Mahomed, Buddha, Nanak, Kabir, Chaitanya, Shankara, Dayanand, Ramkrishna were men who exercised an immense influence over, and moulded the character of, thousands of men. The world is the richer for their having lived in it. And they were all men who deliberately embraced poverty as their lot.

I should not have laboured my point as I have done, if I did not believe that, in so far as we have made the modern materialistic craze our goal, we are going down hill in the path of progress. I hold that economic progress in the sense I have put it, is antagonistic to real progress. Hence the ancient ideal has been the limitation of activities promoting wealth. This does not put an end to all material ambition. We should still have, as we have always had, in our midst people who make the pursuit of wealth their aim in life. But we have always recognized that it is a fall from the ideal. It is a beautiful thing to know that the wealthiest among us have often felt that to have remained voluntarily poor would have been a

higher state for them. That you cannot serve God and Mammon,⁵ is an economic truth of the highest value. We have to take our choice. Western nations are to-day groaning under the heels of the monster god of materialism. Their moral growth has become stunted. They measure their progress in £. s. d. American wealth has become the standard. America is the envy of the other nations. I have heard many of our countrymen say that we will gain American wealth, but avoid American methods. I venture to suggest that such an attempt, if it were made, is foredoomed to failure. We cannot be "wise, temperate and furious" in a moment. I would have our leaders teach us to be morally supreme in the world. This land of ours was once, we are told, the abode of the gods. It is not possible to conceive gods inhabiting a land which is made hideous by the smoke and the din of mill chimneys and factories and whose roadways are traversed by rushing engines, dragging numerous cars crowded with men who know not for the most part what they are after, who are often absent-minded, and whose tempers do not improve by being uncomfortably packed like sardines in boxes and finding themselves in the midst of utter strangers, who would oust them if they could and whom they would, in their turn, oust similarly. I refer to these things because they are held to be symbolical of material progress. But they add not an atom to our happiness. This is what Wallace,⁶ the great scientist, has said as his deliberate judgment:—

"In the earliest records which have come down to us from the past, we find ample indications that general ethical considerations and conceptions, the accepted standard of morality, and the conduct resulting from

these, were in no degree inferior to those which prevail to-day."

In a series of chapters he then proceeds to examine the position of the English nation under the advance in wealth it has made. He says: "This rapid growth of wealth and increase of our power over Nature put too great a strain upon our crude civilization, on our superficial Christianity, and it was accompanied by various forms of social immorality almost as amazing and unprecedented." He then shows how factories have risen on the corpses of men, women and children, how, as the country has rapidly advanced in riches, it has gone down in morality. He shows this by dealing with insanitation, life-destroying trades, adulteration, bribery and gambling. He shows how with the advance of wealth, justice has become immoral, deaths from alcoholism and suicide have increased, the average of premature births, and congenital defects has increased and prostitution has become an institution. He concluded his examination with these pregnant remarks:—

"The proceedings of the divorce courts show other aspects of the result of wealth and leisure, while a friend who had been a good deal in London society assured me that, both in country houses and in London, various kinds of orgies were occasionally to be met with, which would hardly have been surpassed in the period of the most dissolute emperors. Of war, too, I need say nothing. It has always been more or less chronic since the rise of the Roman Empire; but there is now undoubtedly a disinclination for war among all civilized peoples. Yet the vast burden of armaments, taken together with the most pious declarations in favour of peace, must be held

to show an almost total absence of morality as a guiding principle among the governing classes."

Under the British aegis we have learnt much, but it is my firm belief that there is little to gain from Britain in intrinsic morality, that if we are not careful, we shall introduce all the vices that she has been a prey to owing to the disease of materialism. We can profit by that connection only if we keep our civilization, and our morals straight, i.e., if, instead of boasting of the glorious past, we express the ancient moral glory in our own lives and let our lives bear witness to our boast. Then we shall benefit her and ourselves. If we copy her because she provides us with rulers, both they and we shall suffer degradation. We need not be afraid of ideals or of reducing them to practice even to the uttermost. Ours will only then be a truly spiritual nation when we shall show more truth than gold, greater fearlessness than pomp of power and wealth, greater charity than love of self. If we will but clear our houses, our palaces and temples of the attributes of wealth and show in them the attributes of morality, we can offer battle to any combinations of hostile forces without having to carry the burden of a heavy militia. Let us seek first the Kingdom of God and His righteousness, and the irrevocable promise is that everything will be added unto us. These are real economics. May you and I treasure them and enforce them in our daily life!

—From *Speeches and Writings of M. K. Gandhi*

NOTES

1. *Sir William Wilson Hunter* (1840–1900), a distinguished Indian Civil Servant.
2. *Rockefeller, Carnegie*, two great American capitalists and philanthropists.
3. *St Mark*, an Apostle of Christ.
4. *Peter*, an Apostle of Christ.
5. *Mammon*, god of wealth or riches. Worldliness.
6. *Alfred Russell Wallace* (1823–1913), an English scientist.

THE SUCCESS OF NON-VIOLENCE

Shri Jawaharlal Nehru

Jawaharlal Nehru, who was born in 1889, has become a legendary figure even in his lifetime. "A prince among men", he is the idol of the Indian nation to-day, and a new India is being born under his guidance. As the author of India's foreign policy, he speaks not only for the whole of Asia but for all the peace-loving peoples of the world. But for his policy of dynamic neutrality and his refusal to allow India to align herself with any of the great power-groups of East and West, the world might well have been plunged into yet another ghastly war. This extract beautifully explains the fundamentals of India's foreign policy and the ideals for which India stands under the leadership of Shri Jawaharlal Nehru.

MR. PRESIDENT, I am deeply grateful to this great University and to you, Sir, for the honour you have done me in inviting me to-day and in conferring the honorary degree of Doctor of Laws.

It is an honour to be associated with this University and with many men of learning and seekers after truth assembled here, and I shall treasure it. To have that signal honour conferred upon me by one who has played such a distinguished part in both war and peace, adds to its value.

I have come to you not so much in my capacity as Prime Minister of a great country or as a politician, but rather as a humble seeker after truth and as one who has continuously struggled to find a way, not always with success, to fit action to the objectives and ideals that I have held.

That process is always difficult, but becomes increasingly so in this world of conflict and passion to-day.

Politicians have to deal with day-to-day problems and they seek immediate remedies. Philosophers think of ultimate objectives and are apt to lose touch with the day-to-day work and its problems. Neither approach appears to be adequate by itself. Is it possible to combine these two approaches and function after the manner of Plato's philosopher-kings? ¹

You, Sir, have had the experience of the rôle of a great man of action and also of that of a philosopher as the head of this University, and should be able to help us to answer this question.

In this world of incessant and feverish activity men have little time to think, and much less to consider ideals and objectives; yet how are we to act even in the present unless we know which way we are going and what our objectives are?

It is only in the peaceful atmosphere of a University that these problems can be adequately considered.

It is only when the young men and women who are in the University to-day, and on whom the burden of life's problems will fall to-morrow, learn to have clear objectives and standards of value that there is any hope for the next generation.

The past generation produced some great men, but as a generation it led the world repeatedly to disaster. Two world wars are the price that has been paid for the lack of wisdom on man's part in this generation. It is a terrible price, and the tragedy of it is that even after that price was paid we have not purchased real peace nor a cessation of conflict, and an even deeper tragedy is that mankind

does not profit by its experience and continues the same way which had led previously to disaster.

We have had wars and we have had a victory; yet what is victory and how do we measure it?

A war is fought usually to gain certain objectives. The defeat of the enemy is not by itself an objective but rather the removal of an obstruction towards the attainment of the objective. If that objective is not attained, then that victory over the enemy brings only negative relief and indeed, is no real victory.

We have seen, however, that the aim in wars is almost entirely to defeat the enemy, and that the other and real objective is often forgotten. The result has been that the victory attained by defeating the enemy has only been a very partial one and has not solved the real problem, or if it has solved the immediate problem, it has at the same time given rise to many other and, sometimes, worse problems. Therefore, it becomes necessary to have the real objective clear in our minds at all times, whether in war or in peace, and always to aim at achieving that objective.

I think also that there is always a close and intimate relationship between the end we aim at and the means adopted to attain it. Even if the end is right but the means is wrong, that will vitiate the end or divert it into a wrong direction. Means and ends are thus intimately and inextricably connected and cannot be separated. That, indeed, has been the lesson taught us by many great men in the past, but unfortunately it is seldom remembered.

I am venturing to place some of these ideas before you not because they are novel, but because they have im-

pressed themselves upon me in the course of my life which has been spent in alternating periods of incessant activity and conflict, and enforced leisure.

The great leader of my country, Mahatma Gandhi, under whose inspiration and sheltering care I grew up, always laid stress on moral values and warned us never to subordinate means to ends. We are not worthy of him and yet, to the best of our ability, we try to follow his teaching. Even the limited extent to which we could follow his teaching yielded rich results. After a generation of intense struggle with a great and powerful nation, we achieved success, and perhaps the most significant part of that achievement, for which credit is due to both parties, was the manner of it. History hardly affords a parallel to this solution of such a conflict in a peaceful way, followed by friendly and co-operative relations. It is astonishing how rapidly bitterness and ill-will between the nations have faded away and given place to co-operation, and we in India have decided of our own free will to continue this co-operation as an independent nation.

I would not presume to offer advice to other and more experienced nations in any way, but may I suggest for your consideration that there is some lesson in India's peaceful evolution which might be applied to the larger problems before the world to-day?

That evolution demonstrates to us that physical force need not necessarily be the arbiter of man's destiny, and that the method of waging a struggle and the way of its termination are of paramount importance. Past history shows us the important part that physical force has played, but it also shows us that no such force can ultimately ignore the moral forces of the world, and if it

attempts to do so, it does so at its peril. To-day this problem faces us in all its intensity because the weapons that physical force has at its disposal are terrible to contemplate.

Must the twentieth century differ from primitive barbarism only in the destructive efficacy of the weapons that man's ingenuity has invented for man's destruction?

I do believe, in accordance with my master's teaching, that there is another way to meet this situation that faces us.

I realize that a statesman or a man who has to deal with public affairs cannot ignore realities and cannot act in terms of abstract truth. His activity is always limited by the degree of receptivity of the truth by his fellowmen. Nevertheless, the basic truth remains and is always to be kept in view and, so far as possible, it should guide our actions. Otherwise, we get caught up in a vicious circle of evil when one evil action leads to another.

India is a very old country with a great past. But it is a new country also, with new urges and desires. Since August, 1947, she had been in a position to pursue her own foreign policy. She was limited by the realities of the situation which she could not ignore or overcome. But even so she could not forget the lesson of her great leader. She has tried to adapt, however imperfectly, theory to reality in so far as she could. In the family of nations she was a newcomer and could not influence them greatly to begin with. But she had a certain advantage. She had great potential resources which no doubt would increase power and influence.

A greater advantage lay in the fact that she was not fettered by the past, by old enmities or old ties, by historic

claims or traditional rivalries. Even against her former rulers there was no bitterness left. Thus, India came into the family of nations with no prejudices or enmities, ready to welcome and be welcomed. Inevitably she had to consider her foreign policy in terms of enlightened self-interest, but at the same time she brought to it a touch of her idealism. Thus she has tried to combine idealism with national interest.

The main objectives of that policy are: the pursuit of peace, not through alignment with any major Power or group of Powers, but through an independent approach to each controversial or disputed issue: the liberation of subject peoples: the maintenance of freedom, both national and individual: the elimination of racial discrimination: and the elimination of want, disease and ignorance which afflict the greater part of the world's population.

I am asked frequently why India does not align herself with any particular nation or group of nations, and told that because we have refrained from doing so, we are sitting on the fence. The question and the comment are easily understandable, because in times of crisis it is not unnatural for those who are involved in it deeply to regard calm objectivity in others as other than irresponsible, short-sighted, negative, unreal, or even unmanly. But I should like to make it clear that the policy India has sought to pursue is not a negative and neutral policy. It is a positive and vital policy, which flows from our struggle for freedom and from the teaching of Mahatma Gandhi.

