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REPORT OF PREPARATORY CONFERENCE OF REPRESENTATIVES OF UNIVERSITIES

CONVENED AT UTRECHT, 2-13 AUGUST 1948, BY UNESCO
IN COLLABORATION WITH THE NETHERLANDS GOVERNMENT

UNITED NATIONS EDUCATIONAL, SCIENTIFIC
AND CULTURAL ORGANIZATION
Paris 1948

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FOREWORD

THE Preparatory Conference of Representatives of Universities was called as a result of a decision by the Third General Conference of Unesco which was held at Mexico City in October, 1947. At that time, I was instructed to call "a meeting of representatives of universities during 1948."

One of the main reasons for this decision was the growing feeling on the part of university people that the time had come to renew and extend the pre-war efforts to achieve international co-operation among institutions of higher education. This was expressed in the Mexico City resolution. It was shown by the response to our invitation and by the active participation of the delegates, both participants and observers, in the Universities' Conference itself.

During the extended discussions in the plenary sessions and in the sectional meetings, a number of important recommendations were unanimously approved. Some of them will be of assistance in lending encouragement to universities seeking to extend their activities leading to international understanding. Other recommendations will furnish the basis for continuing co-operation at the international level among the institutions themselves. Still others will be of assistance to Unesco in planning and developing its programme in the field of higher education.

Although the delegates officially expressed their appreciation to those who contributed to the success of the Conference, I want to express also the deep gratitude of Unesco. Our thanks are extended to the Netherlands Government, to the Officers of the Conference, and to the Local Committee at Utrecht and their assistants. Our thanks are given also to the special lecturers, and to all the participants and observers whose considered judgment and thoughtful deliberations made possible a significant advance in international understanding. Indeed, the Conference was itself a demonstration of mutual understanding and good will among the representatives of universities of thirty-two countries.

It is my earnest hope that this Conference will be the beginning of increasingly significant developments leading to co-operation among universities, and thus among nations.

JULIAN HUXLEY.

PREFACE

THIS statement departs somewhat from the usual form of preface. It is written primarily for those who are interested in higher education but who have not the time or the abiding interest to read the report in full. It is an attempt very briefly to answer the two questions most commonly asked about the Conference: What did it consider? And what were its results?

The Preparatory Conference of Representatives of Universities was a meeting of 118 world leaders in higher education. Unesco had issued invitations to the various governments of the world, including both non-Member and Member States of Unesco. Participants and observers came from 32 countries, and were selected either by their Governments or by agencies designated by them. The observers who came from 12 international organizations were chosen by the groups they represented.

All the delegates, including also the members of the Unesco Secretariat who were in attendance, worked and lived for twelve consecutive days in the lovely 1900 year-old municipality of Utrecht.

In discussing the possible values to be gained from the Conference, Dr. C. E. Beeby, Assistant Director-General of Unesco in charge of Education, suggested at the first Regular Session that:

> "Perhaps the principal advantage of such a meeting is the opportunity it provides for persons with similar problems and very different backgrounds to come together and to understand each other. This is always important, but it is even more so now, due to the fact that the war sharply reduced and, for some countries, totally cut off cultural contacts among the universities.
>
> "A more obvious advantage of such a Conference is to be found in the exchange of experience in meeting common post-war problems, such as numbers of students and shortages of buildings, equipment and staff. Even if no solutions can be found, it may at least be satisfactory to know that such problems need not be worked out single-handed. Many of the problems may be old and stale on a national level, yet they have hardly ever been discussed on an international level.
>
> "The Conference may also lead to the setting up of some form of mechanism for continuing co-operation among universities, such as an International Council on Higher Education. If it is felt that a real need exists for such an organization, then the

formulation of plans for it, and the later calling of an even more representative world Conference, may be a major outcome of these sessions."

What did the Conference consider?

The term "preparatory" was included in the title of the Conference to indicate that one of its major functions was to decide if the universities of the world wished to call a full-scale conference at some later date. The time had been relatively short between the Third Session of the General Conference of Unesco in November, 1947, which authorized the "meeting of representatives of universities", and the holding of the Conference in August, 1948. Consequently, it had been impossible to procure the prior judgment of governments or institutions of higher education on the issues included in the agenda. This would of course be essential for a full-scale conference.

The meetings at Utrecht were organized to provide as much opportunity as possible for discussion, and it was, in a very real sense, a working conference. Five General Sessions were held in the evening, with addresses by eminent university authorities. Twelve regular or plenary sessions were devoted largely to reports on significant developments and current problems in higher education in the countries represented at the Conference, and to action on the documents drafted by each of the five Sections into which the Conference divided. The Sections met for a total of three days. For each a working paper had been previously prepared, consisting primarily of a series of questions. The topics of the Sections were:

The Changing Rôle of the University	(Section I)
Academic Standards	(Section II)
Financing and providing basic services for Higher Education	(Section III)
University Education and International Understanding	(Section IV)
Means of continuing International Co-operation among Universities	(Section V)

At the first Regular Session, Dr. C. E. Beeby pointed out that, in planning the Conference, Unesco had, to some extent, been faced with a dilemma. If its preparations had been too complete, it might have given the impression of wishing to dominate the Conference. On the other hand, if the preparations had been inadequate, the whole organization might have been formless and inchoate. The delegates were urged to feel entirely free to make such changes in the organization or agenda of the Conference as they desired.

The discussions and the statements on the developments and problems of higher education showed a number of striking similarities, and several significant differences, among the various countries represented and in the attitude of the delegates.

Every country, with only one exception, reported increased enrolment in universities and other institutions of higher education, as compared with the pre-war period. These increases were significant, both in number and in percentage. The largest numerical increase occurred in the United States, which reported enrolment in 1947 of 2,300,000 students, or approximately 900,000 more students in higher education than in 1939. A number of countries in the East and Middle East reported more than 100 per cent. increase during the same period.

This post-war expansion was not, it was agreed, a temporary phenomenon. While other factors played a part, it was unanimously felt that the increase in students was basically the result of a demand for greater educational opportunities. Representatives of countries that have consistently restricted enrolment in their universities agreed that the pressure to admit a larger number of students was greater now than ever before. Thus, any consideration of the problems of higher education must be viewed in the light, not of temporary emergencies, but of long-range continuing needs for world-wide expansion.

The greatest increase, both in number and in percentage, has been in the field of the physical sciences. The delegates recognized that this was perhaps a natural result of increasing mechanization, but repeatedly emphasized the need for similar or even greater expansion in the social sciences. There was considerable difference of opinion as to how this balance could be attained, but there was a fair measure of agreement that greater emphasis upon general education would be a first step in this direction.

In the discussion of university finance, there was unanimity on two points. One was that higher education will be increasingly financed by the State. The other was that little apprehension was felt regarding the development of sinister aspects of State aid; that the danger was there, but that it was latent rather than actual.

In the field of research, two trends were evident : there has been a vast expansion in research, but such expansion has been almost entirely in the physical sciences; and an increasing amount of scientific research, financed largely by industry and by governments, has been developed outside the universities. The delegates believed that there should be a similar expansion in the funds available for research in the social sciences, and they decried the tendency to develop research agencies outside the university, since research and instruction were inseparable functions of higher education.

The delegates recognized serious weaknesses in higher education —shortage of teaching staff, low salary scales, inadequate facilities of all kinds (particularly limited library and laboratory facilities), and insufficient guidance and care for the health of students. These were obvious, and perhaps inevitable, in the post-war period, but the delegates were also highly critical of present methods of university instruction. They believed that poor teaching resulted, partially at least, from the failure on the part of the institutions either to require professional preparation for university teaching or to accept responsibility for the improvement of the teaching of members of their staff.

All were strongly of the opinion that the universities were in a unique position to develop international understanding and that they were not now adequately accepting this responsibility.

There were many other areas of agreement, as indicated by the unanimous approval of the recommendations of the Conference. But there were also areas in which basic differences were evident.

The most important difference showed itself in the answers to the fundamental question: What is the rôle of the University? At one extreme were those who believed that its function was the training of an *élite* by an *élite*; at the other were those who believed that it should serve all young people who could benefit from some kind of higher education after leaving school. The United States, and to a somewhat lesser degree the British Dominions, represented the latter point of view: France, and to a varying degree other European countries, represented the former. The East and the Middle East, still in the early stages of university development, had not yet had to face this issue.

This difference in attitude showed itself in discussions of the extent to which the curricula or faculties should be expanded to meet the interests and abilities of students. It was evident, also, in discussions on student selection, on expansion of physical facilities, and on the extent to which the university should be responsive to national needs, or should encourage the development of other types of institutions to meet these needs.

Although there was definite agreement that the university should increasingly recognize its community responsibilities, there was a difference in judgment as to how far this responsibility should entail an extension of the services of the university. For example, all believed that the university had a responsibility in the field of adult education, but some believed that it should only provide advanced technical courses; others believed it should reach the entire community, and should use such media as radio and cinema.

An extremely interesting difference of opinion was evident in relation to academic freedom. All believed it was essential to higher education, and all agreed that political factors should not restrict freedom of teaching or the selection or retention of teachers. There was, however, a difference of opinion as to whether this should also apply to religious factors, and finally a compromise statement on this point was adopted in the final report.

A seemingly minor point, but one reflecting a basic difference in judgment, was the extent of freedom which should be allowed students in regard to attendance at lectures. Some felt that specific requirements were an essential part of university training; others believed that only the end-product, as measured by final examinations, was important, rather than the means through which the student had acquired his knowledge. A middle ground was represented by those who believed that attendance and satisfactory progress must be assured for students who were recipients of financial assistance through State funds.

These were some of the more important areas of agreement and

of disagreement. These differences, while not resolved, were discussed in a spirit of mutual understanding which led to the unanimity of judgment expressed in the Conference recommendations.

What were the results of the Conference?

What, specifically, was accomplished? There were, of course, intangible values resulting from the co-operative work of nearly two weeks together. The delegates came to a fuller understanding of the problems of other countries, and saw their own problems in world perspective.

There were, however, many more obvious results. Many of the statements included in the Conference report will strengthen the hands of university leaders in matters of general university policy, and in the further development of activities leading to international understanding. The delegates also developed a specific programme of action to be undertaken, at the international level, to foster closer co-operation among the universities of the world, and created the means through which, in co-operation with Unesco, this programme will be initiated and administered.

Only a few illustrations can be given of the general statements that may influence university policies. The Conference called upon the universities to "consider afresh the part they must play in education and to lay special stress upon general education, the moral and aesthetic development of their students and the responsibility of the university to the local and to the world community." It "deplored any general tendency for governments to establish institutes for fundamental research outside the universities", since "teaching is best done in an atmosphere of research", and urged an expansion of research in the social sciences. The Conference affirmed "its faith in the principle that the benefits of higher education should be available to all without discrimination on the basis of race, sex, politics, or religion", and urged that there be still further expansion of financial assistance to students in order to minimize the economic barrier to equality of educational opportunity.

The programme of action recommended by the Conference was broad, yet specific. The following partial list of activities indicates the nature of the programme to be developed: (1) the establishment of a general clearing-house on university problems and developments; (2) the publication of a university directory at regular intervals; (3) the development of means of procuring uniform statistics on higher education; (4) the making of surveys, on a world-wide basis, of enrolments, teacher qualifications, finance and curriculum revision; (5) the stimulating and facilitating of the practice of loan or exchange of teaching and research staff among the universities of the world, and the exchange of students; (6) the assembly and evaluation of information on teaching materials; (7) the facilitation of better distribution of laboratory and instructional materials, including films, through procuring necessary modifications of customs regulations and

currency restrictions on such materials; and (8) the gathering and dissemination of information on summer courses and student tours, and assistance in making them more effective in developing an understanding of other peoples and countries.

The Conference did not content itself with recommendations for action. It created the means to put the programme into operation. It appointed an Interim Committee to establish and administer an International Universities Bureau; to draw up a proposed constitution for an international organization of higher education; and to plan and call a conference in 1950 to establish the organization on a permanent basis.

Unesco was requested to finance the expenses of the Interim Committee and the Bureau until the permanent organization is formed during the 1950 Conference.

This Report

A brief statement is necessary regarding the organization of this report. It completely departs from the sequence of the Agenda. No attempt is made to summarize the discussions except as they are embodied in the Statements adopted by the Conference. Chapter I includes summaries of the addresses of the Section Chairmen and the recommendations of the Conference. Chapter II gives the addresses presented before the General Sessions; and Chapter III is devoted to the descriptions of Significant Developments and Current Problems in Higher Education in each of the countries participating in the Conference. The Appendix includes special reports, the Working Papers, and a roster of the persons participating in the Conference.

Instead of summarizing the various lectures and recommendations, it has seemed best to keep the exact wording of the speakers as far as possible, but some editing of the manuscripts was necessary in the interest of brevity and to avoid repetition.

The Preparatory Conference of Representatives of Universities was a demonstration in international co-operation. Problems were faced realistically, discussed frankly, and definite conclusions were reached. But the work of the Conference will be of little significance unless it influences the policies and practices of institutions of higher education, of governmental agencies and of international organizations. Only in this way will the real value of the Conference be felt in furthering the development of international understanding and world peace.

FRANCIS J. BROWN,
Secretary-General of the Conference.

OFFICERS OF THE CONFERENCE

At the first plenary session of the Conference, on August 3rd, the following were unanimously elected:

President: Dr. H. R. KRUYT, President of the Netherlands National Commission for International Co-operation in the Fields of Education, Science and Culture.

Vice-Presidents: Dr. ANDRÉ ALLIX, Rector of the University of Lyons, France.

Sir CHANDRESHWAR PRASAD NARAYAN SINGH, Vice-Chancellor of the University of Patna, India.

Each Section elected its own officers as follows:

SECTION I:

Chairman: Dr. IFOR L. EVANS, Vice-Chancellor of the University of Wales.

Vice-Chairman: Sir CHANDRESHWAR PRASAD NARAYAN SINGH, Vice-Chancellor of the University of Patna, India.

Rapporteurs: Professor I. A. GORDON, Vice-Chancellor, University of New Zealand.

Dr. G. A. CURRIE, Vice-Chancellor, University of Western Australia.

SECTION II:

Chairman: Dr. MATTA AKRAWI, Director-General of Higher Education, Ministry of Education, Iraq.

Vice-Chairman: Professor ANDRÉ MERCIER, Professor and Secretary to the Rector, University of Berne, Switzerland.

Rapporteur: Dr. F. L. R. SASSEN, University of Leiden, Netherlands.

SECTION III:

Chairman: Sir JOHN D. G. MEDLEY, Vice-Chancellor, Melbourne University, Australia.

Vice-Chairman: Dr. ANDRÉ ALLIX, Rector of the University of Lyons, France.

Rapporteurs: Mr. M. S. SUNDARAM, Secretary, Education Department, India House, London.

Mr. K. WIERSMA, University of Leiden, Netherlands.

SECTION IV:

Chairman: Professor PAULO DE BERREDO CARNEIRO, Permanent Delegate of Brazil to Unesco, Member of Unesco Executive Board.

Vice-Chairman: Dr. O. H. MALIK, Vice-Chancellor, West Punjab University, Lahore, Pakistan.

Rapporteur: Professor C. A. W. MANNING, London School of Economics and Political Science, University of London.

SECTION V:

Chairman: Dr. GEORGE F. ZOOK, President of the American Council on Education.

Rapporteur: Dr. J. F. FOSTER, Secretary of the Committee of Vice-Chancellors and Principals, and of the Universities Bureau of the British Commonwealth.

A Steering Committee was appointed by the Conference, consisting of the President, the two Vice-Presidents, and the five Chairmen of Sections. Dr. C. E. Beeby, Assistant Director-General of Unesco in charge of Education, and Dr. Francis J. Brown, Secretary-General of the Conference, were asked to meet with the Steering Committee as observers from Unesco.

CHAPTER I

RECOMMENDATIONS OF THE CONFERENCE

The five Sections, into which the Conference divided, drew up statements of recommendations which were presented in plenary session. After discussion and some slight revision, they were unanimously adopted by the whole Conference. They are reproduced here in the form in which they were finally approved.

The work of each Section began with a short opening speech by the Chairman. A brief summary of what was said is printed as an introduction to each of the five statements.

I. THE CHANGING RÔLE OF THE UNIVERSITY

Opening Remarks by the Chairman of Section I

Dr. Ifor L. Evans, Vice-Chancellor of the University of Wales, stressed in his introductory statement that much was expected from the universities of the world at this time. Theirs was not a task of mere conservation. Their growing inheritance could be a potent means of ensuring individual and social betterment, and it fell to the universities to strive for cultural continuity through change.

He emphasized the preparatory nature of the Conference and said that its primary duty was to prepare a reasoned programme for a still more representative Conference, which, after time for consultation with academic constituents, Unesco should be encouraged to assist in arranging next year, or not later than 1950.

The Chairman pointed out that the main task of the Sections was to define their problems as closely as they could and give precision to them—not necessarily to offer solutions. The report should take the form of reasoned statements of fact and opinion. Further facts could, where necessary, be ascertained and added later.

1. *The Changing Rôle of the University*

The university in the modern world is faced with many changes, both within its own walls and in the community outside. The pressure of these changes makes it essential that universities should consider afresh the part they must play in education.

New economic and social forces are at work, many of which already influence or will in the near future influence university education. The population of most countries is on the increase, and health services and standards of nutrition tend to improve. The status of women is being raised. In many countries there have been changes in the political, economic and social structures which make the community more conscious than it has been in the past of the nature of university education.

Even when we disregard the temporary sharp increase in student enrolments caused by the entry of war veterans and the flow of returning students, whose courses were suspended by the war, the indications are that the numbers seeking university education will remain at a higher level than before the war. In the developed countries, like those of Europe, the figure may become relatively stable. In the countries of the East, and many of the British colonies, the figures will probably continue to rise as the countries become more industrialized.

A further cause of the increase in student numbers is the growing demand for greater opportunity for university education. This takes two forms:— (*a*) a demand, at present being met by increased provision of scholarships, that all students of high ability, irrespective of their social or financial position, should be able to enter a university, and (*b*) a demand that *any* young person who wishes to have the benefit of university education should spend some period of young adult life in an institution which can transmit something of the social and cultural heritage of civilization. All or almost all countries are agreed on the wisdom of the first. Countries are divided somewhat on the practicability of the second. America and, to a lesser extent, the British Dominions have adopted an "open door" policy; the universities of Europe tend towards a policy of more restricted numbers and of more rigid selection. The two extremes are represented by the American view that the forces of society must determine the shape and content of university education, and the view held in many Western European countries that the universities cease to be universities if they endanger their standards through too free a system of entrance.

An outstanding cause of increased university enrolments is the recent rise in the numbers studying the natural sciences. This is due in part to the demands of national defence, the needs of industry, and the growing use of machinery in modern life: moreover, the seemingly definite and practical nature of the sciences appeals strongly to young people.

Apart from these problems of high enrolment, the universities face new problems of finance. The private fortunes that have in many countries financed universities in the past are disappearing, and, more and more, the universities are dependent on governments, and, in the end, on the taxpayer, for support. When funds are largely derived from public sources, the public and its representatives may feel they should have a voice in the development of universities and in the choice and number of students who are accepted.

In general, it is true to say that many people, both in the university and in the community, share a growing belief that the university has a wide social responsibility to the nation and, beyond the nation, to humanity at large.

2. *The Responsibility of the University*

On the question of how far the university should respond to the increasing demand for higher education, two schools of thought exist. The first holds that the university is directly concerned with the education of students with a wider range of abilities than in the past; the second considers that, although the university cannot dissociate itself from such students, they are not the direct responsibility of the university as such.

The two schools are represented by existing university institutions. Universities of the first pattern admit students of various levels and types of ability, and make such modifications as may be necessary in the courses of study offered. Universities of the second type consider that university education is "education of the *élite* by the *élite*", and advocate that, for students other than the academic *élite*, other types of institutions, financed and controlled by the State, should be developed or extended. In many European countries, university teachers and administrators give considerable service to these institutions, but they do not regard such service as their primary function. Most university people agree that it is the responsibility of society to provide a wider variety of higher education than has been available in the past, and advocate that university participation in such extended education should be encouraged. This participation will vary from advice and guidance to direct provision of facilities. The exact nature of the participation must spring from the university pattern in each community.

It is generally admitted that many students with the necessary ability still lack the opportunity for higher education. In extending facilities of whatever nature to such students, institutions must first attempt, as rapidly as possible, to re-establish a satisfactory ratio between the number of students and the number of staff, and also a reasonable balance between teaching and research, both of which have been temporarily disturbed by the over-riding duty of meeting the immediate needs of ex-service men and women. Moreover, there is for the moment a world-wide shortage of trained academic personnel, and the uncontrolled expansion of universities in the immediate future would result in a further reduction of the time

available for research, and a consequent general decline in academic standards.

3. *The Nature of University Education: The Balance of Studies*

Much has been written in recent years on the relationship between specialized studies and general education. There is no doubt that specialized education is on the increase. The complex organization of society makes this inevitable. Many universities are offering, or are considering, facilities for "general education" in an attempt to balance the education of the specialist. Can this be done without lengthening the years of study? The feeling of the Conference is that general education for the specialist is desirable and is possible within the number of academic sessions at present given to special study, but the precise balance and details must be worked out by the various faculties in collaboration.

One danger should be avoided—that of assuming (as often happens in Arts faculties) that specialized or scientific education is not education at all. In the end the quality of the teaching is what counts. A specialized subject, taught in a liberal spirit, offers more opportunity for the intellectual and social development of the student than a general subject taught as a narrow discipline. On the other hand, there are certain fields of human endeavour, such as language, philosophy, science, and history of civilization, in which all students, irrespective of their subject, should have information and opportunities for discussion, and these should form a part of all university curricula. Whether they are developed in specific courses, or evolve *pari passu* with the teaching of special studies, is merely a problem of technique and presentation, for which more than one solution is possible.

No university can afford to neglect the moral and aesthetic development of its students. Mere intellectual development is not enough. But the methods used to achieve this end must vary as human beings vary. In certain confessional universities the teaching of moral doctrine may be explicit. In the secular universities it must necessarily be implicit. The study of fundamental values is part of the study of man. A healthy university atmosphere in which teacher and student meet in a spirit of toleration and goodwill may well achieve as much as any doctrinal teaching.

No student is complete without an appreciation of the aesthetic side of life. The universities in the great metropolitan centres are at an advantage here, and can draw on the theatre, the concert hall, and the museum of fine arts. In smaller and more remote centres the university must, however, make special efforts to encourage and stimulate aesthetic development, though not necessarily in formal university studies.

Special emphasis must be laid on the importance of community life. Students learn to live as educated people as much from living in a group during their formative years as from any instruction or direction which they may receive. Non-resident universities should

do all they can to provide for their students the amenities of a community life.

4. *Research*

The university has a duty to advance and interpret knowledge as well as to transmit it, so that creative work must be part of the duty of the staff of all universities. Teaching, too, is best done in an atmosphere of research, and staff, equipment, libraries and funds must be adequate to ensure that those men and women who have the ability and the desire for research may have time free from teaching to do it.

Fundamental research may be defined as creative work carried out regardless of its immediate application to economic or social ends, but with the object of enlarging basic knowledge. Applied research has, on the contrary, an immediate objective, and is devoted to the solution of certain economic or social or other problems.

Even so, it must not be assumed that the university should confine itself to fundamental work alone, although this should be its main sphere of research. Applied problems often lead to new fundamental knowledge. It is, however, essential that the university should in the main engage only in those researches, the object of which is the discovery of general principles rather than the achievement of merely practical and specific results.

On the problem of the university and its relation to special research institutes, state departments and the like, the Conference deplores any general tendency for governments to establish institutes for fundamental research outside the universities. It believes that it is in a nation's best interests that institutes devoted to fundamental or similar research should be established within the universities. Research specialists have to be trained in the universities, and the research departments should be there to assist in their training. This would also prevent different institutions having to compete for staff. The funds necessary to staff and equip these departments must be provided.

Much larger funds and greater efforts should be expended on research in the social sciences and on creative work in the humanities. It can be no exaggeration to say that the future of the world, and even perhaps the survival of civilization as we know it, rests as much with these studies as with the natural sciences.

It is probable that much fruitful work might come from more co-operative research within universities themselves. People trained in different disciplines often cross-fertilize ideas and so stimulate each other.

Duplication of work need not be harmful provided that each group keeps in touch with research workers elsewhere. A friendly rivalry is not damaging to progress. The State has a right to provide funds in such a way that unnecessary duplication is avoided, but has no right to interfere in the direction of the research itself.

It is probable that Unesco might help the co-ordination of research on a wide basis by assisting international scientific associations.

5. *Specialized Institutions*

There are a number of institutions, of which teacher training and technical institutes are obvious examples, which are essential elements in all provision for education. The universities cannot be indifferent to the welfare and progress of these institutions, but how far they should assume direct responsibility for their administration and standards is still an open question.

It can be said, however, that it is clearly desirable that in all such institutions general education at a university level should be an essential element of training; that all training in technology should include a substantial foundation of basic science; and that teaching in these institutions should be conducted in an atmosphere of research.

Difference of opinion about the amount of direct responsibility the university should assume for such institutions is so great between countries, and between universities in the same country, that we recommend that a special section of the next conference be devoted to the subject. Meanwhile, Unesco should be asked to collect and collate information about such institutions as a basis for discussion at the next conference.

6. *Adult Education*

The whole question of adult education is bound up with the conception of the duties of the universities in their particular regions. In some isolated communities the university might be expected to provide much intellectual and cultural leadership, whereas in a region where there are many other cultural and educational institutions, the university might safely play a more restricted rôle. Further, in many communities the task of establishing and developing the more immediate duties of the university is so urgent that a dispersal of energy into the field of adult education might render the performance of the major task impossible. In general, the universities might well consider paying more attention to adult education, but the amount of responsibility which they accept for it must vary with the circumstances of each area.

It is recommended *that the whole problem of the duty of the university to its region and the related problem of adult education be referred to an appropriate body for further study.*

SUPPLEMENTARY STATEMENT REGARDING DEFINITION OF TERMS

(drawn up by a Sub-Committee of Section I and approved by the whole Conference)

The question of terminology is full of difficulties, since the same term is frequently used with different meanings, not only between

countries, but also within a given country; and different terms are sometimes used to connote the same thing. This will call for further study by the appropriate body in due course; all that can be attempted for the moment is a general statement which will assist in delimiting the field, and in the drafting of questionnaires in preparation for the next conference.

Higher Education should be understood as including all teaching and related research provided for students who have satisfactorily completed an approved course of secondary education.

Universities are institutions of higher education devoted to teaching and research and legally entitled to confer degrees.

The word *College* is used in several different senses. In the field of higher education the term includes: (1) residential constituent member institutions of such universities as Oxford, Cambridge, and Yale; (2) institutions of university character united in a wider federal union, as in London, Wales, and New Zealand; (3) institutions which are on the way to becoming universities in their own right—such as the four independent University Colleges in England; (4) the four-year Colleges in the U.S.A., which normally prepare students for their own initial degrees; (5) Junior Colleges in the U.S.A. giving courses, usually of two years' duration, following high school graduation. In some instances, these courses are included in a secondary school organization; (6) the term is also used in France not merely to describe a particular type of secondary school, but also the Collège de France, which is a unique institution devoted to higher learning at an advanced level.

In addition to Universities and Colleges of university status, there are *other institutions* of higher education which can fairly claim university rank. These are called by different names in different countries, and include Technical High Schools, more or less after the German pattern; Institutes of Technology (as, for example, in Manchester and Massachusetts); and the Grandes Ecoles, which are so characteristic a feature of higher education in France. These various institutions are usually of a specialised character, but the level of achievement is sometimes very high indeed.

The term *student* is used to connote a person who is matriculated in, or otherwise admitted to, an institution of higher education. Comparisons of student numbers are notoriously difficult, since in some countries (e.g. Great Britain) a clear distinction is made between students who devote the whole of their time to their studies and those who do not: while in others (e.g. France) no such clear-cut line of demarcation is drawn.

II. ACADEMIC STANDARDS

Opening Remarks by the Chairman of Section II

In his introductory statement, Dr. Matta Akrawi, Director-General of Higher Education in Iraq, said that academic standards were notoriously varied, between countries, between universities, and even within the confines of a single large university.

It was of doubtful value to speak of standards in the sense of yard-sticks with which to measure and compare the achievements of one university with those of another, especially with one in a different country. Standards should rather be taken to mean the achievements of a university as compared with its previous record, or the attainments of its students as measured against the attainments in the same field of their predecessors of one or more years before. The question therefore resolved itself into one of improving standards within any particular university.

He drew the attention of the Section to one of the most outstanding problems of post-war university education—the great influx of students into institutions of higher learning and their insistent demand for admission in ever larger numbers. He thought that in few countries would it be possible for universities to resist this demand for education, and in this way to maintain their traditional studies and attitudes unchanged. There were two alternatives: to admit only the best students available, or, in the freer conception of a university, to offer a great variety of subjects and accept students with a correspondingly large range of abilities.

In the first instance an appreciable proportion of the students would be kept out of the universities, and other types of institutions might arise to meet their needs. The problem of standards, while perhaps partially solved from the standpoint of the university, would hardly have been solved when viewed from a national point of view. It would simply have been thrown on the shoulders of other authorities.

The alternative policy had its own problems, which might result in lowering of standards, but this could be avoided. What was needed was a modified conception of standards, fitted to each ability group on the one hand, and put in terms of each particular field of study on the other. Different minds with different levels of ability were fitted to work in different fields of study, and it was the business of the university to keep each to the highest standard of achievement possible.

The Chairman concluded by saying that there was a negative and positive way of looking at academic standards. The negative way had to do with weeding out students who were not fit for higher education, while the positive way tried to discover and develop to the full the abilities of the students, and lead them to ever greater heights of achievement. Both had their place in the educational

scheme of the university, but the latter, the positive way, was the more constructive. It was the main function of a university.

Statement Adopted by the Conference

1. *Admission and Selection of Students*

It is generally agreed that examinations, whether given by the State, by the universities, or by the secondary schools with or without supervision from the State or the universities, are not a sufficient basis for the admission and selection of students for entrance to the university. While these examinations can be improved by further study and research into their methods, it is felt that they should be supplemented by other means. Among the possible means are: scrutiny of the whole secondary school record, report of the school on the character and personal qualities of the student, an interview, and psychological tests. Guidance procedures, which involve an understanding of the student and his needs, and the giving of advice on the course which he might follow at the university or elsewhere, may also operate as methods of selection. In this connection, a health examination may prove valuable.

The large influx of students has put a great strain on the universities, making some form of selection necessary. The distinction is made between selection before and after admission. The former is more successful in the private universities, while public universities are more sensitive to popular pressure. The latter gives a chance to the doubtful student and eliminates the unfit, usually after the first year. Perhaps the best is a combination of the two methods. Certain countries have introduced, or are introducing, a preparatory or propaedeutic year. It appears that in some countries there has been a lowering of academic standards due to the influx of students; in other countries standards have been maintained. Some of the reasons for the lowering of standards are: war conditions; rapid expansion of secondary education without adequate preparation, staffing, or equipment; shortage of university staff; and increase in specialization at the level of secondary education.

In some countries requirements for admission have a restrictive effect on the work of secondary schools, and complaints on that score have been made in these countries. As only a fraction of the pupils from secondary schools go to the university, it is desirable that schools should have the liberty to adjust their curricula to their needs, and to the needs of life.

The Conference affirms its faith in the principle that the benefits of higher education should be available to all without discrimination on the basis of race, sex, religion or politics.

On the question of basing student selection on a study of world-wide needs, there is not sufficient data available. It is suggested, however, that those universities which are much sought after by foreign students should make such provision as is practicable for

their admission. Within any country a student should be free to choose his field of study, except where a country cannot provide sufficient facilities to satisfy that choice. A desirable practice would be to give the student information, on a national basis, about those professions which are more over-crowded than others, and about opportunities for employment. It should also be emphasized that the possession of a degree in a professional subject would not necessarily confer the right to practice that profession.

2. *Equivalence of Qualifications*

Professor R.M. MacLean, of the International Association of University Professors and Lecturers, presented a report of the study of equivalence made by the Association at the invitation of Unesco. (See Appendix A). The report was adopted. *The Conference recommends to Unesco that it assist in providing for the continuation of the study of equivalence.*

It is felt that the problem of equivalence cannot be solved on a wholesale international level, and that the most practical way is to work it out between one country and another, and between universities. *The Conference calls upon Unesco to recommend to its Member States that they promote bilateral or multilateral consultations on the question of equivalence but without limiting the right of universities to enter into agreements among themselves.*

3. *University Staff*

Except in a few countries, there is a general shortage of staff. Among the major reasons for this shortage are: (i) the competition of industry which pays higher salaries; (ii) the competition of government services; (iii) an increase in the number of students; (iv) the continuous development of university education and the creation of new universities; (v) a drain on staffs by more prosperous countries.

The Conference recommends the practice of exchanging or lending staff among the universities of the world. This practice will be greatly facilitated if arrangements can be made whereby a staff member on exchange or loan retains his post as well as his rights of promotion in salary or grade in his own university.

The proper ratio between students and teaching staff varies among different fields of instruction. To *ex cathedra* lectures in the Arts and Law, and to other theoretical lectures in any field a relatively large number of students may be admitted. But in subjects requiring laboratory work and in seminars the ratio must be small, not exceeding twenty to one.

As a corollary to the principles of academic freedom and the liberty of education, a university teacher should be appointed and be free to continue his work without discrimination on racial, political or religious grounds, provided that: (i) it is reasonably clear that he will carry out the duties of his office in a spirit of free enquiry, that he will exercise a due sense of responsibility in performing these

duties, and that he will not engage in activities inconsistent with them; and (ii) that he is not occupying or applying for a position in a university whose charter or nature limits its choice of teachers.

4. *Teaching Methods*

With a few exceptions, there is at present no systematic training of staff in methods of teaching. Opinion on this matter ranges from those who think that no such training is necessary or desirable, to those who believe that not only a study of methods but a study of the place, problems, and issues of university education would be useful.

The Conference recommends that a survey be made of teaching methods used in universities throughout the world, including such methods as exist of training university staff in presenting their subjects. As one means of such training the Conference also recommends the practice of a sabbatical leave with full pay for university staff. Such a practice would not only foster international understanding but would also help to raise the standard of the staff.

The use of films and other audio-visual aids in university teaching is very desirable. Certain problems, however, must be solved in order to make the use of films more widespread: (i) the problem of production which involves heavy financial responsibility; (ii) the problem of distribution which is hampered by customs duties between one country and another; and (iii) the problem of the dissemination of information about films. While many countries have agencies or bodies for handling films and providing information, no agency exists to disseminate information on the international level. The members welcome the news that the agenda of the Third Session of the General Conference of Unesco contains a proposal for the establishment of an international film institute, and expresses the hope that the project will be realized.

The Conference recommends that Unesco make an enquiry into the use of films for teaching purposes in the universities of the world and in other institutions of higher learning.

5. *The Universities and Secondary Education*

As academic standards depend to an appreciable extent upon the quality of the teaching given in the secondary schools, the Conference agrees that it is the responsibility of the university to encourage study and experiment in the field of secondary education, and to take part in the preparation of secondary school teachers.

6. *University Equipment*

Except in those countries which are able to produce a large amount of equipment, there is a wide shortage of supplies, due mainly to the following reasons: (i) the rapid progress of science in the last decade, which has made much of the existing equipment out of date; (ii) war destruction of university equipment and of industries producing it; (iii) lack of financial means, as well as customs and currency barriers; and (iv) creation of new institutions, especially

n the East, which are dependent on foreign sources for equipment. *To facilitate the transfer of necessary equipment, the Conference alls upon governments to abolish customs barriers and modify urrency exchange restrictions as they affect laboratory equipment nd instructional materials including books, films, and other supplies.*

. Effects of the War

The Conference is deeply conscious of the responsibility of higher ducation for the rehabilitation of universities in war-devastated areas. he following recommendations are made:

(i) *That scholarships for post-graduate training be provided for the staffs of those universities which, because of war-devastation, cannot offer this training themselves;*

(ii) *That the practice of university adoption be continued and expanded. The practice should consist not only in adopting war-devastated universities, but also, where practicable, in offering or extending assistance in all academic fields to any university not in a position to provide for its own urgent needs. These include equipment for instruction, and laboratories and adequate staff. Needs for staff might be met by lending professors or assistants;*

(iii) *That Unesco be commended for the effective work it has done for educational rehabilitation in war-devastated countries, and that such assistance be extended to other countries in need of equipment, although not devastated by the war;*

(iv) *That Unesco be requested to study the needs for higher education among displaced persons, and to offer such assistance as is possible;*

(v) *That the hope be expressed that the European Recovery Programme will be extended to include the training, on the university level, of technical personnel as an effective method of stimulating recovery.*

III. FINANCING AND PROVIDING BASIC SERVICES FOR HIGHER EDUCATION

Opening Remarks by the Chairman of Section III

Sir John Medley, Vice-Chancellor of Melbourne University, said that he supposed no university had ever had too much money. It was certain that under present circumstances no university had enough money, but he would not elaborate on the reasons for rising costs and for incomes quite inadequate to cope with the demands made upon them.

Each country had to view its financial problems against the background of its own history and its own environment, but the Chairman anticipated that the comparative studies arising from the discussions in the Section might help to clarify individual difficulties. He went on to outline a programme for the Section, on the basis of the working paper compiled by Unesco, covering the problems of the university in its financial relations with the State, with industry, with the private benefactor, and with the student.

Statement Adopted by the Conference

The rise in general costs has seriously affected the universities. Some reasons for this are outlined in the working paper. In addition, the war has stimulated a larger enrolment, and the universities are being called upon to provide skilled personnel for certain undeveloped parts of the world where systematic efforts are being made to improve facilities for professional studies.

1. *General Observations*

The Conference offers the following observations after a careful survey of the various methods of financing higher education in different countries:

(i) Owing to increasing State aid, university income in most countries has kept pace surprisingly well with rising costs. This does not mean that, in many cases, universities are not prevented by lack of funds from carrying out essential projects, and paying adequate salaries. The solution must lie in the education of public opinion by universities themselves, and by the press and other agencies.

(ii) There is in general little apprehension, on the part of the countries represented, of the development of sinister aspects of State aid. The danger is always there, but is latent rather than actual.

(iii) It is generally realized that universities must inevitably rely more and more on State aid. It seems that the average amount of such aid is tending to become stabilized at about 60 per cent. although there are many variations on both sides of this figure, ranging from the private universities of the United States to countries in which State aid is almost the sole support of universities. Apart from State aid, an increase in university revenue depends upon the policy adopted towards the taking of fees, and on the possibility of donations from private benefactors. The latter is increasingly remote owing to rising taxation and the disinclination of the wealthy to contribute towards institutions which rely largely upon the State. In some countries donations from private and industrial sources are allowed as deductions from taxable income. The Conference strongly approves of this procedure.

(iv) The Conference emphasizes the great importance of the kind of machinery whereby State funds are disbursed for higher education. The first essential is for universities to be able to plan their own programmes in the certainty of reasonable finances being available. This can be done either by the allocation of a definite percentage of the national budget or through a suitable Grants Committee disposing of "block grants" of fixed amounts on a longer than annual basis. We draw particular attention to the system of "block grants" worked out in Great Britain. There the University Grants Committee draws directly from the Treasury on a quinquennial estimate, and recommends to the Chancellor of the Exchequer, at its unfettered discretion, the details of its disbursements.

(v) It is not wise to pronounce in general terms upon the influence liable to be exercised on university autonomy by the acceptance of grants, for research or other activities, from governments, industries, professional organizations, or private individuals. There is absolute agreement on the necessity for as complete a degree of university autonomy as is reasonably compatible with the receipt of public funds, but the details must be worked out by individual universities themselves.