Peace is not only an absolute necessity for us in India in order to progress and develop, but it is also of para-

mount importance to the world. How can that peace be preserved? Not by compromising with evil or injustice: but also not by talking of and preparing for war.

Aggression has to be met, for it endangers peace. At the same time the lesson of the last war has to be remembered, and it seems to me astonishing that in spite of that lesson we go the same way. The very process of marshall-ing the world into two hostile camps precipitates the conflict which it is sought to avoid. It produces also a terrible fear. That fear darkens men's minds and leads them into wrong courses. There is perhaps nothing so bad and so dangerous in life as fear. As a great President of the United States said, "There is nothing really to fear except fear itself."

Our problem, therefore, becomes one of lessening and, ultimately, putting an end to this fear. That will not happen if all the world takes sides and talks of war. War becomes almost certain then. We are a member of the family of nations, and we have no wish to shirk any of the obligations and burdens of that membership. We have accepted fully the obligations of membership of the U.N. and intend to abide by them. We wish to make our full contribution to the common store and to render our full measure of service. But that can only be done effectively in our own way and of our own choice. We believe passionately in the democratic method and we seek to enlarge the bounds of democracy both on the political and economic planes, for no democracy can exist long in the midst of want and poverty and inequality.

Our immediate needs are for economic betterment and raising the standards of our people. The more we succeed

in this, the more we can serve the cause of peace in the world. We are fully aware of our weaknesses and failings, and claim no superior virtue, but we do not wish to forfeit the advantage that our present detachment gives us, and we believe that the maintenance of that detachment is not only in our interest but also in the interest of world peace and freedom. That detachment is neither isolationism nor indifference nor neutrality when peace or freedom is threatened. When man's liberty or peace is in danger we cannot and shall not be neutral; neutrality, then, will be a betrayal of what we have fought for and stand for.

If we seek to ensure peace, we must attack the root causes of war and not merely the symptoms. What are the underlying causes of war in the modern world?

One of the basic causes is the domination of one country by another, or the attempt to dominate. Large parts of Asia were ruled till recently by foreign and chiefly European Powers. We ourselves were part of the British Empire, as were also Pakistan, Ceylon and Burma. France, Holland and Portugal still have territories over which they rule. But the rising tide of nationalism and the love of independence have submerged most of the Western Empires in Asia. In Indonesia, I hope that there will soon be an independent, sovereign State. We hope also that French Indo-China will achieve freedom and peace before long under a Government of its own choice. Much of Africa, however, is subject to foreign Powers, some of whom still attempt to enlarge their dominions. It is clear that all remaining vestiges of imperialism and colonialism will have to disappear.

Secondly, there is the problem of racial relations.

The progress of some races in knowledge or in invention, their success in war and conquest, have tempted them to believe that they are racially superior and have led them to treat other nations with contempt. A recent example of this was the horrible attempt, so largely successful, to exterminate the Jews. In Asia and Africa, racial superiority has been most openly and most insolently exhibited. It is forgotten that nearly all the great religions of mankind arose in the East and that wonderful civilizations grew up there when Europe and America were still unknown in history.

1 The West has too often despised the Asian and the African and still in many places denies them not only equality of rights but even common humanity and kindness. This is one of the great danger points in our modern world; and now that Asia and Africa are shaking off their torpor and arousing themselves, out of this evil may come a conflagration of which no man can see the range or consequences.

One of your greatest men said that this country cannot exist half slave and half free. The world cannot long maintain peace if half of it is enslaved and despised. The problem is not always simple, nor can it be solved by a resolution or a decree; but unless there is a firm and sincere determination to solve it, there will be no peace.

, The third reason for war and revolution is the misery and want of millions of persons in many countries, and in particular in Asia and Africa. In the West, though the war has brought misery and many difficulties, the common man generally lives in some measure of comfort—he has food, clothes, shelter to some extent. The basic problem of the East, therefore, is to obtain these necessities of life.

If they are lacking, then there is the apathy of despair or the destructive rage of the revolutionary.

Political subjection, racial inequality, economic inequality and misery—these are the evils which we have to remove if we would ensure peace. If we can offer no remedy, then other cries and slogans make an appeal to the minds of the people.

Many of the countries of Asia have entered the family of nations; others, we hope, will soon find a place in this circle. We have the same hopes for the countries of Africa. The change should proceed rapidly, and America and Europe should use their great influence and power to facilitate it. We see before us vast changes taking place not only in the political and economic spheres, but even more so in the minds of men. Asia is becoming dynamic again and is passionately eager to progress and raise the economic standards of her vast masses. This awakening of a giant continent is of the greatest importance to the future of mankind and requires imaginative statesmanship of a high order.

The problems of this awakening will not be solved by looking at it with fear or in a spirit of isolationism by any of us. It requires a friendly and understanding approach, clear objectives and a common effort to realize them. The colossal expenditure of energy and resources on armaments, that is an outstanding feature of many national Budgets to-day, does not solve the problem of world peace. Perhaps even a fraction of that outlay in other ways and for other purposes will provide a more enduring basis for peace and happiness.

That is India's view, offered in all friendliness to all thinking men and women, to all persons of goodwill, in

the name of our common humanity. That view is not based on wishful thinking, but on a deep consideration of the problems that afflict us all, and on its merits I venture to place it before you.

—*From a speech delivered at a Special Convocation of Columbia University, held to confer the Honorary degree of Doctor of Laws on Shri Nehru, November, 1949.*

NOTES

1. *Plato's philosopher-kings*, Plato in his *Republic* says that a perfect society can be created only if philosophers, that is, wise men, become the rulers.

BOOKS AND LIBRARIES

James Russell Lowell

James Russell Lowell (1819-91) was an American poet, essayist, editor, and diplomat. He was born at Cambridge, Mass., and educated at Harvard. He abandoned the law in 1841 after taking a degree in it. With his journal, the *Pioneer*, he began a long career as editor and contributor to various periodicals. His *Biglow Papers* established his reputation as a social satirist and wit. *Conversations on Some of the Old Poets* showed him as an able critic. In 1856 he succeeded Longfellow as Smith Professor of French and Spanish at Harvard. In 1877 he was appointed Minister to Madrid and three years later Minister to London, where he remained till 1885. His speeches in English published as *Democracy and Other Addresses* contain some of his most enduring work. His letters edited by C. E. Norton remain valuable for their keen and lively comments on public affairs and the literary activities of his generation. His other works include *Fireside Travels*, *Among My Books*, and *My Study-Windows*.

HAVE you ever rightly considered what the mere ability to read means? That it is the key which admits us to the whole world of thought and fancy and imagination? to the company of saint and sage, of the wisest and the wittiest at their wisest and wittiest moment? That it enables us to see with the keenest eyes, hear with the finest ears, and listen to the sweetest voices of all time? More than that, it annihilates time and space for us; it revives for us without a miracle the Age of Wonder, endowing us with the shoes of swiftness and the cap of darkness, so that we walk invisible like fern-seed, and witness unharmed the plague at Athens or Florence or

London; accompany Caesar on his marches, or look in on Catiline¹ in council with his fellow conspirators, or Guy Fawkes² in the cellar of St. Stephen's.³ We often hear of people who will descend to any servility, submit to any insult, for the sake of getting themselves or their children into what is euphemistically called good society. Did it ever occur to them that there is a select society of all the centuries to which they and theirs can be admitted for the asking, a society, too, which will not involve them in ruinous expense and still more ruinous waste of time and health and faculties?

Southey⁴ tells us that, in his walk one stormy day, he met an old woman, to whom, by way of greeting, he made the rather obvious remark that it was dreadful weather. She answered, philosophically, that, in her opinion, "*any* weather was better than none!" I should be half inclined to say that any reading was better than none, allaying the crudeness of the statement by the Yankee proverb, which tells us that, though "all deacons are good, there's odds in deacons". Among books, certainly, there is much variety of company, ranging from the best to the worst, from Plato to Zola,⁵ and the first lesson in reading well is that which teaches us to distinguish between literature and merely printed matter. The choice lies wholly with ourselves. We have the key put into our hands; shall we unlock the pantry or the oratory? There is a Wallachian⁶ legend which, like most of the figments of popular fancy, has a moral in it. One Bakála,⁷ a good-for-nothing kind of fellow in his way, having had the luck to offer a sacrifice especially well pleasing to God, is taken up into heaven. He finds the Almighty sitting in something like the best room of a Wallachian

peasant's cottage—there is always a profound pathos in the homeliness of the popular imagination, forced, like the princess in the fairy tale, to weave its semblance of gold tissue out of straw. On being asked what reward he desires for the good service he has done, Bakála, who had always passionately longed to be the owner of a bagpipe, seeing a half worn-out one lying among some rubbish in a corner of the room, begs eagerly that it may be bestowed on him. The Lord, with a smile of pity at the meanness of his choice, grants him his boon, and Bakála goes back to earth delighted with his prize. With an infinite possibility within his reach, with the choice of wisdom, of power, of beauty, at his tongue's end, he asked according to his kind, and his sordid wish is answered with a gift as sordid. Yes, there is a choice in books as in friends, and the mind sinks or rises to the level of its habitual society, is subdued, as Shakespeare says of the dyer's hand, to what it works in. Cato's⁸ advice, *cum bonis ambula*, consort with the good, is quite as true, if we extend it to books, for they, too, insensibly give away their own nature to the mind that converses with them. They either beckon upwards or drag down. *Du gleichst dem Geist den du begreifst*, says the World Spirit to Faust, and this is true of the ascending no less than of the descending scale. Every book we read may be made a round in the ever-lengthening ladder by which we climb to knowledge and to that temperance and serenity of mind which, as it is the ripest fruit of Wisdom, is also the sweetest. But this can only be if we read such books as make us think, and read them in such a way as helps us to do so, that is, by endeavouring to judge them, and thus to make them an exercise rather than a relaxation of the mind. Desultory reading,

except as conscious pastime, hebetates the brain and slackens the bow-string of Will. It communicates as little intelligence as the messages that run along the telegraph wire to the birds that perch on it. Few men learn the highest use of books. After lifelong study many a man discovers too late that to have had the philosopher's stone availed nothing without the philosopher to use it. Many a scholarly life, stretched like a talking wire to bring the wisdom of antiquity into communion with the present, can at last yield us no better news than the true accent of a Greek verse, or the translation of some filthy nothing scrawled on the walls of a brothel by some Pompeian ⁹ idler. And it is certainly true that the material of thought reacts upon the thought itself. Shakespeare himself would have been commonplace had he been paddocked in a thinly shaven vocabulary, and Phidias,¹⁰ had he worked in wax, only a more inspired Mrs. Jarley.¹¹ A man is known, says the proverb, by the company he keeps, and not only so, but made by it. Milton makes his fallen angels grow small to enter the infernal council room, but the soul, which God meant to be the spacious chamber where high thoughts and generous aspirations might commune together, shrinks and narrows itself to the measure of the meaner company that is wont to gather there, hatching conspiracies against our better selves. We are apt to wonder at the scholarship of the men of three centuries ago and at a certain dignity of phrase that characterizes them. They were scholars because they did not read so many things as we. They had fewer books, but these were of the best. Their speech was noble, because they lunched with Plutarch ¹² and supped with Plato. We spend as much time over print as they did,

but instead of communing with the choice thoughts of choice spirits, and unconsciously acquiring the grand manner of that supreme society, we diligently inform ourselves, and cover the continent with a cobweb of telegraphs to inform us, of such inspiring facts as that a horse belonging to Mr. Smith ran away on Wednesday, seriously damaging a valuable carry-all; that a son of Mr. Brown swallowed a hickory nut on Thursday; and that a gravel bank caved in and buried Mr. Robinson alive on Friday. Alas, it is we ourselves that are getting buried alive under this avalanche of earthly impertinences! It is we, who, while we might each in his humble way be helping our fellows into the right path, or adding one block to the climbing spire of a fine soul, are willing to become mere sponges saturated from the stagnant goosepond of village gossip. This is the kind of news we compass the globe to catch, fresh from Bungtown Centre, when we might have it fresh from heaven by the electric lines of poet or prophet! It is bad enough that we should be compelled to know so many nothings, but it is downright intolerable that we must wash so many barrow-loads of gravel to find a grain of mica after all. And then to be told that the ability to read makes us all shareholders in the Bonanza ¹³ Mine of Universal Intelligence!

One is sometimes asked by young people to recommend a course of reading. My advice would be that they should confine themselves to the supreme books in whatever literature, or still better to choose some one great author, and make themselves thoroughly familiar with him. For, as all roads lead to Rome, so do they likewise lead away from it, and you will find that, in order to understand perfectly and weigh exactly any vital piece of

literature, you will be gradually and pleasantly persuaded to excursions and explorations of which you little dreamed when you began, and will find yourselves scholars before you are aware. For remember that there is nothing less profitable than scholarship for the mere sake of scholarship, nor anything more wearisome in the attainment. But the moment you have a definite aim, attention is quickened, the mother of memory, and all that you acquire groups and arranges itself in an order that is lucid, because everywhere and always it is in intelligent relation to a central object of constant and growing interest. This method also forces upon us the necessity of thinking, which is, after all, the highest result of all education. For what we want is not learning but knowledge; that is the power to make learning answer its true end as a quickener of intelligence and a widener of our intellectual sympathies. I do not mean to say that every one is fitted by nature or inclination for a definite course of study, or indeed for serious study in any sense. I am quite willing that these should "browse in a library", as Dr. Johnson called it, to their hearts' content. It is, perhaps, the only way in which time may be profitably wasted. But desultory reading will not make a "full man", as Bacon¹⁴ understood it, of one who has not Johnson's memory, his power of assimilation, and, above all, his comprehensive view of the relations of things. "Read not," says Lord Bacon, in his essay *Of Studies*, "to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read, but not curiously [carefully], and some

few to be read wholly and with diligence and attention. *Some books also may be read by deputy.*" This is weighty and well said, and I would call your attention especially to the wise words with which the passage closes. The best books are not always those which lend themselves to discussion and comment, but those (like Montaigne's *Essays*) which discuss and comment ourselves.

I have been speaking of such books as should be chosen for profitable reading. A public library, of course, must be far wider in its scope. It should contain something for all tastes, as well as the material necessary for a thorough grounding in all branches of knowledge. It should be rich in books of reference, in encyclopædias, where one may learn without cost of research what things are generally known. For it is far more useful to know these than to know those that are *not* generally known. Not to know them is the defect of those half-trained and therefore hasty men who find a mare's nest on every branch of the tree of knowledge. A library should contain ample stores of history, which, if it do not always deserve the pompous title which Bolingbroke gave it, of philosophy teaching by example, certainly teaches many things profitable for us to know and lay to heart; teaches, among other things, how much of the present is still held in mortmain by the past; teaches that, if there be no controlling purpose, there is, at least, a sternly logical sequence in human affairs, and that chance has but a trifling dominion over them, teaches why things are and must be so and not otherwise, and that, of all hopeless contests, the most hopeless is that which fools are most eager to challenge—with the Nature of Things; teaches, perhaps, more than anything else, the value of personal character as a chief factor in what

used to be called destiny, for that cause is strong which has not a multitude, but one strong man behind it. History is, indeed, mainly the biography of a few imperial men, and forces home upon us the useful lesson how infinitesimally important our own private affairs are to the universe in general. History is clarified experience, and yet how little do men profit by it; nay, how should we expect it of those who so seldom are taught anything by their own! Delusions, especially economical delusions, seem the only things that have any chance of an earthly immortality. I would have plenty of biography. It is no insignificant fact that eminent men have always loved their Plutarch, since example, whether for emulation or avoidance, is never so poignant as when presented to us in a striking personality. Autobiographies are also instructive reading to the student of human nature, though generally written by men who are more interesting to themselves than to their fellow men. I have been told that Emerson¹⁵ and George Eliot agreed in thinking Rousseau's¹⁶ *Confessions* the most interesting book they had ever read.

A public library should also have many and full shelves of political economy, for the dismal science, as Carlyle called it, if it prove nothing else, will go far towards proving that theory is the bird in the bush, though she sing more sweetly than the nightingale, and that the millennium will not hasten its coming in deference to the most convincing string of resolutions that were ever unanimously adopted in public meeting. It likewise induces in us a profound and wholesome distrust of social panaceas.

I would have a public library abundant in translations

of the best books in all languages, for, though no work of genius can be adequately translated, because every word of it is permeated with what Milton calls "the precious life-blood of a master spirit" which cannot be transfused into the veins of the best translation, yet some acquaintance with foreign and ancient literatures has the liberalizing effect of foreign travel. He who travels by translation travels more hastily and superficially, but brings home something that is worth having, nevertheless. Translations properly used, by shortening the labour of acquisition, add as many years to our lives as they subtract from the processes of education. Looked at from any but the æsthetic point of view, translations retain whatever property was in their originals to enlarge, liberalize, and refine the mind. At the same time I would have also the originals of these translated books as a temptation to the study of languages, which has a special use and importance of its own in teaching us to understand the niceties of our mother tongue. The practice of translation, by making us deliberate in the choice of the best equivalent of the foreign word in our own language, has likewise the advantage of continually schooling us in one of the main elements of a good style—precision; and precision of thought is not only exemplified by precision of language, but is largely dependent on the habit of it.

In such a library the sciences should be fully represented, that men may at least learn to know in what a marvellous museum they live, what a wonder-worker is giving them an exhibition daily for nothing. Nor let Art be forgotten in all its many forms, not as the antithesis of Science, but as her elder or fairer sister, whom we love all the more that her usefulness cannot be demonstrated in dollars.

cents. I should be thankful if every day-labourer among us could have his mind illumined, as those of Athens and of Florence had, with some image of what is best in architecture, painting, and sculpture, to train his crude perceptions and perhaps call out latent faculties. I should like to see the works of Ruskin within the reach of every artisan among us. For I hope some day that the delicacy of touch and accuracy of eye that have made our mechanics in some departments the best in the world, may give us the same supremacy in works of wider-range and more purely ideal scope.

Voyages and travels I would also have, good store, especially the earlier, when the world was fresh and unhackneyed and men saw things invisible to the modern eye. They are fast sailing ships to waft away from present trouble to the Fortunate Isles.

To wash down the drier morsels that every library must necessarily offer at its board, let there be plenty of imaginative literature, and let its range be not too narrow to stretch from Dante¹⁷ to the elder Dumas.¹⁸ The world of the imagination is not the world of abstraction and nonentity, as some conceive, but a world formed out of chaos by a sense of the beauty that is in man and the earth on which he dwells. It is the realm of *Might-be*, our haven of refuge from the shortcomings and disillusion of life. It is, to quote Spenser, who knew it well—

“The world’s sweet inn from care and wearisome turmoil.”

Do we believe, then, that God gave us in mockery this splendid faculty of sympathy with things that are a joy for ever? For my part, I believe that the love and

study of works of imagination is of practical utility in a country so profoundly material (or, as we like to call it, practical) in its leading tendencies as ours. The hunger after purely intellectual delights, the content with ideal possessions, cannot but be good for us in maintaining a wholesome balance of the character and of the faculties. I for one shall never be persuaded that Shakespeare left a less useful legacy to his countrymen than Watt. We hold all the deepest, all the highest satisfactions of life as tenants of imagination. Nature will keep up the supply of what are called hard-headed people without our help, and if it come to that, there are other as good uses for heads as at the end of battering rams.

I know that there are many excellent people who object to the reading of novels as a waste of time, if not as otherwise harmful. But I think they are trying to outwit nature, who is sure to prove cunninger than they. Look at children. One boy shall want a chest of tools, and one a book, and of those who want books one shall ask for a botany, another for a romance. They will be sure to get what they want, and we are doing a grave wrong to their morals by driving them to do things on the sly, to steal that food which their constitution craves and which is wholesome for them, instead of having it freely and frankly given them as the wisest possible diet. If we cannot make a silk purse out of a sow's ear, so neither can we hope to succeed with the opposite experiment. But we may spoil the silk for its legitimate uses. I can conceive of no healthier reading for a boy, or a girl either, than Scott's novels or Cooper's,¹⁹ to speak only of the dead. I have found them very good reading at least for one young man, for one middle-aged man, and for one

who is growing old. No, no,—banish the Antiquary,²⁰ banish Leather Stocking,²¹ and banish all the world! Let us not go about to make life duller than it is.

—From *Literary and Political Addresses*

NOTES

1. *Catiline*, Lucius Sergius Catiline (108–62 B.C.), Roman politician and conspirator.

2. *Guy Fawkes* was executed for playing a leading part in the Gunpowder Plot in 1605. Guy Fawkes Day is still celebrated on 5th November every year.

3. *St. Stephen's*, St. Stephen's Hall in Westminster. It is beside the House of Lords.

4. *Robert Southey* (1774–1843), English poet and man of letters. He was the author of a famous biography of Lord Nelson.

5. *Émile Zola* (1840–1902), a famous French novelist.

6. *Wallachia*, a province of Rumania.

7. *Bakala*, a fictitious character.

8. *Cato* (234–149 B.C.), Roman statesman.

9. *Pompeian*, pertaining to Pompeii, a town of Campania buried by ashes from Mt. Vesuvius in 79 A.D.

10. *Phidias* or *Pheidias* (c. 490–c. 417 B.C.), Greek sculptor.

11. *Mrs Jarley*, a character in Charles Dickens' novel *Old Curiosity Shop*. She was the proprietor of a travelling waxworks show.

12. *Plutarch*, Greek biographer who lived in first century A.D. His most famous work is the *Parallel Lives* of twenty-three Greeks and twenty-three Romans.

13. *Bonanza*—in mining, a rich ore body or pocket, especially of gold or silver. Hence anything that yields a large income.

14. *Lord Bacon* (1561–1626), an English writer and philosopher.

15. *Ralph Waldo Emerson* (1803–82), an American poet, essayist, and philosopher.

16. *Jean Jacques Rousseau* (1712–78), a French philosopher and political writer.

17. *Dante* (1265–1321), the greatest of the Italian poets. He was the author of the *Divine Comedy*.

18. *Alexandre Dumas* (1803–70), a French novelist.

19. *James Fenimore Cooper* (1789–1851), an American novelist.

20. *The Antiquary*, a novel by Sir Walter Scott.

21. *Leather Stocking*, a nickname of Natty Bumppo, the hero of some of the novels of Fenimore Cooper, which, in consequence, were called the "*Leather Stocking Tales*".

THE PEAL OF BELLS

Robert Lynd

"Surely I shall not spend my whole life with my own total disapprobation."

—Dr. Johnson on his 72nd Birthday

Robert Lynd (1879-1949) was the literary editor of the London *News Chronicle* and wrote under the pen-name Y Y. He wrote his essays in the intimate and chatty style of Charles Lamb which won for him the warm affection of his readers. His style is persuasive, simple, and gentle without any mannerisms about it, and his essays are logical and reflective.

It is a new year, and I have begun a new life. This, I think, is better than merely talking about it. But it is more difficult and brings one just as little credit. No one, indeed, seems to observe the signs of the new life except the man who is leading it. I once had a friend who told his wife that he was beginning a new life, and who went with her to a New Year's Eve party at which he thought he was being particularly abstemious,¹ while she thought he was denying himself nothing. The next morning he complained of a headache. "Of course, you have a headache," she told him and added: "I thought you said you were going to begin a new life." "Much good there is in beginning a new life," he retorted bitterly, "when you don't even notice it. Last night was the beginning of the new life!" He, I suppose, remembered chiefly the things he had refused at the party, while she remembered chiefly the things he had taken. There is always this personal element in our judgment of ourselves and of each other.

We cannot go about, unfortunately, telling everybody about the temptations we have resisted. As a result, people judge us exclusively by the temptations to which we yield. This is very hard on those of us who are unusually susceptible to temptation and who frequently succumb out of sheer inability to go on resisting for ever.