(vi) One of the new sources of income for universities in certain countries is the aid given by the State for the higher education of ex-service men. In the United States, in most countries of the British Commonwealth, and in Western Europe, where liberal bursaries were granted for ex-service personnel, the growing responsibility of the universities has been adequately met by increased finances from the State. This, however, is a source of income which must diminish considerably in the course of time, and which will actually disappear after a period of about five years. During this period many universities will have increased their facilities both in equipment and teaching personnel. There is, therefore, a distinct danger that

university activity will tend to shrink unless these facilities can continue to operate fully, so as to assimilate larger numbers of those students from secondary schools who are seeking higher education. This must mean that the finances that accrue to the university under the scheme of rehabilitation of ex-service personnel will have to be met in some other form, by the State, when once the present programme comes to an end. This all goes to prove that in the matter of higher education the State will have to accept an ever-increasing financial responsibility.

2. *Student Fees and Financial Aid to Students*

With the exception of those in certain countries such as Denmark and China, almost all universities levy fees; but the scale varies so widely that the Conference has no precise data on which to base any conclusions. In an ideal system, it is agreed that higher education should be available for every student, provided he or she has the necessary aptitude to benefit by it. Mere elimination of fees alone will not solve this problem in view of the costs necessarily incurred by the student, particularly in residential institutions. An extended system of scholarships for deserving students is the only satisfactory alternative to throwing open institutions of higher education by making them free. It is observed that in most countries some sort of "means test" is in operation in deciding the awards of scholarships. The system of granting loans to students, either by the State or other agencies, is not in general a sound substitute for scholarships, but it is found that in many countries loans are operated for the benefit of limited numbers of students. It is also observed that, in many countries, private organizations and individuals, as well as industrial concerns, award scholarships. While universities can hardly be expected to discourage such assistance, it is thought desirable that they should guard against accepting scholarships which are not based on academic considerations.

On the subject of part-time work in the university, it is found that in almost every country there is some proportion of students in this category, and, while part-time study is not undesirable for certain groups of students, especially for those whose outside work has a bearing on their studies, universities as a rule should emphasize the benefits of full-time work and community living. The Conference notes with pleasure that in many universities there is a definite policy of encouraging the establishment of hostels for students. A superannuation scheme for teachers is also important.

3. *Planning*

Though there has not been any comprehensive planning in most countries in the matter of university education, it is evident that post-war pressures have forced governments to give considerable attention to the future of higher education. The initiative for planning has in many cases been taken jointly by the State in consultation with the universities. It is, of course, always desirable that

universities should be fully represented in any matter concerning the re-organization and expansion of higher education.

4. *Universities in War-Devastated Countries*

The Conference wishes to record its appreciation of the attempts made by Unesco to bring relief to the universities of war-devastated countries. It is convinced that the possibilities of greater mutual assistance as between universities should be explored, and the needs of the universities in the war-devastated areas be made known through Unesco.

5. *Recommendations*

(i) Since the Conference is convinced that no useful work can be done in the field of university finance at any subsequent conference unless some basic comparative figures can be worked out, *it is recommended that Unesco, or such other international bodies as may be set up, be asked to collect the necessary information.* It is emphasized most strongly that unless the questions asked are few and simple it cannot be expected that universities will answer them.

(ii) Since the financing of the development of international understanding at the university level can best be promoted by encouraging inter-university exchange of teachers and research workers, *it is recommended that Unesco make a pronouncement as to the importance of such exchange, the need for its adequate financing, and the desirability of bi-lateral agreements.*

The main difficulty is that of finance. But the need is urgent, and solutions to the problem should be found in several different ways, one of the most practical of which would be the conclusion of as many bi-lateral agreements between countries as possible. The Conference believes that this recommendation should strengthen the hands of those negotiating with their governments upon the subject.

IV. UNIVERSITY EDUCATION AND INTERNATIONAL UNDERSTANDING

Opening Remarks by the Chairman of Section IV

Professor Paulo de Berredo Carneiro, of Brazil, began by pointing out that the question concerning University Education and International Understanding was related on the one hand to some of the oldest traditions of the universities, and on the other, to the most insistent requirements of the world in which we live. He recalled the rise of the universities in the Western World, the growth of the international colleges, and the free expansion of education, first made possible by a community of language and an international teaching staff. The university—surmounting religious and political conflicts—had been a valuable link between the West and the East, and its efforts for the union of mankind, through an intellectual and moral culture—placed within everybody's reach—had been extended to the New World from the first moment of its discovery. This tradition, which had never been interrupted, assigned to university education, in our time, a paramount rôle in the development of international understanding.

Such a mission was both urgent and complex, in a world drawn closer together materially, but more than ever divided spiritually by cultural and ideological antagonisms. Only a great intellectual and moral force, entirely free and independent of temporal powers, could succeed in re-establishing order and in creating that "society of minds" without which no human community could long exist.

In conclusion, the Chairman said that the problem of international understanding could not be considered in isolation from the social problem as a whole. In the human order everything was linked together—whether health, virtue, or peace were considered. It was for this reason that Unesco had invited the Conference to examine all the means which the university could use to contribute to a better world-understanding.

Statement Adopted by the Conference

1. *Terminology*

Throughout its deliberations the Conference was kept constantly alive to the necessity of observing certain elementary distinctions. It was frequently reminded of differences between apparently similar terms. For instance, among institutions of higher education reference was made at one time or another to:

(i) International Departments, in the sense of departments staffed by academic personnel from a variety of countries;

(ii) International Centres, in the sense of institutions where students from a variety of countries might receive instruction or pursue their research;

(iii) Centres or Institutes for 'international' (in the sense of 'area' or 'regional') studies;

(iv) Departments of International Relations, in the sense of departments for teaching and research in matters of an international kind.

Further, it has been found useful to differentiate between three uses of the expression 'international understanding'. Some conceive it as essentially *a relation* to be looked for *between* persons or groups of different nationality. To others it appears to mean a quality, or qualification, to be looked for *in* individuals, as for example in those seeking service with some international bureau. Thirdly, it might mean an understanding of problems of an international or world-wide nature.

2. *Preparation for Work in International Fields*

After reviewing the conditions in a wide range of countries the Conference concludes that, whatever might be said as to training for other kinds of international activity, little or no provision has as yet been made anywhere for the specific purpose of fitting students for service with such bodies as the United Nations Secretariat, Unesco itself, or other Specialized Agencies of the United Nations. In regard, therefore, to the proposed International Council on Higher Education, *the Conference recommends that this Council, if constituted, be asked (a) to seek from the relevant international organizations a provisional estimate of their probable staffing requirements in the years ahead, together with any possible indications as to the attributes desirable in prospective applicants for the posts to be filled; and (b) to seek means for ensuring, either at an international university yet to be established, or through the co-operation of departments of International Relations in existing universities, that more systematic provision be made for the training of suitable candidates for work of the kind required.*

3. *Development of International Departments or Faculties within Universities*

The Conference takes note of the recommendation made by the Second Session of the General Conference of Unesco, that consideration be given "to the possibilities of organizing in certain universities throughout the world International Departments consisting of scholars, professors, and educators from foreign countries." This proposal is warmly endorsed provided that it be interpreted to mean that such Departments should consist in part of scholars, professors, and educators of the country in which the university is located. The Conference considers, moreover, that such International Departments should be set up wherever and in whatever form a university may find

most appropriate; whether in the extension of programmes in international or regional studies already established; in specialized departments for the study of international relations; in the expansion of departments of social science, the humanities, or other disciplines; or in subjects not necessarily related directly to international affairs. In regard to questions of finance, recruitment of staff, selection of students, and other organizational matters, the Conference considers that an International Council on Higher Education, if constituted, would be in an excellent position to proffer advice, and more generally to act as a clearing house of ideas and methods concerning the development of such International Departments. The possible creation, under the auspices of the United Nations, of international research laboratories is also noted with considerable interest.

4. *Development of International Understanding among all Students*

The phrase "international understanding" is here used as meaning "a friendly feeling towards other peoples, based upon knowledge". The growth of this feeling is dependent upon a variety of factors, basic among them being what was called "the intellectual component". The "right emotion," it was said, must have as its basis a "right vision". It is with this consideration chiefly in mind that the following recommendations are made:

(i) *That universities be asked to consider the possibility of including among their conditions for the admission of new students either the attainment of a fair proficiency in at least one foreign language, or, as an alternative option, a satisfactory showing in an elementary paper on international affairs;*

(ii) *That all the suitable documentary and other material issued by the United Nations and its Specialized Agencies, and especially that connected with the problem of international understanding, be given free distribution on the widest possible scale for use in the teaching of international affairs in the universities;*

(iii) *That universities be urged to consider the initiation, where these do not exist already, of special courses and seminars designed to set forth the historical evolution and the present state of international relationships, and in particular of international organization, in such a manner as will benefit teachers and students alike;*

(iv) *That Unesco make use of all means for promoting the establishment of fellowships for university teachers, especially for those lecturing on international relations, so as to enable them to study abroad;*

(v) *That Unesco make use of all possible means for furthering the increased provision of internships designed to give suitable students a first hand acquaintance with the functioning of the United Nations, Unesco itself, and other Specialized Agencies; and that it urge governments* (a) *to allow the universities a*

preponderant voice in determining who is to hold them; (b) *to assist wherever necessary in meeting the costs of travel; and* (c) *to ensure that all internships are given to genuine students in the ordinary sense, and not to persons already engaged in public services;*

(vi) *That institutions of higher education pay special attention to the teaching of natural sciences, social sciences and humanistic studies from a broad international point of view, and that textbooks used in these subjects be kept clear of traces of narrow national prejudices;*

(vii) *That Unesco encourage, through Member States, the organization of exhibitions to be shown in university centres, with a view to promoting, among the students of different countries, the right emotional and intellectual appreciations of one another's aesthetic and cultural heritage;*

(viii) *That institutions of higher education, wherever they have assumed responsibility for the training of teachers for primary and secondary schools, be urged to include in that training some instruction in international relations, as well as in techniques for nurturing international understanding in their classrooms;*

(ix) *That ways and means be devised to provide for a world-wide pooling, as well as for distribution to universities, of all materials—from documentary films to information on techniques—for fostering international understanding among children;*

(x) *That Unesco encourage in the universities, by all appropriate means, the development—or, where they do not already exist, the creation—of student and student-staff societies likely to foster among students in all faculties an interest in international affairs.*

The Conference had its attention drawn to the action of universities and students in certain countries in giving hospitality and help to displaced students, and wishes to bear witness to the value of this form of contribution to international understanding.

5. *Tensions affecting International Understanding*

The Conference heard with deep interest an account of what Unesco is doing and planning with respect to the problem of "tensions". It was struck by the degree to which an enquiry of the sort foreseen must depend for its momentum upon the presence, in the universities themselves, of persons for whom the question for investigation was a matter of immediate and continuing concern. It accordingly recommends:

(i) *That all those universities, not already possessing special Chairs or Departments or not otherwise providing for teaching and research on the subject of International Relations, be urged as*

soon as possible to establish such Chairs or Departments or make other provision for such systematic teaching and research;

(ii) *That all universities be urged, under the aegis of the proposed International Council on Higher Education, to make every effort, through mutual co-operation, to bring to early fruition the scheme set forth in a Unesco publication (SS/TAIU/2) for the setting up of an International Social Science Institute.*

6. *Exchange of Students and University Staff*

The Conference recommends that, in the development and organization of interchanges of students, the governments and private institutions concerned bear particularly in mind the necessity for:

(i) *seeing that such students have previous knowledge of the history, customs and language of the country to which they are going; and ensuring, where necessary, that their command of the spoken language is brought up to date by means of a refresher course before they go;*

(ii) *employing the most exacting tests in their selection;*

(iii) *giving students guidance as to the centres of teaching and research best suited to their needs;*

(iv) *obtaining for them desirable facilities in the matter of passports, visas, and transportation; and*

(v) *arranging sickness insurance benefits in the country in which they are to reside.*

The Conference further recommends that interchanges of teachers and scientific research workers be facilitated and developed by all possible means.

It is felt that some programme should be developed to encourage capable post-graduate students to spend even a limited time in a country not their own. As one means to this end it is suggested that the universities might well be encouraged to provide special short courses of study abroad where this is not already being done. It is further suggested that, where appropriate, some formal recognition be given for such study and travel, but that such recognition should not amount to a degree.

The Conference believes that the problem of the interchange of students, as well as of teachers, is of such importance as to be referred to an International Council on Higher Education, if established.

V. MEANS OF CONTINUING INTERNATIONAL CO-OPERATION AMONG UNIVERSITIES

Opening Remarks by the Chairman of Section V

In his introductory statement Dr. George F. Zook, President of the American Council on Education, said that the Section had the responsibility of facing the question as to whether there was clearly a need for an international organization or council of universities. Their task was to discuss the matter as fully as possible, to communicate their conclusions to their national constituencies, and to invite them, and other nations not represented at the Conference, to a full-scale Conference, perhaps in the summer of 1949. If, at this future date, an affirmative decision were reached on the need for such an organization, a constitution and programme of work could then be adopted.

Dr. Zook outlined some of the points for and against the establishment of a council of universities, and said that one of the first questions to arise was that of the basis for membership. The Section might profit from the experience of the International Institute of Intellectual Co-operation, but it should be remembered that an international organization of universities, as represented by the Permanent Commission of 1937, was not at all equal to the demands of that time, and much less to those of the present. They had to consider nothing less than some kind of an international organization which would ultimately include universities of all countries of the world.

It was his opinion that the various international organizations, concerned with higher education from whatever aspect, should be represented in any proposed new organization of universities, although probably not as basic members. Nor did he think that, at this stage, an over-all invitation could be issued to individual universities to become charter members.

He suggested that some procedure might be adopted whereby an existing voluntary organization within each country—or one created for the purpose—might be regarded temporarily as the charter member to serve as a two way channel of communication between the universities of the country which it represented and the proposed international organization.

Dr. Zook raised one further point which he thought should receive consideration. He said that the Conference discussions had revealed very clearly that the universities of various countries had developed along different lines. But in all countries there had been a great expansion of facilities for higher education—often in institutions independent of the universities—to meet new social demands and the wishes of individual students. He hoped that the Conference would consider the more comprehensive problems of higher education as a whole, since the resources of all types of higher education institutions would be needed in the solution of their common problems.

One of the important tasks with which the Conference was charged was that of considering whether any means should be adopted of continuing international co-operation among the universities. It had the assistance of a working paper, which gave a résumé of previous efforts in this field, and which set forth the present issues, and also the guidance of the opening statement in which the Chairman of the Section reviewed the various problems involved.

The Conference, while regarding universities as the principal type of institution falling within its field of enquiry, recognizes that it should not confine its report to them, but should take into consideration certain other institutions of higher education. The word "university" is therefore used in this statement somewhat more widely than in its usual sense so as to include institutions of higher education of the university type which may not carry the name of university.

1. *An International Universities' Bureau*

The Conference is unanimously of the opinion that it is desirable for a Bureau to be established immediately to act as a clearing-house for information about the universities of the world. Some universities are at present served in this respect by national or regional bureaux, but there is no academic information office covering the international field as a whole, nor is there a common basis for comparative statistics, nor any satisfactory single publication to serve as a directory of all institutions of higher education. These are fundamental needs which should, in the interests of all universities, be filled at once; and the Conference believes that the time is clearly ripe for the establishment of an International Bureau as the appropriate instrument to provide these and other services. A suggested formulation of the objects of such a Bureau is set out in Section 7, paragraph (vi) of this report.

2. *Controlling Authority for the Bureau*

The various possibilities as to the appropriate body or organization under whose auspices and support such a Bureau should function appear to be:

(i) that the Bureau should be organized within the framework of Unesco itself and be financed by it;

(ii) that the Bureau should be run in conjunction with some international body already working in the field of higher education, such as the International Association of University Professors and Lecturers;

(iii) that the Bureau should be controlled by some organization representative of the universities themselves.

The Conference, after discussion of these alternatives, concludes that an international organization of universities would be the most appropriate authority to be responsible for the Bureau. Unesco, while

not unprepared to give the initial impetus, by financial and other aid, to a venture of this sort, would not wish to face a long-term commitment to it, and in any case it is linked to governments rather than to individual corporations. It is felt that any international association which represents only particular interests in the universities would be inappropriate to manage an agency providing a link between the institutions in all fields.

3. *An International Association of Universities*

The Conference firmly believes that there should also be some form of association among the universities of the world. A university has everything to gain by the development of closer official contacts with sister institutions in other countries, which could be obtained under the auspices of such an association. The stimulation of research into problems of university life and work, and the holding of periodic conferences, could be better promoted by an organization of this sort than by any other. It seems essential, moreover, that the voice of universities as a group should be heard along with those of associations of academic scholars and of governmental and non-governmental organizations of an international character. The creation of organizations like Unesco, with a wide range of functions in the international field, makes it essential that the universities of the world should be able to make representations to them.

The Conference is in favour of preliminary plans being made with a view to the establishment of an international association of universities in the fairly near future after the Universities' Bureau has been started. These plans, when prepared, should be submitted to a constituent conference of universities for consideration and possible adoption.

4. *Interim Committee*

It is accordingly thought desirable that this Conference should set up a small Interim Committee with the following main functions: (i) to prepare plans for an association of universities for consideration by a later Universities' Conference; (ii) to establish a Universities' Bureau as soon as possible and to guide its activities until the conference is held. It is considered that this committee should comprise ten members chosen from universities in different parts of the world. A still smaller Executive Committee should be selected from the membership of the Interim Committee. Both committees should be elected in full conference after nomination by the Steering Committee.

The Conference understands that it is within the competence of Unesco to help in the establishment of ventures of this kind; and that Unesco, if formally requested, would in all probability be willing to finance the work of the Committee during the interim stages of forming the association. It is accordingly assumed that a formal agreement could be negotiated with Unesco under which a grant-in-aid would be provided for the Interim Committee, its Executive Com-

mittee, and its Secretariat, as well as for the proposed Bureau. It is urged that the Secretariat and the Bureau be housed within the Unesco office.

5. *International Association*

The Conference recognizes that various matters pertaining to the international association will have to be decided by the Interim Committee, if appointed, but believes that the following preliminary considerations may be found useful.

(i) *Name of the association.* Inasmuch as the functions of universities differ so widely in various countries, and in any case are related to the whole field of higher education, it is suggested that the name of the association should include reference both to universities on the one hand, and to similar institutions of higher education on the other.

(ii) *Purposes of the association.* It will be the task of the next Universities' Conference, upon the recommendation of the Interim Committee, to determine precisely the objects and purposes of the association, but for the guidance of the Committee, the Conference has drawn up a statement of its views on what the scope of the work of the association, including the Bureau, should be. These are set out in Section 7 of this report.

(iii) *Membership.* After consideration of the various bases of membership, it is thought that the proper one is *institutional*, i.e. that the association should be composed of individual universities themselves and not of national or regional groupings of institutions. This institutional membership should be restricted to universities of approved standing and to selected institutions which perform, at the higher educational level, both a teaching and a research or creative function. In each country there are many kinds of institutions of higher education not of full university standing, and obviously the Interim Committee will have a difficult task to determine the general level of eligibility for membership. It will wish to consult the appropriate authorities in each country as to the application there of whatever definition of membership is decided upon. It is the view of the Conference, however, that the association should primarily be one of universities, and that institutions which do not carry the name of university should only be admitted if of university standing and character.

Attention is called to various organizations which have a partial function in the university field, such as, on the one hand, the various international organizations, and on the other, the various national and regional associations of institutions of higher education already in existence: the Interim Committee will need to consider whether any form of affiliated membership or "observer" status should or should not be available to these organizations.

(iv) *Initial Channels of Communication.* The Conference is strongly of the opinion that there should be as direct a relationship as possible between the association and each separate university; but in the early stages at least it will probably be necessary to consult, and even to communicate with, universities through whatever inter-university organization exists in each country or region. In order to identify these, it is suggested that a possible procedure for the Interim Committee is to consult, in each State, with the National Commission for Unesco, wherever it exists, or with the appropriate Ministry; where such inter-university organizations are identified they might be used as channels of communication with universities in the initial stages of forming the association; in any country where no such organization exists, it might be considered desirable to encourage its formation.

(v) *Government of the association.* The precise determination of the rights of members in the government of the association will require careful consideration by the Interim Committee, but it has seemed to this Conference that the general principle should be that at general assemblies and conferences each member institution should be entitled to vote. For the regular business of the association some form of Executive Council will be necessary, and it is thought that the constitution should provide safeguards to ensure that the members of that body are reasonably distributed over the various regions in which the universities comprising the association are situated.

6. *Finance*

The basis on which the association and the Bureau are eventually to be financed goes to the heart of the question as to whether immediate steps should be taken towards their establishment. The Conference assumes that in the interim period Unesco will, through some definite arrangement, provide support for the work of the Interim Committee and the Bureau until the association is formed.

The Conference feels that, when that stage is reached, the member universities should provide, presumably by annual membership dues, the funds for the routine activities of the association including the work of the Bureau. It is contemplated, however, that the association will, from time to time, engage in various other activities and projects for which it may expect to obtain special subventions, either from Unesco, under formal agreements, or from private foundations interested in such work.

It is recognized that a complete response from the many universities of the world on the issue of joining the association will be difficult to obtain, and that maximum financial support from membership dues may take a long time to realize. But it is believed that, for each university, the moral pressure of its claims to true universality, its interest in the field of international understanding, and its appre-

ciation of the services it will receive from the Bureau, will be strong enough to secure its support of the proposed association.

It is not possible for the Conference to make an accurate estimate of the cost of maintaining the association and Bureau, but it would seem from the experience of similar, but less widely based, organizations of this sort that the total budget, when these agencies are reasonably well established, would be in the region of $100,000 per annum. It is suggested that the membership dues of universities should be adjusted according to the size and resources of each university.

7. *Suggested Purposes for a Proposed International Association of Universities*

(i) To provide a centre of co-operation at the international level among universities and similar institutions of higher education, and for organizations in the field of higher education generally;

(ii) To promote international understanding through the universities of the world and to assist them in contributing to the realization of this objective;

(iii) To convene international and regional conferences on problems of higher education;

(iv) To choose for investigation problems of international importance to universities, such as: student health and welfare; equivalence of entrance qualifications and degrees; academic freedom; university finance; selection of students; methods of teaching at the university level; and curriculum reform;

(v) To make recommendations on these and other academic problems, on the one hand to universities and similar institutions of higher education for their consideration; and, on the other, to the United Nations and to Unesco and other specialized agencies for consideration and, where deemed desirable, transmission to national governments;

(vi) To administer an international Universities' Bureau with the purpose of furthering directly or indirectly the following objects:

(*a*) The collection and dissemination of information relating to institutions of higher education throughout the world, as, for example —

accumulating data for answering enquiries from universities, academic associations and individuals;

formulating a basis for comparative university statistics in the international field, and compiling and publishing tables on this basis;

providing for the publication at regular intervals of comprehensive directories of institutions of higher education;

establishing a library of works of reference and official publications of the various universities;

(*b*) The undertaking of such investigations into university problems as may be chosen by the association;

(*c*) The promotion of facilities for the interchange of university students and teachers, as, for example, by the dissemination of data regarding scholarships, fellowships, summer courses, and staff vacancies, by encouraging the establishment of visiting professorships, and by facilitating travel of professors and students from one country to another;

(*d*) The formation of measures for the better distribution and exchange of laboratory materials, books, and other equipment for university study and research among the countries of the world;

(vii) Generally to further the development of universities and similar institutions of higher education.

8. *Resolution*

The Conference accordingly resolves:

(i) *That this Conference believes an international organization of universities and similar institutions of higher education should be established;*

(ii) *That to this end the Conference elect an Interim Committee of ten persons to develop plans for such an organization, and designate from the members of the Committee those who should also serve as an Executive Committee;*

(iii) *That Unesco be requested to finance such meetings of the Interim Committee and its sub-committees as are necessary, and to assist its work;*

(iv) *That the Interim Committee be authorized* (a) *to procure the necessary finance to institute an international Universities' Bureau and* (b) *to enter into a formal agreement with Unesco about the work and finance of the Bureau pending the establishment of the international organization;*

(v) *That the Interim Committee be requested, when the Bureau has been well established, to call a general conference of universities and to report on its plans for establishing an international organization, on the activities of the Bureau, and on such other matters as may seem appropriate to the committee. (It is considered that such a conference could not be held before August, 1950, but that the exact date might be determined, in consultation with Unesco, by the Interim Committee after it had been operating for a year.*

ELECTION OF THE INTERIM COMMITTEE

The Steering Committee made the following nominations for membership of the Interim Committee and its Executive Committee.

Professor Paulo de Berredo Carneiro, of Brazil.
Professor Chen Yuan, of China.
Dr. J. F. Foster, of the United Kingdom.
H. E. Shafik Gorbal Bey, of Egypt.
Dr. Bernardo Houssay, of Argentina.
Dr. Jan Kozak, of Czechoslovakia.
Dr. H. R. Kruyt, of the Netherlands.
Sir Sarvepalli Radhakrishnan, of India.
Dr. Jean Sarrailh, of France.
Dr. George F. Zook, of the United States of America.

No Chairman was nominated as it was felt that the Committee should select its own Chairman. Dr. Kruyt was charged with the responsibility of convening the Committee for its first meeting.

The members of the Interim Committee nominated as members also of its Executive Committee were: Dr. Foster, Dr. Kruyt, Sir Sarvepalli Radhakrishnan, Dr. Sarrailh and Dr. Zook.

The Conference was invited to make any further nominations. Dr. Karol Rebro of Czechoslovakia was nominated as an alternative to Dr. Kozak. There being no further nominations from the floor, the following motion was passed unanimously:

> *That the nine persons for whom no alternative has been presented by the participants be elected unanimously to membership of the Interim Committee; that the selection of a tenth member be referred to the Interim Committee at its first meeting, with power to act; that the Interim Committee also be given the authority to fill vacancies occurring in its membership; and that the membership of the Executive Committee be approved as nominated.*

ADDITIONAL STATEMENT

The following statement was introduced from the floor. The Conference agreed that it should be included in the published report.

"In accordance with the programme prepared for it by Unesco, the Universities Conference has undertaken as its main task to consider, from an international point of view, general university problems, especially the matter of planning suitable agencies for furthering international co-operation. The Conference has reached some definite conclusions to that effect, indicated by the reports and the resolutions adopted.

"The Conference holds that the implementation of these resolutions will be of great importance for furthering both the interests of the universities and international understanding and co-operation. It wishes however to point out that the proposed measures concern mainly the framework of the university, and the aspects which have direct bearing on the goals set by Unesco, whereas the *main* significance of the universities for developing international understanding is of an indirect character. The free search for truth, and the training of young people to understand and appreciate the meaning of research and of the critical method, are in themselves the chief contribution of the universities to the ends of peace and understanding; and the indispensable condition of the development of these aims is world-wide co-operation in the field of scholarship. Consequently, it is of paramount importance for the fulfilment of the universities' international mission that active steps be taken to foster free, international development of pure research in all fields of knowledge, irrespective of their direct bearing on present day problems.

"The Conference gratefully acknowledges what Unesco has already done to that end and urges it to continue and to develop further all such activities which are of inestimable value in this period of restriction and of concentration on problems of short-range and material importance."

CHAPTER II

MAJOR ADDRESSES

The addresses given before the General and Plenary Sessions of the Conference are presented here in the order in which they were delivered.

Opening Address

Dr. H. R. Kruyt,
President of the Netherlands National Commission for International Co-operation in the Fields of Education, Science and Culture, and President of the Conference

The Director-General of Unesco invited me to take the chair for this first meeting of the Preparatory Conference of Representatives of Universities. I gladly accepted this great honour and my first pleasant responsibility is to extend a cordial welcome to all of you. I am especially glad to welcome the Representative of Her Royal Highness Princess Juliana, and His Excellency, the Minister of Education.

The Third General Assembly of Unesco, held at Mexico City in November, 1947, was wise in its decision that such a conference as this should be held. Since the basic purpose of Unesco is to promote mutual understanding among the nations and the peoples of the world, it must develop an important part of its programme through close co-operation with the institutions of higher education.

Universities and similar institutions play a very special part in the spiritual life of the world. This has been true through all the centuries, but it is even more true today. The brief analysis, to which the limitation of time restricts me, of the place of the university in our modern life is abundant evidence of this fact.

Higher education to-day has three main functions. It is evident that its primary aim is the instruction of young people after they have passed primary and secondary schools. They should be taught in such a way that they can become either scholars or people who can apply science independently in social life. Therefore, they should not only acquire knowledge that they can apply, but also insight and dis-

cernment. They should not only have learned to apply what has been taught to them, but they should also have received such an education that they can find ways to solve problems scientifically, even if these special problems have not been included in their instruction. Though a certain basic knowledge is of course indispensable, the main responsibility of the university is to induce people to think. This is a very difficult task, and can be accomplished only if the atmosphere of the university is one of creative scientific life.

This brings us to the second function of the university. It must be the cradle of science; science should not be discussed only, it should be created or at least developed, in the university. It is impossible to induce people to think creatively if the teacher himself has no part in the development of science, if the whole staff does not know the joy of building up new ideas. Therefore an active scientific life is an absolute necessity for academic instruction. But there is still another reason, which demands that active scientific research be a major function of universities. This is the question of *noblesse oblige*; the universities have been, throughout all the ages, the founts of science. If scientific research should to any considerable extent be transferred to special institutes, these new institutions would miss the stimulus of youth, and university students would miss the contact with the creative incentives of science. Instruction and research are closely interlinked and both are basic functions of higher education.

In addition to these two purposes, the university has also a third function. Next to the intellectual stimulation and growth of its students, the university has a responsibility for the education of its pupils as personalities. The social and professional positions which the alumni will take after graduation are such that society does not only require men and women of ability, but also those who are aware of the great responsibility entrusted to them.

These three functions are recognized in all universities but not always with equal emphasis. One university lays stress on one point, the other on another. I am certain that these three functions: instruction, research and personal development will be discussed thoroughly in this conference. The ideal is a synthesis of all three.

This conference is not only important from Unesco's point of view. We, representing the universities themselves, are thankful for the initiative taken by Unesco in calling the conference. We all know our serious responsibilities and we are often aware that we do not measure up to them entirely satisfactorily to others or to ourselves. This has been especially true during these last years since the end of World War II. The universities have faced problems such as they have never had to settle before. This is due, in part at least, to the enormous number of students, many of whom have been prepared through other than the traditional means, and who want an education for a world that is very different from what it was before the war. These problems, some of them new, others only intensified, are not only educational in character. They involve also problems of finance, of organization and of administration. Most of these problems are universal and each university has tried to solve them in its own

way. Let us discuss them here; let us listen attentively to the ways through which others have attacked them; let us compare their solutions with our own; let us appraise our results and seek to discover what we can best do to achieve the high aims we have set ourselves.

It may be that these deliberations will be the most important aims of our conference. I wonder if we can do much more. But I am sure that our meeting together here, with the firm determination to promote higher education all over the world, will give results which will make us happy, which will be beneficial for all of us, and which will, moreover, promote that mutual understanding which always leads to mutual respect.

Address of Welcome on behalf of the Netherlands Government

Dr. J. J. Gielen,
Minister of Education of the Netherlands

Before bidding you welcome, I must express my regret that it was not possible, owing to his absence in England, for His Royal Highness the Prince of the Netherlands, the Honorary President of this Conference, to be present at this opening ceremony.

We should indeed have rejoiced to welcome Prince Bernhard here, as a Member of our Royal Family which, especially at the present period, is regarded with such true affection and gratitude by all the people of the Netherlands, and therefore by our whole university world.

It is now my privilege to address you on behalf of the Netherlands Government and to extend a specially cordial greeting to those who have travelled from other lands to our ancient episcopal city of Utrecht to study and to deliberate upon the problems of higher education and the preparation of young people for posts of responsibility.

Once again, as in the past, Holland finds herself the seat of important international Conferences. For many years our country has served as a meeting place for different systems of culture; at the same time she has come to be recognized as the cradle of free speech. For these reasons, foreigners who come to us—whether as individuals or as organized bodies—are always welcome and, more especially so, when, like yourselves, they represent the highest cultural values of their different countries.

What I have just said will, I trust, have convinced you that the Netherlands Government is truly grateful to Unesco for its action in summoning in our country this first post-war international Conference in the field of Higher Education.

In this post-war period, when people are being driven to direct all their efforts to the supply of material needs, and when spiritual values are in danger of being neglected because of the pressure of immediate necessity, Unesco has a wide field of opportunity as an international organization working in the three vital spheres of education, science

and culture. Unesco possesses both the will to achieve and a highly competent staff of workers. These two elements, combining their action on the international plane, are well suited to assist in the spiritual reconstruction and rearmament which the world needs to supplement its social, economic and political efforts at reconstruction.

To me it is a fact of profound significance that Unesco has included science in its field of work. The practising of science is, first and foremost, an individual activity; but in the course of centuries it has been more and more an occupation which oversteps all personal, local and national boundaries. During the present Conference you will be called on to discuss the character of establishments for higher education and the changes in them which our modern age requires.

Naturally I do not claim to be wiser than your assembly which, I hope, is going to arrive, after discussion, at some fruitful conclusions on this subject. And yet, the problems which the task of higher education presents, at this time, are so alluring that I could not pass them over in silence, for in our country, as in others, the rôle of the university has become one of vital importance, not only for the future of our culture, but also for the social and economic future of our people.

The university is the cradle of the sciences; at the same time it constitutes a society of teachers and students, which traces its origin —as indeed the name implies—to the *Universitas Magistrorum et Scholarium* of the Middle Ages. The university exercises its function of conserving and developing science through private studies and through the researches of teachers and their scientific co-workers. Because it is a society of scholars, it encourages the productive efforts of the individual; it leads him out of his comparative isolation, and ushers him into the active circle of his colleagues. At the same time it brings him into close association with young people of intelligence, thus, it may be, inspiring him to enhanced productive effort. The communication to the students of the results attained by science impels them to deepen and enlarge the scope of their own studies. In the vitalizing atmosphere of the university these results are verified by a study of their sources and by experience. In this way science is safeguarded against becoming something frozen and static, as might indeed be the case, if studies were confined entirely to books.

A university education must stimulate the desire for independent research. The fact that this stimulus is not experienced by all students and that, later on, the greater number of them will not be engaged in scientific work, in no way detracts from the necessity of teaching the scientific method. Only a few chosen ones will be found capable of advancing the boundaries of knowledge, and for these it will suffice that the university has provided them with a foundation for their efforts.

The university does much to advance the study of science and raises it to a higher level by combining the various branches of science within its territory. The *commune vinculum* of the sciences, the *universitas litterarum et scientiarum* is recognized by a university which has developed to its optimum capacity. For, in the university,

the development of the spirit of scientific research is combined with the preparation of the students for positions of responsibility in social life; and in that process the formation of character plays an important part.

Though we are far removed from the Greek ideal of higher education—the formation of the *anthropos kalos kai agathos*—the exalting influence of university education is still, nevertheless, one facet of the university's function. This influence is derived not only from teaching and scientific study, but also from the organized life of the students, for these are all factors conducive to courtesy, good taste, and the creation of the academic approach.

The development of the mind and of the character may also include yet another object—the exploration of a particular conception of life. This applies notably to those universities which are founded on a religious principle, and have as their chief aim the religious and moral development of their students. It is especially in the years succeeding the late war that the question has arisen whether, in this respect, the public universities have not fallen short of their duty; in other words whether, having regard to the moral development of their students, these universities should not abandon their neutral and negative attitude.

Although our conference does not propose to extend its discussions to that subject, I cannot fail to make mention of it as an existing problem. It is in connexion with this same point that I wish to add a word on the value of scientific research.

Research is founded upon truth, and it is from that basis that it derives its authority. Observations made in the process of scientific research are received and assimilated by the human mind, which recognizes throughout that truth is supreme above everything else. From this it could appear that it is doubtful, to say the least, whether science can be detached from a certain philosophic basis; in other words, whether there exists any science free from prejudice. I am very sure that this mental labour, which includes the estimation of values, is influenced by the possession of a philosophy, which may indeed direct it and assist in the solution of problems. This fact does not detract from the intrinsic value and authority of science, any more than the fact that the arrangement and elaboration of observations may be disordered by illusions from which no scientific worker is exempt.

Since all scientific research, when related to a philosophy, is continually seeking to check and verify its results by reference to an evident and rational truth, errors find themselves corrected by a repeated process of reorientation which has only one goal—the truth. In all scientific research it is the truth which continues throughout to be our principle, our guide and our law.

In these introductory remarks I have intentionally given a foremost place to the importance of scientific training in university teaching because in my opinion this function of higher education is in danger of being neglected. The causes of this neglect may be traced to the intense specialization of the sciences, and the increasing demands made on them by the community. In saying this I am not unmindful of the

fact that the university has to serve the community, and that, in consequence, it must have regard to the social structure of the community and be able to satisfy its requirements. Yet it is because of this trend, applicable even in the field of science, that the universities of our day are passing through a crisis of evolution. Perhaps your Conference will consider how far, in the course of this process, a university should seek to put its social functions upon a higher plane.

To conclude these introductory observations, I submit that it is desirable that international discussion should now be organized on this and other problems. It may be very important that one of the results of this Conference should be the institution of organized relations between different countries in the field of higher education.

Once again I wish to thank Unesco for the action which it has initiated in this domain. I also thank the Unesco National Commission of the Netherlands and the Utrecht organizing committee, under its Chairman Dr. ter Pelkwijk, for their valuable and effective co-operation. Expressing my hope that a frank interchange of ideas may lead to the emergence of results which will contribute usefully to the development of university teaching and of science, I declare the Conference open.

The Universities and International Understanding

Dr. Walter H. C. Laves,
Deputy Director-General of Unesco

It is my privilege, on behalf of Unesco, to express to the Netherlands Government our satisfaction in being able to collaborate in the convening of this important Preparatory Conference of Representatives of Universities. If is especially fitting that this first international meeting of representatives of universities since the war should have as its setting the Municipality of Utrecht, now celebrating its nineteen-hundredth anniversary. The hospitality you have extended to the Conference, especially through the extraordinary efforts of the Conference Committee, is but the most recent manifestation of the long evident interest shown by the people, the institutions and the Government of the Netherlands through many centuries in matters concerning education, science and culture.

The collaboration of the Netherlands with Unesco dates, of course, from its earliest days. Your influence has always been felt, and especially during the time when Dr. Kruyt was a member of the Unesco Executive Board. We are happy that he continues to carry forward Unesco's objectives as President of the Netherlands National Commission for International Co-operation in the Fields of Education, Science and Culture.

To the participants and observers of the Conference I extend the

welcome of Unesco to what we hope may be one of the most significant international conferences of our time It is a Conference called for the purpose of considering means by which the universities and other institutions of higher learning may come to co-operate more effectively in the discharge of their responsibilities in the modern world. Both the substance and the form of such co-operation are suggested on your agenda.

Unesco, as the United Nations Specialized Agency concerned with questions of education, science and culture, places great store by the work of this Conference because of the present and potential rôle of institutions of higher learning in raising standards of human welfare throughout the world and in promoting international peace.

From their beginnings, universities have been among the oldest human institutions with an international or supernational orientation. From the days when Abelard in Paris drew students from the far parts of the Western World. the universities have been the means of bringing together people from widely varying national cultures and of disseminating, across political boundaries, the thought and experience resulting from this interchange. This flow of ideas across international boundaries has been the intellectual counterpart of the increasing exchanges in the field of commerce, industry and science, which have brought the development of the "one world" in which we live today.

In a more formal sense, through their curricula, universities have played a profoundly important rôle in the building of this one world. By communicating to generations of men and women in many countries a knowledge of the languages, literatures and histories of other peoples, a knowledge of the common roots of our various cultures in the classics of antiquity, a knowledge of the patterns of human behaviour in the past, they have fostered understanding among the peoples of the world and prepared leaders for the successful conduct of relations among those peoples.

Despite the extraordinary record of achievement, however, the events of the past half-century have shown all too clearly that neither the universities nor any other social institutions of our time have succeeded in creating the kind of understanding among peoples that will, in fact, assure peace in this otherwise unitary world. I need only point out the fact that one of the nations most famous for the brilliance of its universities only recently embarked upon a course of aggression that very nearly wrecked western civilization; and that another nation, famous for the degree to which it has extended the benefits of university education to the masses of its people, attempted, at perhaps the most critical period of history, to escape into the false security of isolation from world affairs.

Perhaps the lesson to be learned from these facts is that what is needed is something more than mere understanding of the cultures and the values of other peoples. That is essential certainly; but I would suggest that this must be supplemented by two other kinds of understanding.

One is a deeper, more nearly universal, understanding of the fact of world inter-dependence, and the nature of the forces that have

made unbreakable, by peaceful means or by war, the bond between the welfare of any one people and that of all other peoples of the world.

The second is an understanding of the means by which the people of one country can live at peace with those of other countries. This involves an understanding of the roots of human behaviour; exploring ways of reconciling apparently conflicting values, and of satisfying irreducible human needs; devising means for the training of leaders properly equipped for the tasks of an international society, and particularly international administration; and inventing institutions adequate to the demands of the new world society.

These are the kinds of understanding the people of the world require if we are to find and to support means of living together harmoniously and peacefully and in a way which will preserve the bases of education, science and culture.

The first of these understandings—the *fact* of world interdependence—is obviously still generally lacking throughout the world. Only isolated groups of individuals, taking the world as a whole, really comprehend the full implications of the virtually complete interdependence today of the welfare of peoples around the world. In some countries a larger portion of the population has encompassed this fact than is the case in others.

In time of war, when the consequence of acting in ignorance of these facts may be national or individual death, mankind seems more ready to accept them and act accordingly. In time of peace, however, when the consequences of errors in judgment show up only after some delay, there is still a tendency to disregard facts, and to continue to act as though the world were a group of isolated, unrelated, and completely independent nations.

The fact of inter-dependence relates not merely to such matters as trade, finance and transportation. It also encompasses the areas of education, science and culture. The progress of civilization depends upon a universal access to knowledge and free exchange of ideas between nations, states, or cultural areas. Without endangering cultural diversity, it is clear that a world inter-dependent in prosperity, peace and human welfare, must be able to progress in all its parts toward common objectives in education, science and culture.

How great is the task of the institutions of learning in furthering this understanding is apparent when one observes the many signs of ethnocentrism, nationalism, provincialism, and racial and religious prejudice, still manifested in public discussion and public policy, even when the consequence is to endanger peace and human welfare.

Few text-books give to the student a true picture of the cultural and scientific history of mankind (in contrast to national histories) and few give to the student a real conception of the inter-relatedness of cultural, scientific, social and political developments within their own countries, much less among nations.

A glance at any day's press reports shows how slow is the progress being made towards developing a rational organization for international trade and finance in the post-war world. A review of the United

Nations Report on the Control of the Use of Atomic Energy shows that even in the face of the greatest threat to mankind's very existence, no agreement has been reached. The facts of world wide interdependence have thus not yet been sufficiently understood and accepted to permit, even at this late date, the attainment of practical results in dealing with these problems.

What is the rôle of institutions of learning in relation to the obvious need for intensive and rapid development of understanding of the facts of one-world living? Surely this is a matter of world-wide concern to these institutions. No doubt you will discuss this at this conference. What can be done in individual countries depends upon their particular educational systems. In some a re-examination of the *entire* educational system may be in order. In others a reconsideration of the *emphases* of educational programmes needs re-thinking. In most countries a minimum requisite will be a closer *integration* of the work in different but related disciplines in order to ensure that the students emerge with a whole, rather than a segmental, view of the world in which they are to live.

Whatever the precise rôle of institutions of higher learning in different countries, it is clear that leadership must come from them, since, in large measure, they provide the final goal and set the standards of education.

The second kind of understanding—the means by which we can live together harmoniously and peacefully—is closely related to the first. But in contrast to the first, a considerable body of research is still required to establish the facts and to secure their recognition at even the highest educational and scientific levels. The facts of inter-dependence are available; the means most suitable for living within the limits set by those facts still require the most intensive study.

For several centuries the world has been making progress through the natural sciences toward understanding the nature of the physical world, and has been applying to transportation, commerce and industry the results of research in natural science. But we cannot claim to be even on the threshold of an equal enlightenment in understanding the nature of the social world. We have, indeed, found the means for fairly effectively eliminating mankind, but we still lack the knowledge and attitudes to prevent ourselves from doing so.

In contrast to the almost unlimited funds available for research in the natural and applied sciences, only a pittance has gone into social science. Social science is still rudimentary and one can scarcely speak of its existence on a world scale. For many people the appropriateness of research in social and human relations on an experimental and systematic basis is still open to question, much as were the mediaeval beginnings of free inquiry through natural science. There continues to be heavy reliance on the assumption that war is a consequence of human nature and that human nature does not change. Yet to social scientists it is clear that wars are not inevitable and that human nature does indeed change. A recent statement of a distinguished international group of social scientists, called to-

gether by Unesco (1), has reminded the world that "... there are vital needs common to all men which must be fulfilled in order to establish and maintain peace: men everywhere want to be free from hunger and disease, from insecurity and fear; men everywhere want fellowship and the respect of their fellowmen, the chance for personal growth and development. The problem of peace is the problem of keeping group and national tensions and aggressions within manageable proportions and of directing them to ends that are at the same time personally and socially constructive, so that man will no longer seek to exploit man. This goal cannot be achieved by surface reforms or isolated efforts. Fundamental changes in social organization and in our ways of thinking are essential."

They went on to state that: "Modern wars between nations and groups of nations are fostered by many of the myths, traditions and symbols of national pride handed down from one generation to another... education in all its forms must oppose national self-righteousness and strive to bring about a critical and self-disciplined assessment of our own and other forms of social life... There is urgent need for a concentrated, adequately financed international research and educational programme."

They conclude by recommending "... the co-operation of social scientists on broad regional and international levels, the creation of an international university and a series of world institutes of the social sciences under international auspices. We believe that international scientific fact-finding studies could contribute useful information concerning the cultures of all nations and bring to light dangerous insecurities and sources of tension, as well as legitimate aspirations of people all over the world. Equally certain to be rewarding are studies of educational methods in the home, the school, and in youth organizations and other groups by which the minds of the young are oriented toward war or toward peace. From the dissemination of the information resulting from these studies, we may anticipate the emergence of concrete proposals for the guidance of national programmes of education."

The mere study of conflicting cultural or national values is inadequate for the present needs of our international society unless it leads also to the formulation of means of reconciliation wherever differences constitute barriers to international peace.

On the institutional side of international relations there is an equal need for leadership from institutions of higher learning. The United Nations Agencies give expression to the facts of world interdependence and provide machinery for meeting certain problems of this "one world". But these agencies rest firmly upon existing patterns of national and social organization; they deeply reflect traditions and experiences of a world that has passed into history. While fully recognizing that international agencies are social institutions which evolve with use and experience, it must be emphasized that the

(1) *A Statement on the Causes of Tensions which make for War* (Unesco/ss/TAIU/3.)

world they are called upon to serve did not become interdependent slowly, but very rapidly. How much time remains for the international institutions to adjust themselves so that they may serve the needs of our time is difficult to predict—but certainly it will not be long.

Here then is an area to which institutions of higher learning could make a real contribution through both research and teaching. We know too little about the best ways of conducting international business. The influence of parliamentary systems has been great, but are they, in their present state of development, the best that can be devised for international organization? This might usefully lead to behaviouristic studies of the organization of international conferences so that they may result more precisely and more surely in a resolution of differences through negotiations. Which of the variety of patterns for administrative organization on the national level can best be used in creating new patterns for expediting international business? What are the requisites for developing an international civil service which is free from national control, but not insensitive to national differences, and not unconcerned with ordinary civic responsibilities? How can the now baffling problem of communication be simplified so that men who speak the same official language may understand the full meaning of each other's words, even though they come from cultural backgrounds so diverse that the same words call forth different associations and mean different things? Or again, what must be done to co-ordinate national and international institutions for carrying on the affairs of one world by means short of a single world government? This problem alone presents a major challenge today to social and political scientists with a creative and experimental bent.

Clearly the success of an organized international approach to world problems depends upon understanding the elements of that process. Research alone is not enough. Positive steps are required, in my judgment, to insure that this understanding is widespread and that the necessary trained leadership is available to conduct the affairs of this one world.

With respect to the first of these, I am reminded of the very significant studies begun twenty years ago by the distinguished American political scientist, Charles Edward Merriam, leading to the publication of many volumes on training for citizenship in a selected group of countries. The studies were especially significant as they indicated the influence brought to bear upon the youth of these countries, by their environment and the effect which these had on their understanding of public affairs and their ability to participate as intelligent citizens in public affairs.

Quite obviously, because of the time lag between social and physical developments in this one world, intensive programmes for understanding the international process are required if the adults of to-day and of to-morrow are to function intelligently in meeting the host of one-world problems now crowding upon them.

The Charter of the United Nations significantly and properly begins: "We, the peoples...". It is the peoples of the world who are the bene-

ficiaries of intelligently and wisely conducted international affairs. But it is also the people who ultimately give the permission or the instruction that the affairs shall or shall not be wisely conducted. The institutions of higher learning have both a responsibility and an extraordinary opportunity to provide assistance to the people in reaching intelligent judgments.

Closely related is the need to-day to increase quickly the available manpower for conducting world affairs. The shortage is well known to anyone who has attempted to fill public offices with competent personnel. There are obvious reasons for the shortage. Yet the institutions of higher learning could contribute to an early alleviation of the difficulty by directing more attention to public affairs as an honourable and exceedingly important profession. We are in an age requiring the very best talents in international and national politics and administration. The requirements for this service should be as exacting as those for any profession, for the consequences of incompetence may be disastrous for millions of people and for the very survival of our civilization. Much progress has been made in some countries to develop training courses for the public service. More is needed, and with emphasis especially upon problems of international administration and those which lie to-day on the border between national and international administration.

The urgency of the task before us calls for a new allocation of the energies of the institutions of higher learning. As already suggested, curricula need to be reconsidered in terms of content, emphasis and integration. More than this, there is need for greater collaboration among the social sciences themselves, and between the social sciences and related disciplines of the natural sciences and humanities for a joint attack upon the problems at hand. There is obvious need for bringing into much closer personal touch professional men in similar fields who are geographically and nationally separated, for an interchange of ideas is necessary if the solutions arrived at are to have universal support and understanding. Special institutes, regional and world centres of study and research, organized and financed on an international basis, are obvious requisites to achieving world mindedness and the marshalling of energies and talent commensurate with the tasks before us.

These are some of the problems to-day facing the universities and other institutions of higher education. Their solution is ultimately a matter for leaders of education in each country. Yet this Conference may well consider means to stimulate and co-ordinate the efforts of national leaders toward the end of achieving solutions quickly and on a universal basis.

New Horizons in University Development

George G. Stoddard,
President of the University of Illinois
Member of the Executive Board of Unesco

It is not my function to draw up the agenda or to set the issues of this first universities' conference under the auspices of Unesco. We meet in a beautiful city, rich in its heritage of Roman, Goth and Frank. If this Conference should found a permanent world organization in higher education, it will itself be a historic event. But to all of that, I shall give no attention to-night.

Instead, I should like to call upon a distinguished British scholar, Sir Richard Livingstone, to set the stage for us. He said:

> "A man lives with details and immediate problems in the narrow deep-sunk pit of his daily work, and needs at times to climb out of it and look round; to see not only the departments with which he is concerned but his occupation as a whole, and that occupation's place in the wider order of things; to remember that principles should guide individual decisions and to consider what these principles are; to study related problems and methods in other institutions and countries. Every moment the crust of routine is forming over the mind, thickening, and impairing its fertility; only a continually renewed activity of thought can break it up." (1)

Accordingly, my aim is to push a little against the crust that covers all of us when we are busy at home. We have in this gathering a surplus of mental energy and, thus far, entanglements of neither structure nor instruction. Eventually, what we say may be heard or read and what we do may well be deplored. For Unesco is supported by public funds from its Member States and Unesco is full of professors who are especially unreliable when abroad. Fortunately, there has been much borrowing—in fact, a two-way traffic between college campus and government office.

Unesco, therefore, as a bridge between the academic and the political, is new chiefly in form and size; it has official standing and it is almost world-wide in scope. Unesco, moreover, is polarized—weak or sturdy, right or wrong, it is multi-celled but single-purposed. As I said recently in San Francisco:

> "Peace *is* our problem in Unesco; fundamentally we have no other problem. It seems to me, therefore, that Unesco must choose fast whether, on the one hand, to stay in quiet waters far from danger and significance, or, on the other, to consider itself as a militant organized force for peace. The long-term plans of Unesco are indeed marvellous, provided that they do not form a steadily receding horizon. I feel that they can be

(1) *The Future in Education*, Cambridge University Press, 1941, p. 101.

reached only through bridges of finite length of which the only thrilling example to date is in educational reconstruction and rehabilitation.

Unesco, in short, needs more than hopes, plans, programs, debates, reports, working parties and committees. Above all, it needs *assignments.* It needs assignments starting from people's mandates, expressed through their representatives in national commissions, delegations and work projects. Unesco is a part of the fundamental law of forty nations; as such it need not be on the defensive. Clearly the forty member states are themselves on the defensive. If they go all out for armaments while backing away from Unesco, they will have forgotten the ultimate purpose of military strength which is to keep the peace. Unesco, stressing understanding and a general exchange of goods and services brought about through sound economics, technical development and education, may yet convince all but the most foolhardy that war, like crime, does not pay. *This means that Unesco, not itself political, must form a solid basis for many a political decision.* It means that Unesco will become obnoxious to those who regard war as a necessary solution to every present evil."

Hence, Unesco, eager to be effective, can be effective only as it applies the unique force of ideas hammered out by men who have already gone far in their own fields. Clearly, Unesco cannot construct a roof over its own pillars—its *E, S* and *C*— without testing the strength given to Education, Science and Culture. The question is, what kind of education are we talking about? Is the concept transferable from person to person and from tongue to alien tongue? Can a Member State make up its collective mind, if it has one? Even harder to grasp is the initial *C* for Culture, the last pillar to be raised. It was indeed the choice of this word *Culture,* with its non-silent partner, *Communications,* that curtained off from our activities a substantial and dangerous sector of the world.

Let us look first, however, at the long-festering schism that lies squarely within the western world of thought. What is there so mean and perverse about science and technology? Why do so many persons condemn a system that meets, as never before, the ancient and basic needs for food, clothing, shelter, transport, communications and recreation? Why do we praise unstintedly the operations of obscure brain-cells if only they work in obscure fields? Is the common always wrong and the rare superior? I believe it is time to move out of the divided house in which men's minds are forever torn between what was and what is, or between what is and what could be.

At the Sixth Congress of the Universities of the British Commonwealth at Oxford in July, Professor John MacMurray of Edinburgh spoke to the question, "What Structural and Moral Changes are produced in Modern Society by Scientific and Technological Advance?" He defined culture as the evaluation of ends, the determination of priorities and, in the long run, a means of choosing a way of life.

Thus technology becomes subservient. MacMurray holds that "a technological obsession is the crisis of modern culture;" even the liberal subjects are infected, for logic is but a "technology of knowledge." In fact, we have numerous humane and liberal subjects in our college catalogues offered to a dubious and resistant student-body with the precise formulations that characterize technology. MacMurray also pointed out that the quarrel is not really between science and humanity, but between two ways of interpreting learning. "If each subject is taught in relation to knowledge as a whole, it becomes a vehicle of cultural understanding." Culture came to deal largely with the certain past; and science, strong in its freedom to experiment, with the uncertain future. Science in this way captured the imaginations of men, pushing the scholastics to the wall, and itself unlocked new doors to humane and creative enterprise. In MacMurray's striking phrase, "a successful science, aided by technology, has fragmented culture, and cultural tradition is fundamentally to blame."

I think that we can all follow the worried Scot in a search for new values that will represent a new culture. At all costs, science must be given a major rôle. At the start, we should re-examine this question of a conflict between science and culture. I shall state flatly that there is no conflict, not because there is agreement, but simply because science has won every battle that has taken place within its territory. Moreover, science has decided what that territory should be, massively achieving supremacy in astronomy, physics, chemistry, geology and biology—and approaching it in psychology— all to such a degree as to relegate pre-scientific conceptions in these vast regions to the realm of the fairy tale. After all, the term *conflict* implies antagonists, preferably well matched. Science to-day recognizes no real adversaries and scarcely lifts an eyebrow against the most threatening gestures. If you want to talk to a scientist about the forces in, on and above the earth, including their history and their future, you will speak his special language or remain forever ignorant and silent. To be without science, or prejudiced against it, is to be defective even in the realms rightly assigned to philosophy and religion.

On the other hand, for the scientist to be without values—a theoretical condition I have not encountered—equally develops confusion. Clearly it is only *scientific method*, not the individual scientist, that ignores human values and priorities. Do you want to kill your enemy, surely, cheaply and in huge numbers? Technology helps. If the enemy should be bugs or bacteria, science is equally willing and, in this case, like the soldier in Iolanthe, generally admired. Science, as such, is strictly non-moral; it is like the high cliff, the stormy sea, the great fire, or the unpredictable plague that has always appeared to threaten man, every one of which phenomena has served to lift man out of the cave and to set him upon a new and exciting pathway.

In short, what we now have *ad nauseum* at all levels of education is not a conflict, but a deficiency. The scientific and the technological dominate the scene and their pre-eminence will not be weakened by anything happening in science, save possibly a final, catastrophic

destructiveness. At the end, most likely we should not find the new values we seek, but again the restless beginnings of a new technology. The reason for this is becoming painfully clear. The simple truth is that there is no hope for large-scale survival on this planet except through the constant application of scientific methods in agriculture, industrial process, transportation and the health professions. If we are to combine the physical needs of over 2,000 million persons with the Christian ideal of the supreme worth of the individual, then we must strive, combine, co-operate, learn, adjust and make good. The level of aspiration of civilized man will never again sink to the simple tropic life, the loin-cloth, or the limestone caves that are now being quietly surveyed. If we cannot get, or do not have the hope of getting, what we have become accustomed to, we shall move in droves toward asylums and concentration camps.

Culture, therefore, has to be blended with and superimposed upon scientific progress. The great blending vats will be found in the social sciences and social structures; they form the mother liquor of the firm values by which they are transformed. We should seek values that have been tested objectively, up to a point; we must then pass beyond a science that cannot do the work of the arts and humanities. But in bidding farewell to science, we must not re-introduce it surreptitiously as a sterile, formalized erudition.

There are several factors that continue to weaken the arts and humanities in modern life, but I shall mention only one. As I see it, the humanities are almost dead because we are afraid of their powers. Their exponents, rather than fight, yielded shamelessly, becoming fretful commentators on the vulgarity of a scientific preoccupation. It is true that we hear of occasional attacks on science, as in the notorious Scopes trial in Tennessee; and the antivivisectionists and a few miscellaneous religious sects are reliably perverse. The humanities are rarely attacked; they are simply ignored, even though they reveal their charms for those who will look at them twice. There is enough dynamite in the Greek and Roman classics to produce a genuine scare, should freedom-loving people expound them with a modern emphasis. If, very soon, philosophers are not again accused of poisoning the minds of youth, I shall question their ability to do anything at all!

The point is that science *is* the human mind freely at work in certain areas, while a comparable mental freedom in the humanities has been taken away by tradition, moral code, political doctrine and religious dogma—with or without evidence as to their beneficial effects upon mankind. It was not always true, but it is true now, that men can think, dream, experiment and pronounce in the realm of science—right up to the frontier of work in nuclear energy, a frontier deadly to both life and freedom. Modern science is lightly attached to its history, but modern culture seems to carry a rusty and ever-lengthening chain.

Universities can help to free the mind in areas of danger and radical departure; they can, if they will, put a premium on the creative arts

which they have so long admired as a past event. What the microscope and telescope are to visual powers, poetry and drama are to general intelligence. Poetry enlarges the world of human experience, setting up new images and enabling us to feel what we have known, and to know what we have felt. The poet, like the Olympic athlete, does for us what we are too lazy, too pedestrian, too circumscribed to do for ourselves; unlike the admired athlete he improves our marks. Not through watching but through reading we grow, for reading is in itself a vital experience.

The complete human being—something organically developed out of science, art and humanity—will work for a living; otherwise someone must work in his place. Universities should stop apologizing for this workaday aspect of their programme. Vocational assignment, with or without vocational preparation, is the lot of all non-parasitic men. Education is costly, but not a luxury, and it is not for the precious soul. In any democracy a liberal education should frankly include the technical, vocational or professional, in so far as such experiences have been organized, documented and generalized. A solid preparation for the economic life is the good earth of liberalism everywhere.

If we can assume, then, that a lack of science and the practical arts will starve us physically and a lack of the liberal arts will starve us intellectually, we can move on to the battleground of the social and political sciences. Let us admit at once that the gloriously successful methodology of the natural sciences cannot be transferred bodily to the study of human behaviour or social institutions. Nevertheless, there is more experimental work in psychology than in geology. For all I know, there are more controlled observations of rat and human responses than of the movements of invisible particles in the cloud chambers of nuclear physicists. In the social studies also there is a powerful utilization of statistical analysis. What is lacking is the existence of precise mathematical formulas that organize observed phenomena into laws. Granted that this lack is a weakness, or at best a difference, what remains to the observer and predictor of behaviour is superior to guesswork, to an aggregation of discrete facts, to formal logic or literary description.

Without creative imagination, work in the social sciences will yield few insights; without a system of hypotheses, facts and experiments, the work becomes sterile and repetitive. Perhaps the most dramatic results spring from a combination of the biological and the social sciences. By applying a knowledge of heredity, environment and biochemistry, farmers produce bigger and better crops, thus changing the outlook of peoples and nations. Man is slower to change the familiar domestic animals and slowest to change himself. He is adept at saving time only to wonder what use he may then make of it.

Yet it is the progressive farmer the world over who leads the way to a new merger of science, technology, social science and the art of living. Every one of the forty-eight States in the United States of America is contributing great wealth toward these programmes.

When President Abraham Lincoln signed the justly famous Morrill Act in 1862, there was strong opposition to this extension of public education into advanced technical and general levels, not all of it disinterested. There was, as I have remarked,

> "an early fear that public universities could not be free in thought and deed. We hear little of that to-day. Freedom to teach is about equally spread among the public and private colleges of the United States. Restrictions upon it are more often related to regional hysteria than to the source of income. Private institutions are free to teach that rich men should not endow them, but they never do. Public institutions may, of course, speak out against more money from taxes—but have they ever done so? On the whole, independent colleges do not follow the Bill of Rights as closely as the tax-supported colleges in regard to race, religion, national origin and economic status, but there are notable exceptions.
>
> Inside the classroom and around the periphery of adult and extension education there are still doubts. What happens in mathematics, astronomy, physics, chemistry, agriculture, engineering, or medicine is rarely controversial, although men once died in agony to bring about this condition. The new firing line is the social studies. Here the independent college temporarily has the edge; it can and does speak up mightily for the minority, the unpopular idea, the shape of things to come. I predict that in labor, commerce, government, social welfare, civic planning and foreign affairs, there will be a tremendous upturn in the work of tax-supported institutions. The people are beginning to see in the objective, forthright work of institutes, colleges and universities, the leadership that has meant so much in agriculture, engineering, and the health professions." (1)

This leadership already goes far beyond science and its applications. It is essentially creative—a new ferment that favors what men can do over what they can remember and repeat. The author of a Pulitzer prize winning play (at present a favorite on the London stage) learned the art of play-writing at the Unversity of Iowa in the most completely agricultural state in America, and he does not stand alone.

There is, in short, a democratic component in the modern university that should not be overlooked. If you are hunting for talent where should you look? The answer, backed by research is, *in all walks of life.* Dull and average parents may produce bright children. Even though the *percentage* of high talent is smaller than among the well-educated, the base to which it is applied is vastly greater. The balance is upset, too, by the tendency of "the best people" to have relatively small families. Were all their children bright—which they are not—they would normally compete with one or two bright children out of any large family of ordinary workers. The competition, to be fair and not progressively loaded against the poor and the numerous, calls

(1) *Ferment in Education.* Urbana : University of Illinois Press, 1948, p. 4.

for equal attention to mental development long before the college age level; in fact, a start at age five or six is definitely late. It can never be said too plainly that a decent preparation for university life should begin in the nursery school. The speech and habit patterns and emotional insights gained in these formative years, under good conditions, are a firm rock for all subsequent growth.

Now these remarks may give the impression that Americans, at least, have faith in all kinds of education at every level. This is more than a half-truth. Of course, there is no such thing as *the* American view; we are proud of our heritage of dissent. By way of illustration, I can cite the Report of the President's Commission on Higher Education(1) of which Dr. George F. Zook was Chairman and Dr. Francis J. Brown, Executive Secretary. The Commission viewed without alarm the potential doubling (by the year 1960) of the present college student enrolment which exceeds 2,250,000. This is *not* a prediction of what will happen, but an estimate of what would happen, if we were to send to college all students who could succeed in the work. Such doubling will be harder to finance and still harder to prepare for by way of good teachers and facilities; it will not take place at all in an armament-centered world.

Lest you carry home the idea that under this plan every last American would be going to college, let me say that the majority would never see the inside of a college hall. Also, if you really believe that only one of five should have a try at college, which is the present situation, it would be a self-revealing experience to gather five young people from among your friends in order to draw lots for the lucky one!

Now some Americans and countless other people do not want to educate youth in large numbers. Chancellor Robert M. Hutchins of the University of Chicago, a man of wit and charm, is alarmed at the proposed pile-up of reluctant learners. The Commission knew that he would not like the report and it is something of a tribute to their integrity and courage that they went ahead in blithe disregard of so formidable a critic. At times they accidentally agreed with him! For example, Mr. Hutchins had said at my installation at the University of Illinois, six months in advance of the Commission's report:

> "It is not enough to say, then, let us have lots of education, or lots of expensive education, or lots of education of the right people. We must have universal education, let it cost what it may, of the right kind, and that is the kind through which we may hope to raise ourselves by our own boot-straps into a different spiritual world. That is the kind which places a sound character and a trained intelligence above all other aims, and which helps the citizen to work out for himself a set of principles by which he may live. Only by such a set of principles rationally arrived at and firmly held, can the democratic

(1) *Higher Education for American Democracy.* Washington, D. C.: U. S. Government Printing Office.

man hope to be more than a transitory phenomenon lost in the confusion of a darkening world."

Thus, we are brought squarely around to the issues raised by Professor MacMurray. Is university life, as experienced by the student, really a waste of time? Like everything else, it may always be useless to the lunatic fringe. For the many, it strikes me as sound and good—well worth preserving while we set about improving it. I get this optimism from leaning over the shoulders of students at work in the laboratory, or from listening to reports, debates and discussions on every conceivable question. If there is a loss of vitality, it is not in the curiosity and energy of students. Who will take them and do better by them and for them? The military? The industrialist? The business man? The studio? If so, by what means thus far unrevealed to educational leaders will students be brought to the top of their capacities? Certainly the university is designed for learning and living.

Do we truly have what Livingstone calls a "civilization without ends... an ample body with a meagre soul?" Let us, then, at Utrecht —and everywhere—think of better ends and of better ways to achieve them. The world crowds in upon us threateningly. The university is dedicated to youth and to society as a whole—to the future. Let us resolve to keep it strong, useful and free.

The Relation between Higher Education and the State

Professor Georges Scelle,
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France is one of the countries in which the relations between the State and education have been the subject of passionate disputes. Many of the problems are still acute, although the constitution of 1946 laid down the principle of free education at all levels and made this an obligation of the State.

But the problem of education arises in relation to the Nation rather than in relation to the State, for as Aristotle has said: "the State is only an aggregation of public services designed to fulfill the ultimate aims of the Nation." Unfortunately, the State, in the hands of political leaders, often succeeds in deflecting from their proper goals the tasks which should be assigned to the public services. In this way education and instruction may become the instruments of dictatorships and political propaganda.

Higher education is the axis of the culture of the nation. It does not constitute the whole of its culture, since there is also primary and secondary education. Nor is it identical with science, or with transcendental research, nor again with applied science. It is the culture

(1) *Ferment in Education. Ibid.*

of an *élite*. In point of fact, higher education is the university: it includes research work, but as preliminary instruction; it includes orientation, but not technical application; there is also specialization, but within a framework of universalism.

The aim of the university is to be the genesis of thought for the *élite*. It receives pupils; it turns them into thinking men but not necessarily into savants. This was the conception of the German Idealist School under the leadership of Humbolt at the beginning of the nineteenth century, a conception which was at last universally adopted under the symbol of the doctorate of philosophy, in which the thought of the university regains its unity.

From the foregoing analysis, two conclusions are seen to emerge. One is that no civilized state can disavow its interest in higher education. Even those who believe that everything should be left to private initiative are obliged to fill in the gaps which arise, owing to the inflationary tendency of its requirements. Thus, in England, they have a "University Grants Committee." Moreover, it is necessary to have safeguards against abuses which might disturb public order.

The second conclusion is that the intervention of the State should never be allowed to go as far as domination, or the development or creation of a monopoly. In France we have had the experience of the Napoleonic University. Throughout all time, scientific progress, e.g. the mechanism of Descartes, Newtonism, Darwinian evolution, has been in conflict with power. Science demands even the freedom to make mistakes, for it is borne of the correction of errors.

However, there is no stereotyped system capable of ensuring, unassailably, the freedom of higher education. In this matter every people has its own idiosyncrasies but these may be reduced to three principal types: the British, the American and the European.

The British type claims to be able to dispense with a public education service. In reality, this is not a panacea: education may become a slave, in the same way as the press or the propaganda service, if it is made subject to the power of money, to religious dogmas or even to conformity. On the other hand, a public education service may be decentralized and autonomous. The combination of private initiative with autonomy within a public education service is capable of establishing a harmonious balance.

The American type is non-Federal, leaving the responsibility of higher education to the several States and to private initiative. This general statement must be qualified in two respects. The Federal Government has, since 1862, given financial assistance to certain state institutions giving instruction in "agriculture and mechanical arts". During and following World War II, through contractual arrangements with both publicly and privately controlled institutions, the Federal Government has provided buildings, equipment and funds for research, for specialized instruction and for veterans' education. The second exception is the statistical and advisory service provided by the U. S. Office of Education.

The European continental type, with some variations among the

various countries, is a centralized State system of higher education. Members of faculties are, except in a relatively few private institutions, employees of the State.

Speaking generally, it may be said that in any type of organization, the freedom of higher education implies: first, the legal independence of the educational establishments; second, independence in education, recruitment and disciplines; and third, individual independence and the security of the teacher. But in no case can the supervision or intervention of the State be entirely excluded.

Legal, financial, and material autonomy, find their expression in the acquisition of a legal personality by the educational establishment; this may even go so far as to constitute a sort of co-operative system. We prefer a system by which the assets are administered by the academic body itself rather than by a State bureaucracy, or even by a body of trustees, as in America. Here again, the system of the British "Grants Committee" seems to be a model. But we must also be grateful to the United States Supreme Court for its jurisprudence concerning the legal autonomy of higher educational establishments.

The independence of education and of science constitute the second and central point of our subject. The independence of the teaching staff is expressed in freedom of recruiting by the universities. That is the *Venia legendi* of *Docendi* of the German universities. In our view, a system of recruitment which is confined to a scrutiny of diplomas lends itself to the abuses of co-option and the selection of competitive trustees may often give ground for suspicion. It is the system of examinations, combined with publicity, which appears to give the best guarantees. Freedom of recruitment requires that it be supplemented by autonomous disciplinary power under the control of the supreme jurisdiction of the State.

This freedom must also be supplemented by the right to determine the curricula of studies, leaving the State, however, the right of inspection, in order to ensure that instruction is given in all subjects necessary for the culture of the *élite*. This is specially desirable in those countries in which the possession of diplomas is a necessary condition for entrance into most careers. We greatly admire the Anglo-Saxon countries where, by a sort of professional trades-unionism, the recruitment and discipline of the liberal professions is left entirely in their own hands. We favour the system of an organization by Orders (Doctors, Lawyers, Architects), but the exclusion of all State control in this respect would appear too dangerous in the more politically-minded countries. We also see a danger, in the democratic countries, of demagogic movements which might lead either to the manipulation of educational curricula by the users themselves, or to a flood of diplomas which might deprive them of all their value, or even to an increase in the number of students. The result would be not the selection of an *élite*, but a system of "mass education", which is inconsistent with the very notion of higher education.

As regards the third implication, the individual independence of the members of the teaching staff, such autonomy is expressed in freedom of instruction by the spoken word or in writing; by security of employment and by security of livelihood for the teacher. The requirement of freedom of thought for the teacher would, by itself, justify the introduction of State education in countries where only private, denominational universities exist. Security of employment implies that the occupant of an educational post should be, as we say in France, "the owner of his own chair", and may in no case be deprived of it, except under jurisdictional control, and not by the arbitrary decision of a political administration or a Board of Employers. Security of livelihood implies an adequate salary and leisure for research. Unfortunately, in some of the most democratic countries, a false equalitarianism has ended in a levelling downwards, the overburdening of the service, and its devotion to subsidiary aims. The extent to which this has occurred, is perhaps one of the worst injuries inflicted on modern higher education.

At this point we might close our description of the relations between the State and higher education were it not that events, and also our own specialization, compel us to examine the international conditions of education. We are not referring here to the international relations of the universities, i.e. to exchanges of students or teachers or even to the creation of international educational establishments. The problem is whether the State should be regarded as the absolute master of all higher education in the present condition of international relations. No doubt, in this connexion, the State would claim its full sovereignty, and we recognise that that is the first principle enshrined in the Charter of Unesco; still, we do not believe that this exclusive competence is legitimate, still less that it can be eternal.

It is difficult to say whether the covenant of the League of Nations (Art. 15, par. 8) or the Charter of San Francisco (Art. 2, par. 7) regarded education as a matter of "domestic concern." It can be argued that this is so; yet the notion is evolutionary, and in a system based on an association of the "peace-loving States" it seems improbable that Mussolinian or Hitlerian methods of training the *élite* would long be tolerated. This is one of the places in which Federalism should assert its claims. The precedents are still rather discouraging. In Switzerland there are only cantonal universities. In America, in spite of the efforts of Washington, Monroe and Madison, the constitution has not granted jurisdiction in this matter to the Federal State, and no federal university has been established. These deficiencies may lead us to believe that it will be difficult to institute any kind of international supervision of the national systems of higher education. But, however difficult it may be, something in that sense must be done. Absolute sovereignty belongs to the past, and as William of Orange said, "It is not necessary to succeed in order to persevere."

UNESCO AND HIGHER EDUCATION

Dr. JULIAN HUXLEY,
Director-General of Unesco.

Although I am sure that others who have preceded me on the programme of this very interesting conference have expressed their gratitude to the Netherlands Government, I want, both officially and personally, to extend the sincere gratitude of Unesco to all who have contributed to its success. It would have been a real pleasure for me to have been with you throughout all of your sessions, but the pressure of other responsibilities has kept me away and makes it necessary for me to leave again tomorrow.

In addressing you to-night, I shall do so largely in my capacity as Director-General of Unesco. In such a gathering as this, however, I cannot resist drawing also from my very considerable experience in university life in various countries and continents.

The primary objective of Unesco is to foster peace and general welfare through the international aspects of the problems of education, science and culture. In each of these three fields of Unesco's activities, the universities of the world are a vital and dynamic force. Consequently, the calling of this conference of universities is a natural and logical development in the work of Unesco. It is my hope that this first international gathering of university representatives since the war will prove of value to you in solving your problems on the international level. I hope, too, that you will advance still further the co-operative work in this field which was begun by the International Institute of Intellectual Co-operation, but interrupted by World War II.

One of the very interesting proposals made at the first international conference which was convened by the Institute some ten years ago, was the creation of a permanent organization to represent the universities of the world. I am pleased to learn that you are discussing the creation of such an organisation and have already taken steps in that direction. When an international body of universities is formed, or an interim procedure is developed looking toward its later organization, Unesco will do its best to help it stand on its own feet by providing, as far as possible, financial assistance, physical accommodation, and secretarial help during its first years.

Unesco cannot achieve its objective or conduct its programme single-handed. Obviously it cannot work only through a Secretariat of a few hundred people in Paris and a mere handful of persons in far-flung field offices. It must work also through other channels.

Fortunately, in a number of countries and in many fields, such channels already exist. One of the most important is that provided by the Unesco National Commissions already established, according to the terms of the Constitution, in twenty-eight Member States. I hope that they will soon be established in the remainder. The other main channel through which Unesco must function is the non-

governmental international bodies specialising in some particular field—for instance, the International Council of Scientific Unions or the international student groups. A third channel, and there are many others, is the regional organizations, illustrated by the Institute of Research in the Hylean Amazon.

I cannot too strongly emphasize this fundamental policy of Unesco, namely that of delegating responsibility to and of co-operating with other organizations and agencies. In implementation of this, Unesco is glad to assist in the creation of organizations, where they do not already exist, that can help in achieving its objectives. Assistance was given in the formation of the International Council of Museums, and this summer, in the creation of the International Theatre Institute. If a need is felt for similar organizations in other fields, Unesco will seek to be of such assistance as possible. The final steps have already been taken towards the creation of international councils in the medical sciences and in philosophy and humanities. You can now understand why I said a few moments ago that a permanent world body representing the universities would be welcome and that Unesco would help to create it.

Some of you are undoubtedly asking, "What can Unesco do in the international field of education, both through its secretariat and in co-operation with other organizations?" This question cannot be answered completely, for Unesco is still a very young organization. But past experience and present plans clearly indicate some of the means through which Unesco can assist the universities.

One of the ways is through helping to create a common pool of information on which all nations can draw to assist in the solution of their problems. The value of such a pool would not reside merely in an accumulation of different experiences, but would emerge chiefly from a comparison of different ways of looking at a problem. It would be extremely profitable, for instance, for an Englishman to revise his views on State "interference" in higher education after discussion with a Frenchman.

Research is another illustration of the values of such a pooling of experience as I am suggesting. In Russia and in other Eastern countries, research is being taken away from the universities and delegated to technical academies. In North America, research comes within the province of the universities, although there is recently developing a trend to establish research institutes more or less autonomous in character; while in parts of Latin America and in the traditional Moslem universities, research is not an organized function of the university. Discussions among Russians, Americans and Moslems on the relationship of research and the university could be of very great value.

But there are also immediate and perhaps more practical tasks in the field of higher education for Unesco. Universities are included in our programme of reconstruction of the war-devastated countries. Our funds for this very important work are relatively limited; but we have stimulated such organizations as the Commission on Interna-

tional Educational Reconstruction and have assisted in making surveys of the cultural needs of such countries and in raising and directing the expenditure of funds.

Another possible way of furthering rehabilitation in higher education would be for a more fortunate institution to adopt a less fortunate university in a war-devastated country. In using the concept of adoption, I am not thinking in legal terms but rather of the acceptance of responsibility for direct assistance. Unesco would be glad to facilitate the initial contacts in order to assist the development of such a programme.

There are many other ways through which Unesco and the universities can co-operate in the solution of our common problems. I am sure that these will be developed through your discussions, and I assure you that they will be given very serious consideration in the further development of Unesco's programme in higher education.

I should like now to turn to some more general aspects of the changing rôle of the university in the modern world. During the past five months, I have had the opportunity of visiting nineteen countries and I have seen many problems from wholly new standpoints.

One important problem which has been thus far neglected is the function of the modern university in relation to the arts. There has been, and is, a dangerous tendency to over-intellectualisation, which often leads to the triumph of the academic and intellectual over the aesthetic and creative approach. Very few universities have art schools attached to them; few have a Chair of Fine Arts. The idea that people are essentially barbarous, or at least in one important respect, uneducated, if they do not understand or appreciate the Arts has not yet penetrated the portals of many universities. Those who are ignorant of science, history or the classics are considered uneducated, but a student can pass through a modern university and know nothing of Purcell or Giotto, of architecture or of modern painting. The function of the Arts, which is creative and expressive, is surely as important in education as that of science and learning, which is cognitive and intellectual. Much of the present individual and social frustration is due to the lack of the psychological outlets which the Arts can provide. Strong emotions, such as loyalty and patriotism, can find their most wholesome and fruitful expression through the Arts. I would suggest that, as far as possible, the buildings in which the university is housed should reflect this same emphasis in the high quality of their architecture.