Knowing myself intimately, I am able to take a more sympathetic view of myself than other people can be expected to take, and I forgive myself for shortcomings that in anybody else would distress me. It is a very unhealthy frame of mind to get into to be always reproaching oneself for one's peccadilloes.² I am sure the most cheerful people are those who confine their censures almost entirely to the lapses of their neighbours. This is also, I hold, the more modest attitude. Like other people, I desire a better world, but I have the wit to realize that I alone can do very little to improve things, while other people could improve the globe out of recognition in seven days, if only they would conquer their evil instincts. They are the human race: I am a helpless individual, an onlooker. It would be mere conceit to regard my own faults as being half so serious in their consequences as theirs. Hence I feel an honest glow of pleasure when I see other people behaving well, and I am melancholy when I see, or even hear of other people behaving badly. I often long to direct them with good advice, and refrain only because I know that friendship itself will not stand the strain of very much good advice for very long. And so, while I am inwardly aching to preach to my errant fellow-creatures, I find myself talking to them instead about diet, diseases, cinemas, Bernard Shaw, and the day on which I backed three winning horses at Ascot.³ I doubt, indeed, if

I have ever warned even an intimate friend against one of his minor faults. I doubt if any of my friends know that I know their faults. In spite of the pain that our friends' faults cause us, we keep up a fantastic pretence of blindness in order that we may remain tolerable to each other. That is why we have to talk behind people's backs. There is no other chance of talking freely. Then Truth comes out of her well, smiling and without a blush. How good it is to learn the worst about our friends and acquaintances from her impartial lips! "A shrew"—"Drinks, doesn't he?" "He's as mean as the devil"—"He and his wife quarrel in public so"—"The foulest bore in London"—"Always looks as if he had spilled soup down his waistcoat"—"Ruining himself gambling"—"He's got the most appalling swelled head"—"He's such a coward. Always runs away". These are the sort of things it is much better to say *about* a man or woman than to their faces. There is such a thing as tact, which reminds us, for example, that, if we wish to tell the truth about a conceited man, it is better to wait until he has gone out of the room. He will not resent it then. He is so conceited that he will not even guess that we are saying how conceited he is. Some people would condemn this as scandal-mongering. But surely it is better to tell the truth behind people's backs than never to tell it at all.

Besides if we are to abolish this form of veracity, how are we going to preserve our moral standards? It is by listening to gossip about our friends that we learn to distinguish between right and wrong, and, as we see their reputations being torn more and more rapturously to pieces, they serve as a kind of awful warning to us, like the penitents confessing their sins at a revival meeting.

And they are more fortunate than the penitents, for they do not have to confess their sins: we confess them for them. That grave, rather sad-looking little man—you would never guess what his vice was till someone told you when he had gone that he had written an "Ode on the Intimations of Insobriety,"⁴ and that his wife did not guess his secret till one night after he returned home from a party she found him folding up a bath towel and carefully putting it away in a drawer under the impression that it was his evening suit. From tales such as these, we learn what sins to avoid and the importance of being careful but not too careful. And if the sin of which we are told does not happen to be one of our own favourite sins, to join in condemning it is noble practice in moral enthusiasm. Thus, the miser is a moral enthusiast as he condemns the spendthrift, and the spendthrift as he condemns the miser. The drunkard becomes a moral enthusiast as he tells the truth about the amorist and the amorist as he tells the truth about the sot. The hypocrite, the sluggard, the glutton, the flatterer of the people, the slum landlord, the sweating employer, the harsh mistress, the lazy workman are all capable of such moral enthusiasm; and moral enthusiasm is not a thing with which we should part lightly.

Even so, I find it more difficult, as I get older, to confine my moral enthusiasm to the lives of other people and I grow egotistically concerned about the life I myself am leading. I should not have believed you if you had told me twenty years ago that at my present age I should not have settled into more admirable and virtuous ways. The faults of a man who had reached or passed middle age used to surprise me when I was a boy, and if I saw in

him signs of vanity or fear or greed or ill-temper, I disliked them as something unnatural. It seemed to me extraordinarily easy for a middle-aged man to be virtuous and, indeed, I could hardly imagine what middle-aged men could find to do except behave well. I saw that a number of them abstained from doing so, but in their self-indulgences they seemed to me to be as defiant of common sense as white blackbirds. As I grew from boyhood to youth I came to like many of these self-indulgent elders, but I thought of them chiefly as ‘rum coves’, eccentrics, “old sports”, and never as normal human beings who had arrived at years of discretion. When I came to read Horace⁵ in class, I learned that it was by no means easy even for a middle-aged man to be virtuous. But I nevertheless remained sure that virtue was more temptingly within reach at the age of forty than at sixteen. And I knew in my bones, though not without sorrow, that Horace was right when he affirmed that there was a stage in life at which it was time for a man to bid good-bye to folly. As I sat under the stern eye of master, and heard the Latin being translated into school-boy English, I felt wave after wave of emotion sweeping over me—a wave of self-pity followed by a wave of intense resolve to play the man at some future date—at those curfew lines with which the second epistle of the second Book of Epistles⁶ ends:

Vivere si recte nescis, decede peritis,
Lusisti satis, edisti satis at que bibisti;
Tempus abire tibi est, ne potum largius aequo.
Rideat et pulset lasciva decentius aetas.⁷

Even to-day, when I can no longer read Latin, and have to guess what “*decede peritis*” means, the lines con-

tinually haunt my memory and bring back those feelings of luxurious regret with which a boy many years ago used, in anticipation, to bid farewell to Epicurus⁸ and subscribe himself a Stoic.⁹ Alas! despite all this, I find myself as I grow older approaching much more nearly to the likeness of one of those "rum coves" I used to laugh at than to the graver portrait of the Stoic I admired.

Yet somewhere in me, I feel sure—a Stoic is buried and awaiting resurrection. "Ye're a young Stoic, Master Y., ye're a regular Trojan,"¹⁰ my nurse used to say to me, when she gave some base medicine in a teaspoonful of raspberry jam and I took it without wincing. I did not know at the time what the words meant, and I don't think that she knew either, but I was pleased by her flattery which she lavished on me on all occasions of discomfort or danger. If she took me to the dentist's or put a lava-hot poultice on chest, she always began and ended with: "Ye're a young Stoic, Master Y., ye're a regular Trojan;" and though it was not true, it made me feel a better and happier boy. Looking backward, I see in it an unfulfilled prophecy which I surely ought to have set about fulfilling some time ago, and I feel a better and happier man. What if now at last I should adopt the advice of Horace to himself—should listen even to the counsellor in my own breast—and should say to myself gently.

Lusisti satis, edisti satis atque bibisti;
Tempus abire tibi est—

and rise from the table of pleasure and leave the sweet dishes of folly to younger mouths? There is something attractive to me in the prospect. The bare and frugal board of the Stoics has its own charm. There is no pleasure

to surpass that of liberation. Philosophers aver that the chains that bind me are so fragile that they will break at a touch, and indeed that, at a mere wish, I can sever them one by one—indolence, self-indulgence, envy, fear, and folly—and escape. How delightful to achieve a godlike indifference to the things that one knows do not really matter and that do matter to one so much? How else is it possible to become serene—which is the visible grace of wisdom? “A man,” my doctor tells me, “is either a fool or a physician at forty,” and it is also true, I fancy, that at that age a man is either a fool or a philosopher. O, miserable choice between the rival pleasures of folly and philosophy! I have tried for a long time to combine them by enjoying the pleasures of folly in practice to-day and the pleasures of philosophy in anticipation to-morrow. Even that, however, becomes a jangling and uneasy compromise with advancing years, and I grow more and more convinced that sometime or other sooner or later—perhaps this very year—the grand break with folly must be made. In facing this fact, I feel that I have taken the first step into a new life, and, so far, the New Year seems to have begun excellently well, *Lusisti satis*. True—Good night, folly? Good morning, virtue?

—From *The Peal of Bells*

NOTES

1. *abstemious*, temperate, abstinent.
2. *peccadilloes*, a slight offence; a petty fault.
3. *Ascot*, a fashionable horse-racing track at Ascot Heath near the village of Ascot in Berkshire, England.
4. *Ode on the Intimations of Insobriety*, parody of the title of Wordsworth's poem, *Ode on the Intimations of Immortality*.

5. *Horace* (65-8 B.C.), a great Roman poet.
6. *Book of Epistles*, a book by Horace.
7. *Vivere, etc.* If you do not know how to live rightly, turn to those more experienced. You have played enough, eaten enough, drunk enough. It is time for you to go away lest you should have more than your share. Let passionate age laugh and dance more fittingly.
8. *Epicurus* (344-270 B.C.), a Greek philosopher, founder of Epicureanism that lays emphasis on human happiness.
9. *Stoics*, a school of Greek philosophers, who believed in enduring the sorrows and sufferings of life patiently.
10. *Trojan*, pertaining to Troy. One who shows pluck and endurance.

ON LETTER-WRITING

Alpha of the Plough

Alpha of the Plough was the pen-name of A. G. Gardiner (1865-1946), who was for some years Editor of the *Daily News*, an influential Liberal daily. In addition to some of the most delightful essays he wrote some full-length biographies. As an essayist he throws interesting light on contemporary life but he will be remembered chiefly as the writer of lively and vivid character-sketches. He is not content merely to describe life as it is lived these days; he also moralizes. In a very friendly tone he shows us how many frictions of life can be avoided if we only keep our good humour and a good temper.

Two soldiers, evidently brothers, stood at the door of the railway carriage—one inside the compartment, the other on the platform.

"Now, you won't forget to write, Bill," said the latter.

"No," said Bill. "I shall be back at — to-night, and I'll write all round to-morrow. But, lor, what a job. There's mother and the missus and Bob and Sarah and Aunt Jane and Uncle Jim, and—well, you know the lot. You've had to do it, Sam."

"Yes," said Sam, ruefully; "it's a fair teaser."

"And if you write to one and miss another they're offended," continued Bill. "But I always mention all of 'em. I say 'love to Sarah', and 'hope Aunt Jane's cold's better', and that sort of thing, and that fills out a page. But I'm blowed if I can find anything else to say. I

just begin 'hoping this finds you well, as it leaves me at present', and then I'm done. What else is there to say?"

"Nothing," said Sam, mournfully. "I just sit and scratch my head over the blessed paper, but nothing'll come. Seems as though my head's as empty as a drum."

"Same here. 'Tisn't like writing love-letters. When I was up to that game 'twas easy enough. When I got stuck I just put in half a page of crosses, and that filled up fine. But writing to mother and the missus and Sarah and Jim and the rest is different. You can't fill up with crosses. It would look ridiklus."

"It would," said Sam.

Then the train began to move and the soldier inside sank back on his seat, took out a cigarette, and began to smoke. I found he had been twice out at the front, and was now home on sick leave. He had been at the battle of Mons,¹ through the retreat to the Marne, the advance to the Aisne,² the first battle of Ypres,³ and the fighting at Festubert. In a word, he had seen some of the greatest events in the world's history, face to face, and yet he confessed that when he came to write a letter, even to his wife, he could find nothing to say. He was in the position of the lady mentioned by Horace Walpole,⁴ whose letter to her husband began and ended thus: "I write to you because I have nothing to do: I finish because I have nothing to say."

~ I suppose there has never been so much letter-writing in the world as is going on to-day, and much of it is good writing, as the papers show. But the case of my companion in the train is the case of thousands and tens of thousands of young fellows who for the first time in their lives want to write and discover that they have no gift of self-express-

sion. It is not that they are stupid. It is that somehow the act of writing paralyses them. They cannot condense the atmosphere in which they live to the concrete word. You have to draw them out. They need a friendly lead. When they have got that they can talk well enough, but without it they are dumb.

In the great sense letter-writing is no doubt a lost art. It was killed by the penny post and modern hurry. When Madame de Sévigné,⁵ Cowper,⁶ Horace Walpole, Byron, Lamb,⁷ and the Carlyles wrote their immortal letters the world was a leisurely place where there was time to indulge in the luxury of writing to your friends. And the cost of franking a letter made that letter a serious affair. If you could only send a letter once in a month or six months, and then at heavy expense, it became a matter of first-rate consequence. The poor, of course, couldn't enjoy the luxury of letter-writing at all. De Quincey⁸ tells us how the dalesmen of Lakeland⁹ a century ago used to dodge the postal charges. The letter that came by stage coach was received at the door by the poor mother, who glanced at the superscription, saw from a certain agreed sign on it that Tom or Jim was well, and handed it back to the carrier unopened. In those days a letter was an event.