Another basic problem may, perhaps, best be formulated by the question: "How can the universities provide not merely instruction but education that will be really relevant to moral and ethical issues?" There are peculiar difficulties in this connexion, since morals and ethics are often tied up with religion. But the problem basically resembles that of the arts, since aesthetic and emotive, and not only intellectual, factors are involved.

But there is also the problem of international understanding. The

questions which universities may well ask themselves are: "What is the rôle of the university in helping people to a better understanding of cultures other than their own? Are the universities really doing all they can and should do to foster international understanding? What are the best methods of doing so?" A few institutions, such as the London School of Oriental Studies, have made significant contributions in this field, but they are rather specialized and few in number. There is little opportunity for the bulk of students in most European and American universities to understand any foreign culture other than the standard classical culture of the West. Perhaps the further development of exchanges among professors and students may help to solve the problem.

The question of international universities has often been discussed at Unesco. It is gratifying to note that some experiments are beginning in certain zones of Germany and elsewhere; Unesco can help in this direction by assembling and disseminating information about these and similar experiments and programmes.

Mutual understanding is important among the universities themselves, for the very term itself means one thing in one country and something quite different in another country. For example, as I recall from my still vivid personal impressions of the Near East, the Moslem and Islamic systems of higher education such as I saw at El Azhar, Kairouan and Tunis are completely different from those of Western Europe. The university at Kairouan still retains many of the traditions of twelve centuries ago when it was founded. In Egypt there is need for a closer relationship between El Azhar and the modern universities.

A related problem is that of equivalence of degrees. Unesco is much interested in the development of such equivalence because it would facilitate freer exchange of students. In this respect at least, the university system of the Middle Ages might be taken as a model.

The promotion of international understanding is a task in which the institutions of higher education might play an important rôle. This is a large subject, however, and I cannot pursue it here, beyond saying that in it I hope for very close co-operation between the universities and Unesco.

From an organizational point of view, there are many issues involved in the establishment of new institutions of higher education. There is a level of size, population and wealth below which it is impossible for a small country to create a university worthy of the name. Is local patriotism to prevail, or will universities be pooled among a group of smaller nations or combined with those of bigger neighbours, or will the students of the small countries simply be forced to study elsewhere?

In this connexion, there are two special problems. One is that of the expansion of higher education in non-self-governing territories. Students in these areas must choose between leaving their home country to study in the imperial mother country or other more advanced nations, or depend upon the new institutions that are

growing up in their own lands. The other is the future of university systems in countries where foreign effort has provided the institutions of higher education; for example, Lebanon, where there are both French and American universities, but no national university.

On my recent visit to the Middle East, I saw how political independence has given an extraordinary impetus to the development of new educational institutions. In Syria, for example, a national university is being developed on a large scale and with great enthusiasm.

Looked at from a world angle, the problem presents itself thus: how most adequately and effectively to provide the opportunities for higher education to all peoples. At times it may prove better to have a single university serve the youth of a group of countries rather than letting local patriotism insist on separate local institutions. It may also be that the universities alone cannot cope with the present task. Some of their work, notably in the field of research and post-graduate study, is being taken off their shoulders by the growth of new organizations. In the United States and most Western European countries more and more research is being done in government and industrial institutions. In the U. S. S. R., the Academies of Sciences are concentrating more and more research in their own hands and away from the universities (just at the time, it may be noted, when in countries like Great Britain, attempts are being made to group every kind of technical subject, such as agriculture or the training of teachers, around the universities).

Allied with this problem is the question of the optimum size of a university. There are, for example, over 40,000 students at the Sorbonne; over 20,000 of them in the Faculty of Law alone. This number seems to me to be far too large—as unwieldy as would be a city of 20 million people. The problem is becoming more and more serious as the number of university students increases. Perhaps developments in secondary education may point the way to a solution. Already the provision of secondary education for all is a practical proposition in many countries. But as a result, it is becoming split into two channels —one an end in itself, the other a preparation for higher education. This trend may, in the future, be carried into the universities. To provide physical and intellectual accommodation for all undergraduates it may be necessary to create on a large scale institutions such as the American junior college, as well as expanding the universities proper.

But I hope very much that this gathering will not restrict itself to the discussion of organizational and administrative matters only. An improved curriculum should be your central aim. My own teaching experience in biology can be taken as an illustration of the need for reform. Too often, the curriculum of to-day still has a medieval basis, since botany is derived from a study of herbs, zoology from that of higher animals, and physiology and pharmacology are centered on human medicine. It would be better to get rid of this inertia of centuries and re-group the biological curriculum into broad subjects such as evolution, genetics, physiology and ecology.

Professor Bernal has suggested two possible lines of approach to research—the convergent and the divergent—and the same quality may perhaps be relevant in the teaching curriculum also. The convergent approach implies research in various fields converging upon a single problem. Cancer, for instance, can be investigated with the aid of biochemistry, cytology, genetics, experimental embryology, radiology and tissue culture. The divergent approach implies beginning with a single field and trying to find out how it applies in other disciplines. Thus general principles radiate out or diverge from the single origin. Modern genetics, for example, now has some relevance in almost every field of human knowledge.

Thus far I have been discussing some of the problems of broad policy in higher education. There are, of course, many problems of a more specific type of which I shall select only three: preparation for university teaching, examinations, and publications.

Elementary and secondary school teachers are required to learn the art of teaching and to possess a diploma or certificate as evidence of having completed professional preparation for teaching. For some mysterious reason, university teachers have always been exempt from this discipline. They are presumed to know human psychology, to be efficient in imparting knowledge and satisfying the thirst for knowledge, and to adapt their teaching techniques to utilize new instructional devices, without benefit of professional technique and experience. Yet I am afraid that university teachers still rely only on the oral method of lectures, apparently oblivious of the fact that printing was discovered some 500 years ago—and know little and care less about new aids to teaching such as the radio, the cinema and other audio-visual techniques. Even within the technique of the lecture, many have never learnt that an hour is the absolute maximum if they will keep their audiences' interest.

Closely allied with the preparation of university teachers is the extent to which university teaching is viewed as a profession. In most of Latin America, for instance, teaching in a university is not a full-time job. Law and medicine are the most important faculties, simply because lawyers and doctors can afford to teach in their spare time. The idea of a full-time university professor, with both instruction and research among his duties, has in most universities not yet fully developed.

In regard to examinations, I have often felt that scholarships, especially for schoolmasterships and final honours, are too much of an ordeal for young people. I am inclined to agree with Professor Flugel in his recent book in which he compares certain features of our modern examination system to the initiation ordeals of primitive tribes: in both, the repressed jealousies of the old are vented on the young. Perhaps teachers should look into their own sub-conscious. Their methods may kill, rather than foster, the spirit of youth.

Publication is, in my judgement, a much more important function of universities than is usually recognized. It provides a channel and a stimulus for the spirit of free enquiry and free discussion. One of

the social duties of institutions of higher education is the publishing of books and monographs that would be unprofitable for commercial publishers.

In its Constitution, the aims of Unesco are defined as peace, and the general welfare of mankind. While this is its ultimate aim, it needs also a less general goal, a more specific framework into which to fit its many and varied practical projects (which, without some such unifying and at the same time concrete framework, run the risk of appearing only as a vague and unrelated assemblage of ideas). I am wondering whether we could not have this more specific formulation of aims, "the advancement of world civilization"—civilization implies peace, and is based upon education, science and culture; and our international nature enjoins us to think of civilization as a world phenomenon.

In any such task, the institutions of higher education have a very important part to play; after all, their prime function is to turn out civilised human beings, not merely technical specialists capable of earning their living. Throughout history, and especially now, the urge to advance and to maintain world civilization *is* of prime importance to the universities, which must be the spearhead of any such efforts.

I am sure that your meeting here together will be both interesting and profitable. I hope that Unesco may look forward to enduring co-operation with the universities of the world through some permanent organization, the foundations of which will be laid at this conference.

The University as a Force in World Co-operation

Mr. M. Ruthnaswamy,
Vice-Chancellor, Annamalai University, India.

I am sorry to begin on a rather depressing note but I am just recovering from the effects of international transportation in our modern world. I had so many barriers to cross in international travel that I am inclined to call it international trouble.

How different it was when the universities were founded! In the Middle Ages there was less talk of internationalism but more of real international intercourse. Students were much freer then, in their choice of universities, than they are to-day; they had no need, either in the East or in the West, for passports or visas, no entrance examinations, no talk of equivalence of degrees; they were free to travel and to study at different universities, as they pleased.

The position of the universities was then very high indeed. They were acknowledged as leaders of intellectual life, and accepted as lawgivers of the intellectual world; their opinions were sought by the

highest in the land, even from beyond the borders of their own country; they contributed greatly in the past to the advancement of international learning. For instance, international law began with Vittoria at Salamanca, and it was greatly to the credit of universities in the past that statesmen in the Middle Ages and, for some time afterwards, always consulted their schools of international law.

I have begun with these contrasts not to disparage the universities of to-day, but, rather, to bring home the challenge to our modern universities to seek to recover their international position.

Unfortunately international law is not a very popular subject now; it is invoked only during war, or on the eve of war, and is at a discount in times of peace. The study of international relations, either as history or in terms of current developments, has likewise been popular, chiefly because of a certain narrow nationalism that too often determines its content and point of view. Yet, international law, international relations and allied subjects should be included in the curricula, and more intensively studied at all universities. This is especially imperative at the present moment, when international relations, particularly between Western and Eastern nations, are being almost entirely rebuilt.

I deplore the narrowness of the specialization system in modern universities. The great duty of the universities should be to create a body of common ideas which all nations in the world will accept, and which will bind the peoples of the world together. Speaking as an Indian, I feel that this *corpus* should be based on spiritual ideas, not on any particular conception of spirituality, but on the general truth that spirit is superior to matter. Expediency should give way to equity and good conscience, and material progress to righteousness. It should be the great duty of the institutions of higher education to formulate lofty conceptions.

Universities should play an active and positive part in promoting international intercourse on terms of equal partnership in progress. They should begin at home by organizing international conferences much more frequently than heretofore. A two-way traffic of exchange should be created from West to East and from East to West. Just as the East is learning from the West, the West still has much to learn from the East, particularly in human relationships, individual and collective.

All universities in general, and more so in the East, are financially poor. The sabbatical year is unknown in India chiefly for financial reasons; to some extent the importance of travel for educational purposes has not yet been fully realised, partly at least, because travel expenses are enormous, because distances are so great, even within India itself. Research and instructional equipment is difficult to procure and much is needed to provide for the necessary expansion of higher education. I do not know what our financial problem will be, but cannot the big corporations give some help, especially during this critical period?

The riches the East has to offer are of a different nature—materials

for the comparative study of religion and the evolution of religious ideas, of statecraft and kingship; laws of war; geology and mineralogy and physical geography. Even to-day in India, there are remnants of tribes living in primitive conditions which would offer fruitful material for anthropological research.

There should be exchange of books and documents on these subjects between East and West. The study of comparative religion should also be organized so that Eastern religions might be known to the West and influence the course of Western intellectual and spiritual development, and thus raise the level of culture all over the world. Modern universities in the East are of recent growth; yet they inherit the traditions of countless centuries, and, in spite of inadequate buildings, staff and equipment in general, occupy a very important place in the intellectual and cultural life of their countries.

The Western universities are older, richer and sometimes better equipped. They, too, are rendering a vital service not only to their countries but to all mankind.

It is my earnest hope that through this Conference and whatever permanent organization may develop, as well as through the continuing activities of Unesco, there may develop more intensive and more intimate co-operation of all universities, and that in this way the intellectual progress of the world may be furthered. This is a challenge to us all, and, looking at the past history of universities, I am sure they will meet this challenge. They will do everything they can, not only to raise the intellectual level of the world, but also to promote progress in many directions, and chiefly toward international understanding and world peace.

Summary Statement

Dr. H. R. Kruyt

We have come to our last regular session, and the Steering Committee has asked me to present a summary of our deliberations. I am glad to do so, as I am sure we all share certain general impressions of our two weeks' living and working together. Then, too, we have made real progress in the furthering of international co-operation among the institutions of higher education throughout the world.

The discussions, both in plenary sessions and in sectional meetings, have taken place in the greatest harmony and have shown that mutual understanding which leads to respect. This attitude on the part of every delegate has made my task as President of the Conference a very pleasant one.

Higher education is a great spiritual force. The world cannot live on mere emotion, even when that emotion is good. It is the special task of the institutions of higher education to lay the foundations of

creative knowledge and thereby to achieve true enlightenment. It is the duty and the coveted privilege of university teachers to pass on such experience—both knowledge and insight—to their students. By so doing, they both further the development of science and of knowledge for their own sake, and lead the minds of the young through honesty to truth. The university, with its dialectical analysis and synthesis, is a force in the world similar to religion or art. The position of the universities has always been difficult, and is now more difficult than ever, as their responsibilities are greater. This fact was one of the reasons for the convening of this Conference.

Following our interesting preliminary discussions on the functions of the modern university, considerable time was given to the reports on "Significant Developments and Current Problems in Higher Education" in the various countries represented. I frankly confess that I did not expect much to emerge from these reports, but I was quite wrong. They were amazing, and, indeed, thrilling. Most of the problems of the universities throughout the world are similar—almost identical; only the solutions are different. There is the American view, which is a sincere attempt to bring the advantages of higher education to as many people as possible—to all who have the ability to profit from it. Then there is what I would term the classical view that universities are only for the intellectual élite—"the *élite* instructing the *élite*", to repeat the phrase of Dr. Scelle. Finally, there is the cry for help from the younger universities which lack equipment, teachers and research specialists, and experience.

The special problems of the Conference have been discussed in the meetings of the Sections. I have been struck by the devotion of the members of these meetings—there has been no "cutting of sessions" by the delegates. Throughout the discussions, there was a strong spirit of co-operation and a realistic wish to achieve results. Each Section drafted a portion of the Conference report and the success of their deliberations is attested by the fact that the entire Conference unanimously adopted the sectional drafts with only a very few changes, and these minor in character.

The problems involved in the establishment of means to continue our co-operative work has been given long and serious consideration. Real progress has been made. We have proposed the establishment of an international association in the field of higher education and the immediate creation of an International Universities' Bureau. We have elected an Interim Committee to make the practical arrangements and to administer the Bureau until the permanent organization is established.

The institutions of higher education through the world are an autonomous force in society. They should, therefore, have an autonomous organization ready and able to co-operate with the United Nations, with Unesco, and with other international and academic bodies.

Will such a scheme as we have proposed prove effective? It *must* be effective, and there is no time to be lost in making it so. Everyone

has desired it and the prognostics, as seen in this Conference, are good. I believe that there can be no better motto for our future work, both of the universities of the world and of the organization for which we have laid the foundation, than the words taken from the arms of our host University of Utrecht: *Sol justitiae illustra nos.*

CHAPTER III

REPORTS ON SIGNIFICANT DEVELOPMENTS AND CURRENT PROBLEMS IN HIGHER EDUCATION

During the Conference a member of each delegation presented a brief report on "Significant Developments and Current Problems in Higher Education" in his own country.

These reports are printed here as nearly as possible in the form in which they were given at the Conference. Some editing has, however, been necessary, and in a few cases considerable cuts have had to be made in order to keep all the reports fairly even in length. (1)

They are arranged in alphabetical order according to countries.

AUSTRALIA

In Australia there are six universities established under State Acts, and one newly created university for post-graduate studies and advanced research, which was established by Act of Parliament at the national capital. The total number of students is approximately 30,000, some 20,000 of them attending full time and the rest part time.

Five of the State universities obtain their funds partly from fees, partly from endowments and partly from the State; one only (Western Australia) charges no tuition fees, so that its grant from the State is proportionately higher. All six are governed by Councils which enjoy unrestricted autonomy in the allocation of funds, in the appointment of staffs, in academic standards and in other matters. State Governments have an excellent record of non-interference with university affairs, even when, as in one case, their financial contribution rises as high as over 80 per cent. of total income.

The Federal Government, as distinct from the several States, contributes certain funds to universities specifically for research, and makes substantial contributions for the training of men and women returning from the Forces.

(1) Reports on developments in higher education in Brazil and in the Dominican Republic were given orally at the Conference, but were not submitted in written form for this Report.

The university population is high and is steadily increasing. This reflects the Australian attitude that all who are mentally equipped to pass the entrance examinations should, if they wish, be able to enjoy university education. Both State and Federal Governments have established legislation aiming at giving equal educational opportunity through the lowering of economic barriers, but the process of equalizing educational opportunity is not yet complete. Although our origins and tradition are those of Western Europe and, particularly, of Great Britain, we are moving in the same direction as the United States in giving an ever greater proportion of our people higher education. This trend is likely to continue.

Special Problems

Our first serious problem, therefore, is to find extra funds to meet our added responsibilities. The situation is complicated by the fact that the 10,000 men and women from the Armed Forces, now studying at the universities, are wholly financed by the Federal Government. For these returned students the Government pays not only the fees, but also a substantial sum to meet the whole cost of their tuition. In addition, the Federal Government has supplied large sums for laboratories and class rooms in which to train the increased numbers of students, and has provided much valuable equipment.

With this Federal money, the universities have been able to increase their staffs to cope with the post-war increase of students, but, when these veterans have completed their courses, the Federal monies will cease to flow to the universities and some other source of funds will have to be found. Meanwhile student enrolment is not falling to the pre-war level of 14,000; it may fall to about 25,000 but it will then probably increase again. Endowments are drying up owing to high taxation; universities receive no municipal funds in Australia; industry does not give money except for specific research; and some State Treasuries are unable to meet the increased demands.

No doubt means will be found to secure funds, because higher education is in ever stronger demand by a large proportion of our people. Meanwhile, however, the problem is acute.

The second Australian problem is distance. Australia is the size of the United States of America, but has only 7,500,000 people. The universities are distant from each other and from other countries. Each university has therefore to be a "maid of all work" for its own region, and there is little opportunity for special institutions to be developed in any State university. Efforts are being made to remedy this isolation by encouraging a flow of students to Europe and America for higher studies, but funds are inadequate to meet the needs.

Australian universities are all accepting some students from Asiatic countries, but overcrowding by our own young people keeps the number of foreign students to only a few hundred. Australia has 1,000 million Asiatic neighbours to the North, and looks forward to a continually increasing cultural interchange with them.

A third problem lies in the urgency, in a vigorous young country,

of the need for students to finish their education as early as possible and get to work. We have no junior colleges on the American model to give students two years in which to mature between high school and university, and we rarely have a sixth form in our high schools where they can continue their general education for a year or so, after passing the higher examinations which could give admission to the university. The students come straight from the leaving examination at an average age of seventeen and a half years, and then the majority of them study science and the applied sciences. Only about 15 per cent. are able to live in colleges and hostels, so that community life is denied to most of them.

The greatest influence for general education is probably the wide range of student club activities which are encouraged by the universities, but organized and run by the students themselves. Universities provide a good professional training, and science is well taught in adequately equipped laboratories; they provide, with fairly limited means, tolerably good libraries; but they can still be charged with being in fact a collection of professional schools. Australian universities have not solved the problem of combining with good professional training the opportunity also for good general education.

A fourth problem is the National University and its implications for the others. It has as yet no substantial staff or buildings, but it is trying to recruit the best available talent for staffing the projected institutes for research and post-graduate studies in medicine, and in natural and social sciences. Buildings and the best research equipment are to be provided as soon as possible, and administrative staffs have been appointed. Adequate funds will be provided from the Federal Government. It already finances large institutes for scientific research under a Commonwealth Council for Scientific and Industrial Research, and the amount of money available for the new university and the C.S.I.R., just mentioned, is some twenty times the amount which the Federal Government makes available for research in all the State universities.

University staffs, especially on the scientific side, in the State universities claim that their time for research has been too greatly curtailed by teaching demands and inadequate lecturing assistance. They feel that they should have staff large enough to allow them to devote up to one half of their time to research. Now the question is whether the fact that the Federal Government is already committed to such large research expenditure in its own institution, the new National University, will restrict its increasing grants to the State universities? The probability seems to be that the new institution will itself help to increase the allocation of research funds to the others, but only the future will tell.

(*This statement is based on the report presented by* Dr. G.A. Currie, *Vice-Chancellor of the University of Western Australia*).

Higher education in Belgium is given in four universities: two State universities at Ghent and Liège respectively, and two free universities, the Catholic University at Louvain, and the University at Brussels, in which instruction is based on the principle of full freedom of thought. Each of these universities has faculties of philosophy and letters, law, science and medicine. Applied science is taught, either in special schools attached to the university (Louvain) or in a Faculty of Applied Science (Brussels). There is also at Louvain a Faculty of Theology and at Brussels a Faculty of Social, Political, and Economic Sciences, for the teaching of those subjects which, in other universities, are taught in schools of social science and higher institutes of economic or commercial studies.

Besides these universities, there are the Hainaut Polytechnic at Mons, the two State Agricultural Colleges at Ghent and at Gembloux, two schools of veterinary medicine at Cureghem (Brussels) and at Ghent, and two restricted faculties, the Saint-Louis Institute at Brussels and the College of Notre-Dame de la Paix at Namur which only issue diplomas in Philosophy and Letters and in Science. Training for colonial administration is given in the Colonial University at Antwerp.

The number of students attending the various institutions of higher education in the country is about 20,000, an increase during the last twenty-five years of approximately 60 per cent. This increase has been due to the greater number of women students now entering the universities, the growing demand for university degrees in both private and public spheres, the greater opportunities granted to young people to take up higher studies, and the rise in the population of the country.

Attempts have been made by certain universities to reduce the number of students so as to avoid the overcrowding of laboratories and training centres, and to maintain a high level of teaching. The University of Brussels instituted, after the liberation, entrance examinations for the Faculty of Science and for the Philosophy Section of the Faculty of Philosophy and Letters. This experiment was not followed by other universities, and has been dropped. The failures in the examinations at the end of the first year, in the various universities, are about 60 per cent.

Finance and Control

The State universities are entirely financed by the State, which appoints the staff on the advice of the appropriate faculties. However, the universities enjoy complete independence in academic matters. The free universities are supposed to meet their own expenses, but since 1930, the State has granted them a subsidy which amounts to about 50 per cent. of their budget. They are governed by administrative boards whose membership and powers are freely determined by their own regulations.

Academic degrees which permit the recipient to practice in pro-

fessions, such as teaching, law, and medicine, are subject to legal regulations which fix the subjects to be included in the curriculum and the minimum duration of studies. In the case of law, the degree must be approved by a Committee of Ratification set up by the State. Other degrees, as in science, are issued by the universities in accordance with their own procedures. The legal regulations, and the authority to grant degrees, apply equally to State and free universities.

Scientific Research

Scientific research in Belgium is carried out almost exclusively in the universities. They receive assistance from the national fund for scientific research, which was set up in 1927 and for which more than 100 million frs. were raised by public subscription. The Belgian universities are most anxious to restore the scientific equipment of their laboratories, training centres and libraries. The Board of Scientific Research, established after the liberation, has estimated that 2,000 million Belgian frs. are needed for the re-equipment of the national universities and scientific institutions.

Up to the present, it has been impossible for the Government to include in the budget the necessary credits to enable the suggested programme to be carried out. This situation is a hindrance to the development of research and scientific work. The draft of a law is now before Parliament, providing for the allocation to the National Fund of part of the sum now allocated to the free universities, the amount of which is to be revised and increased. The National Fund for Scientific Research gives subsidies for research work: (1) to young graduates, who are thus enabled to work in the university laboratories (they receive a subsidy equal to the salary of secondary school teachers); (2) to professors, to enable them to buy certain instruments or apparatus necessary for their research, to pay the expenses of the publication of their theses, or to pay travelling expenses. Scientific research is also promoted by the Institute of Scientific Research for Industry and Agriculture, and by the Institute of Scientific Research in Central Africa.

Relations among Universities

Very satisfactory relations exist among the Belgian universities, all of which take part in the administration of the National Fund for Scientific Research and of the University Endowment. Successful experiments have also been made in effective and close collaboration in research. Several national inter-university research centres, and also an inter-university institute of nuclear physics, have been set up. Besides fostering close relationships between the professors of all universities, this policy has the great advantage of avoiding, to some extent, overlapping in the construction of laboratories and the purchase of material. Through the University Endowment, the universities cooperate with the State in the award of grants to students. A Joint Committee for Government Grants and University Endowment

Loans to Students has been set up, and the State puts at its disposal annually a sum of 7,500,000 francs.

Students' Association

The students of the various faculties are members of faculty societies which form part of the general students' association of each university. These associations combine to form the National Federation of Belgian Students.

International Relations

The relations between Belgian universities and foreign universities are facilitated by the exchange of professors, and it would be advantageous to increase these exchanges. Bilateral agreements have been concluded with France, the Netherlands, Great Britain and Czechoslovakia for the promotion and organization of exchanges of professors. The French Endowment pays for the acceptance each year of a foreign professor in one of the four universities and also pays the expenses, in each of the Belgian universities, of a professor from another Belgian university. Finally, as a result of personal contacts, foreign professors are enabled to visit the country to give courses or to work in certain laboratories. Some universities, particularly the University of Brussels, have foreign scholars (French, Swiss, Dutch, Russian, German and American) on their teaching and scientific staff.

The number of foreign students has decreased since the last war, as they prefer to go to countries where the cost of living is lower. The universities have, however, accepted a fair number of refugee students, especially Poles and Yugoslavs.

The professors of the Belgian universities have organised the Universitas Belgica which forms one section of the International Association of University Professors and Lecturers.

(*This statement is based on the report presented by Professor* J. BAUGNIET, *Rector of the Free University of Brussels*).

BURMA

The University of Rangoon is the only university in Burma. Before the war, the number of students was over 2,000, but there are now over 4,000. It is a residential university, and the University Estate, some six miles outside Rangoon, is a little town in itself. The university has its own endowment, which, however, is not large, and although not a State institution, it receives a substantial yearly grant from the Government.

Before the war, the control of the university was in the hands of the British professors and senior lecturers. There was friction

between the students and the staff, and the Burmese public looked upon the university as an alien institution. In spite of this, the British staff set a high standard of academic achievement, and Rangoon became one of the leading universities in the East. There was a strong student movement, and during the period 1936-1941, the Students' Union of the university was the centre of the nationalist movement.

The university remained closed during the period of the Japanese occupation. The Japanese Army used the University Estate as their headquarters, and stripped the university of all its scientific and classroom equipment. One large building, the Teachers' College, was destroyed as a result of Allied bombing. Before the Japanese retreated from Rangoon, they destroyed the university library, the finest library in the East, and thousands of valuable manuscripts and books went up in flames.

Special Problems

When the university reopened in 1946, it had to face five serious problems. First, the need for books and equipment, both classroom and scientific; secondly the shortage of staff, since most of the British professors and senior lecturers left on retirement. There were, fortunately, trained Burmans to take the Chairs, but there were not enough to fill the vacant senior lectureships. The Indian universities were helpful, and qualified Indian scholars were recruited on short-term contracts. In the meantime, some twenty graduates of the university were awarded State scholarships and sent to American universities for their post-graduate studies.

The third difficulty was that of the university's relations with the State. It had to borrow freely from the government for its rehabilitation, and the government wanted to ensure that the money was being wisely used. It therefore sought to exercise direct control over the university, which had to struggle to preserve its academic freedom.

The fourth problem was the prejudice of the public against the university which was regarded as an alien institution. The university was set the task of proving that it was a national institution.

The fifth problem was in relation to the students. Most of them had taken part in the resistance movement against the Japanese, and they were veterans, although young in age. They had lost valuable years because of the war, and wanted a short cut to a university degree, but the university had to maintain its high standard of instruction and examination.

To meet these five problems it was felt that drastic changes in university organization were necessary. It was decided to centralize the university administration and to change over from a federation of constituent colleges to a single organization with different faculties. A small Senate of some eighteen members, all professors, has now been formed, and a Council, consisting of some thirty members, of which roughly half are Deans of Faculties and the other half repre-

sentatives of the students, of public bodies and of the Burmese Parliament.

The period 1946-1948 has been a period of great difficulty for the university of Rangoon. Tremendous burdens were placed on the senior members of the staff, most of whom were under forty years of age. The staff strove to make the university a national institution, but at the same time retained English as a compulsory subject, in addition to Burmese, for English was the only international language known in Burma. In spite of a 100 per cent. increase in the number of students, the university was determined to maintain its standards, both of teaching and examination. After a time, public opinion, formerly critical, became favourable towards the university. The government no longer desired full control of the university, and recognized the principle of academic freedom. The students settled down to study; and cordial relations between students and staff prevailed. When the independence of the country was declared on 4 January 1948, the University of Rangoon was accepted as the national university by the Government, by the students, and by the Burmese people.

International Relations

The gaining of independence, however, meant that the university could no longer remain in the association of the British Empire universities, namely the Empire Universities Bureau. The university has a British tradition, and the Burmese, although they fervently love their own culture, have a great admiration for British institutions and British culture. This tradition is now difficult to maintain. When American-trained State scholars return perhaps American tradition will replace it. The university hopes to send some post-graduate students to Dutch universities, especially to the University of Leiden, which has contributed so much to oriental studies. We wish to have a closer relationship with all the continental universities, but the language difficulty is in the way. We also look to the Australian universities for help and guidance and closer co-operation, for we believe that the Australian Government, and the Australian people also, have a great sympathy and regard for the peoples of South-east Asia.

(This statement is based on the report presented by Dr. Htin Aung, *Rector Magnificus and Administrator of the University of Rangoon).*

Canada

There are in Canada twenty universities granting degrees and seven Arts Colleges with degree-granting powers. Three other universities possess degree-granting powers but do not exercise such authority

except in theology; degrees in other subjects are granted by another institution to which they are affiliated.

Canada has a dual system of both provincial and private universities. The former are State-supported, and the latter sometimes draw contributions from the Government. Notwithstanding State support, the universities enjoy complete freedom, both in appointment of staff and in teaching.

The number of students in all the institutions of higher education is about 80,000 out of which approximately one-fifth are enrolled at the University of Toronto. The increase in the number of students since the pre-war years is partly due, as in a number of other countries, to the special educational provision being made for veterans of World War II.

Special Problems

Canadian universities are facing all the usual post-war problems, such as overcrowding, shortage of staff and maintenance of academic standards. These problems intensify the need for public support of both State and private institutions and also raise the question of Federal assistance to higher education.

Possibly the basic factor that will determine the future of the universities is the educational philosophy which prevails. In Canada, the logic of democracy demands "the career open to talents", meaning that the universities today should be open to all with the required ability, and not merely to a small élite. It will inevitably call for an increase in the variety of courses offered, as intellectual tastes vary; but this should not be detrimental to the universities, since every field of human knowledge is, surely, a legitimate subject for university study.

(This statement is based on the report presented by Professor H. B. MAYO, *of the University of Alberta).*

CHINA

Before the outbreak of war in 1937 there were 108 institutions of higher education in China. These were of three kinds: universities, colleges (of the same standard as the universities but with not more than two faculties), and normal and technical schools. Each category included national institutions supported by the Central Government; provincial institutions financed out of provincial revenues; and private institutions maintained largely by endowment and gifts. Within the last group were a number of Christian universities and colleges, founded and mainly supported by Christian missions.

With the Japanese invasion, educational institutions in the areas along the coast, where most of them were situated, had to be moved

to the interior of the country. Out of the 108 institutions, 92 had to move, some only once, many twice, and some four or five times. Fourteen universities had their grounds and buildings completely destroyed. Both books and equipment were lost or damaged in transit and the long treks meant great physical hardship for the students and staff. In 1945, however, 141 institutions of higher education were at work. The number of universities fell from 42 to 38, as some were temporarily amalgamated. The number of students increased to 80,000—almost double the pre-war figure.

After the war most of the institutions moved back to the areas from which they had come. This was almost as serious, in terms of loss of university equipment, as the original dislocation. Some of the universities, however, left a portion of their staff and equipment in the interior to form separate institutions. Others which had been temporarily amalgamated regained their separate identity, and some institutions were taken over from the puppet regime and re-established. As a result, the number of universities has now increased from 38 to 53, the colleges from 51 to 69, and the technical schools from 52 to 72. By 1947 there were altogether 194 institutions of higher education in China, and the number of students had increased from 80,000 to 192,000, or three times the pre-war figure.

Special Problems

Academic standards have inevitably deteriorated as a result of the Japanese invasion, the civil war, and the present extremely difficult economic situation. The cost of living goes up by leaps and bounds. Many teachers take on several posts in order to support their families, and those who still possess them, sell their books and family treasures. Under-nourishment is common among the students. During the war, maintenance, accommodation and tuition were provided entirely free. Those who joined the universities during the war still receive the same assistance. Of those who joined later, 40 per cent. are given full scholarships and 40 per cent. half scholarships, but the grants are quite inadequate and living conditions for students are intolerably difficult. Demonstrations and disturbances are frequent; strikes are common, sometimes with the faculty staffs taking part. But relatively few of the students are political agitators; the large majority work hard at their studies.

The university teachers are underfed and miserably poor. With the whole family crowded into a few rooms provided by the university, they have to toil at domestic chores and extra tasks besides their own academic work. Lectures are given in crowded classrooms and research goes on in unheated laboratories. Some resign, but many more remain. The picture of one of them, a professor of physical chemistry, is very clear in my mind. Both he and his wife have become victims of consumption and their baby boy is always ill in bed. They cannot keep a servant and so the students come to help and to nurse them when they are too ill to get up themselves. Yet in addition to teaching, the professor continues his research and

contributes original papers at regular intervals to scientific journals.

One of the most significant proposals for raising the standards of higher education was that made last year by Dr. Hu Shih, now President of the National Peking University. He put forward a ten year plan for higher education under which no additional universities or independent colleges would be set up within the next ten years. The maximum efforts of the nation would be concentrated for the first five years on improving five universities, chosen because of their excellent records, by enabling them fully to develop their research projects, and to become important centres of learning. Five more universities would be chosen and improved with the same concentrated effort in the second five year period. Meanwhile, the 40 national universities and national independent colleges, not chosen under the plan, would be provided by the Government with adequate funds to enlarge their existing facilities and to be ensured of a chance of continued existence. Thus, in course of time, each institution might become the best university or college in the locality.

This radical plan has called forth much comment and criticism. Even its critics are more or less agreed, in principle, on the need for reform and the concentration of effort on a few universities, but they are very much divided as to which universities should be among the chosen. But the proposal is bold and has evoked great repercussions throughout the educational world in China.

It is difficult to plan for the future when you have to live from hand to mouth, day by day. But as long as the Chinese universities have such teachers and students as I have described, even though their present situation is gloomy, their future prospects are sure to be bright.

(*This statement is based on the report presented by Professor* CHEN YUAN, *of the Unesco Executive Board*).

CUBA

The University of Havana was established in 1728 and chartered as a Royal and Pontifical University under religious control. Its initial faculties included law, theology, medicine and arts. In 1842 the university became a national and secular university and new courses in physics, chemistry, geography and history were added.

When Cuba became independent, further changes were introduced and finally, the Cuban Constitution of 1940 provided for the legal and financial autonomy of the university. By constitutional provision, two and a quarter per cent. of the national budget has to be devoted to the university. Today, the university has thirteen schools or faculties which include social science, commercial science, education, dentistry, pharmacy, veterinary science, agriculture, engi-

neering and architecture, in addition to those already mentioned.

One of the problems of the University of Havana is the influence of partisan politics on the behaviour of student leaders. Political parties frequently use the students to advance their own political aims, and persuade them to take action in the form of strikes or resolutions against the Government, political parties and other organizations.

Cuban students fought bravely against the tyrannical regime of General Machado from 1930 to 1933. They earned well-merited revolutionary prestige and because of it, students today have a great influence upon public opinion. Eager to profit from this special situation, political parties place at the head of student organizations persons, more interested in politics than in academic work, who will serve their interests. There is an extra-university struggle to secure positions within the student executive council, and the university has to deal with students movements which originate in partisan activities from outside.

Another problem is that of the relations between students and the university administrators. The hardships undergone by students during the Machado régime—the university was closed from 1930 to 1933 and from 1935 to 1937—were compensated for by a reduction in the time and subject requirements for graduation. These concessions were meant to be temporary, but, once granted, it called for a great deal of effort to go back to the earlier situation. False student leaders go on asking for unjustified concessions and during their electoral campaigns student candidates are likely to present all kinds of demagogical requests to secure student support. Occasionally, the refusal of these requests results in clashes between the students and the university authorities.

A third problem is similar to that of other institutions: the University of Havana with its 15,000 students, is seriously overcrowded. Its teaching facilities are inadequate for such a large number and the problem is very difficult to solve. Because of lack of resources, we cannot substantially increase the university faculties nor provide additional buildings or equipment.

A complication may arise from the possible surplus in professional personnel resulting from the large number of graduates. A reduction in the in-take of students through selective examinations is a possibility, but there would be great objections to it. Perhaps a solution may be found if new activities and greater opportunity for employment can be provided for the students.

International Activities

In 1928, the university commemorated its two hundredth anniversary, and in 1930 called an International Congress of Universities. It was held at Havana, and fifty-two universities in different parts of the world were represented. This congress was, to our knowledge, the first international congress of universities ever held. One of the resolutions called for the creation of an International Office of Univer-

sity Information, with residence at the University of Havana, and instructed it to gather and to provide data and information relative to universities the world over. The University of Havana maintains this office out of its own budget. Records, catalogues and publications of universities in America, Asia and Europe are kept there and information on other universities is available upon request.

The University of Havana has a summer school where special attention is given to foreign students. During the last five years ninety visiting professors have been employed from abroad, and the number increases every year.

(This statement is based on the report presented by Professor José M. Gutierrez, *Dean of the School of Science, University of Havana).*

Czechoslovakia

The Czechoslovak Republic has three full universities: the Charles University in Prague, the Masaryk University in Brno and the Comenius University of Bratislava; four Institutes of Technology (or technical universities); one mining, one agricultural and one veterinary school; an Academy of Fine Arts and another school for Applied Fine Arts; and other institutes of higher learning. The German University in Prague and other German schools of high rank do not exist any more; a university in Olomouc in Moravia, which ceased to exist in the eighteenth century, is being re-established, and there are isolated faculties of medicine in two Czech towns to which other faculties may be added later on.

All Czech schools of university rank were closed down in the Autumn of 1939 after the massacre of Czech students by the Nazis. They remained closed until the end of the German occupation, but clandestine teaching and research went on. The natural result of this interruption of higher education, which lasted five and a half years, was that a flood of students of both sexes quickly returned, and as early as the end of May 1945, all these schools were teeming with life. The old Charles University in Prague had 23,000 students; the high-water mark has been maintained since and it is only this year that the tide shows signs of retreating

The plight of both professors and students is easy to imagine . There was, and still is, a shortage of textbooks; 642 professors have had to serve over 60,000 students. There are other lecturers too, especially so-called docents, i.e. assistant professors, but the disparity is almost appalling. One man lecturing to 500 students has been no exception; at the Faculty of Medicine there were occasionally over 1,000 people, and the largest halls in Prague had to be hired for the purpose.

The problem of training younger persons for an academic career is of the utmost importance. Any help from international organizations

will be keenly appreciated; it will constitute one of the best investments ever made. May I ask Unesco to spread this truth?

To add to the difficulties, new schools have been founded; for example, an Academy of Music, and a School of Political and Social Studies for journalists, social workers and budding political professionals. The teachers in national schools clamoured for the university training which had been their goal for two generations. They succeeded in their demands, and new teachers' colleges have been added to the universities. Czechoslovak universities now have six faculties: philosophy, (i.e. liberal arts), science, medicine, law, theology and education.

The students are well-organized, perhaps over-organized and intensely politically minded. Until early this year the country was governed by the National Front which comprised all the political parties. Tension was steadily growing among them and the students reflected the political and social currents in a way that matched their youthful temperament. This was partly offset by their ability to manage their own affairs both at the schools and in their social relief organizations. It was a sound scheme to invite them into the various faculty commissions, and even to the meetings of professors. The Faculty of Philosophy, at the Charles University, did this very extensively, on the basis of a unanimous vote by all the professors. The results were gratifying. The student members of the various commissions were well-informed and helpful. Among other things a reform of the curriculum and of examinations was discussed. Later events speeded up these developments.

When the political storm broke over Czechoslovakia in February, the new régime was declared to be one of a regenerated National Front. The Communists, who have since absorbed almost all the members of the former Social Democratic party, have 70 per cent. of all the seats in the new Parliament. So-called Action Committees sprang up right at the outset. They simply emerged and began a political purge—a kind of fellow-travellers campaign in reverse. People in responsible positions, state officials, etc., were dismissed or put on the retired list pending further investigations and final decisions. Action Committeees also appeared at universities and other institutes of higher learning; they consisted of students and employees with a sprinkling of professors. On the very first day a mimeographed pamphlet was circulated which demanded the resignation of the Rector and all the Deans of the Prague University, except the Dean of the Faculty of Education who was a Communist. The Rector, Professor Englis, an economist who had been, before 1938, four times Minister of Finance and is considered an economic liberal, tendered his resignation; it was silently accepted by the Ministry of Education and new academic elections took place which put the former Rector, Professor Rydlovsky, a famous mathematician who is a member of no political party, at the head of the Charles University. The Deans remained. The pamphlet was declared to be the work of some Trotskyists; their identity was never established.

The results of the purge at the universities and other schools of a

similar rank are as follows: out of the 642 professors, 3 were dismissed; 2 of them had already fled abroad; 16 were put on the retired list with a pension which amounts to about one half of their former pay; 16 more had to stop lecturing for a limited time, but, in this case, all but 2 of the verdicts have since been revised. Of the docents, 13 have been deprived of their *venia docendi*, i.e. their authorization. The charge against them was either collaboration with the Nazis during the occupation, or membership of the German sponsored League against Bolshevism, or simply reactionary views. Some of the retired professors had already been debarred from their lecture rooms on account of their behaviour during the occupation.

The Communists are aware of two dangers. The first and major one is the unassimilated new Party member. Too many dependent people have been induced to sign up with the Party, and opportunists abound in Czechoslovakia as they do everywhere else. This creates an internal problem, the more so, as it is known that quite a few people with a tarnished past have, in this way, obtained a general remission of sins. Since I have no inside knowledge, I am unable to predict what the announced purge within the Party will be like.

The other danger lies in rash decisions. It is obvious that the great power of the Action Committees was a temptation for go-getters and vengeful individuals to remove those who were standing in their way or had aroused their ire.

This second danger—that of rash and harsh measures—has been realized by some of the Action Committees at the universities. At my faculty where two professors were retired and one fled abroad, several more faculty members were attacked, at the outset, but this was rectified almost immediately. The Deans negotiated with the Action Committees, not without success. However, at the Faculty of Medicine, where almost nothing happened at first, several assistants were later dismissed.

This, then, is the truth without either varnish or overstatement. These events caused a very unfavourable reaction. At the beginning of August, the Charles University in Prague celebrated the 600th anniversary of its foundation. It was cold-shouldered by the Scandinavian countries; delegates from the West, except France, were scarce and the British universities cut us dead. Outstanding British scholars even refused to come to Prague to take the honorary degrees offered to them. I wonder how they feel about it now, for the University has certainly done no harm.

Special Problems

The problems before us are great and manifold. Students are now taking part in the management of their universities and sit on all the councils in considerable numbers. It is hoped that this will eventually result in the revival of the academic community—the *universitas magistrorum et scholarium*—which has been all but lost for some three centuries.

Student representatives, mostly young doctors, will now assist at the

examinations. Curiously enough this is welcomed by the professors, for their presence bodes ill for badly prepared candidates. Students are less patient than most professors.

A thorough revision of the curriculum, which has long been overdue, has been taken up, even by the Action Committees themselves, with great energy and interesting results. At my own faculty the students of the various groups of subjects will each have a compulsory common basic training of two years after which they will go into one of three branches: one leading up to the State examinations which qualifies them for teaching at secondary schools; the second leading to a diploma for cultural workers; the third, after five years of study, to the doctor's degree (Ph.D.). This degree is a mere title; no claim can be based on it without further special qualifications. For instance, for an academic career, what is known as "habilitation" is required.

A few new lecturers have been appointed who have not followed this narrow path. This is especially true of the new schools and also of my faculty. Some are outstanding men who will lecture, for example, on the history of the working class, on economic history and related subjects. However, the weight of academic tradition is so great that they themselves insist, with but few exceptions, on a real habilitation which would put their scholarly standing beyond doubt and would increase their authority with the students.

Academic elections for the coming year have brought many Communists to the fore; some older colleagues have been overlooked, but the elected men are prominent scholars and scientists in their own right, apart from their Party affiliation.

The great number of students remains one of the chief problems. It must be borne in mind that all education in Czechoslovakia is given in State schools and costs almost nothing. We are told that only talent and application will open the gates of universities in future. All this is in connexion with a thorough reform of national schools concerning which a new law has recently been passed. The absence of class distinctions in itself is a praiseworthy principle, if applied without bias. But the numbers are going to be a permanent worry, for the eagerness to study continues. Perhaps, we shall see educated men working in trades and factories. Why not? Many are already doing this temporarily in what are known as working brigades.

It is interesting to note that this problem is being tackled in connexion with the reform of examinations. There are going to be several examinations during the four (or more) years of study. Each examination will be a precondition for further credits. This, it is hoped, will eliminate much of the dead-wood among the students. On the whole, results at examinations have been, since the end of the war, better than before. They continue to be satisfactory. Our young folk know from bitter experience what it means to be deprived of educational opportunities. However, not all of them will be able to get appropriate posts, even if we reckon with the fact that most of the girls marry. Since a *numerus clausus* is an odious idea in my country, new students will be systematically informed about the possibilities before they decide on their line of studies.

I hope I shall have an opportunity to discuss in Section V the bearing of universities on international relations. Many countries are looking up to the universities, and to Unesco, as among the great hopes of this world. The scholars and scientists live in worlds without bounds, though not without boundaries. Their responsibilities are growing day by day, especially since science is rapidly changing our lives and discovering, at the same time, almost apocalyptic means of destruction. The basic problem, of course, is that of social reconstruction and reconciliation. It is, then, more than a concluding phrase, it amounts almost to a prayer when I say: "Scholars and scientists of all countries, unite".

(*This statement is based on the report presented by Professor* JAN B. KOZAK, *Dean of the Philosophical Faculty, Charles University, Prague*).

DENMARK

The number of students in the universities of Denmark is now about 13,000, which represents an increase of 20 per cent. since 1939. They are taught in two universities and in four specialized schools of higher education The University of Copenhagen, which includes five faculties, was founded in 1479 and is a State university. The University of Aarhus, established in 1926, was a private foundation, but the State is now paying nine-tenths of its budget and it is under much the same kind of supervision as Copenhagen University. The specialized schools in Copenhagen are: the School of Veterinary Medicine and Agriculture; the Polytechnic School; the School of Odontology; and the School of Pharmacy. Between these schools, which are all State institutions, and the universities, a certain degree of co-operation has developed, notably during the German occupation, although it has never assumed a formal character.

Special Problems

One problem, common to many universities is that of institutional autonomy. Speaking generally, it may be said that the autonomy of the universities has been respected, in every sense of the word, as far as the appointment of teachers and freedom of instruction is concerned. But we have had to fight to safeguard it, and we suffer, of course, from the ordinary evils of State control, especially in a period of straitened finances For example, an attempt is being made to apply to all members of the teaching staff, with the exception of the professors, the ordinary government regulations which fix the maximum age for entrance into the civil service. But it is often desirable, and even necessary, to nominate persons with long experience gained outside the university.

Another problem is the question of admission to the universities. Any person who has passed his "baccalauréat" may be admitted to the universities, but not to the specialized schools for technical education in which access to the necessary equipment is essential. In selecting students, attention is given to the marks they obtained in passing the "baccalauréat". For the schools of odontology, in particular, the standard of marks required is almost excessively high. The absurdity of this situation is generally recognized. If a student has obtained low marks—let us say in history—he cannot become a dentist, but he may become a doctor or a veterinary surgeon! In the universities some of the professors would like to re-establish a balance by introducing a *numerus clausus*, at any rate for the faculty of medicine.

Another aspect of the same problem concerns financial restrictions. The number of students has increased almost threefold over a period of forty years; but the number and value of the scholarships has by no means kept pace with this development. It is true that education is entirely free—at least, in principle—but the expenses for food, housing, and books are extremely high, especially in view of the inordinate length of the academic curriculum in Scandinavia. One must reckon with at least eight years for the course of medical studies; and the absolute minimum for a university degree is five and a half years. Efforts are now being made to remedy these evils, so far as possible: an excellent university restaurant has been established, with a canteen; a system of loans has been organized; the number of houses for students has been considerably increased. But these measures are by no means sufficient. Recently, it has been proposed that students who have passed a preliminary university examination shall be eligible for grants which, in the case of poor students, will be sufficiently liberal to allow them to live decently.

This problem is still under consideration, but it raises another issue —the extent to which supervision of the students' work is desirable. At present, students are, for the most part, perfectly free to attend lectures or not, just as they please. We entirely agree that in some faculties the more advanced students should devote all their time, for perhaps six months, to studying at home, or in a library, but only in the case of students holding State scholarships is some slight supervision exercised. If, however, a new system of grants is introduced for advanced students, supervision will have to be extended to all those who receive them; at the same time we consider that every student should be allowed the largest possible measure of freedom.

As regards foreign students, they have free access to the universities provided: that they have passed an examination equivalent to our "baccalauréat", and possess an adequate knowledge of Danish and Danish civilization; and that material conditions allow of this admission. We deeply regret that, at the moment, there is no space for foreign students in our specialized schools, or in the medical faculties. We have, however, made an exception to this rule by admitting a large number of candidates from Norway, as a friendly gesture towards the Norwegian students who were so sorely tried by the German occupation.

Students' associations in Denmark, apart from two big associations of students at Copenhagen and Aarhus and a number of special associations of students, exercise their influence through students' committees, which are elected according to democratic methods by the students of each university or school. These committees have a number of functions, such as: improving the conditions of students, organizing contacts with other countries, arranging exchanges of students, assisting their comrades in the devastated countries. They have no direct influence on the administration of the university; nevertheless, there is close and fruitful co-operation between the committees and the university authorities.

A very serious problem relates to the shortage of equipment and teaching staff. The number of teachers is, in most cases, absurdly small in comparison with the number of students. The teaching suffers from this, and the professors do not enjoy sufficient leisure for their scientific work. An attempt is to be made—soon, I hope—to remedy these defects by founding additional professorships, increasing the number of assistant teachers, and by giving young scholars the means of progressing and pursuing their studies in Denmark or abroad. But I wish to emphasize that no one favours the establishment of a dividing line between research and instruction.

The universities are centres of almost every kind of scientific research. The great national foundations—notably the Carlsberg Foundation and the State Foundation, Rask Oersted—are designed to enable research work undertaken in Denmark to acquire an international aspect. They give considerable grants to the universities and to university men, in order to assist them in every possible way in pursuing their research and publishing their works. The government has, however, recognized that the State must subsidize scientific work more effectively than it has done hitherto, and a mixed commission of members of the National Assembly and of university staff is now examining all the questions arising in this connexion, e.g. the subsidies to be accorded; the construction of new buildings; and the granting of facilities, in certain cases, for team work. Unfortunately, it must be added that the economic crises in our country, together with the housing shortage, are likely to hinder the immediate realization of these intentions.

The aim of higher education in Denmark is that no talented young man or woman should be debarred, owing to lack of money, from choosing an academic career. We desire that the only limits on entrance to the universities should be those imposed by the actual capacity of our institutions and the personal qualifications of the candidates. We are still far from the attainment of this ideal, but I am convinced that the State will undertake to provide all talented students with the means of pursuing their studies.

(This statement is based on the report presented by Professor Dr. CARSTEN HØEG, *of the University of Copenhagen).*

At the beginning of the period of Egyptian independence, some twenty-five years ago, Egypt had one private university, founded in 1908, and six State Higher Schools: Medicine, Engineering, Agriculture, Veterinary Science, Commerce and a Training College. They were attended by about 3,800 students—all men, since there was no provision at all for the higher education of women.

The year 1925 marked a new era in higher education in Egypt. In that year, Fouad I University was inaugurated as a State university. Starting with four faculties; arts, science, medicine and law, it incorporated the private university the higher training college, the schools of medicine and law, and, later, the remaining higher schools.

In the year 1938-1939, the number of students attending Fouad I University was 8,300. As the number was growing from year to year, Farouk I University was founded in Alexandria in 1942 to relieve the pressure.

The total number of students attending the two universities in the session just ended was 18,100 representing an increase in university population of 115 per cent. during the last nine years. Medicine has shown the highest increase, 370 per cent., and law the least, probably because the Law School had formerly enrolled one third of the entire number of students. Although women students are now admitted to all faculties, they number only eight per cent. of the total. The largest numbers are enrolled in the faculties of arts and medicine.

The number of foreign students has risen from 132 to 766, or an increase of 480 per cent. They nearly all come from neighbouring countries, including Greece. Their national secondary education certificates are recognized by our universities, but in some cases foreign students have to take a supplementary examination.

Besides the universities, the Ministry of Education has founded several higher institutes such as the Institutes of Engineering, Agriculture, Commerce, Fine Arts and Applied Arts. There are also two Higher Training Colleges and two Institutes of Education, and, for women, several Higher Schools, mostly for the training of teachers in specialized fields such as domestic science, fine arts and social service. All these institutions have been developed within the last ten years and now enrol some 4,000 students. The instruction is of a more practical nature than in the universities.

In addition to these new State universities and institutes, Egypt has a 1,000-year-old Islamic Institution, El Azhar University. For centuries, its domain had been Islamic theology and jurisprudence, and Arabic languages and literature; but in 1930 and 1938 reforms were introduced and modern studies were added. The number of students at El Azhar is now approximately 18,000.

This expansion of higher education in Egypt is not due to any abnormal or temporary factors such as the return of ex-service men. It is due to normal continuous growth and is in keeping with the

expansion in other types of education In fact, plans are already being considered for the founding of another new university at Assiout in Upper Egypt, and, but for the shortage of staff, some faculties would have begun work in the next university session.

Special Problems

This expansion in higher education is beset with many difficulties and has presented many problems. The first is that of staffing; the universities have provided their own staff to some extent, especially the junior members; many graduates were sent to Europe and America for post-graduate work, and we have secured the services of many professors and lecturers from abroad. But there is still some shortage. Here, I think, Unesco should be able to render very great help by organizing a scheme which will facilitate the exchange of professors and lecturers from one university to another for limited periods. Egypt, although not such a rich country, may serve as an example in the facilities it provides by loaning teachers to other countries, especially the neighbouring ones. Realizing the needs of the other Arab countries, Egypt encourages its teachers whenever possible to accept loan posts, and gives them financial aid, besides counting these periods towards their pension and promotion.

A second problem is that of procuring apparatus and other equipment. Great difficulties have been experienced, particularly during the war. Although things have since improved, there are still some difficulties and the question of currency has lately intensified the problem.

Another major problem which confronts us is the extent and manner in which expansion in university and higher education should be controlled. This major problem raises many questions. Should university education be reserved for those who are considered fit for it and, if so, how can such ability be determined in advance? Should the expansion in the different faculties be controlled or directed by the needs of the country, and how can these be assessed? Related to these questions is the problem of demonstrating, to the best advantage, the services which a university graduate can render. Are there new areas of employment in which they can prove their worth?

It might be said that the law of supply and demand will operate, and in the case of medicine and law this is probably true. But we must not be satisfied with that. Universities must take the lead in many cases, and a university that does not take a pioneer part in the life of the nation is failing in its mission. Because of Egypt's progressive economic development, there need be no fear of over-production of university graduates.

As to the type of students to be admitted to the university we have, as formerly stated, founded higher institutes for the students who have finished their secondary education but are of a more practical bent. But the rest of the trouble lies really in the secondary education system itself. So far, it has been almost always of the academic type. The result has been that most of those who finished their secondary

education wished to enter the universities without, in many cases, having the necessary aptitude. This practice has been detrimental to their own interests and to the interest of university teaching as well.

Happily this will be remedied by the new reforms which have lately been introduced. Secondary education will be varied and the non-academic or semi-academic will be well provided for in secondary technical and modern schools Students will still have the opportunity to finish their education in higher schools, or even in a university in the special cases which merit it. Corresponding reforms have been introduced in the final examinations of the secondary schools, and it is hoped that the new system will prove beneficial to university education.

(*This statement is based on the report presented by Dr.* MOHAMED SADEK GOHAR BEY, *Rector of Farouk I University*).

FINLAND

There are three universities in Finland; the State University of Helsinki, and two private universities. Helsinki University, whose autonomy is guaranteed by the Constitution, is the largest and the most important, with seven faculties and more than 10,000 students, of whom 43 per cent. are women. In addition, several *écoles supérieures* provide technical and commercial instruction, primarily for the preparation of school teachers. The number of students attending the *écoles supérieures* has risen rapidly; in 1895 it was 2,000; before the second world war nearly 10,000; now the number is nearly 15,000. The total enrolment in higher education is approximately 40,000; the total population of Finland is 4,000,000.

Special Problems

After the war, several *écoles supérieures* in Finland had to contend with considerable financial difficulties. The economic situation of the private schools became difficult because of inflation. As for Helsinki University, the State was not able to provide the funds needed to repair the material damage done during the war. Under these conditions, the help received from certain friendly countries was of enormous importance. Not forgetting the other countries, I would like to mention in particular that the repairs to the principal building of the University of Helsinki were carried out thanks to the gifts which came to us from Sweden; and that the United States and Switzerland gave great assistance in completing our university libraries.

As a result of the difficult economic situation of our country, the salaries of professors, and of all teaching personnel, have become quite inadequate. Considerable help has been given by a State system of supplementary allowances, which are granted to the most eminent pro-

fessors for periods of three years at a time. About one professor in four, who holds a Chair, can obtain an allowance in this way. A new law, recently passed, has instituted a system of scholarships for students who are without adequate financial means.

The rising number of students in the *écoles supérieures* requires a larger number of teaching personnel. But, especially at the University of Helsinki, the number of professors has not been sufficient for the number of students. In 1946, there were about 100 students to a professor, and 15 students to a teacher, at the university. The highest numbers were 129 and 50 respectively in the faculty of law. It is evident that this disproportion between students and teacher has had a bad effect on education. It means that the personal contact between student and teacher, so important in academic education, no longer exists.

This continued increase in numbers of students, and the need, at the same time, to expand the activities of the *écoles supérieures* into new branches of education, has raised the question of the relationship between the universities and other institutions of higher education and the re-division of work between these different categories of educational institutions. The whole question is: Should the universities, in general, keep up the classic arrangement of their old faculties, or should they extend their facilities in order to help in the education of students preparing for different branches of practical life?

Another problem of general interest, which is now being considered in Finland, is that of limiting the number of students in the *écoles supérieures*. For practical reasons and, above all, because of the lack of space in the laboratories, we have had to restrict the number of pupils in these institutions and also in some of the faculties at the University of Helsinki. The first restrictions were enforced in the Faculty of Medicine; afterwards at the Faculty of Agriculture and Sylviculture, and the physico-mathematic section of the Faculty of Philosophy. Finally, we instituted an entrance examination for students at the Faculty of Law. At the present moment, the only faculties at the University of Helsinki which are completely free of entrance restrictions are: the Faculties of Theology and of Political Science, and the historical and philological sections of the Faculty of Philosophy. How far shall we have to go in these restrictions, and what other reasons than the ones I have already quoted make limitation of enrolment desirable?

These problems have been the subject of long and serious discussion in our country. I imagine that the same problems exist in other countries, and I am convinced that to exchange points of view will be of enormous help in their solution.

(This statement is based on the report presented by Professor Veli Kaarlo Merikoski, *Professor of Administrative Law at the University of Helsinki.)*

All university degrees in France are awarded by the State. The great majority of the students are in State universities, which are the best equipped. There are 17 of them, but they do not all possess the four fundamental faculties of law, medicine and pharmacy, science and letters; on the other hand, some of them have additional faculties. There are also five free universities, known as "Catholic Institutes"; and a certain number of "Great Schools" of higher education, some of which are free, but most of which are under the authority of the State. The pupils in these "Great Schools" are limited in number and are recruited by competition. Their curricula is strictly specialized, and those who pass out of them can look forward to assured careers. The relations between these schools and the universities are varied in character; in some cases they are extremely close, in others they are non-existent.

The State universities are autonomous bodies. The Deans of the faculties are elected by their colleagues. The Rector alone is designated by the State; he is always chosen from among the university professors, preferably from among the Deans. His function is to preside over the University Council, the members of which are elected by the faculties. He may sometimes make suggestions, but he does not give orders. No control is exercized over the teaching.

All the faculties, and every university as a whole, have their own autonomous budgets. They may accept donations and grants. The main part of their revenue was derived, until recently, from the fees paid by the students. But as the fees have not yet been raised appreciably, the proportion of the university budgets which they represent has shrunk considerably, so that the bulk of the universities' financial resources is now represented by State grants. This situation is costly for the tax-payers and full of danger for the autonomy of the universities.

The majority of the professors are nominated by the State. But in the faculties of law and medicine they have to be designated as the result of a competitive examination for the whole of France. In the faculties of science and letters they are chosen from a list of persons possessing qualifications laid down by professors, elected by their colleagues, who know well the capabilities of all the candidates in each specialized field. The faculties make their selection on the basis of this list, and their choice is almost always ratified by the State. It may be said that, in this way, the universities of France recruit their staff by co-option. Except in certain highly specialized fields, they never find any difficulty in obtaining professors, for the number of qualified persons listed in each speciality is much greater than the number required. Perhaps some universities, in countries where there is a shortage of teachers, might take some names from these lists.

The State requires the faculties to provide instruction in certain subjects, but even in these subjects the universities frame their own curricula, to which the State merely gives formal approval. The univer-

sities are free to create any professorships they require and to establish institutes for instruction or specialized research, as they see fit. The financing of these projects is then, as a rule, undertaken by the university.

The increase in the number of students is not at present due to demographic causes. It is due to:

1. The increasing number of young men who are seeking access to a higher level of culture, and to the careers which they believe will be opened to them by the possession of a university degree;
2. The fact that university fees have hitherto remained at a very low level;
3. The increasing number of bursaries and grants accorded by the State, especially to ex-service men and women and former members of the Resistance Movement.

The result has been a remarkable democratization of recruitment, even in those faculties and schools which before the war were chiefly attended by students from the privileged classes. The over-crowding of the universities is especially noticeable in Paris, which has more than half the students of France but less than one third of the professors.

Students are free to enrol for any course of lectures, to study in the library, to work in the laboratories, and even to sit for certain examinations. Only when it comes to the degree is the *baccalauréat* insisted upon as proof that the student has taken the secondary school course. In this case, however, a number of equivalents are accepted, so as not to bar the door to students of humble origin, to foreign students, or to those who have been unable to take the normal secondary course owing to over-crowding of the schools and colleges.

In order to avoid encumbering the already crowded lecture-halls with unsuitable students, we are now introducing a propaedeutic course in general knowledge on entrance to any of the faculties. This method has long been used in the medical faculties. It is hoped that it will not become a rigid obligation, which would be inconsistent with the flexibility and variety that should characterize higher education.

As regards the living conditions of the students, the problems of housing and nutrition are still very serious. A State service entitled "Social Activities for the Benefit of Young People in Schools and Universities" is trying to solve these problems; it employs social assistants who look after the welfare of the students, and it also maintains an employment bureau for their benefit. In every university the students have one or more associations, which are attached to the National Union and to the International Union of Students. These Associations have organized excellent canteens, which are supervised both by the universities and by the students. A limited number of students elected by their comrades sit on the University Council for the discussion of questions which concern them (two students for administrative and general questions; sometimes more for disciplinary questions).

French universities are open to students of all ages, both for general education and for certain kinds of scientific specialization. Many of our students are officials, teachers of secondary or technical classes, or primary school teachers.

In France, it is considered that higher education must play a leading part in the advancement of learning, so that it cannot, at the same time, assume the task of popularizing knowledge for all kinds of audiences. The university is for the intellectual élite among the people, but it cannot educate the people as a whole. For those who wish for higher education but do not seek diplomas, there are public courses at the universities and the three "Great Scientific Establishments" in Paris— the Collège de France, the Museum of Natural History and the School of Arts and Crafts. For those adults who have been deprived of general education, basic instruction is provided by the State and by various private institutions. Such instruction, while not excluding cultural education, is mostly of a technical nature.

With the increase in the number of students, the employment of graduates has become a problem. The faculties of letters and the faculties of science prepare many of their students for employment as teachers, but employment is only guaranteed for those who have passed the competitive tests for appointments. Some students in the science faculties, and those in the scientific institutes, are prepared for posts as engineers or chemical research workers. The finding of posts for students depends on the general degree of economic recovery. At present, the situation is favourable, and in most of the specialized services the demand exceeds the supply. But the faculties of law and medicine are, at the moment, in danger of producing more lawyers and especially more doctors than are required.

Except for the preparation of doctors and jurists, the French universities do not undertake the actual technical training of engineers, dentists, artists, musicians, etc. This is the responsibility of the numerous technical institutes, some of which are attached to the universities.

The National Centre for Scientific Research, which is mainly financed by the State, has its own laboratories and its own research workers. In addition, it furnishes grants to a large number of teachers, and even to students, in the universities. The greater part of the research work, which it subsidizes, is carried on elsewhere than in the university laboratories.

The foreign students may be roughly divided into two categories: those who desire to learn French, and those who want to attend the lectures given in certain laboratories or by certain professors. The former go mostly to Paris. Most of the foreign baccalauréats are recognized as equivalent to the French *baccalauréat.* For those who do not possess it, an examination in general knowledge and in the French language is held, in its place, for foreign students.

Exchanges of professors and students with foreign universities are arranged by a State department which works under the Ministry of National Education (University Services for Relations with Foreign Countries) and maintains close relations with the General Directorate

of Cultural Relations in the Ministry of Foreign Affairs. Its resources are limited and the universities themselves cannot, for the time being, afford any independent action in the matter.

A problem of immediate practical importance is that of books and periodicals in foreign languages, especially those published in hard-currency countries. Although Unesco is only in direct relation with governments, it is to be hoped that it will consider the creation of some kind of university clearing-house for scientific and learned works published in different countries.

(*This statement is based on the report presented by* M. André Allix, *Rector of the University of Lyons.*)

Germany (1)
British Zone

The university situation in Germany is fundamentally very much the same as in all Western countries. The main difference is that most of the problems in Germany present themselves in an acute form.

In the British zone, sixteen institutions of higher learning are now operating— seven universities (Kiel, Hamburg, Cologne, Bonn, Munster, Göttingen and the Technical University, Berlin), one medical academy and five technical high schools (including a veterinary college and a mining academy, two art colleges and a high school of music). The number of students attending these institutions is approximately 35,000—more than twice as many as in 1939—and that in spite of a *numerus clausus* imposed by the Control Commission in consultation with the university authorities. Thousands of applicants have had to be denied admission.

Special Problems

The material difficulties under which these institutions reopened in the winter of 1945, or early in 1946, can scarcely be imagined. With the exception of Göttingen all had been severely damaged; Kiel and Munster completely bombed out. The losses in university building ran usually to between 40 and 60 per cent. Most of the libraries had suffered heavily or had been evacuated for safety and were not available. Teaching staffs were depleted by war casualties and by the purge of active National Socialists. There was an acute shortage of teaching supplies for all education purposes, especially of paper for textbooks and notebooks. In addition, food was most inadequate, and living and housing conditions in the bombed towns incredibly difficult. Further, the shock of a crushing defeat together with the col-

(1) The invitations of Unesco to the governments of the occupying countries asked that one representative from each of the four zones in Germany should attend the Utrecht Conference as an observer.

lapse of all their former ideals, produced widespread apathy and discouragement among the people. During the last three years considerable progress has been made, especially in repairing or rebuilding the universities themselves, but even to-day the same difficulties largely prevail.

In the circumstances, it was perhaps natural that the dominant impulse was to re-establish the universities as they had been before 1933. Nazism had been defeated and was therefore discarded. In the universities under the Nazi regime there had always been a certain core of passive resistance, just as there had been in the Weimar period. The professors who took over, usually old men who had grown up under the Kaiser, had so much to do in the purely material field, that they had not the energy to tackle the vast problems of radical university reform in terms of entirely new social conditions. This marked conservative trend has created a gulf between the universities and the broad masses of the population, which is one of the crucial problems to-day. The universities are reproached by the Trade Unions, the Cooperative Societies and some of the political parties, with not having given any decided lead against the doctrines and practices of National Socialism, with having more or less sold out to Hitler to retain their secluded life and privileges, and with now being instruments of reaction through their traditionalism.

These accusations are undoubtedly exaggerated, but they have sufficient substance to make the conflict a real one. The universities have, so far, done little to remove the causes of suspicion and friction. Little has been done to broaden the basis of recruitment of the student body, to revise the curriculum in the light of modern requirements, to overhaul the whole system of examinations. Only in the field of university administration has there been some progress towards democratization. Senates and faculties have been enlarged to provide increased representation of assistant professors and *dozenten*, and to include representatives of the student body when student affairs are under discussion. In most cases these concessions do little to reduce the autocratic rule of the full professors. Indeed, much of the effort of the university Rectors, united in their Rectors' Committee, has been directed towards the preservation of the autonomy of the universities, especially with regard to the *Laender* governments.

The policy of the Control Commission has been governed throughout by two principles: first, that the doctrines of National Socialism and militarism should be completely eliminated from the entire educational system, and, in particular, from the universities; and secondly, that the necessary radical reforms should be initiated and carried out by the Germans themselves. It was considered that any reform imposed from above would only be transient. During 1946 the main effort of the education authorities, apart from assisting reconstruction, was directed towards denazification on the one hand, and stimulating the desire for reform on the other. Encouragement was given to the establishment of the Committee of Rectors to coordinate university policy, especially as regards reform; to the formation of representative student committees in each institution, and for

the Zone as a whole; to joint meetings between the Rectors and the representatives of the Trades Unions, Cooperative Societies and political parties with a view to finding a sound basis for co-operation. Leading educationists from abroad were invited to Germany to survey the situation and discuss the problems with the Rectors. By 1947, when provisional governments had come into being in the *Laender*, it was considered that entire responsibility could be transferred to the *Laender* authorities, and this was done.

Since then, the role of the Control Commission in education has been essentially that of advisor. In the matter of university reform, the initiative was taken by the Military Governor who appointed a Commission of ten German educationists together with a British and a Swiss member to study and report on the contribution towards a sound democracy being made by the universities, and to consider what measures could be introduced to increase that contribution. Normally, however, all educational developments lie in the hands of the German authorities.

Relations with other Countries

One of the main efforts of the Control Commission has been to break the spiritual isolation in which Germany has lived for so long. As early as 1946 a scheme was initiated and financed by the Control Commission whereby the universities were enabled to purchase periodicals and scientific journals from the United Kingdom. During 1947 this was extended to include books. Facilities were also given to organizations in other countries to provide books and journals, and grateful mention must be made of the valuable contributions of Switzerland and Sweden in this connexion. In 1946, lecture tours of prominent personalities were organized, and in 1947, international summer schools in which students and lecturers from many countries took part, were held in all the universities. Lecturers from the United Kingdom have been available to the universities for lecture courses during term, and the British Council has appointed English *lektors* and professors of history and social science. In the other direction, twenty fellowships for junior lecturers have been provided to enable young professors to spend a year at British universities with senior Common Room privileges, and scholarships have also been provided for a number of post-graduate research students. Students from the United Kingdom are also now spending one or two terms at German universities. A project for an international college of social studies, which was to have been carried out in co-operation with the United States education authorities has, unfortunately, been held up for the present. The success of these contacts has been great, especially among the students, and plans for their considerable expansion during the coming years have been prepared by both the United States authorities and ourselves.

(*This statement is based on the report presented by Mr.* R. H. PENDER, *Head of the Universities Section of the Education Board of the Control Commission.*)

GERMANY [1]
United States Zone

The task which has been assigned to our office is the democratization of the universities in the American Zone of Occupation. This zone includes the four *Laender*, Bavaria, Wuertemberg, Baden, Hesse and Bremen, and the United States sector of Berlin. It has about 20 million inhabitants and approximately 30 institutions of higher education, not including the research institutes.

For brevity and conciseness, I will ask and seek to answer five questions.

By what means have we tried to achieve our objective?

Not by issuing direct orders to change the statutes of the universities. We could have done this, but, if we had, the results would certainly have been very undesirable, for clandestine opposition would have been aroused. But:

1. By removing from office in successive purges a considerable number of professors and administrative officials who, due to their former political affiliation or activities, were no longer considered as qualified for a teaching or administrative position. Besides, all active Nazis were banned from the student body and strict rules of admission were established.
2. By a considerable number of conferences with the rectors of the universities, and representatives of the students, in which all the problems of general organization and policy were discussed and resolutions taken.
3. By conferences with the deans and members of faculties, in which questions of courses of study, and methods of instruction were taken up and resolutions adopted. Frequently representatives of the functional divisions of Military Government (legal division, civil administration, information control, etc.), experts from America and representatives of the Allied Military Governments co-operated in these conferences.
4. By conferences with university officers of the *Laender* of the American zone, in which proposals for policy to be followed were worked out on the basis of previous experience. In this way, the chapter on higher education in our Military Government regulations was able to be continually adjusted to meet changing needs.
5. By a special committee on higher education which was formed in the *Laenderrat* of the American zone. This committee was composed of the representatives of the university adminis-

[1] The invitations of Unesco to the Governments of the occupying countries asked that one representative from each of the four zones in Germany should attend the Utrecht Conference as an observer.

trations, and three Rectors representing the three *Laender* universities. The work of this committee was particularly valuable in relation to the problem of university constitutions.

6. By the Education Committee in the Allied Control Authority in Berlin. Among the problems which were treated were : admission of students; training of university professors; and law in the Kaiser Wilhelm Society. Unfortunately this attempt at equalization of university conditions throughout Germany did not work out well. Agreements were reached on some points, but never on all. East and West never fully agreed on all aspects of the questions discussed.
7. By an exchange of professors, students and materials. More and more we have come to consider this exchange as the best means of democratization of our universities. The experiment started by the University of Chicago, which has been sending professors to the University of Frankfurt, and the international vacation courses established in the three Western zones, are examples of our efforts. Such importance has been given to this activity of the Military Government, that it was detached from the higher education office and established as a special branch.

Which problems have we tackled and how far have we solved them?

1. *Constitutions of the Universities:* No constitution has so far been approved although plenty of work has been done by commissions. A draft produced by the *Laenderrat* Committee suggests increasing the rights of all the members of the staff, and of the students, in the governing bodies of the universities. The main problem for the Military Government was always the unsatisfactory relations between the university and the public. An institution similar to the Boards of Trustees existing in America has been suggested by us. But in this respect the university professors were adamant; their interpretation of autonomy does not admit interference by outside forces in the affairs of the university.
2. *Admission of students:* The German universities were in the past attended by the sons and daughters of the upper middle class which was conservative by tradition. All attempts during the Republic and under the Nazis to change that situation were unsuccessful. We have now about 10 per cent. of workers' children in the universities, more than ever before, but certainly not enough. There is, as yet, no equalization of educational opportunities with respect to the universities. We have tried to promote it by scholarships and by encouraging the *Laender* Governments to grant scholarships and to make universities studies completely free of charge. A great number of admission problems like entrance examinations, the admission of former Nazis and officers, have been partly

solved. A points system, taking into account all the qualifications and handicaps of candidates for admission, has been established in our *Laender.*

3. *Curriculum:* We have urged on the universities the introduction of new fields, particularly political science, and a broadening of general education. The so-called *dies academicus,* forums and general lectures in some universities were the only, but still unsatisfactory, results of our efforts.

4. *Methods:* The German universities still use for the most part the lecture method. There are relatively few seminars, and these only in some fields. Small classes, in which the students discuss problems with the professors, are hardly known. They cannot be conducted to-day for lack of professors. We are, therefore, urging an increase in the number of Chairs.

5. *Guidance:* In this respect the German universities have hardly done anything. There are no tutors; there is no advisory body which helps the student through the labyrinth of courses and gives him the necessary social, economic and professional orientation.

What are the main difficulties?

These are: the economic misery of the students, resulting from lack of food, clothing, living space and books; lack of teaching space and equipment in the destroyed cities; the currency reform which may ban some poor, but desirable, students from the universities; and the ideology of the professors. They still cling to the old tradition of the German universities and often tend to forget the decline of their scientific standing in the last twenty years, particularly under Hitler. They are mostly unwilling and unable to tackle the task which they have had to assume of educating the students for democracy.

What important new projects have we sponsored?

1. The School of Advanced Studies in Berlin. At the suggestion of the Military Government, the *Laender* of the American zone and Berlin have established a foundation for this purpose. Some former Kaiser Wilhelm's Institutes, some other institutes in Berlin and some new institutes now form this school. Among the new institutes the most important will be one for educational research, a field not widely known in Germany. However, the political situation in Berlin may make it necessary to change the organization of this institution.

2. The transformation of the former university at Gressen, whose buildings have to a great extent been destroyed, into an agricultural college which will also have a department for home economics and for the science of nutrition.

3. A school of public health in Heidelberg.

4. A school of politics comparable to the former Berlin school, in Frankfurt a/Main.
5. A centre of social sciences in Marburg.
6. Two other institutions, the International University in Bremen, and the university in the Western sector of Berlin, have so far not materialized, but plans for them are still under way.

What is our main hope?

According to the almost unanimous opinion of the professors, the students in the universities have improved, and are more mature than they were. In all the conferences and conversations which I have had with their representatives they have shown goodwill and intelligence. It has often been reported that the majority of the students still favour Nazism. There is no proof of that. They are, no doubt, nationally minded and are becoming more so as the misery, under which they have to labour, continues. But there can hardly be any doubt that they could become more democratic if they had the right leaders among the professors. It is our hope that ever greater numbers can be sent abroad into democratic countries, particularly to the United States, and that more and more students and professors from democratic countries will come to Germany and will give the leadership which, unfortunately, is now almost completely lacking in the German universities.

(*This statement is based on the report presented by* Dr. FRITZ KARSEN, *Chief of Higher Education, U. S. Army in Germany.*)

HAITI

Haiti is the only American Republic in which French is the official language. The University of Haiti has been in existence as an administrative unit of the Haitian Government only since October 1, 1945.

The University includes Faculties of Medicine, Pharmacy and Dentistry; Law; and Letters and Science. In addition there are the Ethnological Institute, the Central School of Agriculture, and three free Schools of Law. The Faculty of Letters and Science includes also the Higher Normal School and the Polytechnic School of Haiti, both established in 1947, and the School of Photography.

There are approximately 1,000 students in the university. Each faculty and each school of higher education has a students' association; these are combined to form the Federation of Students of the University of Haiti.

So far as scientific research is concerned, the university believes that Unesco will succeed in organizing a system under which duly

qualified students of the smaller universities will be allowed access to the research centres of the great American and European universities.

It is hoped that, with the aid of the French Institute of Haiti, the University will be in a position to offer, in the academic year 1948-1949, courses in languages and French civilization to students from North and Latin America.

Finally, the Haitian University considers that Port-au-Prince, being the geographical centre of the Americas, and the meeting-point of three great systems of culture, would form the ideal situation for an international Institute under the aegis of Unesco and the United Nations.

(*This statement is based on the report presented by* Dr. LUCIEN HIBBERT, *Rector of the University of Haiti.*)

HONDURAS

The University of Honduras was founded in the year 1845 by the Father Jose Trinidad Reyes as *Sociedad del Cenio Emprendedor y del Buen gusto.* Two years later, the State assumed responsibility for this Academy and its name was changed to *Universidad Nacional del Estado de Honduras.* In 1852 the Faculty of Law was established. The present name of the University is *Universidad Central de la Republica.*

It now has faculties which grant degrees in: law, political and social sciences; medicine and surgery; dentistry; pharmacy; physical and mathematical sciences and the humanities. During recent years, President Carias and his Minister of Public Education have given their full support to the University. They have opened new schools such as the school for nurses, and introduced courses on archeology and humanistic studies.