Now when you can send a letter half round the globe for a penny, and when the postman calls half a dozen times a day, few of us take letter-writing seriously. Carlyle saw that the advent of the penny post would kill the letter by making it cheap. "I shall send a penny letter next time," he wrote to his mother when the cheap postage was about to come in, and he foretold that people would not bother to write good letters when they could

send them for next to nothing. He was right, and the telegraph, the telephone, and the typewriter have completed the destruction of the art of letter-writing. It is the difficulty or the scarcity of a thing that makes it treasured. If diamonds were as plentiful as pebbles we shouldn't stoop to pick them up.

But the case of Bill and Sam and thousands of their comrades to-day is different. They don't want to write literary letters, but they do want to tell the folks at home something about their life and the great things of which they are a part. But the great things are too great for them. They cannot put them into words. And they ought not to try, for the secret of letter-writing is intimate triviality. Bill could not have described the retreat from Mons; but he could have told, as he told me, about the blister he got on his heel, how he hungered for a smoke, how he marched and marched until he fell asleep marching, how he lost his pal at Le Cateau, and how his boot sole dropped off at Meaux.¹⁰ And through such trivialities he would have given a living picture of the great retreat.

In short, to write a good letter you must approach the job in the lightest and most casual way. You must be personal, not abstract. You must not say, "This is too small a thing to put down." You must say, "This is just the sort of small thing we talk about at home. If I tell them this they will see me, as it were, they'll hear my voice, they'll know what I'm about." That is the purpose of a letter. Carlyle had the trick to perfection. He is writing from Scotsbrig to his brother Alec in Canada, and he begins talking about his mother. "Good old Mother," he says, "she is even now sitting at my back, trying at another table to write you a small word with

her own hand; the first time she has tried such a thing for a year past. It is Saturday night, after dark; we are in the east room in a hard, dry evening with a bright fire to our two selves; Jenny and her bairns are 'scouring up things' in the other end of the house; and below stairs the winter operations of the farm go on, in a subdued tone: you can conceive the scene!" How simple it is and yet how perfect. Cannot you see Alec reading it in his far-off home and his eyes moistening at the picture of his old mother sitting and writing her last message to him on earth?

Keats expresses the idea very well in one of those voluminous letters which he wrote to his brother George and his wife in America and in which he poured out the wealth of family affection which was one of the most amiable features of his character. He has described how he had been to see his mother, how she had laughed at his bad jokes, how they went out to tea at Mrs. Millar's, and how in going they were struck with the light and shade through the gateway at the Horse-Guards. And he goes on: "I intend to write you such volumes that it will be impossible for me to keep any order or method in what I write; that will come first which is uppermost in my mind, not that which is uppermost in my heart—besides I should wish to give you a picture of our lives here whenever by a touch I can do it; even as you must see by the last sentence our walk past Whitehall all in good health and spirits—this I am certain of because I felt so much pleasure from the simple idea of your playing a game of cricket."

There is the recipe by one of the masters of the craft. A letter written in this vein annihilates distance; it contin-

ues the personal gossip, the intimate communion, that has been interrupted by separation; it preserves one's presence in absence. It cannot be too simple, too commonplace, too colloquial. Its familiarity is not its weakness, but its supreme virtue. If it attempts to be orderly and stately and elaborate, it may be a good essay, but it will certainly be a bad letter.

—From *Pebbles on the Shore*

NOTES

1. *Mons*, a town in Belgium. In the First World War it was the scene of the first battle between the British and the Germans.

2. *Aisne*, a river in France. It was the scene of four great battles in the First World War.

3. *Ypres*, a town in Belgium. It, too, was the scene of heavy fighting in the First World War.

4. *Horace Walpole* (1717–97), an English man of letters.

5. *Madame de Sévigné* (1626–96), a French writer and lady of fashion. She is famed for her Letters, written to her daughter, which give a wonderful picture of the period in which she lived.

6. *William Cowper* (1731–1800), an English poet.

7. *Charles Lamb* (1775–1834), an English essayist.

8. *Thomas de Quincey* (1785–1859), an English essayist.

9. *Lakeland*, the Lake District in the north of England.

10. *Le Cateau, Meaux*, towns in France.

THE BIRTH OF THE AEROPLANE

C. L. M. Brown

C. L. M. Brown is a writer on scientific subjects. In this extract he describes the attempts of Orville and Wilbur Wright to invent the first aeroplane. These pioneers in aeronautical flight took due advantage of the experiments that had been made before them in this direction. They verified the conclusions arrived at by others, and, by co-ordinating the observations of their predecessors with their own skill and spirit of enterprise, they were able to conquer the air. The Wright Brothers are to-day recognized as the inventors of the aeroplane, an invention that has revolutionized modern life.

THE story of Wilbur and Orville Wright's determined struggle to solve the problems of heavier-than-air flight is a story of splendid endeavour rewarded by splendid success. Theirs was certainly one of the greatest attainments of this or any preceding age; a triumph that was gained by the exercise of those qualities of brain and heart that in the material sphere have raised mankind to the pre-dominating position it occupies on this planet. Properly understood and appreciated, it is a story that should kindle the imagination to as fine an elation as any tale of heroic exploits of remoter days. The fullness of the triumph does not belong to the Wrights alone; it is shared by all those adventurers who through hundreds of years had sought to bring the regions of the air within the ambit of man's activity, and may be shared by any who have the ambition to enlarge the fields of this conquest. But the long romance of endeavour culminated in the work of

the Wrights, and theirs was the decisive victory. Moreover, the combination of qualities which the brothers brought to bear upon their task included all those that throughout had made progress possible and were essential for ultimate success.

Wilbur Wright, the third son of Milton Wright, was born near Newcastle, Indiana, U.S.A., in 1867, and Orville was born in 1871 at Dayton, Ohio, where the Wrights were then living. They were of New England stock, one of their ancestors having emigrated from England as early as 1637. While still a boy Orville possessed himself of a primitive printing outfit and began to publish a boys' paper. Later, with an improved press he produced a weekly newspaper, *The West Side News*. Wilbur then joined him in the capacity of editor, and soon they were publishing a weekly magazine in addition, which they called *Snap Shots*. Wilbur, who had a crisp and telling literary style, contributed numerous articles on local affairs. These were the great days of the "safety bicycle", and the brothers, apt and businesslike as they always were, started the Wright Cycle Company, manufacturing a machine known as the "Van Cleve", which won a local reputation for soundness and good workmanship. They were thus engaged when their attention was first directed to aeronautics.

It was in 1896 that a newspaper paragraph recording the death of Otto Lilienthal * in Germany, and giving a brief account of his exploits, roused their interest in flying. It is a pleasant thought that Lilienthal, who in his life had done so much for the cause of flight, should by

* A pioneer of flight who carried out many important experiments in gliding. It was in the course of one of these experiments that he met his death.

his death have inspired with something of his own ardour the two young men who were destined to take up the work to which his life had been devoted, and bring it to fulfilment. The incident of Lilienthal's death seems to have made a deep impression upon Wilbur, and he was moved to re-read one of his favourite books, Marcy's *Animal Mechanism*. "From this I was led," he later declared in a lecture, "to read more modern works, and as my brother soon became equally interested with myself, we soon passed from the reading to the thinking, and finally to the working stage."

They read all the existing aeronautical literature that they could lay hold upon; the writings that most encouraged them were those of Lilienthal and Langley,¹ and from them they were soon able to estimate the stage of progress that aeronautical science and practice had reached. They were also influenced by the work of Stringfellow, whose designs they regarded as valuable contributions to the development of the aeroplane.

From the writings and lectures of Wilbur Wright it is possible to follow the progress of their work without difficulty. From the very outset the brothers realized that all the pioneers had been handicapped, in varying degrees, by one thing—lack of experience in handling a machine in the air. Lilienthal's death had been due to this very cause.

"It seemed to us," Wilbur stated in the lecture already mentioned:

that the main reason why the problem had remained so long unsolved was that no one had been able to obtain any adequate practice. We figured that Lilienthal in about five years of time had spent about five hours of

actual gliding through the air. The wonder was not that he had accomplished so little, but that he had accomplished so much. It would not be considered at all safe for a bicycle rider to attempt to ride through a crowded city street after only five hours' practice, spread out in bits of ten seconds each over a period of five years; yet Lilienthal with this brief practice was remarkably successful in meeting the fluctuations and eddies of wind gusts. We thought that if some method could be found by which it would be possible to practise by the hour instead of by the second there would be the hope of advancing the solution of a very difficult problem. It seemed feasible to do this by building a machine which would be sustained at a speed of eighteen miles per hour, and then finding a locality where winds of this kind were common.

The Wrights, therefore, after their preliminary study of aeronautical literature, during which time they were, so to say, surveying the problem from a distance and meditating how best to approach it, decided that the first thing to do was to build a glider. They condemned as "wasteful and extravagant" any method which included the construction of a machine before one knew how to fly it, "mounting delicate and costly machinery on wings which no one knew how to manage". Their decision could not have been such a simple one as it now appears. In 1896 Lilienthal had been killed, and Chanute,² after limited successes, had abandoned his experiments: in the following year Percy Pilcher met his death in England. Gliding, in the face of such events, was not the kind of hobby to which one would lightly turn: how much more

reasonable, if one must dabble in aeronautical research, to confine one's activities to the experimental shop and the construction of model machines. Such considerations did not appeal to the Wrights. For some little time they studied the flight of birds, hoping to gather some suggestion of the means by which they secured their balance. They came to the conclusion that this was done instinctively, the result of inherited aptitude and constant practice. So too it must be, in part, if men were to fly, they concluded.

"Now, there are only two ways of learning to ride a fractious horse," wrote Wilbur Wright with caustic humour:

one is to get on him and learn by actual practice how each motion and trick may best be met; the other is to sit on a fence and watch the beast awhile and then retire to the house and at leisure figure out the best way of overcoming his jumps and kicks. The latter system is the safer, but the former, on the whole, turns out the larger proportion of good riders. It is very much the same in learning to ride a flying machine; if you are looking for perfect safety you will do well to sit on a fence and watch the birds, but if you really wish to learn you must mount a machine and become acquainted with its tricks by actual trial.

As the result of information provided by the Weather Bureau at Washington they decided to carry out their first experiments at Kitty Hawk, near the Atlantic coast of North Carolina, where steady winds favourable to gliding might be expected. They pitched their camp in the summer of 1900. The death of Pilcher, following

that of Lilienthal, led them to think that the dangers of gliding made it an unreliable method of experiment, and they attempted at first to attach a line to their machine and fly it as a kite. The results showed them that some of their expectations, based on Lilienthal's figures, could not be realized; but in the main this system proved inadequate, and they decided that actual gliding flights must be undertaken if real progress was to be made. They moved a distance of four miles to the Kill Devil Sand Hills and there began to practise short gliding flights without mishap.

They proceeded at first with extreme caution, making their glides as near the ground as possible, and doing everything to eliminate unnecessary risk. They knew that they must learn to walk before they could run; and they knew, moreover, quite apart from the natural instinct of self-preservation, that the security of their lives was the prime essential to the success of their project. The unavoidable risks of their enterprise were sufficiently grave; to have neglected any precaution, whether out of carelessness or foolish bravado, would have seemed to them the essence of inefficient workmanship. The foremost necessity was that they should retain their lives for the continuance of the task.

Wilbur Wright has given an account of this first year's practical work:

The slope of the hills was 9.5 degrees, or a drop of one foot in six. We found that after attaining a speed of about twenty-five to thirty miles with reference to the wind, or ten to fifteen miles over the ground, the machine not only glided parallel to the slope of the hill, but greatly increased its speed, thus indicating its ability to glide on a somewhat less angle than 9.5

degrees, when we should feel it safe to rise higher from the surface. The control of the machine proved even better than we had cared to expect, responding quickly to the slightest motion of the rudder. With these gliders our experiments for the year 1900 closed. Although the hours of practice we had hoped to obtain finally dwindled down to about two minutes, we were very much pleased with the general results of the trip, for, setting out as we did with almost revolutionary theories on many points and an entirely untried form of machine, we considered it quite a point to be able to return without having our pet theories completely knocked on the head by the hard logic of experience, and our own brains dashed out into the bargain.