The Rector is appointed by the Executive Power and conducts the internal affairs of the Supreme Council of Public Education. The membership of this Council includes the Rector, Deans of Faculties and three to five other members appointed by the Government. However, the organization of the university is still not modern and needs the technical advice and help of Unesco.

(*This statement is based on the report presented by* Dr. ANTONIO VIDAL, *Chargé d'Affaires of the Republic of Honduras in France.*)

The oldest university in Hungary is the University of Budapest which bears the name of its founder, Peter Patzmany. Similar universities were founded at Debrecen, Szeged and Péos. Besides these universities there is, in Budapest, a technical high school known as the Technical University, which was established in the nineteenth century. As far as their development and their organization are concerned, the universities are planned largely on the German model. The College Eotvos, however, follows the pattern of the French *Ecole Normale Supérieure*. In the last decades and during the oppression by the Fascists this college was one of the bastions of free-thinking youth, fighting for democracy.

Till the end of the sixteenth century our high schools took their example mainly from the western-European and Italian universities and kept a very close contact with them. During this time close cultural relations were maintained with our southern and eastern European neighbours. From the sixteenth century, our country lost its freedom and may be considered as having become a colony of the German Reich. Consequently Hungary became more and more almost exclusively under German influence. This was the real situation until almost the end of the first world war.

Between the two world wars the great poverty of the country and the short-sightedness of the ruling classes left its mark in every field of our cultural policy, and on higher education. In spite of this, remarkable progress was made in the universities of Debrecen and Szeged. In the case of Szeged this was largely thanks to the help of the Rockefeller Foundation. In the period of Fascist policy, reactionary philosophy and ideology were emphasized almost to the exclusion of the natural sciences. Only ten of the seventy Chairs of the faculty of philosophy at Budapest served the natural sciences and not one of these was prepared to teach methods of scientific thinking. Also, the scientific institutions had to work with obsolete apparatus. Yet, in spite of all these difficulties, serious work was done, very extensive research was carried out and important results were achieved. The number of students at the universities was 19,000, of whom 5,500 were in jurisprudence and only 3,500 in all the sciences, including medicine and engineering. Some of the students were practically excluded because of their religious origin.

The second world war, which laid waste the entire country, did not spare its academic life. Many university buildings were destroyed, and those which were spared were severely damaged. Scientific instruments were confiscated, and the Nazis robbed the buildings of their most precious possessions.

But almost immediately after the liberation, large numbers of young people gathered amid the ruins of the universities. The number of students increased from 17,000 to 27,000. These were mainly drawn from that stratum of society for which university study had

been unattainable in the past. A large number of sons of workers and peasants, born in poverty, are now taking advantage of the changed situation and are devoting themselves to their studies with incredible eagerness. The numbers enrolled in the various disciplines has also changed; the majority of the students are now studying the natural sciences.

Young people are re-building their own colleges and directing them along new democratic lines. The Hungarian workers have launched activities under the slogan of "the workers for science". They are rebuilding a considerable part of our scientific institutions by voluntary work and the factories have supplied extremely valuable materials for their equipment. To give only one example: for the repair of our surgical clinic at Budapest about 350,000 Frt. were given by the Government. The staff of the clinic, the factory workers and the whole community offered their labour to the value of more than 2,000,000 Frt. to rebuild the clinic. But this is not enough; our aim is not only to reach the pre-war level, but to join, as soon as possible, the ranks of the nations ahead of us in the fields of science. The young people of Hungary are working hard to reach this goal and our people are willingly prepared to make great sacrifices.

Naturally, it is impossible to admit everyone who wishes to study in the universities. We are forced to select the candidates by means of pre-examination, in order to guarantee a first class education. Though we are well aware of the defects of this system we have not yet found a better solution. Experience has shown us that the certificate of our secondary schools is not sufficient evidence of a candidate's suitability for university study. At present, we are working to re-organize the whole school system, and a compulsory eight-years attendance of primary school has been introduced to raise the level of the general education of our people. In connexion with this, we are planning a secondary school curriculum with strong emphasis on instruction in the natural sciences. Perhaps as a result of such changes, we can eliminate the need for a university entrance examination.

Because of the work of developing our industry and modernizing our still primitive agriculture, more skilled persons are wanted and, to meet this need, two new high schools have been established: a new university for agriculture in 1945, and in 1947 a technical high school. The old technical high school trained engineers in general technical knowledge; the aim of the new school is to reach the same high standard, but to give a more specialized education.

A new university for economics and social sciences is now being established. We are also organizing neuro-surgical institutes in three medical faculties, and we want to develop a research centre and hospital for tuberculosis, an orthopaedic clinic, and institutes for physics and chemistry at the University of Budapest. The Academy of Music and the Academy of Design, as well as several other academies of arts, have been revived.

We have started a three-year economic plan which we hope to be able to finish within two and a half years. Our scientific activities

must be organized and directed in accordance with this plan. There is, of course, no question of compelling any scientist to undertake any particular research. On the contrary, we wish to establish a research organization which will enable talented people to work freely in their own special fields. To encourage scientific research, the plan includes the provision of the necessary funds and equipment. We have organized a National Centre of Libraries and, in a few weeks, the Hungarian Centre of Documentation will begin its work. A National Council of Scientists is to be created which will co-ordinate research activities. One of its first tasks will be the establishment of a central research laboratory equipped with the most precise instruments. This central laboratory is meant not only for the use of its staff but for every scientist. We want to select the most able young research workers and, through a planned policy of scholarships, send them abroad to the most important research centres throughout the world. We hope to get much help in doing so from international organizations and especially from Unesco.

(*This statement is based on the report presented by Dr.* GEORGES SZANTO, *Chief of the Section for Higher Education, Hungarian Ministry of Education*).

Popular Colleges

The Popular Colleges are hostels for students, where the needy but talented children of the Hungarian workers and peasantry are given an opportunity to study and to acquire knowledge of trades and professions, without financial anxieties.

In the summer of 1946 thousands of worker and peasant students took possession of a number of empty, forsaken buildings, ruined houses and barracks, and with their own hands repaired them, made them habitable, and provided the elementary requirements of living. These primitive homes were the nucleus of the Popular Colleges.

The fact that they were started entirely on spontaneous initiative, proves that there was no speculation or ulterior motive behind their foundation, and this applies to the whole course of their development. They are essentially the offspring of reality. To-day there are approximately 10,000 students in 160 Colleges, and the number is still increasing. The Colleges provide homes for 25 per cent. general school students, 50 per cent. secondary school pupils, and 25 per cent. high school and university students.

The Colleges have been established throughout Hungary, and are independent of the general schools and universities. They are united under the National Association of Popular Colleges—known as *Nekosz*—which supervises the organization of the whole movement. When the Act of Parliament for the nationalization of education was introduced, the Association retained its autonomy.

Within the Colleges, the university, high school and secondary school students direct their own life under the management of a Board of Directors who are elected every two to three years by the students from among their own ranks. The Board is responsible for

the administration of the various Colleges, the admission of new members, the plan of work and the direction of the social life of their fellow-students.

The Popular Colleges train the young people in self-government. The director, the secretary, the librarian, the chairman of the People's Tribunal, the managers of the so-called co-operatives are all students of the Colleges, who regard these functions, not as mere games, but as serious tasks to be carried out with due responsibility. In this way, the students are trained in self-reliance, initiative and leadership. The inner structure of College life offers a great variety of tasks so that the machinery of self-government depends on almost every student; in one way or another he becomes absorbed in the work and feels responsible for duties which are performed for the benefit of the community.

The Popular Colleges are playing an important part in helping to fill the gaps in the present educational system which is still in the throes of much-needed reform, and suffering from serious shortages of staff. The Colleges are primarily hostels, but, because of this, they are in a position to establish, for those students who come within their sphere of influence, a system of technical work by which they are able to widen the field of learning and raise its standard. They have their own staff of tutors, and a regular working plan which includes the compulsory teaching of languages. A wide range of material is provided for the study of social and political problems, and there is a regular course of lectures and debates, arranged, as well as attended, by the students.

These Popular Colleges are the best illustration of the general development of our new educational system and represent the most important elements in Hungary's democratic educational policy.

(*This statement is based on a paper by Dr.* Ladislas Kardos, *Representative of Popular Colleges, which was prepared for the Conference, but was not presented.*)

India

To-day when we speak of education in India, we generally think of education as introduced by the European settlers, principally by Christian missionaries, and later by the Government. But in the past, India had its own system of education with a number of what might be called universities in different parts of the country. The University of Taxila, for example, flourished at the time of Alexander's invasion and, about six centuries later, the University of Nalanda, near Patna, had some 10,000 students in residence. These universities were all monastic establishments, but women were not excluded, either as students or as teachers. The impact of foreign culture and

other causes gradually dissolved these great centres of learning, and now nothing remains of this old system of education in India, except a few small establishments where Sanskrit, our ancient tongue, and the learning it enshrines, is still taught by the traditional methods.

The educational pattern which has developed during the last century or so is almost entirely on Western lines. The first universities were founded in 1858 in Calcutta, Bombay and Madras. Now there are twenty-four universities, including the Civil Engineering College at Roorkee, which was raised to the status of university in July 1948, and the university for women at Poona. No students or teachers are barred from the university on account of their religion. The universities encourage co-education, although there are also colleges specially for women students. The Inter-University Board, with its headquarters at New Delhi, co-ordinates the work of our universities, as far as possible, without interfering in any way with their freedom and autonomy.

Universities in India are of different types. Some are independent units with their own faculties and courses. Others represent affiliations of several colleges each with their own faculties and courses. In this case, the university acts as a controlling and guiding agency on the academic side, prescribing standards and courses of studies and conducting the examinations. It also decides on the qualifications of teachers and approves their appointments. Most universities are, in fact, a combination of these two types.

The income of the universities is derived mainly from the fees paid by the candidates for the different examinations, supplemented by grants from provincial governments. Most universities have their own endowments, either from the State or from private benefactions. Appointments to professorships, readerships, and lectureships are made by the universities concerned, subject in some instances to the formal sanction of the State, which has seldom been refused. Constituent Colleges are each under the administrative control of their Principal and Governing Body, and obtain their funds from the same sources as the university. The Government of India has recently set up a University Grants Committee on the lines of the one in the United Kingdom, through which it is proposed to make substantial grants to universities.

All the universities and most of the better-equipped constituent colleges have facilities for research. There are schools of research in tropical medicine with well-equipped hospitals attached, a Nutrition Research School, Councils of Agricultural Veterinary Research, and a Lac Research Institute. The Government has lately decided to establish up-to-date National Laboratories for physics, chemistry, fuel research and metallurgy. Private gifts have endowed Research Institutes at Calcutta, Poona, Bangalore and Bombay, which are also subsidized by the State. Most of the research laboratories maintained by large industrial concerns work in close collaboration with the universities of India. There are recognized colleges of music at Lucknow and Poona where Indian classical music, both vocal and

instrumental, is taught and diplomas granted. The University of Patna also has a department of music.

Significant Developments

There is a considerable demand, even in the public services, for trained teachers and for graduates in medicine, agriculture, and all branches of engineering, which the universities have not so far been able to meet. Another significant development is the increasing demand for educational facilities for women. India is still hesitant in taking kindly to co-education, and colleges exclusively for women are still preferred. The number of women graduates or licentiates in medicine is still quite inadequate, since there are only two medical schools and one medical college open exclusively to women. Most medical colleges in India do, however, reserve a percentage of their places for women applicants.

The most important problem is finance and its implications. Most universities depend on income from fees, State aid and private benefactions; this last source has, however, been drying up quickly under the changing social order. State aid generally implies some measure of State control. The amount of State control varies from province to province, and from university to university; in actual practice this control has been reduced to the minimum, but the retention of the State's rights is almost universally resented.

There is an increasing demand for admission to the universities by both men and women, especially for science, engineering, medicine, agriculture and training of teachers. It is estimated that, on the average, four out of every five men and women who apply have to be refused.

The inadequacy of equipment, of building materials and of buildings is a serious problem. Scientific apparatus and chemicals of pre-war standard and purity are either unobtainable or prohibitive in cost, or cannot be shipped; even books are hard to get.

Because of the large numbers at present attending our colleges, there is a lack of close personal relationship between the teachers and the students. Contact tends to be limited to the formalities of the classroom, and education becomes too mechanical.

Resident accommodation for students presents another problem. Very few, if any, of our colleges can provide residence for all who need it. On an average, about 25 to 30 per cent. of the students live at home; 30 to 35 per cent. in college hostels; and the rest in lodgings, under such supervision as the colleges can provide, which is usually very slight.

Finally, there is a lack of facilities for travel and study abroad, either for students or for members of the staff.

Future Trends

At a conference of Vice-Chancellors, educationists and Ministers of Education from various provinces, held at Delhi in January 1948,

it was decided to frame our university studies in such a way as to produce men and women of wide international outlook; we considered the advantages and disadvantages of such an objective in view of the conflicting ideologies in the world to-day. It was also realized that universities should not only furnish trained citizens of the world, but guide individuals in the choice of studies and professions. Behind poor citizenship, failures, and consequent waste of human material, lay mental maladjustment of the individual to his environment. As the basis of training for good citizenship of the country or of the world, there must be personal guidance, aptitude tests, psychiatric assistance for the individual, and correction of idiosyncracies. Psychological research is, therefore, being encouraged; Patna has set up an Institute of Psychological Research and Service, and other universities have followed suit. Industrial psychology and educational psychology are being developed.

The universities encourage students' activities and organizations, such as Students' Unions, sports and games, inter-college and inter-university debates and athletic competitions. The number of foreign students in India, is, at present, comparatively small, but facilities are offered and they are welcomed at most of the universities, particularly in Calcutta, Benares, Madras and Viswabharati.

Now that the universities of India have come into their own, we shall re-orientate our university education, examine the achievements of other countries and adopt those measures which seem most fitting, without sacrificing anything of our own spiritual heritage.

(*This statement is based on the report presented by Sir* CHANDRESHWAR PRASAD NARAYAN SINGH, *Vice-Chancellor of the University of Patna*).

IRAN

Iran possesses two universities: the first is the University of Teheran, which was founded in 1934; and the second is the University of Tabriz, the administrative centre and the spiritual capital of the great province of Azerbaidjan. The creation of three others, to meet the country's present cultural needs, is under consideration.

The University of Tabriz, which recently celebrated the first anniversary of its foundation, has two faculties: medicine and letters. Its administration is not yet autonomous, but is the responsibility of the Department of Higher Education of the Ministry of National Education. It will probably be several years before it emerges from its present stage. Education is free, in the sense that the financing of the University by the State does not restrict academic freedom. The lectures are all given, in the Persian language, by scholars who before the war studied in Europe, or in the higher cultural and scientific institutions of Teheran.

Teheran University deserves a fuller description. It is not only the one modern university in our country, but it is also one of the most advanced of the higher educational establishments of the Near East, from the point of view both of its organization and of its standards and methods of instruction. At the same time it upholds the tradition of our old "Madrassa" of the Middle Ages, which gave the world mathematicians, historians, geographers, doctors, jurists, and writers or poets, whose ideas and experience have left their mark upon Iranian culture.

Ten years after its foundation, the University of Teheran was legally granted administrative and financial autonomy, though circumstances prevented its full realization. After this, the University gained ground even more rapidly than in the past and the number of its dependent institutions increased. A Veterinary Faculty, and a Faculty of Agricultural Sciences, which had been administered until 1944 by the Ministry of Agriculture, were added to the six original faculties. Furthermore, a "University City" was created, in order to provide increased facilities and amenities for the young people who come from the remotest parts of the country, eager to understand even the most complex modern scientific developments. The University established cordial relations with some of the European universities, including those in France and Switzerland, from which most of the Iranian professors had come, after distinguishing themselves in their studies in these two countries.

The six original faculties of the University of Teheran were: law, political and economic sciences; letters, philosophy and pedagogy; medicine, pharmacy and dentistry; technology; science; and theology. To-day, the University includes three other faculties: fine arts; veterinary surgery; and agriculture. The higher normal school continues to form a part of the faculty of letters and of the faculty of science.

The administration of Teheran University is on much the same lines as that of the universities of Western Europe. The Rector, who is elected by the Deans of the different faculties, and who must himself be a dean of one of the faculties, is appointed by an Imperial Firman on the proposal of the University Council and the Minister of National Education. The deans and deputy-deans are also selected from among the professors of each faculty and are appointed by the Minister on the proposal of the Rector.

The Council of the University meets under the presidency of the Rector, and consists of the Deputy-Rector, the Deans, and two representatives from each faculty. It lays down the conditions for the entry of students; approves the curricula drawn up by the Councils formed in each of the faculties; prescribes the conditions for obtaining university degrees; draws up the university regulations promulgated by the Rector; proposes, or gives its approval to, measures for reforms or improvements in the teaching, or in university administration, etc. The University Council is not only an administrative, but also an advisory body.

The length of the courses of study varies in the different faculties

from three to six years. The conditions for the entry of students also vary, and some of them include the passing of a competitive examination (as in the faculties of law and medicine).

Though it is financed by the State, the Teheran University is also permitted to receive donations and bequests, subject to the previous approval of the Council.

One of the characteristic features of the University is that it strives to assist students who are talented but are not sufficiently well-off to enable them to study. Assistance is given either by allowing the students to become boarders, or by grants of money. These grants are mostly given to students who intend to become teachers, or who satisfy certain prescribed conditions and pass a spécial examination. In the school years 1946-1947, the grants awarded by the University amounted to 35,530 rials, distributed among 105 students. Efforts are made every year to increase the number of these grants. The " University City " provides free board and accommodation for 500 students. In 1947-1948 they were selected from among the 5,025 students enrolled in that year.

This number was about 239 per cent. higher than the number enrolled in the academic year 1939-1940. In the previous year, 1945-1946, there was a total of 4,662 students. In the same year, 681 students completed their studies.

Special Problems

The first and most pressing problem of Teheran University is that of finance, which has become particularly embarrassing owing to the economic depression. As a result, it has been difficult to add to the university staff or to improve the technical equipment of the University. This has retarded the progress which our faculties ought to be making in the fields of study and research, without which higher education loses its chief purpose. Secondly, there is the problem of politics. All attempts to give the university a particular political bias have been prevented, without, however, limiting the freedom of the students and the teaching staff to participate in political and social debates. It must, however, be admitted that these debates sometimes take a direction which science, letters and the arts should avoid. Students' associations exist in most of the faculties and are authorized so long as they do not assume any political complexion.

Lastly, there are the problems of the future. In order to determine whether, in the fourteen years which have elapsed since the university's foundation, it has fulfilled its duty and responded to the spiritual and material demands of the nation, the university must undergo a kind of self-examination. It must consider the steps which may be needed for far-reaching reforms, either in the administration, in the curricula, or in the new methods of a purely practical nature, which may have to be adopted if we wish to see higher education attaining its full stature.

(*This statement is based on the report presented by Dr.* H. Chajid Nourai, *Professor of the Faculty of Law, Teheran University*).

Iraq is one of the few countries which has neither a national nor a private university, in spite of the fact that, in past ages, it was the seat of great institutions of higher learning. However, the establishment of a national university is in view and, before leaving Baghdad, I learnt that the present Minister of Education is endeavouring to realize this plan. The non-existence of a university in Iraq does not mean, however, that the country is deprived of institutions of higher education. It has a number of independent colleges administered entirely by separate administrative bodies, and controlled by the Ministry of Education, except in the case of the Medical College which is under the control of the Ministry of Social Affairs.

The oldest of these colleges is the College of Law which was founded in the latter part of the Ottoman rule in Iraq. It began by providing one year of study, but the course has now been extended to four years. In the meantime, numbers have multiplied and there are now more than 2,000 law students. This has been due to the increase in the number of secondary school graduates, and their ever growing interest in the study of law. This type of education has a unique prestige in Iraq because of the numerous channels it provides to Governmental jobs.

Another institution of higher learning is the Higher Teachers' College which was founded in the fall of 1923, and provided evening classes for elementary school teachers training for posts in the secondary schools. The college developed and grew and now gives a four-year course to students from the secondary schools. It has five departments—Arabic literature, social science, natural science, mathematics and English, and a total enrolment of 532 students, including 178 women. On the same lines as the Higher Teachers' College is the college for women established in 1945 for the purpose of preparing teachers for the girls' secondary schools.

Other institutions of higher education in Iraq are the College of Engineering, the College of Medicine and the College of Commerce and Economics. The Engineering College was founded in 1942, but its history can be traced back to a small school of Engineering which was established in 1921. The College of Medicine, affiliated with the College of Pharmacy, was founded in 1927. The most recently established is the College of Commerce and Economics, founded in the fall of 1946.

The total number of students enrolled in all these institutions amounts to 4,119, including 583 women students, in a country of a little less than 5,000,000 population. Iraq also depends for its university educated personnel on those whom the Government sends to study in the Lebanon, Egypt, Europe and the United States of America.

Higher education in Iraq is free except in the case of the Colleges of Law and Medicine where small fees are charged. The Higher Teachers' College, the Women's Teachers' College, and the College of

Engineering are boarding schools, with all the expenses paid by the Government.

With regard to students' organizations, the student body of each college has its student council or union to assist the administration in solving problems closely related to the daily life of the students. In addition, the students organize themselves into committees to plan their social, as well as their intellectual, activities.

Special Problems

As to the problems and issues we are facing in Iraq concerning higher education and the establishment of the long awaited national university, they are much the same as in other countries. The intensity of these problems, however, may vary. Inadequate finance, too many students, lack of grounds and buildings, problems relating to research, the need for a preparatory class to enable students to matriculate in English, lack of materials and equipment, and the shortage of staff and personnel, are the most serious difficulties.

Relations with other countries

There are about 100 foreign students in our various colleges, all studying at the expense of the Government and living in boarding schools. They come from Syria, the Lebanon, Transjordan, Yemen, and even from far away Java.

Ever since higher education began in Iraq, professors from other countries have been invited not only to teach but also to give us their suggestions and recommendations regarding the development of this type of education. The need for these professors is now greater than ever before.

(*This statement is based on the report presented by* Dr. MAHOMED HUSSAIN-AL-YASSIN, *Associate Professor, Higher Teachers' College, Baghdad.*)

MEXICO

The National University of Mexico was established by Royal Charter in 1551, and started to function two years later, becoming thereby the oldest university in the Americas. During the intervening centuries, the university and its allied institutions have undergone numerous change and much reorganization, due to philosophical and political developments accompanying the transition of the country from colonial to national status.

The nature and problems of higher education in Mexico to-day may perhaps be best illustrated by a brief description of the National Autonomous University. This university at present consists of thirteen schools: medicine, law, engineering, architecture, veterinary

medicine, dentistry, economics, commercial and public accountancy, music, plastic arts, science, philosophy and letters and the Graduate School of Specialized Professional Studies. Some 22,000 students are enrolled and the annual budget is approximately 3,500,000 dollars. For post-doctoral studies and research, the university has established numerous institutes corresponding to the major scientific and humanistic disciplines. In addition to these institutes organized within the university itself, there exist in Mexico City a number of official and semi-official establishments which enjoy administrative autonomy, but are affiliated with the University Graduate School in connexion with certain aspects of their academic programmes.

Special Problems

The problem which immediately claims one's attention in considering higher education in Mexico, as in most Latin American countries, is the enormous increase during recent years in the demand for higher education, without there being anything like a corresponding increase in budgetary funds with which to meet this demand. The majority of students from the provinces, interested in pursuing programmes of specialized and professional study, crowd the faculties of the National University, because their needs are not adequately provided for within the seven provincial universities located in different regions of the Republic. An additional problem, still unsolved, is to find satisfactory procedure for selecting students who apply for admission to advanced and specialized studies. The expensive equipment required for the successful teaching of the basic sciences is practically non-existent, though slight but encouraging progress has been achieved in recent years. Library facilities still leave much to be desired in specialized fields, both from the point of view of organization and acquisitions.

Many of the difficulties which retard the progress of higher education in Mexico are due to the fact that both the public and the Government have yet to realize that a university cannot be other than an expensive enterprise for all concerned. Tuition, salaries for teaching staff, and general budgetary appropriations remain in Mexico on a completely unrealistic basis. The full-time professor, so essential for a satisfactory programme of instruction, is to-day the rare exception, rather than the norm, in all the schools of the university. Extremely low tuition fees, and an inadequate estimate of a student's minimum expenses in successfully pursuing a serious programme of study, attract to the university numerous students who have to devote so much time to work outside the university that they are unable to give full attention to their studies. This vicious circle means that both professors and students are occupied elsewhere during those hours of the day normally devoted to courses of work, so that for many, both teaching and studying become a pursuit of secondary importance carried on at times when fatigue impairs the quality and intensity of the whole educational programme.

We all agree that specialized research as an end in itself is desirable

within the programme of any large university. It is equally evident that serious research programmes demand both generously appropriated funds and thoroughly trained participants, if they are to be successful. Within a national university, moreover, successful development and subsidization of research programmes over a number of years demand a selection of research problems which will show that the needs and interests of the Government and the nation—to which the university owes its support—have not been neglected. Only recently has the National Autonomous University of Mexico sufficiently appreciated the importance of this, and set up research programmes which will contribute to the development of important national resources.

A certain instability within the administration of many Latin American universities, as well as a lack of continuity between one university administration and another, tends to obstruct the successful planning and development of long-range programmes of instruction and research. The restlessness of students, and the excessive ambition of student organizations to participate directly in the administration of the university, contribute much to this instability.

The general record of our university during the last twenty years is not so discouraging as the above emphasis on problems and difficulties might lead one to suppose. Progress achieved in the publication of books, the organization of research and training programmes within the numerous divisions of the university, and an increasing awareness of the need for a realistic clarification of aims and procedures—all these imply a serious desire within the university to improve its programme and increase the facilities for carrying it out.

(*This statement is based on the report presented by* Dr. José Zozaya, *Director of the Graduate School, University of Mexico.*)

The Netherlands

In the Netherlands there are ten institutions of higher education for a population of 9.5 millions. Some fifteen years ago there were serious discussions as to whether this number was not an unnecessary luxury for such a small country. At this moment, however, these institutions are overcrowded and an expansion of facilities and an increase in the number of universities is contemplated. There are six universities, two economic institutes, one technical and one agricultural institute. Besides these, there are other institutes for post secondary school education such as ecclesiastical seminaries, military academies and academies for physical culture, although these institutes are not generally considered to be in the category of higher education, properly speaking.

Of the institutes of higher education, six are under the charge of the public authorities; five are administered by the State and one by the Municipality of Amsterdam; the remaining four are administered under private authority. The existence of Government and private institutes side by side in the field of education may be taken as a symbol of the fact that parents in the Netherlands are free to educate their children in harmony with their own conceptions of life.

Besides the three State universities at Leiden, Utrecht and Groningen, the State administers the Technical Institute at Delft and the Agricultural Institute at Wageningen which have remained outside the universities. Their position can be explained historically but, nevertheless, it is generally regretted that they have no direct relation with university departments.

With the exception of the economic high school at Rotterdam, the institutes of higher education supported by private organizations are religious foundations. There are three of these: the Calvinistic free university at Amsterdam, founded in 1880, the Roman Catholic University at Nijmegen (1923) and the Roman Catholic Economic High School in Tilburg (1927). Until a short time ago these institutes were financed entirely by private persons or associations. This year, however, a law has been passed by which the institutes will be materially subsidized by the State. This means the extension of the principle of financial equality of public and private instruction, which was inaugurated by a modification of the Constitution in 1917. Up to then, this financial equality existed only in the field of primary education.

Both the universities and the technical schools are institutions for education and for research. In theory all our universities include the five original faculties: theology, law, medicine, the natural sciences and literature and philosophy. (In practice, this applies only to the public universities.) Departments of veterinary surgery, of economics and of political science and social sciences have been added to some universities. The conditions for all examinations, including those for the private institutes, are laid down by an academic statute in the form of a Royal Decree.

Special Problems

Some of the problems of higher education in Holland can be traced to the individualism of the Dutch character. There is a noticeable tendency in the State universities towards greater independence and autonomy. All nominations of professors and other teaching personnel are made by the central authority, the Crown, or the Minister of Education, Arts and Sciences, and all funds for personnel and material necessities must come from the State. Many complaints are heard in university circles about this cumbersome and complicated administration of which there are abundant signs. On the other hand, one may hear criticisms, pointing to the deficiency in coherence and the lack of co-operation among the universities. More co-ordination is essential, not only to provide a more economical adminis-

tration, but also to ensure greater unity in the various fields of science.

There is no organized inter-university relationship in our country; there is only the centralized authority of the Ministry of Education, Arts and Sciences. A State Commission, appointed by the Minister of Education two years ago to study the re-organization of higher education, is expected to report in a few months. It is anticipated that this State Commission will propose more freedom for the universities, especially as far as finance is concerned; and that an attempt will be made to attain more co-operation under an Academic Council, to which certain responsibilities will be delegated by the State.

It is characteristic of higher education in the Netherlands that great freedom is allowed both in teaching and in scientific research. The State does not exert any influence in these matters, and will only intervene where public order or moral standards are concerned.

Admission to the universities is unrestricted. Unlike many other countries we have no *numerus clausus* although, for the present, it has been found essential to limit the number of students in the faculties of medicine, which are seriously overcrowded. Anyone is free to follow the lectures in the universities. The passing of the final examination of the secondary schools is required only if the student wishes to sit for the university examinations. There is a curious regulation which permits anyone holding the requisite secondary school diploma to enter for these examinations, regardless of whether he has followed the university lectures or not. The standard of education of the students seems to have declined recently, particularly since the last war, but it is expected that the principle of freedom will continue to be maintained.

One of our problems is to find a better means of selecting students. It has often been noticed that a particular course of study is followed with difficulty, or even abandoned, by some of the students. To avoid waste of intellectual talent, improved methods of guidance are being considered. I do not believe, however, that in our country any pressure will be exerted where the choice of a profession is concerned.

There is also a negative aspect of our system of higher education, which is that an improvement of the moral and physical condition of the students is not officially recognized as the universities' responsibility. Public institutions take no part in the formation of the moral and ethical views of the students, although private universities differ in this respect. This part of education is for the most part entrusted to the student bodies and thus left, almost exclusively, to the organizing abilities of the students themselves. This situation is not expected to change, but, nevertheless, the question arises as to what extent care for the students, particularly care for their health, should be taken over by the university authorities. The general opinion is that this task should be included in the sphere of interests of the universities.

During the years of occupation of 1940-1945, the Netherlands universities waged a heavy battle. Most of the students, professors and

the rest of the university staff adopted a firm and implacable attitude in defence of freedom of education and learning. Due to isolation from the outside world during those years, there has been a strong tendency since the liberation to renew international contacts. Many university teachers have brushed up their knowledge abroad and have established new contacts with colleagues both by means of personal visits and at conferences. Many students have travelled to broaden their outlook.

University circles in many countries have given the damaged Netherlands universities moral and material assistance, for which we are deeply grateful, and many foreign scientists and students have visited our venerable institutes of learning. The Netherlands, for centuries a meeting place of many civilizations, and for many years a champion of international co-operation, most cordially welcomes the visitor from abroad who, with us, will further the aims of research and education.

(*This statement is based on the report presented by* Jhr. Dr. C. J. A. DE RANITZ, *of the Ministry of Education, the Netherlands.*)

NETI NDIES

In the Netherlands East Indies or, as this country will be called in the future, Indonesia, education on a university level was begun in a limited number of schools: the School of Medicine at Batavia, the Technical School at Bandoeng, and the School of Law and Social Sciences at Batavia. Just before the war two additional schools were opened: the School of Agriculture at Buitenzorg, and the School of Arts and Letters at Batavia. Although these were all Government institutions, they were wholly independent from each other. Since the war, however, a central university has been founded and the existing institutes of higher learning have become its constituent members.

The new university was confronted by many difficulties. In the first place, a large percentage of the intellectuals had been killed by the Japanese, while many others were so desperately ill that they could not resume their work. All faculties were seriously understaffed and only by strenuous efforts could new personnel be found. Immediately after the war Indonesia was occupied by the Allied troops who, in many instances, were housed in the buildings of the university and almost completely ransacked and destroyed the equipment. Even now, only a part of the equipment and materials has been restored. At the same time, there was a considerable increase in the number of new students. During the Japanese occupation primary and secondary school education was seriously affected. As a result, when the Central University was opened, the educational level of the new students was rather low, and special measures had to be taken in order to enable

them to fill the gaps in their secondary education. Owing to the arrival of students from Republican territory, this problem still causes some trouble, but the faculties have now gained experience in dealing with it.

Meanwhile, in view of political developments, the status of the university has had to be reconsidered. The Indonesian Federation will consist of several major states or *negaras*, while the states are sub-divided in councils or *daerahs*, which mainly represent ethnographical units. With regard to the Central Government the separate States and councils will have a certain degree of independence. Primary education, for instance, will be looked after by the smaller units, i.e. the *daerahs*; care of secondary education will be in the hands of the Governments of the larger units, the *negaras*; and education on the university level will be the responsibility of the Central Government of the Federation.

The central board of the university will probably be in Batavia, but the faculties will be distributed over the various States. As yet the rights and responsibilities of these States have only been roughly outlined. The definite status of the federal university cannot be fixed until the varicus States have been finally constituted and the question thoroughly discussed with the responsible government. At present this has only been done in the case of Eastern Indonesia.

There is no doubt, however, that the university will remain a State institution, operating with funds allocated by the Federal Government. Most people agree that there must be no direct interference from the Government, but that control should be effected by a board of curators with the president of the university responsible to the board. This is more or less the way in which the federal university operates at present.

Meanwhile the university is rapidly expanding. Various new faculties have been established so that at present, in Indonesia, the study of any branch of science is possible, and the faculties are distributed over the various separate states. There are new faculties of veterinary medicine at Buitenzorg, a faculty of natural sciences at Bandoeng, a faculty of medicine and of dental surgery at Soerabaya, and finally a faculty of economic sciences at Makassar on Celebes. Plans are being considered for the establishment of two additional faculties of medicine, one at Makassar and one at Medan in Sumatra. Whether, in the future, there is going to be more than one university remains a question. For the present, however, it seems advisable to concentrate every effort on creating one university of international standing.

Everyone is free to follow the lectures of the university, whether general or specialized. In this respect the regulations of the universities in the Netherlands have been adopted. In accordance with these regulations, only those having sufficient qualifications are permitted to take the examinations. In most cases university degrees obtained at the University of Indonesia are valid in the Netherlands, and vice versa. Owing to the many problems which have to be solved, and the importance of the university for the independent federal Indonesian

State, the interest in the university is considerable and its future can be considered with optimism.

(*This statement is based on the report presented by Dr.* E. A. KREIKEN).

NEW ZEALAND

The University of New Zealand is a federal University consisting of four University Colleges, and two Agricultural Colleges. The University is not itself a teaching body: the teaching and research are done in the colleges. Each University College is governed by its own Council, drawn from its own university district. Each Agricultural College is likewise governed by its own Council, but both are part of a School of Agriculture which has a separate governing body for the purpose of co-ordinating and assisting in their work

The University is governed by a Senate of thirty persons, of whom the Government appoints only four, in addition to the Director of Education. The Senate has final control of the University, both in academic and in administrative matters. In academic matters, the Senate has the assistance of certain advisory bodies of which the most important is the Academic Board, composed of representatives of the professorial boards of the colleges. The Board advises upon courses of study, upon examinations and upon any other academic matters.

In a federal university, the balance of power between the university and the constituent colleges is of great importance. The university confers its degrees upon students who are taught in the colleges by staffs appointed by the colleges. In order to maintain adequate standards, the university determines whether the professors appointed by the colleges are to be recognized as professors of the university, who alone may act as members of the Academic Board. In practice, a college does not appoint a professor unless it knows in advance that the professor will be recognized by the university. The university also approves the prescriptions for courses of study. In recent years, the university has made these prescriptions quite general in form so as to allow freedom to the teachers in the colleges to teach those subjects in which they are especially interested. Subject to the reserved powers of the university, which, as just explained, have recently been exercised in favour of freedom in the colleges, each College Council completely controls the administration of its college, including the erection of buildings, the appointment of staff and the provision of equipment. There is one student representative on each of the College Councils. It has generally been found that he has usefully put the views of students on matters of college administration.

The subjects taught comprise all the usual branches of arts and science, also law, commerce, theology, music and fine arts. There

are professsional schools of a high standard for medicine, dentistry, mining, engineering, architecture and home science. The Agricultural Colleges act as professional schools for agriculture. Special schools are being established in forestry, social studies and anthropology.

Entrance to the University

Until 1945, entrance to the university was by examination only. In that year, the Senate introduced the system of accrediting, whereby the headmaster or the headmistress of such secondary schools as are approved by the university may nominate those of their students who have completed four years of secondary education, for entrance to the university without passing the University Entrance examination. Other students may nevertheless take the University Entrance examination conducted by the university. In order to assist the working of the accrediting system, each university college has appointed a liaison officer to keep the college in touch with the secondary schools of its district. It is too early yet to say whether the accrediting system will prove to be a successful method of entrance. In the past, the real standard of entrance has been fixed by the professors at the end of a student's first year. In some years, between 40 and 50 per cent. of the number of first-year students have been failed.

Number and Type of Students

Except for the study of medicine, no restriction has been placed on the number of students. To-day, there are some 11,000 students in the university out of a population of 1,750,000, i.e. about one to every 160 of the population. Since 1939, the number of students has increased by more than 100 per cent. Many of the new students came from the armed Forces and there may be some decrease in numbers when the pressure of rehabilitation has slackened. The great increase of students brought the usual difficulties of finding space, staff and equipment. The increase has not included many foreign students. We should be glad to receive them if we could, but, in existing circumstances, probably the most that we can do is to try to assist students from war-devastated countries. Last year our Government made a grant for the purpose of assisting the Unesco scheme to aid these students.

In the professional schools, the students are full time. In arts and science about half the students are part time, and earn their own living; in law and commerce the proportion of part time students is even greater. The part time student is usually very much in earnest but naturally cannot reach the highest standard of academic achievement. We have to increase the number of full time students and the number of residential colleges which, at present, are few.

Finance

It is almost a tradition in New Zealand that education is the financial responsibility of the Government, and the funds for the university and its colleges, as in the case of primary and secondary education, come

mainly from Government grants. This is so in respect of both capital and income. The endowment income is small. Even the fees paid by students come mainly from Government bursaries paid to students who qualify for admission to the university. In the past, the colleges competed for Government grants; now, the University Senate has established a University Grants Committee. It will visit the colleges, estimate their respective financial needs, and present to the Government a budget covering, for example, a quinquennium which will be designed to enable each college to fulfil its function in relation to the university as a whole. Each college will still have freedom to establish any course of study within its constitution, but it is not likely to do so, if its own resources are not sufficient, without being assured of continuous funds through the University Grants Committee. Dependence on Government grants must always carry the possibility of a risk to the independence of a university, but New Zealand Governments have not sought to interfere with that independence.

The Future

The question of standards of admission is a live issue. Whether we shall follow the American or the British method remains to be determined. If we follow, as we do at present, the American method, large numbers of students will continue to fail at the end of the first year. If we follow the British method, we shall need to raise the standard in the higher forms of our secondary schools. Whatever method of admission we adopt, we intend that our advanced students shall have the opportunity of reaching a high level of achievement. To this end, we have recently increased the ratio of staff to students in many departments, raised salaries, improved the conditions of superannuation and made more liberal provision for leave abroad. We hope to make effective provision for the interchange of staff and students with other universities. We hope to develop opportunities for research, and have already made greater provision for this by providing funds and scholarships which will enable professors and other members of the staff to engage in research that interests them. We contemplate that some kind of applied research in science as well as fundamental research may be undertaken in the university, but in this respect, the relationship of research in the university to the research of Government departments and private research institutes remains to be determined.

In the future, the university colleges will cease to have direct control of adult education. For many years past they carried on that work, but it will now be under the control of a separate Council of Adult Education. It will continue, however, to be staffed by university lecturers.

Explicitly, we expect our university to do all that a university is intended to do—preserve knowledge, disseminate it, and advance its boundaries; and, in the process, to train minds and to equip the professions with skilled personnel. Implicitly, we expect our university to develop character. For this we rely, of course, upon the disci-

pline of university studies, particularly of humane studies, and also upon the continual association of the student with the staff, of the young with the old. In our university, this relationship is not very formal and is usually friendly. For the development of character, we rely further upon the association of student with student. They mingle in many clubs, which they voluntarily form and conduct, and which are not usually limited to faculties. There are clubs of many kinds and, as in Australia, the political clubs as such make little appeal to the general body of students. In these ways we depend on university life to develop in the student qualities of tolerance, sympathy and co-operation, and a respect for human personality and for the rights and views of other people.

(*This statement is based on the report presented by Sir* DAVID SMITH, *Chancellor of the University of New Zealand.*)

PAKISTAN

There are three universities in Pakistan: the Punjab University at Lahore, the University of Dacca, and the Sind University at Karachi. Of these, that of the Punjab is the oldest and most developed, with eleven different faculties. The University of Dacca also has most of the usual faculties, but the University of Sind, being very young, has still to develop many of them. A new university may very soon be established at Peshawar to provide higher education for the people of the Afghan race, who live on the border between Afghanistan and Pakistan. The creation of additional universities in other important centres is also being considered, as each of the present universities has to provide higher education for an area and population which is much too large to be served by a single institution. The University of Dacca, for example, is the only institution of higher education in an area of 43,000,000 population and the area of the Punjab has a population of more than 20,000,000.

The structure of the universities of Pakistan is of a dual nature. Each university has a number of more or less well-developed colleges affiliated with it, but it also has a number of teaching departments staffed by its own professors, readers and lecturers.

The main reason why Muslims wanted to divide the sub-continent of India was to establish a state in which they could live and work in accordance with the Islamic way of life. It is, therefore, natural that the Government of Pakistan has now decided that the educational system shall be inspired by Islamic ideology and shall, among other characteristics of Islam, emphasize the true Islamic principles of universal brotherhood, social justice and toleration. The universities have accepted this decision which, I believe, is one of the most important in the history of modern education. It does not mean,

however, that the universities will be content only with instituting faculties of theology in which the principles of Islam will be taught and investigated. What it does mean is that the universities will endeavour to re-examine the entire field of knowledge, in so far as it affects, or is affected by, the Islamic religion. Its purpose is to assure that the student has full benefit of the Islamic point of view in his study of all the various branches of learning. He will, of course, be free to choose it or to reject it, but it will be the duty of the universities to see that the Islamic point of view is not ignored, as has hitherto invariably been the case.

The importance of this new development lies in the fact that Islam professes to be a complete code of life, not only for the individual but also for society as a whole. It has, as such, an intimate relationship, not only with such subjects as metaphysics and ethics, but also with history, political science, economics, civil and criminal law, sociology and biology. Islam rejects the idea of superiority and inferiority among races; it makes no distinction among human beings on the ground of colour, and permits inter-marriage between them; it abolished interest on money loans of all kinds, which strikes at the very root of capitalism in its present form; it requires an annual levy on capital; it lays down the principle that the criterion of high or low among mankind consists neither in wealth nor in power over others, but in serving others; it regards all human beings as but one community, and sees as the great ones among them, only those who submit to God and carry out His will.

I am conscious of the fact that the intellectual climate of to-day is averse to religion, at least in its revealed form, and that we in Pakistan are running a great risk of being regarded as medieval and reactionary because of our desire to integrate education and religion. But we believe that reaction is not necessarily antagonistic to real progress and that everything modern is not necessarily superior to everything medieval or ancient. Islam, we believe, is entirely at one with modern civilization in its characteristic emphasis upon the contemplation of nature and the harnessing of natural forces in the services of man. The differences of outlook between Islam and modern civilization is not over the scientific progress of man, but over the purposes of human life and the way in which such life should be lived if its ultimate purposes are to be achieved. A clear knowledge of these purposes of human life and of the ways and means for their realization is, according to the Islamic view, the finest goal of higher education. We regard education to be incomplete, or even dangerous, if it is not illumined by the spirit of religion.

Special Problems

One of the problems with which we are faced in Pakistan is that of language. The medium of instruction in our universities, as in the case of the universities in India, has hitherto been the English language. We have benefited from this in many ways, but we feel that imparting education in a foreign language entails a serious loss of

time and effort. We have therefore decided to replace English by Urdu as the national language. English will thus assume the place of a secondary language, but a sufficient knowledge of it will be required for students entering professional colleges, or taking up post-graduate work. Serious problems are created by this change, especially in connexion with the translation of books from foreign languages, and in the use of technical terms. But, fortunately, progress has already been made through the work done at Osmania University in Hyderabad and we hope, within a reasonably short time, to make Urdu an efficient vehicle for imparting higher education in all its forms.

Another urgent problem that is giving us a great deal of immediate anxiety is that of the rehabilitation of students who have come to us as refugees from India. In the partitioning of India, between seven and eight million persons migrated from India to Pakistan and between four and five million from Pakistan to India. These refugee students and their parents have, for the most part, lost all they possessed and have no means to pay their tuition fees, to meet the cost of board and residence, or to purchase books. The universities are trying to ameliorate the situation as best they can, and the Government and the public are helping as much as possible. But the problem is too vast to be solved satisfactorily within a short time.

The exodus of Hindus and Sikhs from Pakistan has left large gaps in the staffs of the colleges and universities. Some of their places have been filled by Muslim refugee teachers from India, but the magnitude of the dislocation is so great that another three to five years must elapse before our universities can begin to function in a normal manner.

(*This statement is based on the report presented by* Dr. O. H. Malik, *Vice-Chancellor of the University of the Punjab, Lahore*).

Portugal

There are four universities in Portugal: three classical universities at Lisbon, Oporto, and Coimbra, and one technical university at Lisbon. Speaking generally, the teaching in these institutions is remarkable for its profundity and scope; but for this very reason, it gives rise to some serious problems which, indeed, are not peculiar to Portugal, but exist to a certain extent in all countries.

The mission of the University has changed. In the Middle Ages, when it was created, the University was not really designed for scientific research or for professional training. Its object was enlightenment, not as a pretentious adornment of the mind, but as a loftier outlook on the world and on life; in fact, as a living system of ideas in regard to man's environment, his own values and his aspirations.

For in the universities of the Middle Ages, the subjects chiefly taught were theology, philosophy and the arts.

The rôle of the modern university is different. It has two ultimate aims: one is education for the intellectual professions; the other is scientific research and the training of scientists. Enlightenment of the mind is no longer the object of the University. Man, that "unknown quantity", is nowhere being studied in his essential nature, as a living, biological and moral entity. The scholar or the technician, with some rare exceptions, does not have his mind enlightened. He knows his special subject thoroughly, but he is ignorant of everything outside it and has a false idea of himself.

It is essential that the University should regain its former rôle. It must re-establish the unity of man, insist on the common basis of all the sciences and equip students with a system of ideas concerning the world and life.

The whole university system should be founded on three basic ideas: enlightenment of the mind, training for professional careers, and scientific work. Science is the vital force of the University; it provides a basis for enlightenment and it provides the direction for professional technical work. But it is not a part of the duty of the University to make students into scientists; it is, rather, to make all students into persons with enlightened minds and competent as technicians. These are larger issues with which the universities of Portugal and the universities of the world are wrestling.

Turning more specifically to our immediate problems, the most remarkable feature of university life in Portugal in recent years has been the increase in the number of students. The number enrolled in higher education now exceeds by one-third the total number in 1939-1940. The major reasons for such expansion are: (1) the increase in population; (2) the complexity of modern life which is demanding more specialization and opening up new fields of employment; and (3) the increased prestige of certain sciences.

The influence of the second and third factors is very marked and is reflected in the increases in the number of students in the different schools. While the increase in the faculty of letters is only 6.7 per cent., and in law, 19.2 per cent., it is 59.2 per cent. in the higher agricultural institutions, and 84.5 per cent. in engineering.

The supremely important question which is raised by this phenomenon is whether it has caused a lowering of the average intellectual level of the student. In Portugal, to the best of my belief, these increases have not, on the whole, caused a lowering of standards, except in those schools, such as the Faculties of Letters and Law, which attract fewer young people. This is not the case in the other faculties, which enjoy an immense prestige owing to the enormous material progress which has been accomplished in their fields.

(*This statement is based on the report presented by* Professor Dr. Inocêncio G. Teles).

All the institutions of higher education in Siam are at present in Bangkok, the capital; due to its geographical situation the city is the centre of commerce and communications, as well as of the country's administration. Bangkok has a population of some 600,000. The next largest town has less than 60,000.

Siam's institutions of higher education are all in the nature of Government Departments, the appointment of staff and other functions being in accordance with the rules and regulations of the Civil Service Act. This is due to the fact that when education on Western lines was organized, the State had to take the initiative. The Universities developed out of the professional schools which the Government found it necessary to set up, some fifty years ago, in order to train officials to staff its various departments. Schools, such as the Normal School and the School of Administration first became the Civil Service College. Later, in 1916, together with the Medical School, the College was raised to the status of a university and named "Chulalongkorn", after the King who founded it.

The academic side of the University is under the control of the University Council, consisting of the Deans of Faculties, Heads of Departments and Government-nominated members. There are now six faculties in Chulalongkorn University—engineering, arts, science, architecture, commerce and public administration. Those of medicine, pharmacy and dentistry were, in 1940, separated out into another university and placed under the then newly instituted Ministry of Health. The Faculty of Medicine has received valuable aid from the Rockefeller Foundation and was the first to grant degrees. The former School of Agriculture and School of Law became separate institutions of university status.

Special Problems

The major post-war problem of the universities in Siam is that of increased enrolment and public demand far beyond their capacities. The present total number of full-time students is about 3,500, of whom about 40 per cent. are women. It is an average increase of about 70 per cent. over the number in South-East Asia immediately before the War. The cause for this increase must be attributed to normal growth, when one considers that this number of 3,500 represents a ratio of only one in 5,000 of the 18,000,000 population of the whole country. With the more strictly enforced Primary Education Law and the expansion of the secondary schools, the demand for higher education is likely to be intensified in the near future, and plans are being made to set up at least a branch of an existing university, if not a separate university, in a provincial centre.

In coping with this demand the difficulties encountered are lack of staff, equipment and buildings. The universities in Bangkok have suffered comparatively slight material damage during the war, but

since the war ended, economic conditions have considerably worsened. The cost of living has gone up ten times, but the Government has only found it possible to increase four times the salaries of its civil servants, which include the university staff. Under these conditions, men with proper qualifications prefer a business career to a post in the university.

Also, before the war a number of foreign lecturers and professors were engaged on contracts, but now the same number cannot be engaged because, in addition to the rise in the cost of living, the rate of exchange has dropped sharply. In order to make the position attractive enough for a foreign professor to come to Siam, he would have to be paid some ten times the pre-war salary in Siamese currency. Such a condition is particularly unfortunate, because it adversely affects the teaching of English. English is important, not only from the point of view of the study of modern languages as such, but also as a medium of study in the higher education of technical subjects, such as medicine, engineering and commerce. We do not have textbooks and journals on these subjects in Siamese, and before such books can be written, technical terms in Siamese have to be coined and standardized. This has been done for general elementary science, but for higher education we have to rely almost entirely upon books in English.

In preparation for future expansion, the Ministry of Education has now decided to resume, on a much larger scale, the pre-war practice of sending students and teachers abroad for further study. We expect to be able to send them to the countries to which we used to send them before the war, such as the United States, Britain and France, as well as to some others—Australia in particular. But here again, there is the problem of over-crowding, for it is plain that in most of these countries there is scarcely any room to spare for foreign students. But delegates from countries where the ratio of university students is in the order of one to several hundred of the population, will realize our dire need, for we have one student in every 5,000 of the population. I am sure that, knowing this, they will do all they can to help us.

(*This statement is based on the report presented by* Prince RAJADABHISEK SONAKUL, *Rector of the Chulalongkorn University, Bangkok*).

SWITZERLAND

Switzerland constitutes—especially from an academic point of view—an international society in miniature. Of the nine institutions enjoying university rank, one only, the Polytechnical School at Zurich, is a Federal establishment. The seven universities, properly so-called, and the High School of Commerce at St. Gall are cantonal, i.e., they

are financially dependent on the canton governments, which are responsible for all institutions of public education, with the single exception mentioned above. Since the Federal authority does not deal with the universities, it cannot form a connecting link between them. To remedy this defect, a Conference of Rectors has been created, and steps are being taken to give it the requisite stability and permanence. It is intended to serve as a centre of co-ordination for the universities, as a forum for the discussion of their common problems, and as an organ capable of representing them before the Federal authority.

As the Swiss universities were created at different times and under different conditions, they are in no sense uniform in character. Each possesses a marked individuality; this can be seen, for instance, in the different systems of degrees and examinations.

The advent of the Nazi régime in Germany and the collapse of that country after the war, caused a profound disturbance among the universities of German Switzerland by cutting them off from the traditional intellectual *hinterland* with which they had formerly maintained close relations. It is probable that members of the Swiss university staffs in that part of the country will be called upon to play a part in restoring the academic organization of Germanic Europe. The relations of the universities of French Switzerland with France were never of the same character, and their temporary isolation was not felt so acutely.

One of the essential characteristics of the Swiss universities is their cosmopolitanism. This is revealed in the frequent selection of professors from foreign countries, who are not even obliged to acquire Swiss nationality; and also in the composition of the university population which, in the present year, includes representatives of forty-five different nationalities. However, the proportion of foreigners and Swiss nationals varies greatly as between one university and another. The presence of this foreign element in our universities is of some importance, as in many cases the local population would be unable to provide a sufficient number of students.

Persons applying to enter a university have to possess a secondary school leaving certificate. It is not always easy to appraise the value of the certificate produced by foreign students, and the practice of the different universities is not uniform in this respect. The term "undergraduate" is unknown in Switzerland. The university is a "post-graduate" school. In this school, the students are engaged simultaneously in qualifying for higher grades, and in conducting scientific research, either in the faculties or in the numerous specialized institutions which are attached to a university—or to several universities at the same time.

The Swiss universities are essentially dependent for their maintenance on the generosity of the cantons, and their upkeep constitutes one of the larger items of the cantonal budgets. In accordance with the liberal tradition, which retains its vitality in Switzerland, relations of mutual trust have hitherto been maintained between the State

authorities and the boards of the universities represented by the rectors, who are nominated by their colleagues for an unspecified term of office. The members of the Swiss university staffs are not treated as Government officials, and do not regard themselves as such, for the State gives them complete liberty in the discharge of their duties.

Special Problems

It is important that the faculties of moral sciences should be able to provide a seminar system of teaching in which practical exercises and study-groups correspond to the laboratory work carried out in other faculties. As this can only be done usefully in small groups, it is necessary to provide auxiliary staff, and to assume the budgetary liabilities which this entails.

The rising cost of printing, which has reduced the publication of the theses and treatises of the professors, is another cause of concern.

A further difficulty arises in connexion with the restoration of the university community. It is true that in every university in Switzerland local societies of students have been formed, as well as student associations for the different nationalities. There are also general associations of all students, irrespective of their nationality, which are also federated. The chairman of each group acts as a link between the Rector and the body of students.

The problem is how to give a soul to the university; in other words, how to prevent it from gradually acquiring the character of a technical and professional school. What can be done to ensure that the students who pass through it shall carry away with them, not only the consciousness of having acquired a knowledge of certain matters, but also an ideal of life and a moral orientation which will equip them to become good citizens in whatever field they may be destined to work? That inspired sense of unity which alone animates a university, cannot be expressed in administrative forms, but only in the acceptance of an ideal, freely chosen and freely followed by the teacher and by the students.

(*This statement is based on the report presented by* Professor André Mercier, *Professor and Secretary to the Rector, University of Berne*).

Turkey

Turkey has, at present, three universities: the University of Istanbul, the Technical University, also in Istanbul, and the University of Ankara. In addition to these three, we have a large number of higher schools, most of which are under the authority of the Ministry for National Education.

The University of Istanbul is the oldest and, five years hence, will celebrate its 500th anniversary. It has six faculties: medicine, with schools of dentistry and pharmacy; law, science, letters, economics, and forestry—the last detached from the Institute of Agriculture and incorporated in the university in 1948.

The Technical University was constituted in 1942 but had its origins in the School of Military Engineering, founded in 1778, and the higher School of Civil Engineering, established in 1880. It consists of four faculties: civil engineering, mechanics, electricity, and architecture. The University of Ankara is the newest, founded in 1946 by the fusion of faculties already in existence—law, letters, and science—and the creation or attachment of three others—medicine, veterinary surgery and agriculture.

The number of students enrolled is 13,000 at the University of Istanbul; 1,300 at the Technical University, and 6,500 at Ankara. In the total of approximately 21,000, which represents one in 700 of the population of Turkey, there is a large proportion of women students, more than 50 per cent. in some faculties. We have very few foreign students in our universities.

All the universities belong to the State. At the present time, 2.2 per cent. of the Government's annual budget is spent on higher education and comprises 93 per cent. of the income of the universities. Under the new law enacted in 1946, the universities enjoy a very wide autonomy. Within this framework, the faculties also enjoy scientific and administrative autonomy and have their own legal personality. The professors and deans are elected by the Board of Professors, and all proposals for the creation, abolition or amalgamation of professorships or faculties are put forward by this Board. Administrative matters within each faculty are handled through an Administrative Board elected by the professors. The supreme organ of each university is the Senate, which drafts laws and regulations affecting the university as a whole.

An Inter-University Council is made up of *ex officio* and elected representatives of each institution. The universities are not under the authority of the Minister of National Education, although he is the Chairman of the Council and is, personally, the Head of the University. In that capacity, he supervises the institutions, exercising his supervision by presiding over the Council, by obtaining information from the universities, by approving the decisions of the University Boards which require his ratification, and by requiring the examination of any decisions of the Boards which, in his opinion, need to be reconsidered. Decisions which are transmitted for ratification by the Minister must be approved within three months or they are deemed to have been ratified.

In our universities there is no age-limit for professors provided they continue to perform their duties satisfactorily. University professors have the same prerogatives as other high Government servants. There are already several Turkish women holding university professorships. We also have many foreign professors who are engaged under contract and enjoy nearly all the same privileges as the Turkish professors, even

being eligible for election to the administrative boards or to the Senate.

There is an Association of the Teaching Staff of Turkish Universities which is affiliated with the International Association of University Professors and Lecturers.

Student Selection and Assistance

The very rapid development of secondary education in our country has resulted in increasing numbers of applications for university admission. Consequently most of our faculties have been obliged to adopt a *numerus clausus* and to select students. Also, since the university is a community of persons possessing higher qualifications or capacities, it cannot open its doors to everybody. It is compelled to make a selection according to such standards as are considered adequate.

In addition, in most of the faculties, we apply a system of inter-university barriers. For example, in our medical faculty, if a student does not pass his preclinical examinations, he may not register for the more advanced terms. We regard this system as one of great practical utility. It saves young people from vainly pursuing their studies and gives them a chance to seek some career which makes less exacting demands. At the same time, it lessens the strain on the teaching staff and allows them to devote more time to scientific research and improved methods of teaching.

In Turkey, university education has always been of a democratic character, in the sense that it has never been the perquisite of a privileged class. The university grants many scholarships to poor but able students; students also enjoy other advantages such as free health examinations and health care.

Also, in Turkish universities, there is no discrimination among either students or teaching staff on grounds of race, religion, or sex. In each faculty, the students have a Students Association with voluntary membership. There is a union of these associations in each university, and a National Federation of Students for the whole of Turkey.

(*This statement is based on the report presented by Professor* Tevfik Saglam, *Professor of the Faculty of Medicine, Istanbul University.*)

United Kingdom

There are seventeen universities in the United Kingdom and four independent university colleges which, although they do not grant degrees, share in the ideals and aims of their older and larger brethren. The universities vary greatly in size, ranging from London, which in Michaelmas Term 1947, had an enrolment of nearly 16,000 full-time students, to Reading, with just under 1,000. However different in size, they all have one remarkable feature in common: none of them

was State instituted. They are all self-governing societies working under their own charters and deeds of incorporation; all have their own governing bodies, and control their own finances, without external interference. They appoint their own professors and lecturers, and themselves decide whom they will admit as students and what educational standards shall be demanded, both at admission and for degree examinations.

These universities fall into five major groups. First, because of seniority, if for no other reason, come Oxford and Cambridge, both Federal universities, medieval in origin, each formed by the association of some twenty colleges, which are themselves autonomous corporations, often owning considerable estates. These two universities are entirely residential; entrance to them can only be obtained through a college. They account for rather less than one-fifth of the total number of full-time students in the United Kingdom.

Next comes the University of London, also a federation of various colleges and teaching institutions, few of which, however, are primarily residential. About one-fifth of the student population is in the University of London.

The third group, the Scottish universities, are four in number. They are ancient foundations which date back to the xvth and xvith centuries, primarily non-residential but with a strong corporate undergraduate life. The Scots have always been great believers in university education, and the proportion of students in the population is twice as large as it is in England. In all, the Scottish universities account for about a fifth of the student population of Great Britain.

The fourth group comprises the civic universities such as Manchester, Birmingham and Bristol. Since these have all grown up in large centres of population, most of their undergraduates live at home and spend an appreciable amount of their time in travel, with a consequent loss in their communal life. In these universities there is a growing appreciation of the benefits of residence in a college, and hostels are growing in number. Plans are being discussed in some of the civic universities to make residence compulsory during at least part of the course. It is in some of these universities that the most spectacular increases in student numbers have occurred since the war.

The fifth group is the University of Wales which is federal in constitution and consists of four colleges in different parts of the Principality.

At the commencement of the last academic year, autumn 1947, there were nearly 77,000 full-time students registered at the different universities. This is roughly a 50 per cent. increase in the enrolment over the last pre-war year. This increase has, however, not been evenly distributed and the rise in numbers ranges from 17 per cent. in Cambridge to more than 100 per cent. in Birmingham and Sheffield. Residential universities like Oxford and Cambridge cannot greatly expand without altering their whole character and this they have no wish to do. On the other hand, if there is a maximum number of students which cannot be exceeded in a university of the British type, there is probably also an optimum. The smaller universities and

university colleges in Britain may be expected to grow at rates very different from the larger and older established institutions during the next decade.

Special Problems

Expansion brings the familiar problems of shortages in buildings, libraries, apparatus and staff. These are not solved by the provision of more money—it is the need of what mere money cannot buy that raises current problems. Buildings, raw materials and labour are in short supply and require priorities. These can only be granted in proportion to the needs of the country as a whole for housing and replacements in our devastated areas

There has been and still is a shortage of standard books, both "texts" and "authors". This is making the student rely more and more on borrowed books. The valuable and scholarly practice of forming a personal library, however small, is almost impossible for the modern student to adopt. There is a growing tendency for institutions to lend books among themselves, through such a body as the Association of Science Libraries. This service is particularly well developed in Britain, and together with the use of microfilm and photostatic copies, is proving a great boon.

Of all the shortages, that of staff is the most serious. There are not enough trained men and women of the right calibre to fill the vacant academic positions. Opinions might differ, but to me, as in fact to many of my colleagues, it seems that this shortage exists as much because the people just are not there, as that the demands of research institutes, governmental and industrial, have drained them away. Ten to fifteen years ago, there was an under production for our present needs by the universities. Until enough potential teachers and research workers can be produced, any considerable permanent expansion of the student body will have to wait if standards are to be maintained. It follows, therefore, that the utmost care should be taken in the selection of only the best material from the masses of potential undergraduates. This may seem harsh to certain young people, because 90 per cent. of the vacant places are now reserved for ex-service men and women, but a restriction of numbers is at present essential if we are to conserve our standards. Over-rapid expansion must lead to a decline in standards which will be cumulative in its effect and will ultimately destroy the very thing it sets out to advance.

A new problem is arising in British universities at the moment. This or that department is often requested to undertake, for a limited period of time, research on one or another problem for the Government. These requests are more difficult to resist than those coming from industry since the problems are often interesting and of a fundamental nature and the requests are baited with offers of money, staff and apparatus. But to accept does mean that valuable space is occupied, and that the time of the head of a department is taken up in supervising the work. Ultimately there may grow up within the university what is virtually a separate research institution, excellent in itself,

but upsetting the balance of studies. In Oxford we have set up a "balance of studies" committee, whose function is to consider new projects in relation to development as a whole. It is our desire to maintain the traditional balance between the humanities and basic sciences on the one hand and the newer and more technical disciplines on the other.

British universities have traditionally been financed by private benefactions, a source that must inevitably diminish with the decline in private wealth. Of recent years there has been a great increase in Government grants which are made through a body called the University Grants Committee. Although appointed by the Prime Minister, this is not a State department, but a body consisting largely of men and women of academic distinction, charged with the duty of advising the Treasury as to the total grant to be made available for university education, and as to its distribution amongst the several universities. The Committee visits the universities periodically and discusses their needs with them on the spot. It then recommends maintenance grants on a quinquennial basis, and capital grants for new buildings and special items of equipment. The maintenance appropriations are on a block basis; their detailed utilisation is the responsibility of the university itself. It is noteworthy that there has been no less than a fourfold increase in government grants to the British universities since the war, although their student population has only grown by one half.

Higher Education in Colonial Territories

There have been remarkable developments in progress in the British Colonial territories. The range here is enormous, extending from the Royal University of Malta (founded in its present form in the eighteenth century, and badly damaged by air raids during the war), to the University of Hong Kong, and the Medical School and College at Singapore, which suffered grievously at the hands of the Japanese. Reconstruction and reorganization are being taken actively in hand: while, in addition, new university colleges are now being established in the West Indies, and in West and East Africa. The financial basis of all this activity derives from a capital grant of six million pounds from the Colonial Development Fund—that is to say, from the British taxpayer at home, reinforced by substantial annual contributions from local colonial funds.

Here is a vast new field which is being opened out to higher education for the first time, and this, while secondary education is still in embryonic form. The difficulties and dangers are obvious; it is, nevertheless, a great experiment, full of immense possibilities for many of the most primitive, as well as for a few of the most advanced, peoples of the world.

(*This statement is based on the report presented by Professor* T. G. B. Osborn, *of the University of Oxford.*)

An Oxford University debating team, which visited sixty colleges and universities in the United States last year, later aptly summarized in a sentence the fundamental difference in the American and British attitudes toward higher education: "America seems to have decided that educational facilities shall be shared among as many people as possible; the British, that there shall be open competition for a limited number of top-level opportunities." The same contrast would be essentially applicable, I believe, to American and continental views of higher education.

A few figures will indicate quickly the enormous difference between the United States and England in the availability of college and university education. The proportion of the population of university age attending the British universities is still less than 2 per cent. In the United States, in contrast, about 15 per cent. of the young people between the ages of eighteen and twenty-one were in attendance in some 11,800 institutions of higher education in 1947.

Although no other country may even have dreamed of the great expansion of higher education that the United States has already experienced, President Truman's Commission on Higher Education, composed of both academic people and distinguished laymen, has just proposed that the present enrolment of about 2,300,000 students should be doubled by 1960! The Commission set the figure of 4,600,000 students not as a prediction, but as a goal. This number was established as a measure of the educability of the population *for periods of different length* and *for education of various kinds* beyond the high school

It seems unlikely that an enrolment of 4,600,000 can actually be attained by 1960, but a college and university enrolment of 3,000,000 in a little more than a decade is not only possible but probable. This growth—or the Commission's much higher goal, for that matter—would be entirely consistent with the whole of the educational, social, economic, political and cultural development of the United States.

All education in the United States, elementary, secondary and higher, is based on the belief that a democracy cannot exist and grow merely through the leadership of an intellectual élite. The recent development of both secondary and higher education in our country is an expression of the conviction that a modern democratic society must have a large body of citizens who possess a deep understanding of the problems of modern life; who are devoted to the purposes and ideals of a free society; and who will take a responsible and enlightened part in public affairs, both national and international. Furthermore, there is a widespread feeling that the highly educated few are unlikely to be recognized or accepted as leaders in a democracy if the great body of citizens have no basis of communication with them. The problems of human society are not likely to be solved as long as there exists a great intellectual gulf between the highly educated few and

the meagerly educated masses. The differences among citizens in a democracy should take the form of gradations instead of sharp distinctions between the uninformed and the enlightened, the uncultured and the cultivated, the vocationally educated and the liberally educated man.

It is not uncommon in England to hear it said that the United States educates for quantity and Britain for quality. But I think that the apparent contrast in quality between American and English education may be, to a considerable extent, a difference in the kind of education given and in the intensity with which it is conducted. The high school in the United States emphasizes a broad general education, even for students who expect to go on to the university. Much of the work of the first two years in the college and in the university, and some of it at least in the upper two years of the undergraduate course, is devoted to general education. Undergraduate concentration in the American university is less narrow and intensive than the specialization characteristic of English and continental universities, and there is a growing tendency to defer even more of the students' highly specialized work to post-graduate years There is a decided movement, too, to broaden the student's programme of graduate studies. In many instances, his field of specialization will cut across several disciplines.

Due to these two trends—much greater stress on general education, and broadening the field of concentration—the total time taken to attain a high level of specialization is greater in the United States than in English or continental universities. In the end, I believe, one may expect that the accomplishments of our scholars and scientists will be worthy of comparison with those anywhere in the university world.

Nevertheless, I think it is only fair to say that we in the United States have been more successful in democratizing higher education than in individualizing it. It is not undemocratic to recognize and nurture intellectual talent, or any other kind of unusual aptitude. A democracy needs all the talent it can find. The problem before us in American education is to capitalize to the fullest extent the potentialities of all the people.

In spite of the wide availability of higher education in the United States there is still what President Conant of Harvard refers to as a great wastage of talent. Many students of outstanding ability are financially unable to continue their education beyond high school, or to secure a lengthy and costly professional education. President Truman's Commission on Higher Education gave highest priority in its recommendations to means of extending equal educational opportunity to all without regard to race, creed, sex, or financial status. In order to lower financial barriers, the Commission proposed an extensive system of federal scholarships and fellowships.

If education beyond the high school is to be extended to a large proportion of the population, it is obvious that it must not only be individualized with respect to general intellectual capacity, but also with respect to special interests and aptitudes, as well as to different educational and vocational goals. This will entail not only a variety of educational programmes within institutions of complex organization,

but also a variety of kinds of educational institutions beyond the high school. The universities in the United States, particularly the great state universities and land grant colleges, have already incorporated a much wider range of occupational curricula than the English or the continental universities.

The report on "The Problems Facing British Universities" recently issued by Nuffield College, Oxford, takes what would be considered in the United States a very conservative position with respect to the occupational training for which the university should take responsibility. In brief, the report concludes that the British universities should limit themselves to teaching and research in fundamental disciplines, to preparation of teachers for the grammar schools and the universities, and to education for certain so-called higher professions. The report recommended that much of the specialized and professional work undertaken by the American universities should, in England, be given in separate institutions rather than in the universities proper.

Here lies a fundamental difference between university education in the United States and in European countries. The State universities and land-grant colleges, and to no small degree the great private universities, have been responsive to the needs of a complex industrial society for specialized personnel. From the American point of view it is desirable to keep these professional curricula within the university for at least two reasons: first, because specialized training at this level should be combined with general education leading to a rich personal life and to intelligent participation in public affairs; and second, because education in the applied sciences and in such professional fields as education, journalism and social work, should be based upon, and should be conducted in close relation with, the disciplines fundamental to them. If specialized training is to rise above mere technology, if it is to be broadly conceived rather than narrowly designed, if it is to be concerned primarily with general principles rather than the details of practice, it needs to be given in a university setting.

We are rapidly discovering that the same holds true in research. Purely routine research, whether in technical and professional fields, or in the arts and sciences, is out of place in the university. But we ought not to make the mistake of assuming that routine research and applied research are synonymous. Only profound ignorance of the contributions to fundamental knowledge that have been made in recent years, in university departments of agriculture and medicine, would lead one into that fallacy.

Recognizing the importance of research, President Truman's Commission on higher education urged the Federal Government to appropriate large sums to support investigation in the universities. It asked for research funds, not only in the natural sciences, but also in social science, human behaviour, and education; fields which, in comparison with the natural sciences, have had pathetically meager support, but fields on which our security, yes, our very survival, now depends.

(*This statement is based on the report presented by Dr.* THOMAS R. MCCONNELL, *Dean of the University of Minnesota.*)

APPENDIX A

REPORTS PRESENTED TO THE CONFERENCE

1. Equivalences in Entrance Requirements and Degrees

A Statement Prepared by the International Association of University Professors and Lecturers

Part I: General Analysis

It is perhaps a truism to say that the university system in any country depends on the school system in that country, but the reverse is also true, though less obviously. The character of the training given in a university must depend on the nature of the preparation its students have received before they enter. It is likewise true that, however little direct control universities may have over schools, yet the demands which universities make on candidates for admission, must inevitably have profound effects on teaching in the secondary schools. Thus there is mutual interaction at the admission level. The university systems of most countries are older than their school systems; but there has been so much interaction between them that they have largely, though by no means completely, shaken down into some kind of *modus vivendi*. Problems enough remain, however, and we are faced at this moment in Great Britain with an acute question in the process of mutual adjustment; namely how far the universities are justified in imposing their requirements on schools, 70 per cent. of whose pupils will not go to a university; and conversely how far the schools can be allowed to dictate to the universities in the preparation of the other 30 per cent. for university entry.

Logically, it would seem that we must start a survey of comparative standards in the universities of different countries with a survey of their conditions of entrance, since their degree schemes inevitably depend on these conditions and the latter, in their turn, depend upon the school system. In plain words what we make of a student must largely depend on what he is like when we get him.

A world-wide survey of this kind has never been made, for two obvious reasons; first, it is very laborious to collect the information,

and secondly, it has been nobody's business to make it. Individual universities have tackled the problem *ad hoc*, investigating each case as it arose and building up for themselves a table of equivalences, which is, in many cases, kept as their private property. France, with a unified state system of universities which receive so many students from other lands, has gone rather further and has prosecuted enquiries on a national scale, but, even in this case, limited to the interests of the French universities.

Only one attempt at a world survey has been made, namely by the International Federation of University Women, whose report "*Types of University Training*" was published in 1934. This was a pioneer effort, deserving of great praise for the work involved in marking out a path through unknown territory. It was, however, only preliminary and was chiefly concerned with women, to whom alone applied its otherwise excellent analyses of the degree courses taken in universities. In regard to entrance qualifications it also confines itself to a simple statement of the name of the examination required, without any indication of its character or of the equivalents accepted, except what can be deduced from the age at which it is normally taken and from the number of years of secondary school education which preceded it, both of which are represented in a diagrammatic chart.

It is only since the late war that any international bodies have come into existence charged with responsibilities for higher education as a whole. Of these Unesco is naturally the head, and it is a matter for great satisfaction that its Education Department undertook in 1947 to begin a world-wide study of university systems and their standards and equivalences. The International Association of University Professors and Lecturers is another such body, which arose out of the war-time association of many Professors of allied countries as refugees in Great Britain. It now has thirteen national associations of University Teachers affiliated to it and twelve more are in process of formation. At its general Conference in Brussels in April 1947, it adopted a programme in which it specified, as one of its principal interests, the study of university equivalences. Since it has been the wise policy of Unesco to maintain close contact with all unofficial bodies working in the same fields as itself, an arrangement was subsequently entered into between Unesco and the I.A.U.P.L., whereby the enquiries made by the latter body should be integrated with those made by the former. It is with the encouragement of Unesco and with a view to assisting in its enquiries, that this report is presented.

As yet only partial information is available and we shall later make a few suggestions of the lines along which further enquiries might be usefully prosecuted. The information already obtained and promised relates chiefly to the equivalences admitted for university entry, which may be regarded as some guide to the standard of admission in each country concerned. As shown in the appended list, information has been collected from thirty countries; some interim information has been received from two others; while ten other countries have reported, promising information after public enquiry.

Since the contractual relationship with Unesco for the furtherance of the investigation was only entered into at the beginning of the present year, this may be regarded as a very satisfactory start.

It is suggested that the enquiry into standards and equivalences should be divided into sections along the following lines:

First: the entrance requirements of universities, collectively and individually.

Second: the qualifications respectively recognized as equivalent and allowing admission in each case. These two obviously go together and form Part I of the investigation.

Third: the various types of degrees or diploma schemes, up to the standard of initial degrees.

Fourth: the recognition of degree courses as equivalents for admission to post-graduate study for higher degrees. These two, again, are closely related questions and form Part II of the investigation.

Fifth: the position regarding international acceptance of professional qualifications, in so far as these are of university standing. This is a very difficult question and should be kept separate as Part III.

The first part of the enquiry is in several respects the simplest and the others depend upon it. It may be urged that, from the practical point of view, there is more demand for the information regarding admission to post graduate work than to undergraduate studies. That is a matter of opinion, but it may also be fairly argued *per contra* that the equivalence of a degree course cannot properly be decided unless we know the standard of general preliminary education upon which that course is founded. Most of us have had experience of post graduate students, holding some university degree and formally qualified to enter upon research work, whose standard of general education was so weak that they should never have been recognized as eligible for a higher degree. It is to avoid that situation that we seek to link part II of the enquiry to part I. It is not really enough to say to an applicant for admission to higher studies, "Have you a recognized degree?" One should also ask, "Would you have been eligible for admission to any university, supposing you had come here in the first place?" for the one qualification without the other may be hollow and unsound. We do not mean to urge that every particularity of the entrance conditions in each university should be required of the post graduate student, but only that the post graduate entrants should, in a broad sense, have reached some general standard of entry equivalence such as may be agreed upon as a result of this enquiry. This is based upon the belief that the possession of such an entry equivalence is, even for the post graduate student, second only in importance to the holding of a university degree.

From a survey of the information available from thirty countries, given in this report, touching upon equivalences for admission

to universities, it becomes clear that they may be divided into two general categories.

Category 1. A comparatively small group of universities requires that each candidate shall satisfy them at a special entrance examination of their own. (Certificates of secondary education must be presented in order to be admitted to these examinations.) This is quite apart from tests in proficiency in the language of the country, which are much more widely imposed. In this category are: Bolivia, Brazil, Bulgaria, China (except for post-graduate students), London University (for students from outside the British Commonwealth), Poland (not definitely ascertained) and Switzerland (for the Federal Technical University only).

Category 2. A much larger category accepts certificates of secondary education from other countries, for admission without further examination, but among these countries there is a significant division into two groups.

Group 1. Accepts quite generally a certificate which would admit the student into *any* university in his own country without specification, or at least that is what their regulations state. In most of such cases however, claims of equivalence are subject to individual consideration.

In this group are the following: Austria, Denmark, Egypt, Finland, France (Faculties of Law, Science and Arts), Hungary, India, Italy, Mexico, Pakistan, Palestine, Turkey.

Group 2. Limits recognition, *either* by retaining unfettered discretion in each individual case; i.e. New Zealand, Northern Ireland, Uruguay, U. S. A. *or* by restricting recognition to certain types of certificate only, which are determined as "recognized" certificates, and of universities whose matriculations are acceptable and which are considered as being of good standing or of senior status: i.e. Australia, Belgium (certificates must be homologous with Belgian certificate), Czechoslovakia (Latin obligatory), Great Britain (except London in part), the Netherlands, Norway.

There evidently exists a considerable amount of discrepancy between different countries in their attitude to this problem, but it is perhaps significant that those countries which are most apt to receive foreign students and which have naturally given the closest attention to the problem, are the countries where a restriction of the recognition of foreign equivalents has usually been adopted. There is little likelihood of persuading such countries to abandon the restrictions which they have found desirable in practice. Furthermore, in spite of the apparently open door in the countries of group 1, there is in most cases the actual restriction implied by individual consideration of applications.

Those countries and universities which insist on their own examinations will probably insist on retaining that practice, but for others some more regulated form of recognition might well be suggested.