(Further experiments with gliders were made in 1901 and again in 1902, when various improvements were carried out.)

The Wrights had now devised a flying-machine which was capable of flight and amenable to control. All that remained was to supply it with an adequate motive power. In comparison with what they had already done, this was a simple task. They turned to it, nevertheless, with the same zest and thoroughness that had characterized their previous work. Before describing the final stage of their efforts, however, it may be well to give a brief description of the 1902 glider to which they were prepared to pin their faith in the attempt to attain sustained power-driven flight.

It was a biplane, the two main wings being 32 feet in frontal width (span) and 5 feet in depth (chord), giving a total supporting surface of about 305 square feet. The pilot lay horizontally across the middle of the lower plane.

The so-called "horizontal rudder" in front had a sustaining area of 15 square feet, and the rear vertical rudder had an area of 6 square feet. Skids were used as an undercarriage to support the weight of the machine on the ground. The weight of the machine itself, without the pilot, was 116½ lb.

It took the brothers rather more than twelve months to build a suitable engine and devise an efficient screw propeller by means of which its power could be made to react on the air. As Langley had discovered, no suitable engine was yet in existence. The efficiency of the internal-combustion engine had been steadily growing during the latter half of the nineteenth century, and during its last decade, chiefly as the result of the work of Daimler, who since 1882 had been perfecting a light petrol engine for use in the motor-car, was beginning to assume something like its present form. It was still far too heavy, however, to be applied to aircraft. The Wrights realized that the weight per horse-power developed must be drastically reduced, whilst the strength and reliability must be retained. At the present day it is not utterly impossible to find large engineering firms with a big capital, stimulated by trade competition, who may be willing to experiment with strange and unfamiliar designs. In 1902 this was quite impossible. There were no wealthy firms engaged in producing combustion engines by the thousand, to whom experiment was part of the day's work. Moreover, it was an article of the engineer's faith that weight and reliability could not be divorced, and engineers do not readily abandon their cherished beliefs. Another difficulty lay in the fact that existing factory plant was far more limited and unadaptable than it is to-day. Like

Langley and earlier pioneers, the Wrights were compelled to design and construct their own engine.

The fact that in a year they succeeded in designing and constructing an engine giving thirty horse-power and weighing only 7 lb. per horse-power was in itself an accomplishment that might secure them a degree of fame. Indeed, their work in this connection—like the equally meritorious achievement of Langley's assistant, Charles Manly—constitutes an engineering feat that only the more momentous success it made possible could have dwarfed to comparative insignificance. The difficulties involved in designing a suitable screw propeller might have confounded less resourceful and determined men.

At last, towards the end of 1903, all was ready. A new machine had been built similar to the successful one of the previous year. As they found that their engine developed more power than they had anticipated, they utilized the extra weight allowed them in strengthening the general structure. Once more they visited Kitty Hawk and fitted the engine to the new machine. After a few practice flights on the old glider they prepared for the great test. A general invitation to be present at the trial was extended to the inhabitants of the district, but few responded. "Not many were willing to face the rigours of a cold December wind in order to see, as they no doubt thought, another flying-machine *not* fly." Five gentlemen turned up to witness the conquest of the air. They were Mr. A. D. Etheridge, Mr. W. S. Dough, Mr. W. C. Brinkley, Mr. John Ward, and Mr. John T. Daniels. Little would they think, as they came to the level ground north of the Kill Devil Hill, impelled probably more by casual curiosity or friendliness towards

the young inventors than by any real interest in aeronautics, what an epoch-making event they were to see. For a truly epoch-making event was about to take place. Sir Walter Raleigh,³ in the first volume of *The War in the Air*, quotes the description of this famous morning, written by Orville Wright for the Aeronautical Society of Great Britain. It is a concise and unadorned narrative.

On the morning of 17th December, between the hours of 10.30 o'clock and noon, four flights were made, two by Mr. Orville Wright and two by Mr. Wilbur Wright. The starts were all made from a point on the levels, and about 200 feet west of our camp, which is located about a quarter of mile north of the Kill Devil Sand Hill, in Dare County, North Carolina. The wind at the time of the flights had a velocity of 27 miles an hour at 10 o'clock and 24 miles an hour at noon, as recorded by the anemometer⁴ at the Kitty Hawk weather bureau station. This anemometer is 30 feet from the ground. Our own measurements, made with a hand-anemometer at a height of four feet from the ground showed a velocity of about 22 miles when the first flight was made and $20\frac{1}{2}$ miles at the time of the last one. The flights were directly against the wind. Each time the machine started from the level ground by its own power alone, with no assistance from gravity or any other sources whatever. After a run of about 40 feet along a mono-rail track, which held the machine eight inches from the ground, it rose from the track and under the direction of the operator climbed upward on an inclined course till a height of eight or ten feet from the ground was reached, after which the

course was kept as near horizontal as the wind gusts and the limited skill of the operator would permit. Into the teeth of a December gale the *Flier* made its way forward with a speed of ten miles an hour over the ground, and 30 to 35 miles an hour through the air. It had previously been decided that, for reasons of personal safety, these first trials should be made as close to the ground as possible. The height chosen was scarcely sufficient for manœuvring in so gusty a wind and with no previous acquaintance with the conduct of the machine and its controlling mechanisms. Consequently the first flight was short. The succeeding flights rapidly increased in length, and at the fourth trial a flight of 59 seconds was made, in which time the machine flew a little more than half a mile through the air and a distance of 852 feet over the ground. The landing was due to a slight error of judgment on the part of the operator. After passing over a little hummock of sand, in attempting to bring the machine down to the desired height the operator turned the rudder too far, and the machine turned downwards more quickly than had been expected. The reverse movement of the rudder was a fraction of a second too late to prevent the machine from touching the ground and thus ending the flight. The whole occurrence occupied little, if any, more than one second of time.

Only those who are acquainted with practical aeronautics can appreciate the difficulties of attempting the first trials of a flying-machine in a 25-mile gale. As winter was already well set in we should have postponed our trial to a more favourable season, but for the fact that we were determined, before returning

home, to know whether the machine possessed sufficient power to fly, sufficient strength to withstand the shocks of landings, and sufficient capacity of control to make flight safe in boisterous winds, as well as in calm air. When these points had been definitely established we at once packed our goods and returned home, knowing that the age of the flying-machine had come at last.

Wilbur Wright, writing in the *Century Magazine* in 1908, accurately describes the first of the four flights, that lasted twelve seconds, as "the first in the history of the world in which a machine carrying a man had raised itself into the air by its own power in free flight, had sailed forward on a level course without reduction of speed, and had finally landed without being wrecked".

Thus at last man had learned to fly. The hopes of many faithful workers were rewarded not, as it had so often seemed, with failure but with success. The beginnings, it is true, were modest and not very spectacular, like the first uncertain flight of a nestling, but they were the certain beginnings of a mighty conquest, the full meaning and extent of which one can even now only dimly imagine. Man had added one more to the long tale of his triumphs over his natural surroundings.

—From *The Conquest of the Air*

NOTES

1. Samuel Pierpont Langley (1834-1906), an American scientist.
2. Octave Chanute (1832-1910), an American pioneer, glider experimenter.
3. Sir Walter Raleigh (1861-1922), Professor of English Literature at Oxford University
4. *anemometer*, an instrument to measure the velocity of wind.

OUR HOME IN SPACE

Sir James Jeans

Sir James Hopwood Jeans (1877-1946) was an English mathematician, physicist, and astronomer. He is known for his important contribution in the application of mathematics to the problems of physics and astronomy. He was Professor of Applied Mathematics at Princeton University, and later lectured at Cambridge and Oxford. In 1928, he was knighted. Besides numerous scientific papers, he wrote *The Mysterious Universe*, *The Universe Around Us*, *Through Space and Time*, and *Physics and Philosophy*.

THE earth seems such a solid affair when we stand on it, and so big when we travel over it, that it is hardly surprising that men used to think of it as a vast immovable mass, forming the very centre of the universe. Many of them pictured it as a sort of flat board, with the starry sky covering it—rather as a dish-cover covers a dish. Of course they saw that the stars continually turned round the pole, and so they had to suppose that the dish-cover turned round over the dish; this was simpler than to suppose that the dish turned round under the dish-cover. Yet there were some, especially among the Greeks, who held different opinions. More than five centuries before Christ we find Pythagoras maintaining that the earth was of a globular shape: a ball floating in space, he said. Some centuries later, other Greeks, and Aristarchus ¹ in particular, began to see that this ball must not only float in space but must also move through space—must in fact revolve around the sun. But the idea did not prove popular.

Men did not like to think of their home as anything that the centre of the universe; they found it simpler a more flattering to their self-esteem to think of the earth as standing at rest, while everything else revolved round it. And so they continued in their old beliefs for nearly two thousand years after Aristarchus had seen and proclaimed the truth.

Then, just about four hundred years ago, Copernicus,² a Polish ecclesiastic, wrote a book of tremendous importance. He pointed out that the complicated motions of the sun and the planets across the sky could all be very simply explained by supposing that the sun stood still, while the earth and the planets revolved around it. While these ideas were still being discussed, Galileo,³ a professor in the University of Padua, made a small telescope with his own hands and convinced himself—and also showed to all the world—that things were as Copernicus said; the sun did not revolve round the earth but the earth and also the planets revolved round the sun. In this way the earth had to abandon its proud claim to be the centre of the universe—to become an ordinary planet, a mere fragment of matter revolving round a much larger sun. And three centuries of astronomical study have reduced its importance still further. If we look out on a clear moonless night, we shall see the Milky Way stretching across the sky, looking like a faint pearly ribbon. We know now that the Milky Way is a vast belt of distant stars, each star a sun more or less like our own. Most of its stars are too far away to be counted, even in a large telescope, but—strange though it may seem—it is possible to weigh the lot. We can do this by measuring the gravitational force with which they attract our sun.

In this way we find that the Milky Way must consist of about 100,000 million stars. I admit that I find it hard to think of such large numbers, and if you do too, let us call it fifty stars for each inhabitant of the earth. But even this vast number of stars forms only a minute fraction of the stars in the sky. The Milky Way is a flat cluster of stars isolated in space, with our sun well inside it; that is why we see its stars all around us. But it is only one of a vast number of similar clusters of stars, or galaxies as we call them, and each of these also contains another 100,000 million or so of stars. It is difficult to say how many of these galaxies there are, but it seems likely that there are about as many galaxies in space as there are stars in each galaxy, namely about 100,000 million. If so, there will be about fifty galaxies for each inhabitant of the earth, which means five million million stars for each one of us. Roughly speaking, we may say that there are as many stars for each person in the world as there are blades of grass in several square miles of pasture. Think over this next time that you are in a big grassy field, and you will begin to form some idea of the immensity of the universe in which we live. There must be more stars in the sky than there are blades of grass on the whole surface of the earth. A colony of minute organisms inhabiting a blade of grass might look out over the surrounding prairie and reflect that if their own blade of grass supported so much life, how much more must there be in the whole prairie. In the same way it has often been conjectured that as our sun maintains life on at least one of its planets, other stars probably do the same on their planets, so that the whole universe must teem with life.

But it is only a conjecture that other stars are accom-

panied by planets. They are all so far away that we can never hope to see their planets, even if they have any to see. We can only discuss whether they are likely, on general principles, to have planets circling round them as our sun has. If we could discover why our sun has planets, we might be able to form some judgment as to whether other stars are likely to have them or not. There is certainly no obvious reason why our sun should be more favoured than other stars in the matter of planets. It is just one of the 100,000 million stars of the Milky Way and a very ordinary star at that, fairly average in size, weight, brightness, temperature and so on. Some stars—but only a few—are millions of times larger than the sun, but the majority are substantially smaller. If we represent the sun by a cricket-ball, the smallest stars must be represented by pinheads, and the largest by barrage-balloons. Again, some stars give out hundreds of thousands of times more light and heat than the sun, but others give less than a ten-thousandth part as much. If the sun is an ordinary candle, some stars are stronger than searchlights while others are feebler than glow-worms. In these respects, as in others, the sun is about half-way between the extremes. It has eight planets revolving round it, besides our earth. All of them are very small compared with the sun. If we imagine the earth reduced to the size and weight of a cherry, the planets will range from melons to currants in size, but the sun will still have the size, and also the weight, of a good-sized elephant. Four of the planets are larger and four smaller than the earth, so that the earth is the middle-sized planet. It is also of about average temperature, or slightly above. Thus there is nothing in any way outstanding about either the sun or

the earth; we live on a very ordinary planet which revolves round a very ordinary star.

There is, however, another line of attack on the problem. If we can discover how the sun's planets came into existence, we may be able to see whether other suns are likely to have the planets come into existence or not. It used to be thought that the planets were simply bits of matter which the rapidly-spinning sun had thrown off from itself, much as a rapidly spinning bicycle wheel may throw off splashes of mud. If so, we might have expected that those stars which were spinning rapidly would be surrounded by planets, and the others not. But we know now that this explanation will not do. The sun can never have rotated anything like fast enough to throw off planets in this way, and we must look for some other way in which its planets can have come into existence. Most astronomers now believe that this happened through a second star coming quite close to the sun in its wanderings through space, and raising immense tides in the sun; the planets were formed as condensations of a sort of spray which was then thrown off.

To see what this means, let us look at the ordinary tides that we find at the seaside. These are hillocks of water which the moon piles up by its gravitational pull on the waters of the ocean. It raises similar tides in the solid body of the earth, and also in its atmosphere, but these are less noticeable than the familiar ocean tides. All these tides are quite small, partly because the moon which raises them is quite small in comparison with the earth, and partly because it is so far away. If the moon suddenly became as big as the earth, the tides would be eighty times their

present size: hills of water hundreds of yards high. And if this larger moon were brought ten times nearer to the earth than it now is, the tides would be increased a further thousandfold; they would now be huge mountains hundreds of miles high, so that the earth would be pulled completely out of shape by the gravitational pull of the moon. The same sort of thing would happen to the sun if its wanderings through space brought it to within two or three millions of miles of a second and larger star; the same process would repeat itself but on a larger scale. The main difference would be that the sun consists of gas, so that the tides would of course be gaseous too: they would be huge mountains of gas rolling over the surface of the sun. As the two stars approached one another, these mountains would steadily increase in height until they could no longer be described merely as tides. Finally a long jet of hot gas would be pulled out from the sun, pointing in the direction of the second star. It would not last long as a jet, but would begin to break up, much as a jet of water breaks up into drops when it comes out of a hose-pipe. Condensations of gas would begin to form at different points along it, and soon all the gas of the original jet would have collected round one or other of these condensations. The final result would be a number of globes of hot gas revolving round the sun, so that after the second star had passed on its way, the sun would be left with a family of planets as a souvenir of the visit. We can calculate the course of events in some small detail, and find that the family of planets produced in this way would be very like the sun's actual family.

All this makes it highly probable—although it does

not prove—that the sun's family of planets was produced in the way I have described: a larger star wandered near to our sun, pulling it out of shape and raising huge tidal mountains on its surface, and the planets finally appeared as a sort of condensation of the spray splashed up in the process. Now this sort of thing could happen to stars other than our sun, but it will only happen if the two stars come quite close to one another: they must come to within one or two diameters of one another. And the stars are so sparsely scattered in space that such an event is of almost inconceivable rarity. Put three grains of sand inside a vast cathedral, and the cathedral will be more closely packed with sand than space is with stars. Our sun could probably wander about through the stars for many million of millions of years before approaching close enough to a second star to produce planets. This shows that we need not concern ourselves with the possibility of our sun producing a second family of planets in our lifetime. But we can look back to a past epoch when the stars were not the compact masses they now are, but vast nebulous masses of tenuous gas. Such masses are far more vulnerable to tidal attack than the present compact stars, and each star would have a reasonable, although still small, chance of producing planets. But even though this chance were only one in a million, the number of stars in the sky is so great that there would still be millions of millions of planetary systems produced, with several planets in each. Many of these planets no doubt would be very different from our earth, and most of them might be utterly unsuited to the support of life. Even so, there must still be many millions in a physical state like that of our earth.

In some such way as this, we can imagine our earth, and innumerable other planets as well, starting their lives as nebulous balls of gas torn out of their parent suns. After a time such a ball of gas will begin to cool, so that much of its substance will become first liquid and then solid. Generally speaking, the heavier substances will liquefy first, and as they do so, will fall towards the centre, finally forming a solid core like the body of the earth. Most of the lighter substances need much lower temperatures to liquefy them. On bitterly cold planets like Saturn or Neptune, these lighter substances have already liquefied, or even solidified. But our warmer earth is not cool enough to liquefy most of them. Water vapour is rather exceptional, changing into liquid water while the temperature is still fairly high, so that the water vapour in the earth's atmosphere must have condensed at a fairly early stage, and fallen on to the earth's surface in torrential showers of rain. These would fill up any depressions there might be in this surface and finally form oceans such as we know. In the end we have a solid mass of rock, covered in part by oceans of water, and, surrounding all, an atmosphere of gases such as oxygen and nitrogen which do not liquefy at the temperature of the earth. By now the earth had reached a state which was pretty much like its present state, and the stage was set for the appearance of life which, starting from the humblest of beginnings, increased in complexity until man appeared—whether as a culmination and climax, or merely as a transitory incident in the upward surge of life, we simply do not know: the future will show. Millions of other planets have probably followed the same road, and attained a state equally suited for the appearance of life. Has life

appeared on them as it did on earth? If so is it like the life on earth, or has it taken an entirely different path? Again we simply do not know. *

—From *The Listener* (1942)

* The author wishes it to be made clear that this is a broadcast talk, and was not written in the literary form of an essay.

NOTES

1. *Aristarchus* (217-145 B.C.), Greek scholar.
2. *Copernicus* (1473-1543), a Polish Churchman and astronomer.
3. *Galileo* (1564-1642), an Italian astronomer. He was persecuted by the Church for his scientific findings.

THE PLACE OF SCIENCE IN A LIBERAL EDUCATION

Bertrand Russell

Bertrand Arthur William Russell, who was born in 1872, is an English philosopher and mathematician. He studied at Trinity College, Cambridge, where later he was lecturer and fellow. His activities on behalf of peace in the First World War caused him to lose his fellowship and later he was imprisoned for a short time because of an anti-war publication. In 1938 he went to the United States where he became Professor of Philosophy at the University of California. He is a reformer, emphasizing the creative activity of man, which, according to him, can be achieved through a system of universal education. Some of his important works are *Principles of Social Reconstruction*, *Mysticism and Logic*, *An Outline of Philosophy*, *Education and the Social Order*, *Philosophy and Politics*, and *Human Knowledge*.

I

SCIENCE, to the ordinary reader of newspapers, is represented by a varying selection of sensational triumphs, such as wireless telegraphy and aeroplanes, radio-activity and the marvels of modern alchemy. It is not of this aspect of science that I wish to speak. Science, in this aspect consists of detached up-to-date fragments, interesting only until they are replaced by something newer and more up-to-date, displaying nothing of the systems of patiently constructed knowledge out of which, almost as a casual incident, have come the practically useful results which interest the man in the street. The increased command over the forces of nature which is derived from science is

undoubtedly an amply sufficient reason for encouraging scientific research, but this reason has been so often urged and is so easily appreciated that other reasons, to my mind quite as important, are apt to be overlooked. It is with these other reasons, especially with the intrinsic value of a scientific habit of mind in forming our outlook on the world, that I shall be concerned in what follows.

The instance of wireless telegraphy will serve to illustrate the difference between the two points of view. Almost all the serious intellectual labour required for the possibility of this invention is due to three men—Faraday,¹ Maxwell,² and Hertz.³ In alternating layers of experiment and theory these three men built up the modern theory of electromagnetism, and demonstrated the identity of light with electromagnetic waves. The system which they discovered is one of profound intellectual interest, bringing together and unifying an endless variety of apparently detached phenomena, and displaying a cumulative mental power which cannot but afford delight to every generous spirit. The mechanical details which remained to be adjusted in order to utilize their discoveries for a practical system of telegraphy demanded, no doubt, very considerable ingenuity, but had not that broad sweep and that universality which could give them intrinsic interest as an object of disinterested contemplation.

From the point of view of training the mind, of giving that well-informed, impersonal outlook which constitutes culture in the good sense of this much-misused word, it seems to be generally held indisputable that a literary education is superior to one based on science. Even the warmest advocates of science are apt to rest their claims on the contention that culture ought to be sacrificed to

utility. Those men of science who respect culture, when they associate with men learned in the classics, are apt to admit, not merely politely, but sincerely, a certain inferiority on their side, compensated doubtless by the services which science renders to humanity, but none the less real. And so long as this attitude exists among men of science, it tends to verify itself: the intrinsically valuable aspects of science tend to be sacrificed to the merely useful, and little attempt is made to preserve that leisurely, systematic survey by which the finer quality of mind is formed and nourished.

But even if there be, in present fact, any such inferiority as is supposed in the educational value of science, this is, I believe, not the fault of science itself, but the fault of the spirit in which science is taught. If its full possibilities were realized by those who teach it, I believe that its capacity of producing those habits of mind which constitute the highest mental excellence would be at least as great as that of literature, and more particularly of Greek and Latin literature. In saying this I have no wish whatever to disparage a classical education. I have not myself enjoyed its benefits, and my knowledge of Greek and Latin authors is derived almost wholly from translations. But I am firmly persuaded that the Greeks fully deserve all the admiration that is bestowed upon them, and that it is a very great and serious loss to be unacquainted with their writings. It is not by attacking them, but by drawing attention to neglected excellences in science, that I wish to conduct my argument.

One defect, however, does seem inherent in a purely classical education—namely, a too exclusive emphasis on the past. By the study of what is absolutely ended and

can never be renewed, a habit of criticism towards the present and the future is engendered. The qualities in which the present excels are qualities to which the study of the past does not direct attention and to which, therefore, the student of Greek civilization may easily become blind. In what is new and growing there is apt to be something crude, insolent, even a little vulgar, which is shocking to the man of sensitive taste; quivering from the rough contact, he retires to the trim gardens of a polished past, forgetting that they were reclaimed from the wilderness by men as rough and earth-soiled as those from whom he shrinks in his own day. The habit of being unable to recognize merit until it is dead is too apt to be the result of a purely bookish life, and a culture based wholly on the past will seldom be able to pierce through everyday surroundings to the essential splendour of contemporary things, or to the hope of still greater splendour in the future.

My eyes saw not the men of old;
And now their age away has rolled.
I weep—to think I shall not see
The heroes of posterity.

So says the Chinese poet; but such impartiality is rare in the more pugnacious atmosphere of the West, where the champions of past and future fight a never-ending battle, instead of combining to seek out the merits of both.

This consideration, which militates not only against the exclusive study of the classics, but against every form of culture which has become static, traditional, and academic, leads inevitably to the fundamental question: What is the true end of education? But before attempting to answer this question it will be well to define the sense in

which we are to use the word "education". For this purpose I shall distinguish the sense in which I mean to use it from two others, both perfectly legitimate, the one broader and the other narrower than the sense in which I mean to use the word.

In the broader sense, education will include not only what we learn through instruction, but all that we learn through personal experience—the formation of character through the education of life. Of this aspect of education, vitally important as it is, I will say nothing, since its consideration would introduce topics quite foreign to the question with which we are concerned.

In the narrower sense, education may be confined to instruction, the imparting of definite information on various subjects, because such information, in and for itself, is useful in daily life. Elementary education—reading, writing and arithmetic—is almost wholly of this kind. But instruction, necessary as it is, does not *per se*⁴ constitute education in the sense in which I wish to consider it.

Education, in the sense in which I mean it, may be defined as *the formation, by means of instruction, of certain mental habits and a certain outlook on life and the world*. It remains to ask ourselves, what mental habits, and what sort of outlook, can be hoped for as the result of instruction? When we have answered this question we can attempt to decide what science has to contribute to the formation of the habits and outlook which we desire.

Our whole life is built about a certain number—not a very small number—of primary instincts and impulses. Only what is in some way connected with these instincts and impulses appears to us desirable or important; there

is no faculty, whether "reason" or "virtue" or whatever it may be called, that can take our active life and our hopes and fears outside the region controlled by these first movers of all desire. Each of them is like a queen bee, aided by a hive of workers gathering honey; but when the queen is gone the workers languish and die, and the cells remain empty of their expected sweetness. So with each primary impulse in civilized man: it is surrounded and protected by a busy swarm of attendant derivative desires, which store up in its service whatever honey the surrounding world affords. But if the queen-impulse dies, the death-dealing influence, though retarded a little by habit, spreads slowly through all the subsidiary impulses, and a whole tract of life becomes inexplicably colourless. What was formerly full of zest, and so obviously worth doing that it raised no questions, has now grown dreary and purposeless: with a sense of disillusion we inquire the meaning of life, and decide, perhaps, that all is vanity. The search for an outside meaning that can *compel* an inner response must always be disappointed: all "meaning" must be at bottom related to our primary desires, and when they are extinct no miracle can restore to the world the value which they reflected upon it.

The purpose of education, therefore, cannot be to create any primary impulse which is lacking in the uneducated; the purpose can only be to enlarge the scope of those that human nature provides, by increasing the number and variety of attendant thoughts, and by showing where the most permanent satisfaction is to be found. Under the impulse of a Calvinistic⁵ horror of the "natural man", this obvious truth has been too often misconceived

in the training of the young; "nature" has been falsely regarded as excluding all that is best in what is natural, and the endeavour to teach virtue has led to the production of stunted and contorted hypocrites instead of full-grown human beings. From such mistakes in education a better psychology or a kinder heart is beginning to preserve the present generation; we need, therefore, waste no more words on the theory that the purpose of education is to thwart or eradicate nature.

But although nature must supply the initial force of desire, nature is not, in the civilized man, the spasmodic, fragmentary, and yet violent set of impulses that it is in the savage. Each impulse has its constitutional ministry of thought and knowledge and reflection, through which possible conflicts of impulses are foreseen, and temporary impulses are controlled by the unifying impulse which may be called wisdom. In this way education destroys the crudity of instinct, and increases through knowledge the wealth and variety of the individual's contacts with the outside world, making him no longer an isolated fighting unit, but a citizen of the universe, embracing distant countries, remote regions of space, and vast stretches of past and future within the circle of his interests. It is this simultaneous softening in the insistence of desire and enlargement of its scope that is the chief moral end of education.

Closely connected with this moral end is the more purely intellectual aim of education, the endeavour to make us see and imagine the world in an objective manner as far as possible as it is in itself, and not merely through the distorting medium of personal desire. The complete attainment of such an objective view is no doubt an ideal,

indefinitely approachable, but not actually and fully realizable. Education, considered as a process of forming our mental habits and our outlook on the world, is to be judged successful in proportion as its outcome approximates to this ideal; in proportion, that is to say, as it gives us a true view of our place in society, of the relation of the whole human society to its non-human environment, and of the nature of the non-human world as it is in itself apart from our desires and interests. If this standard is admitted we can return to the consideration of science, inquiring how far science contributes to such an aim, and whether it is in any respect superior to its rivals in educational practice.

II

Two opposite and at first sight conflicting merits belong to science as against literature and art. The one, which is not inherently necessary, but is certainly true at the present day, is hopefulness as to the future of human achievement, and in particular as to the useful work that may be accomplished by any intelligent student. This merit and the cheerful outlook which it engenders prevent what might otherwise be the depressing effect of another aspect of science, to my mind also a merit, and perhaps its greatest merit—I mean the irrelevance of human passions and of the whole subjective apparatus where scientific truth is concerned. Each of these reasons for preferring the study of science requires some amplification. Let us begin with the first.

In the study of literature or art our attention is perpetually riveted upon the past: the men of Greece or of the

Renaissance ⁶ did better than any men do now; the triumphs of foreign ages, so far from facilitating fresh triumphs in our own age, actually increase the difficulty of fresh triumphs by rendering originality harder of attainment; not only is artistic achievement not cumulative, but it seems even to depend upon a certain freshness and *naïveté* ⁷ of impulse and vision which civilization tends to destroy. Hence comes, to those who have been nourished on the literary and artistic productions of former ages, a certain peevishness and undue fastidiousness towards the present, from which there seems no escape except into the deliberate vandalism ⁸ which ignores tradition and in the search after originality achieves only the eccentric. But in such vandalism there is none of the simplicity of spontaneity out of which great art springs: theory is still the canker in its core, and insincerity destroys the advantages of a merely pretended ignorance.

The despair thus arising from an education which suggests no pre-eminent mental activity except that of artistic creation is wholly absent from an education which gives the knowledge of scientific method. The discovery of scientific method, except in pure mathematics, is a thing of yesterday; speaking broadly, we may say that it dates from Galileo. Yet already it has transformed the world, and its success proceeds with ever-accelerating velocity. In science men have discovered an activity of the very highest value in which they are no longer, as in art, dependent for progress upon the appearance of continually greater genius, for in science the successors stand upon the shoulders of their predecessors; where one man of supreme genius has invented a method, a thousand lesser men can apply it. No transcendent ability is

required in order to make useful discoveries in science; the edifice of science needs its masons, bricklayers, and common labourers as well as its foremen, masterbuilders, and architects. In art nothing worth doing can be done without genius; in science even a very moderate capacity can contribute to a supreme achievement.

In science the man of real genius is the man who invents a new method. The notable discoveries are often made by his successors, who can apply the method with fresh vigour, unimpaired by the previous labour of perfecting it; but the mental calibre of the thought required for their work, however brilliant, is not so great as that required by the first inventor of the method. There are in science immense numbers of different methods, appropriate to different classes of problems; but over and above them all, there is something not easily definable, which may be called *the* method of science. It was formerly customary to identify this with the inductive method, and to associate it with the name of Bacon. But the true inductive method was not discovered by Bacon, and the true method of science is something which includes deduction as much as induction, logic and mathematics as much as botany and geology. I shall not attempt the difficult task of stating what the scientific method is, but I will try to indicate the temper of mind out of which the scientific method grows, which is the second of the two merits that were mentioned above as belonging to a scientific education.

The kernel of the scientific outlook is a thing so simple, so obvious, so seemingly trivial, that the mention of it may almost excite derision. The kernel of the scientific outlook is the refusal to regard our own desires, tastes,

and interests as affording a key to the understanding of the world. Stated thus baldly, this may seem no more than a trite truism. But to remember it consistently in matters arousing our passionate partisanship is by no means easy, especially where the available evidence is uncertain and inconclusive. A few illustrations will make this clear.

Aristotle,⁹ I understand, considered that the stars must move in circles because the circle is the most perfect curve. In the absence of evidence to the contrary, he allowed himself to decide a question of fact by an appeal to æsthetico-moral considerations.¹⁰ In such a case it is at once obvious to us that this appeal was unjustifiable. We know now how to ascertain as a fact the way in which the heavenly bodies move, and we know that they do not move in circles, or even in accurate ellipses, or in any other kind of simply describable curve. This may be painful to a certain hankering after simplicity of pattern in the universe, but we know that in astronomy such feelings are irrelevant. Easy as this knowledge seems now, we owe it to the courage and insight of the first inventors of scientific method, and more especially Galileo.

We may take as another illustration Malthus's¹¹ doctrine of population. This illustration is all the better for the fact that his actual doctrine is now known to be largely erroneous. It is not his conclusions that are valuable, but the temper and method of his inquiry. As everyone knows, it was to him that Darwin¹² owed an essential part of his theory of natural selection, and this was only possible because Malthus's outlook was truly scientific. His great merit consists in considering man not as the object of praise or blame, but as a part of nature, a thing with a

certain characteristic behaviour from which certain consequences must follow. If the behaviour is not quite what Malthus supposed, if the consequences are not quite what he inferred, that may falsify his conclusions. but does not impair the value of his method. The objections which were made when his doctrine was new—that it was horrible and depressing, that people ought not to act as he said they did, and so on—were all such as implied an unscientific attitude of mind; as against all of them, his calm determination to treat man as a natural phenomenon marks an important advance over the reformers of the eighteenth century and the Revolution.

Under the influence of Darwinism the scientific attitude towards man has now become fairly common, and so to some people quite natural, though to most it is still a difficult and artificial intellectual contortion. There is, however, one study which is as yet almost wholly untouched by the scientific spirit—I mean the study of philosophy. Philosophers and the public imagine that the scientific spirit must pervade pages that bristle with allusions to ions,¹³ germ-plasms,¹⁴ and the eyes of shell-fish. But as the devil can quote Scripture, so the philosopher can quote science. The scientific spirit is not an affair of quotation, of externally acquired information, any more than manners are an affair of the etiquette-book. The scientific attitude of mind involves a sweeping away of all other desires in the interests of the desire to know—it involves suppression of hopes and fears, loves and hates, and the whole subjective emotional life, until we become subdued to the material, able to see it frankly, without preconceptions, without bias, without any wish except to see it as it is, and without any belief that what it is

must be determined by some relation, positive or negative, to what we should like it to be, or to what we can easily imagine it to be.

Now in philosophy this attitude of mind has not as yet been achieved. A certain self-absorption, not personal, but human, has marked almost all attempts to conceive the universe as a whole. Mind, or some aspect of it—thought or will or sentience—has been regarded as the pattern after which the universe is to be conceived, for no better reason, at bottom, than that such a universe would not seem strange, and would give us the cosy feeling that every place is like home. To conceive the universe as essentially progressive or essentially deteriorating, for example, is to give to our hopes and fears a cosmic importance which *may*, of course, be justified, but which we have as yet no reason to suppose justified. Until we have learnt to think of it in ethically neutral terms, we have not arrived at a scientific attitude in philosophy; and until we have arrived at such an attitude, it is hardly to be hoped that philosophy will achieve any solid results.

I have spoken so far largely of the negative aspect of the scientific spirit, but it is from the positive aspect that its value is derived. The instinct of constructiveness, which is one of the chief incentives to artistic creation, can find in scientific systems a satisfaction more massive than any epic poem. Disinterested curiosity, which is the source of almost all intellectual efforts, finds with astonished delight that science can unveil secrets which might well have seemed for ever undiscoverable. The desire for a larger life and wider interests, for an escape from private circumstances, and even from the whole recurring human cycle of birth and death, is fulfilled by the imper-

sonal cosmic outlook of science as by nothing else. To all these must be added, as contributing to the happiness of the man of science, the admiration of splendid achievement and the consciousness of inestimable utility to the human race. A life devoted to science is therefore a happy life, and its happiness is derived from the very best sources that are open to dwellers on this troubled and passionate planet.

—From *Mysticism and Logic*

NOTES

1. *Michael Faraday* (1791-1867), a great English scientist.
2. *James Clerk Maxwell* (1831-79), a great Scottish physicist.
3. *Heinrich Rudolf Hertz* (1857-94), a German scientist who confirmed Maxwell's theories.
4. *per se*, by itself, intrinsically.
5. *Calvinistic*, pertaining to Calvinism, that is, very strict morally.
6. *Renaissance*, the great revival of art and learning that began in Italy in the fourteenth and fifteenth centuries and spread to Western and Northern Europe in the sixteenth century.
7. *naïveté*, artlessness.
8. *vandalism*, hostility to or wilful destruction of beautiful and artistic things.
9. *Aristotle* (384-322 B.C.), a great Greek philosopher and teacher of Alexander the Great.
10. *æsthetic-moral considerations*, considerations based on moral principles and principles of beauty.
11. *Thomas Robert Malthus* (1766-1834), a British clergyman and economist, known for his *Essay on Population*.
12. *Charles Robert Darwin* (1809-82), an English scientist who originated the theory of evolution.
13. *ions*, electrified particles.
14. *germ-plasms*, the substance contained in the germ-cells by which hereditary traits are transmitted.