We would ask the Conference therefore to consider the following proposal: that an international authority, such as Unesco, should set itself the task, already being carried out by the American Office of Education from the American angle, of drawing-up a list of *"Universities of Senior Status"* in each country, such that a student qualified to matriculate in any one of them might be safely accepted by any other university, subject of course to any extra local or faculty requirements which may be imposed. Although the body drawing up that list would have to obtain the fullest local information to aid it in forming a judgment, we hesitate to suggest the alternative: that each country should compile such a list of its own universities; partly because such lists would never command the respect accorded to an impartial international authority; and partly because of the impossibility of finding, in many countries, any authority or body entitled to compile such a list. This does not overlook the fact that in a very few countries, such as as the U.S.A., the task has to all intents and purposes been done already by a competent national body, but the fact remains that it has not been done for the great majority of countries. Such a list is not at all likely to traverse the recognitions already established in some countries, but it may well extend them considerably, and it would afford such countries or universities valuable assistance in the consideration of new cases when they arrive. Actually the list would be of a purely advisory character.

Our consideration has been almost wholly limited to the question of equivalences for admission. Some data on courses and degrees have also been obtained and are incorporated in the appended abstracts of information. A few cases of intervalidation of professional diplomas have also come to light, but not enough to be worth separate consideration, as yet.

Further study is certainly needed, in Part II of our enquiry, and we would suggest that it might take the following course:

1. A detailed study of degree courses; with a strict comparison of: (*a*) types of degrees and diplomas awarded; (*b*) length and general content of courses; (*c*) number and nature of subjects normally studied in each degree course; and (*d*) method of awarding degrees, i.e. type of examination, dissertation etc.

2. The nature of professional qualifications awarded by universities and the rights which they confer, together with a study of all cases where intervalidation exist or where foreigners are allowed to acquire professional qualifications, with the conditions governing them.

The practical outcome of (1) should be to show the way to a wider extension of the privilege of exemption from some period of study in a foreign university, and of the practice of seeking higher degrees abroad on that basis. The outcome of (2) could only be to draw attention to the possibilities involved in intervalidation. The practical application is hedged with many difficulties and would probably have to be left to individual countries or professional corporations to deal with.

We would like, however, to commend these proposals to the consideration and approval of the Conference.

Part II: Extracts from information provided by a number of countries

Countries from which information is available:

Australia
Austria
Belgium
Bolivia
Brazil
Bulgaria
China
Czechoslovakia
Denmark
Egypt
Finland
France
Great Britain
Hungary
India
Italy
Mexico
Netherlands
New Zealand
Northern Ireland
Norway
Pakistan
Palestine
Poland
Sweden
Switzerland
Turkey
Uruguay
United States of America

Countries from which partial information is available:

Guatemala
South Africa

Australia

Schools

Primary, ages 6-12 (in most States from 5 $^1/_2$).
Secondary, ages 13-17 or 18.

Normal Matriculation

In some universities the Leaving Certificate, (4th year Secondary schooling) at 17, of a Public Examinations Board. In other universities there is a separate Matriculation Examination which is taken one year after Leaving Certificate; i.e. at 18.

Equivalences

Each case considered individually. Non-British students must obtain permission from Immigration Authorities at Canberra. Students from

well-known universities generally admitted *ad eundem statum*; i.e. A student must show that he is qualified for admission to a university of good standing in his own country. Others may be required to sit for a special examination. Certain faculties have special pre-requisites and students without these may be subject to special examination in these particulars.

Post-graduate admission

As above: *ad eundem statum.*

Austria

Schools

1. *Lower or Compulsory Schools.*

Ages 6-10 all children attend general primary school.

Ages 10-14 1. Upper grade of the primary school.
2. The *Hauptschule* (upper school). } Alternatives.
3. Lower grade of the middle school.

Upper Schools only in larger towns. They prepare for practical life or for the *Fachschulen.*

2. *Middle Schools.* Divided according to curriculum, into *Gymnasia, Real-gymnasia* and *Realschulen, Frauenschulen.*

University Admission (Matura Abiturium)

These schools prepare for the university and give a *Reifezeugnis* which admits an ordinary student into universities according to faculties, with certain special faculty examinations, according to the requirements of specific faculties, which may be taken, if required, not later than the second Semester in the university.

Entry to the university can also be gained by an external *Reifeprüfung* for privately educated persons and also by a *Reifeprüfung* from a Workers Middle School which gives a four-year course to men over 17 who have been in employment since leaving school.

Equivalences

Diploma certifying completion of a secondary education which would allow entry to a university in their own country. Any such examination claimed as exempting must be recognized by the Austrian university authorities.

If the candidate's country has no suitable secondary school system, he must pass a special University Entrance Examination. Special exemption from this rule may be granted.

Senior Entries

Foreign students who wish to complete their studies in an Austrian university may reckon their period of study in their own country, term for term, towards the period required by the Austrian university e.g. 8 semesters for the Doctor of Philosophy in the Philosophical Faculty.

Belgium

Schools

Primary, ages 6-12.
Secondary, ages 12-18.

Normal Admission

Diplôme de Fin d'Etudes of the secondary schools. Certain special faculty requirements may have to be fulfilled at a special entrance examination to the university.

University work is specialized. The preliminary grade of *Candidat* is taken after two years, but it is strictly on the lines of the advanced studies to follow and contains no element of general education, which is completed in the school.

Equivalences

There are two grades of recognition of certificates and diplomas.

1. Legal Recognition. This is the normal grade of admission for Belgian students. It implies official, legal acceptance of qualifications, in such degree that the holder is entitled to the full rights of professional activity in Belgium. Admission at this legal grade requires the possession of a secondary education diploma which has been recognized as homologous with the Belgian *Fin d'Etudes*. Six years study of Greek and Latin or of Latin alone are required for almost all faculties. Only by admission at this grade, can university degrees subsequently obtained in Belgium be used for professional purposes. Absence of an homologous diploma can be made good by examination in Belgium by the central authority of the *Fin d'Etudes*.

2. Scientific (i.e. Academic) Recognition. Admission at this grade is determined by the offices of the university or technical college concerned, in each individual case. It admits to the same studies as the degree grade but carries no professional rights.

Higher Studies

Admission can only be at the Scientific Grade and is individually determined by the faculty subject to the sanction of the Ministry of Education.

Full allowance is made for studies performed outside of Belgium

after investigation by the faculty of the courses pursued. The candidate may also be asked to undergo complementary instruction in certain subjects, if deemed necessary, for one year, ending with an examination.

The equivalences with British qualifications have been fully worked out by a war-time commission. They accorded, for example, legal equivalence between a B.Sc. Honours and the Belgian *Licence*. Full equivalence has always been granted between the Belgian and the French *Licence*.

(Since this statement was presented by the International Association of University Professors and Lecturers, further information has been supplied by the Belgian Ministry of Education. It is obtainable on application to Unesco.)

Bolivia

School

Secondary, six years.

Normal Admission

Titulo de Bachiller (*Baccalaureat*) after secondary schooling, by passing a special Faculty Entrance Examination.

Equivalences

Foreign students may enter the University on much the same terms as those for Bolivians, namely that they shall present a certificate of full secondary education in their own country and submit themselves to the entrance examination. Uruguayan students who have entered their own university are exempted from this entrance examination and vice versa.

Higher Studies

Equivalence has been agreed upon with Spain for all professional qualifications gained in the universities, which may be freely used in either country.

Brazil

Schools

Primary. Usually four-six years, but varies from four to ten in different states, which have much autonomy. Ages 7-14 on the average.

Secondary.

Ginesio. Junior High School, four year basic course.

Colegio. Senior High School, three year courses in two alternative curricula: classical and scientific. One of these institutions is Federal —the Colegio Pedro II, which takes the leading place among those schools, until recently entirely preparatory to university, which are now broadening their curricula for non-university pupils.

Normal Admission

There is a Federal University of Brazil and three State Universities.

Faculties and schools are semi-independent, on the French model, and have their own entrance examinations, which are competitive. Presentation for this examination depends on having certificate of completion of four years of secondary school, and having reached 18 years of age.

Normal courses are three years for Diploma of *Formado* which is general professional qualification, but many of the professional schools of the University give four year courses. Post-graduate work leads to degrees of Magister and Doctor.

Equivalences

Full legal equivalence is given to any foreign student who presents a certificate of completion of secondary education in his own country, and who passes an examination in Portuguese and Brazilian geography. He must also pass the same competitive entrance examination as Brazilian students.

Both foreign and native students may attend courses as non-degree students on the same terms as above, but taking restricted courses and gaining a certificate by examination.

Foreign students may also attend courses in the Faculty of Philosophy, without entrance examination as "visiting students" and may gain certificates by examination.

Bulgaria

Normal Admission

Diplôme d'études secondaires, admits students to competitive examination for entry into the various faculties and higher schools.

Equivalences

There is only one category of students: those who have been regularly registered as matriculated by above procedure.

Foreigners admitted if they have a Bulgarian diploma or its equivalent. The equivalences have been established by cultural conventions with Poland, Czechoslovakia, Jugoslavia, Roumania, etc.

Outside these limits each case is considered *ad hoc* by the University authorities. Apart from this a valuable *numerus clausus* for foreign students exists in each Bulgarian University.

Schools

Primary, ages 6-12 (six years).
Secondary, Junior, ages 12-15 (three years).
Secondary, Senior, ages 15-18 (three years).

Normal Admission

At 18 years of age, but varies and may be up to two years earlier in some cases.

Admission is by entrance examination. Chinese is a compulsory subject, with a foreign language (usually English), mathematics and history, and some optional subjects. This is the only entrance for degree students, but a few degree students may be admitted on special application.

Equivalences

None regularly established. A special entrance examination may be set for undergraduate applicants from other countries.

Higher Studies

Any student who has a degree from a good foreign university may be admitted to post-graduate study if he can show a sufficient knowledge of the language.

Czechoslovakia

Equivalences

A certificate of completed secondary education which would entitle the student to admission to any recognized university, provided that it includes Latin. If not, then a special examination in Latin must be passed. Normal age of entry is 19.

Full credit may be granted for periods of study elsewhere, but each case is considered on its merits.

Higher Studies

The first degree is taken two years after matriculation. The master's degree is two years after the first degree, and the doctorate, at the earliest, three years from the first degree.

Foreign students are admitted to doctorate studies if they already have a first degree of any recognized university, or have had special training in their own branch of study. They may also be admitted as research workers without candidature for the doctorate. The doctorate is awarded by certification and two oral examinations, which may be sustained in other languages than Czech.

Equivalences

Students who have matriculated at a foreign university or who have passed an examination entitling them to such matriculation, may be admitted by the Vice-Chancellor of the university or the Ministry of Education, each case being considered separately. Applicants must give valid reasons for wishing to study in Denmark. Admission may be limited to one specified faculty and may or may not include the right of being examined. Certain courses e.g. medicine, are overcrowded and will not accept foreign students.

All teaching is in Danish, but no specific test of knowledge of Danish is imposed on entrants.

EGYPT

Schools

Elementary, five years, from ages 7-12. Compulsory.

Primary, average leaving age 12.

Secondary, average leaving age 17. Last year is a preparatory year for the university.

Normal Admission

Egyptian Secondary Education Certificate (special course): *Baccalauréat.*

For Faculty of Arts this certificate must include Arabic, which is a compulsory subject in that faculty.

Normal course of study is four years, beginning at age 17. Some faculties stipulate a preparatory year in addition. The Medical Course is six and a half years (one year being preparatory).

Equivalences

Certificates of secondary education of recognized rank which would admit to a university in the applicant's own country, are accepted for entrance. Non-Egyptian Arab students apply through the Ministry of Education which has a special commission to determine these equivalences. Foreign non-Arab students apply through the university which has an equivalences commission to deal with these cases individually according to rules. The following are regularly accepted: (*a*) London Matriculation; (*b*) Oxford and Cambridge School Certificate, with credits exclusive of Arabic and religion; (*c*) the French *Baccalauréat;* (*d*) the Greek *Baccalauréat* (with merit). Admission to a particular faculty depends on the subjects included in the certificate. Every candidate must satisfy the examiners in an examination in Arabic of Egyptian Baccalaureate standard, at some

period before graduation; except in the Faculty of Arts where this must be taken before entry.

Professional qualifications taken in Egypt are admitted for higher study in some other countries, e.g. law in France and medicine in Great Britain.

Foreign Moslem students are admitted to El Azhar University if they possess an adequate knowledge of the Koran and of Arabic.

Finland

Schools

Elementary Education at present four years, ages 7-11.
Secondary Education eight years, ages 11-18.

Normal Admission

The Finnish Higher School Certificate admits to any faculty in any university. It is a uniform national examination.

Equivalences

The Chancellor may grant an equivalence on special application, if the candidate is entitled to admission to a university in his own country. The B.A. degree is taken in three subjects and examination is of a high standard. The normal course is four years. The doctorate normally requires eight years of study. Lectures are public and may be attended by anyone, but a non-matriculated student may only take part in classes by special permission of the faculty concerned. No non-matriculated student may sit for examination.

Higher Studies

Applicants may be admitted by dispensation of the Chancellor if they hold a B.A. degree of standard equivalent to the Finnish B.A. Other Scandinavian degrees are accepted in this way, and any other case would be considered *ad hoc*, and would be accepted if found to be equivalent to the Finnish degree.

France

Normal Admission

There are two grades of admission. If the student wishes to study without taking a degree it suffices to be enrolled on the register of a faculty or advanced school.

Degree students must be *inscrits*, i.e. matriculated in the university, in the English sense of the word.

Matriculation requires either the *Baccalauréat* or a recognized French equivalent. Equivalences are only accepted in the Faculties of Law, Science and Arts.

Equivalences

Foreign equivalents to the *Baccalauréat*, which would entitle the student to admission to a university in his own country, are recognized for matriculation. If the country concerned does not provide such a certificate the student must pass a special French *Baccalauréat* examination.

Higher Studies

This represents the majority of cases of foreign entrants in France. Degrees equivalent to the *Licence* are established by a special commission and the list is published. Holding one of these degrees permits the student to prepare for a French National Doctorate. Equivalences accepted for the Doctorate of the university are in the hands of the individual faculty.

Holders of certain high British degrees are also allowed to take the *Licence*, being granted the equivalence of two semesters of residence and two out of the four certificates required for the *Licence*.

Guatemala

Schools

Primary, ages 6-13.
Secondary, ages 13-20.

The normal period of university study is five years.

Great Britain

Schools

Primary, ages 5-11.
Secondary, ages 11-18.

For non-university pupils school training usually ends with School Certificate taken at 15-16. University pupils usually stay on to take the Higher School Certificate at 17-18. Both are conducted by external examining Boards.

Normal Admission (in process of re-organization)

The School Certificate is technically the minimum qualification for admission, but as no university accepts students before 17, the great majority of entrants stay on at school to take the Higher Certificate

and enter between 17 and 18. The Higher Certificate confers right of exemption from the first year of university course.

Each university lays down subject requirements for admission, and certificates are only accepted if they cover these subjects, usually five in number.

In the absence of any certificate, entrants must take one of the matriculation examinations which are conducted by individual universities or groups of universities. These are of the same standard as the School Certificate.

Equivalences

The details of conditions vary in each university and are sometimes prescribed very fully. They are however mostly covered by the general statement that, in each case, certain educational certificates, given in other countries, have been specified as recognized for exemption from matriculation requirements. The list of these recognized certifications are sometimes published and are sometimes withheld from publication. Apart from these, it is generally true that a qualification enabling a candidate to enter a university of good standing in his own country would be considered for recognition by an admission committee of the university to which he applies. Most universities also specify a satisfactory knowledge of English and entry to individual faculties may require the passing of a supplementary examination in certain subjects, if these are not covered by the qualifications presented by the candidate. Oxford and Cambridge demand Latin or Greek for candidates in all faculties. Asiatics and Africans may be exempted from this. London University demands the passing of a Special Entrance Examination by all candidates presenting foreign certificates equivalent to matriculation. This examination cannot be taken before the age of 19. Certificates of matriculation standard taken within the British Empire carry exemption from matriculation, but all other candidates must pass the Special Entrance Examination unless they possess a degree from a recognized university.

Higher Studies

Some universities allow entry upon special conditions, which are less strict than those of ordinary matriculation, to any candidate over the age of 23.

Conditions of admission to post-graduate work are also variable, but in general the holder of a first degree in any university of good standing would be accepted, on application, for admission to post-graduate work.

Periods of study completed in foreign universities may also be recognized, under certain limitations, towards the completion of a first degree.

Schools

General, eight years, ages 6-14. Compulsory.

For the higher classes stress is laid on practical training, but there is also a choice of modern languages and Latin.

High School, ages 14-18.

Classical schools
Technical schools
Commercial schools
} Tripartite division.

This ends with matriculation. There is a movement to substitute an intelligence test for non-degree students.

Normal Admission

Only through matriculation, in all faculties. At present there are no non-degree students.

Equivalences

Matriculation may be granted to foreign students who produce a certificate of secondary education which qualifies them for admission to the universities of their own country.

INDIA

Schools

Elementary, five years, ages 5-10.
Middle, three years; or
Secondary (high), six years.

Normal Admission

Students at entry to any university must have passed the Indian Matriculation Examination or the Secondary School Leaving Certificate. Entry is normally at 17, and most courses for the first degree are of four years.

Equivalences

Certificates of completion of secondary education or of matriculation in universities of other countries are normally considered eligible for admission, but each case is considered individually.

Italy

Schools

Elementary, four years, ages 6-10.
Secondary (*Liceo*), eight years, ages 10-18.

Normal Admission

For most faculties the matriculating examination of the secondary schools, taken after eight years, is recognized. It is divided into Classical and Scientific according to the faculty to which entry is proposed.

For economics, commerce, education and agriculture a diploma is taken after seven years of secondary school.

Equivalences

Certificates of secondary school studies abroad are accepted if the Academic Senate of the University is satisfied that the certificate would admit to a university in the country concerned, and furthermore that the studies completed abroad are such as to enable students to follow proficiently courses in an Italian university. Each case is considered individually.

Mexico

Schools

Elementary, ages 7-13.
Secondary, ages 13-18 (?)

Normal Admission

Candidates may be either occasional or matriculated. Occasional students (*oyentes*) may be accepted by the university without specified conditions. They are not admitted to degrees.

Matriculation students must have the *Bachillerato* (Baccalaureate) of the secondary schools. This examination is taken in one of three types according to the faculty proposed for entry: physical-mathematical sciences; social services; medical-biological services.

Equivalences

Certificates of secondary education or of matriculation in another country may be considered for exemption from the *Bachillerato*.

The university considers each case individually. Equivalence may also be allowed in respect of studies already completed abroad.

Schools

Primary, ages 6-11.

Grammar school / High school } alternative types, ages 11-18.

Normal Admission

By School Leaving Certificate of secondary schools. This is taken in one of four divisions according to the faculty proposed.

Grammar school A. (Classical) Faculties of Divinity, Law, Arts and Economics.

B. (Mathematical) Faculties of Law, Medicine, Science and Economics, Technology and Agriculture.

High school A. (Social) Faculty of Economics only.

B. (Mathematical) Faculties of Medicine, Science and Economics, Technology and Agriculture.

Admission may also be obtained as a non-degree student for particular courses without specified qualifications. The normal period for a first degree is four years.

Equivalences

A foreigner wishing to enter a State university must obtain permission from the Ministry of Education. Holders of foreign certificates of secondary education can be matriculated if they are recognized as equivalent to the Dutch certificate. The list of recognized equivalences is established by Royal Decree.

Higher Studies

Exemptions from study, on the ground of periods of study abroad or examinations passed in other universities, are not generally allowed except for some Belgian universities. Such exemptions are however occasionally given by special permission of the Ministry of Education, on application.

NEW ZEALAND

Schools

Primary, ages 7-13.
Secondary, ages 13-17.

Normal Admission

Students now admitted at 17.

Candidates must pass the special entrance examination of the university.

They may also be matriculated on the recommendation of the principal of one of the secondary schools on the approved list. Provisional matriculation may also be permitted, without specified conditions, to candidates over 21 years old.

Equivalences

Applications from foreign students are considered individually on their merits.

Northern Ireland

Schools

Primary: ages 5, 5 $^1/_2$ or 6-14. Compulsory (Rising to 15 in 1951).

Secondary: Intermediate, ages 11-18
Grammar school, ages 12 or 13-18 } Alternative types.

Normal Admission

Matriculation examination of the university, or (with certain restrictions) the School Certificate of the Ministry of Education, Northern Ireland.

Equivalences

School Certificate, matriculation or equivalent certificates are accepted from the United Kingdom and most countries in the British Commonwealth.

Foreigners submitting satisfactory particulars of their educational career may be admitted at the discretion of the university.

Norway

Schools

Primary, seven years, ages 7-14.

Secondary (gymnasium), five years, ages 14-19.

Normal Admission

By the *Examen Artium*, the first examination of the gymnasium. This gives the right to matriculation. In some of the advanced schools and faculties admission is competitive for a limited number

of places, but not in arts or science. In all faculties there is a preliminary qualifying examination in philosophy, taken in the university. Non-matriculated students are admitted free to all lectures but may not obtain degrees.

Arts students who have not included Latin at school, or science students who have not included mathematics, must pass a qualifying examination, for which instruction is provided in the university. The shortest courses are in law (three and a half to four years), in arts they are usually five to six and in medicine seven to eight years.

Equivalences

The *Collegium Academicum* can grant admission to foreign students if they are qualified for admission to universities of high standing in their own country. They may also be granted exemption from the qualifying examinations.

Professional Qualifications

Since the war, degrees in medicine and dentistry from other countries have been, in a number of cases, accepted unconditionally.

Pakistan

Schools

Primary, six years, ages 7-13.
Secondary, five years, ages 13-18.

Normal Admission

By matriculation examination of any Pakistan or Indian university. This admits to the Intermediate Class of two years. This is normally followed by two years for a pass degree, or two-three years for an honours degree.

The master's degree takes two years for the pass degree or one-two years for honours.

Equivalences

London University Matriculation and the Cambridge School Certificate have been recognized as equivalences. Alternatively, any examination which would entitle a student to enter a university in his own country would also entitle him to admission in Pakistan.

Schools

Primary, ages 6-12.
Secondary, ages 12-19.

The position is at the moment uncertain and there is some overlapping, as some pupils may begin secondary education at 12 while others continue primary education till 14.

Normal Admission

At 18 years of ago. Requires a matriculation certificate from a recognized secondary school. The primary degrees are M.A. and M.Sc. taken after four years. The Ph.D. is given for research. If entrants are under 18, a further year is added to their studies.

Equivalences

Foreign students are admitted to the Faculties of Arts and Sciences if they hold a certificate enabling them to enter a university in their own country. Candidates from U.S.A. must have attended college for at least one year after their graduation from high school.

Higher Studies

Applicants for admission to post-graduate work for the doctorate, should hold a degree equivalent to the M.A. or M.Sc of Palestine, i.e. a four year course, or in exceptional cases an honours degree taken in three years. Fitness to do research must also be proved.

POLAND

Schools

Primary, ages 6-12. There are three types of which only one gives access to secondary education.

Secondary: Gimnazium, ages 12-16 } Successively.
Liceum, ages 16-18 }

The latter is directly concerned with preparation for the university.

Normal Admission

By passing the special entrance examination, consisting of a written examination and an oral examination on Polish current affairs. Candidates for admission are thus selected by a special commission, partly appointed by the Ministry of Education. Further selection by another commission is required if the number of applicants for any faculty exceeds 300.

Where there are only limited places in any faculty additional

examination is required: i.e. for all technical departments, sciences, forestry, etc.—mathematics; for architecture—drawing; for the higher mercantile school—modern languages.

Pre-university preparatory courses exist for those who were unable during the war to complete their secondary education. Satisfactory passing of their final examination exempts them from the university entrance examination. The first degree is the *Magista*, which requires four years study.

Equivalences

No up-to-date information available.

South Africa

Normal Admission

Candidates must hold the Matriculation Certificate or its equivalent. No distinction is made between local and foreign students in this respect.

A further communication will be sent later.

Sweden

Schools

Primary, six years, ages 7-13, compulsory. (Varies between five and seven years.)

Secondary, six or seven years.

Normal Admission

At age 19, for the State universities of Uppsala and Lund. Non-degree students, who only attend courses, are admitted without matriculation, they are simply enrolled.

Matriculation students must pass the final examination of the secondary schools.

Equivalences

Equivalent examinations in other countries are acceptable, subject to proof of a sufficient knowledge of Swedish.

Entry to the non-State universities of Stockholm and Gothenburg is on a somewhat less strict basis than in the two State universities.

Swedish universities are so crowded that the entry of foreign students is at present only theoretical.

Schools

University school, five years or more—minimum period is for ages 6-11 years.

Secondary school, ages 11-19. There is some overlap between grades.

Normal Admission

By means of the *Maturität Examination* of the secondary schools. The Federal Technical University has its own entrance examination. Non-degree "auditors" are admitted to university lectures and a Certificate of Attendance is given to such students. They are not matriculated.

Equivalences

Each university is autonomous and conditions vary. As a rule certificates which would admit a foreign candidate to any recognized university in his own country, will be accepted. Sufficient knowledge of French or German is required, but there is no special language examination. Special rules have been adopted for French and American Ex-Service students.

French candidates

The *Baccalauréat* with both parts, taken in France from a State school is generally accepted. If taken outside of France or from a private school the cases are considered individually by the university.

The Technical University of Zurich gives exemption from its entrance examination only to Part II of the *Baccalauréat*, taken in France, with credit in mathematics.

American Ex-Service Candidates

As a rule the B.A. or B.Sc. of a University belonging to the Association of American Universities will be accepted. A completed sophomore year is accepted at Geneva and Lausanne.

Higher Studies

Most universities grant equivalences for periods of study made in French universities. The matter rests with each faculty. Some demand a minimum of two years at a Swiss university.

The French *Licence* is accepted for preparation for the Swiss doctorate and exempts from certain preliminary examinations.

Professional Qualifications

French degrees give no right to enter the public service in Switzerland, but they do give the right to exercise professions, provided

that the latter are not prohibited by federal or cantonal regulations. The only federal regulation restricting practice is that for Medicine.

Turkey

Schools

Primary, ages 7-12.
Secondary, ages 12-18.

Normal Admission

At 18 years. By means of a Baccalaureate examination.

In certain faculties the number of entrants is limited. In such cases the entrants are selected by the faculty, either on the results of the Baccalaureate examination or by means of a special competitive entrance examination.

Equivalences

Foreign students are accepted if they possess a secondary school certificate equivalent to the Turkish Baccalaureat, which would give them admission to a university in their own country.

Uruguay

Schools

Primary, ages 6-12, compulsory.
Secondary, ages 12-17.

Following upon the secondary school, there is a period of two years of preparatory studies (ages 17-19), which must be passed before the pupil can enter a faculty.

Normal Admission

At 19 years. Non-degree students are "enrolled" in the Faculty of Humanities and Science but do not proceed to a degree. Full matriculation is obtained by passing the Baccalaureat, which resembles that in France, or by holding the degree of Teacher of Primary Schools.

All schools and the university are free of charge to students. Courses last on the average from six to nine years.

Equivalences

Foreign students or those without the Uruguayan Baccalaureat are given provisional matriculation if the professors of their subjects are satisfied regarding their capacity and application to work.

Schools

Primary School, ages 6-14.
High School, ages 14-18.
Junior College, ages 18-20.
Secondary school period is completed by "graduation".

Normal Admission

Based upon graduation from High School. Some State universities are compelled to admit all such canditates from within their own State, but other universities specify a high standing in graduation and others require in addition a comprehensive entrance examination. All these are called "regular" students.

Mature candidates who are not qualified in the regular way and who wish to study as non-degree students may be admitted as "special" students.

The B.A. or B.Sc. degree requires normally four years from admission. A certain number of universities (90) carry studies for three years further to the doctorate. A much larger number carry studies for one or two years further, to the stage of *Magistra.*

Equivalences

There are no general regulations; each university is independent. Only tentative indications can be given of the accepted standards. The European Baccalaureat or its equivalents are generally regarded as equivalent to the standard reached at the Junior College, or at the end of the second year in many universities. The determination of the academic value to be placed upon any given credentials rests with the University Registrar, who will be guided partly by the suitability of the subjects previously studied and partly by the marks of quality which the certificate may bear.

The U.S. Office of Education has created a Division of International Education, one of whose functions is to study all cases of demand for recognition of equivalences submitted to it by institutions and to advise them on the evaluation of the credentials presented by the student. Equivalences have been widely and expertly studied by this division, in terms of American requirements.

The British Embassy in Washington furnishes particulars regarding British Colonial credentials and advises on their standing. This is important, as a large number of West Indian students and many West Africans try to enter the U.S. universities. As a general rule, a student qualified to enter a British university would be accepted in the U.S.A.

Higher Studies

Admission to the professional schools is generally limited to those who have passed through the Junior Colleges, while some only accept

the Bachelor's degree for admission. The French *Licence* is generally equated with the American master's degree.

(*This Report was presented by Professor* R. C. MacLean, *University College, Cardiff.*)

2. A Conference on Unesco and the University

organized by the International Student Service

Combloux, France, 21-30 July, 1948

Professor W. J. Rose presented a report of the Conference, organized by the International Student Service, on Unesco and the University. It contained many practical suggestions of university activities which Unesco might be asked to assist, a number of which have been included in the recommendations of the Conference. A copy of the full report can be obtained on request from Unesco House.

APPENDIX B

THE WORKING PAPERS

Section I

THE CHANGING RÔLE OF THE UNIVERSITY

General Statement regarding Terms

In the working papers for all the Sections an effort has been made to avoid terms that have different meanings in different countries. This has not been possible in the case of the two most commonly used terms, "university" and "institutions of higher education". Throughout the working papers, these two terms are used synonymously, and very broadly. It may well be that the Conference will want at some stage to differentiate between "higher education" and "university education"; but no distinction could be drawn in these papers without making assumptions that seemed unwarranted before the Conference.

New Influences on Universities

New influences, or old influences recently intensified, are affecting the practices of universities in many countries. Section I of the Conference may wish to consider what their implications are for future university policy. Other Sections will work over in detail parts of the general field covered in this paper: it is hoped that Section I will feel itself able to take a more comprehensive view, and to see the parts in relation to the whole. The following is a list of factors that appear to affect modern university policy and practice in many countries. It makes no pretence of being exhaustive, or of showing the complex causal relations existing between the different factors. Some items in the list may not apply to all countries.

1. The increase in the number of students. Approximately 5 million students are to-day enrolled in some 4,000 institutions of higher education throughout the world. Although exact figures are difficult to obtain due to differences in terminology, as well as to incomplete reporting, it is estimated that the present total enrolment is approximately one-third greater than the average figure for the decade of the nineteen thirties. Reports received from different countries show wide variations. A few countries

have not yet been able to make up war-time losses, while others report an increase of more than 100 per cent, over the pre-war enrolments.

2. The pressure for equality of educational opportunity, which has in many countries resulted in a rapid expansion of secondary education, and which appears to be one of the causes of the increase in university enrolments. It is also reflected in the expansion of adult education.
3. The increased importance of the natural sciences.
4. The demands of national security upon higher education.
5. The added complexity of life, demanding at the same time greater specialization for the expert and wider general education for all citizens.
6. The greatly increased cost of higher education, resulting in part from the factors mentioned above and in part from general rising costs, which are not matched by increased income from university endowments. The demand for increased grants, either from the State or from private sources, is sometimes reflected in the balance of control of higher education.
7. The growing belief that the university has a wider social responsibility to the community, the nation and the world.
8. Changing moral and intellectual values in the community.

QUESTIONS ARISING

The Section may wish to consider certain groups of questions arising from the interplay of these influences in the field of higher education. The following are suggested as a basis for discussion:

I. *Causes of increased enrolments.*

1. What have been the causes of increased enrolments in institutions of higher education?
2. How far are these causes basic and continuing? What is likely to be the trend in enrolments over the next five years? Over the next twenty-five?

II. *The University's Responsibility*

If it is agreed that the demand for higher education is likely to grow rather than to diminish, several questions of basic policy arise. The history of the expansion of secondary education in many countries over the past half-century may provide the key to some of these problems. The pressure for secondary education for all has, in most cases, resulted in qualitative as well as quantitative changes in the secondary school system. A system, which was originally devised to serve only a small and highly selected proportion of the population, has been faced with the necessity of adapting itself to the needs of a much larger group with a wider variation of abilities and interests. A wider range of subjects and new teaching methods became inevitable. Some countries have developed new types of secondary schools

with a more practical approach for the less academically able youth. Others have tried, by a differentiation of courses, to meet the needs of all young people within one secondary school. In many countries secondary education, taken as a whole, is something very different from what it was at the opening of the century.

If the Section believes that the pressure for secondary education for all, combined with other factors that are already making their influence felt in the university, are likely to result in a demand for higher education for an increasing proportion of the population, it will be interested in the following inter-related questions:

1. To what extent should the education system as a whole respond to the popular demand for post-secondary education for an increasing proportion of the population?
2. To what extent should the institution we now call the university respond to this demand? (*Note*: Questions (3) to (7) try to analyze this question in greater detail).
3. Has the recent increase in university enrolments resulted in a decline in the average level of capacity of students as a whole? Would a further increase in enrolment of, say, 100 per cent. necessarily result in a decline in average capacity?
4. Is there reliable evidence to show what proportion of the population can gain sufficient benefit from universities of the existing types as to justifiy admission? If so, what relation does this figure bear to the proportion now given a university education?
5. If the popular demand for higher education is at any time such as to result in pressure for the admission of students unable to benefit from the university as we now know it, should the university (*a*) continue to insist on some form of selection, or (*b*) follow the line taken by secondary school systems in some countries, and admit all applicants, altering teaching methods and widening the choice of courses of study so as to meet varied interests and abilities?
6. If the university decides to maintain the policy of selection of students, at what stage, how and by whom should the selection be done?([1]) Has the university any responsibility for the further education of those refused university education as we now know it?
7. If the university has a responsibility towards all who seek further education, how shall it meet its obligations to those unfitted for university education in the strict sense? Should they be met by developing new courses in existing universities? Should new institutions be created? If so, by what authority? Who should control them? What are the implications of these courses of action for the maintenance of standards of scholarship in the university as a whole?

([1]) **Problems of student selection will be considered in detail by Section II.**

8. All these questions sum up to one:
"What *is* a university in the twentieth century?"

Note: In considering these very general questions and the more specific ones that follow, the Section may well bear in mind two other questions as a guide to the discussions:

(A) On which of the new factors affecting the modern university would it be useful for an international conference to express considered opinions?

(B) On what issues can this Conference take action beyond the mere expression of opinion?

III. *The Balance between General or Humanistic and Specialized Education*

1. Is it true that the modern world is demanding from the university more highly specialized education for the expert as such and at the same time a broader general education for all citizens as such?
2. If so, what implications has this for the internal organization of the university and for the courses it offers? Are the two functions complementary or incompatible? Can the conflict, if it exists, be resolved without altering the present structure of university departments or faculties?
3. Is the present balance in the university between the natural sciences and the social services, philosophy, languages and literature to be regarded as (*a*) satisfactory, (*b*) permanent? Has the changing balance over recent years created any special problems?
4. Is the university satisfied with its contribution to the moral and aesthetic, as distinct from the purely intellectual, education of youth?

IV. *The Place of Research*

1. Is the present balance between teaching and research in the university satisfactory?
2. Is the balance between pure and applied research in the university satisfactory? Is the distinction one that can be maintained? If so, can the proper field of the university vis à vis State research departments, special research institutes and academies of sciences, be defined? Should the establishment of research institutes be encouraged? What should be their relation to the university?
3. Is there a need to expand research in the social sciences and the humanities? How can it be done?
4. Is there need for further co-ordination of research work carried out (*a*) in the universities of each individual country, (*b*) in universities throughout the world? Could wasteful duplication be avoided? Has the State any rightful function in the co-

ordination of research carried out in all types of institutions? Are there any potential dangers to the individual research worker arising from attempts to co-ordinate research? Can Unesco facilitate the co-ordination of research in institutions of higher education?

V. *Relation of the University to Specialized Institutions*

Certain types of institutions offering courses at the post-secondary level are independent of the university. Teacher training institutions and technical institutes in a variety of special fields are obvious examples in many countries.

1. To what extent is it desirable for certain specialized types of professional and technical training to remain independent of the University?
2. Are there any kinds of professional training now commonly carried on within the university which could better be done outside?
3. If it is agreed that there is a place for institutions of a non-university type at the post-secondary level, is there a need to co-ordinate their work more closely with that of the university? How can this be done?

VI. *Meeting the Needs of Adults*

Many universities have accepted some responsibility for adult education in the broadest sense. Among their more formal activities in this field are university extension lectures, extra-mural courses, and correspondence courses. The more informal activities of some universities include such means as radio talks, public forums and discussion groups, exhibits, library extension services, health clinics, demonstration centres, and public concerts and recitals.

1. Has the university a responsibility to offer adult education to the community as a whole?
2. If so, what responsibility does it have for each of the following:

(*a*) Teaching adults, through both formal and informal means?
(*b*) Stimulating and assisting community organizations in developing their programme for adults?
(*c*) Training leaders in adult education?
(*d*) Conducting or planning research in the field of adult education?

Section II

ACADEMIC STANDARDS

Academic standards at the university level depend on a complex group of factors, of which the most obvious are: the quality of the

students, the quality of the staff, the ratio between staff and students, the material conditions under which work is done,. the amount of freedom enjoyed by university teachers, and the opportunity for the staff and students of any institutions to measure their work against that done in other institutions. University standards are also intimately related, of course, to the intellectual standards and demands of the community as a whole.

Over the past decade, the problems involved in maintaining academic standards in war-devastated countries have been all too obvious. Even in countries more fortunately situated, the events of the past few years have probably had some influence on standards. Quite apart from the direct effects of war, the increase in the number of students, the difficulty of securing and holding teaching staff, and the even greater difficulty of getting buildings and equipment have made life by no means easy for those responsible for maintaining and improving academic standards. So the Section may wish to discuss common problems arising under the following headings:

I. *Student Selection.*

Note: The working paper for Section I "The Changing Rôle of the University", raises certain questions of general policy connected with student selection. It is anticipated that members of Section II will have heard a general debate on that paper before coming to their own sectional discussions, and that they will be able to deal in more detail with questions which Section I will consider only as parts of broad university policy.

1. Has the increase in university enrolments affected academic standards? If so, how far is this due to a change in the average mental ability of the students entering?

2. Have changes in the secondary schools over the past twenty-five years had any effect on the standard of achievement of pupils offering themselves for entrance to the university?

3. What methods of selection for entrance to the university are in use in the countries represented at the Conference? How successfully do they work from the point of view of the university? (*a*) Do they select the most able of the candidates? (*b*) Do they encourage the right pupils to become candidates for entrance?

4. How do they work from the point of view of the secondary schools? Are there any complaints that the entrance requirements of the university exercise a restrictive effect on the work of the schools? If so, what has been done to meet the complaints?

5. To what extent are qualifications granted by the secondary schools accepted for entrance to the university, without candidates having to take an examination set by an authority outside the school? Is accrediting of this type proving satisfactory?

6. Should there be selection for higher education at all? If so, should it be done by:

(*a*) the secondary schools?

(*b*) a State examination?
(*c*) an entrance examination conducted by a university or group of universities?
(*d*) a system of fairly free admission combined with a more rigorous policy of rejection during the first year or two of the university course?
(*e*) any other means?

7. Should personal qualities other than proved intellectual ability be taken into account in selecting students? What can be done to prevent factors of race, sex, religion, or politics from affecting the admission of students?

8. To what extent is it justifiable to base student selection on estimates of a country's need for university trained persons, for example, in such professions as medicine, dentistry, engineering, scientific research, and the civil service? If so, by whom should the estimates be made? Can estimates be made on a purely national basis, or must world-wide needs also be taken into consideration? What are the limits to the assumption that the expansion of university facilities is to be justified in terms of community demand for certain kinds of specialists?

II. *Equivalence of Qualifications.*

Much effort has been expended on the attempt to work out, at both national and international levels, methods of assessing the equivalence of (*a*) university entrance requirements, (*b*) partially completed degree courses, (*c*) university degrees required as a qualification for further study or research, and (*d*) university degrees and diplomas required as a pre-requisite to the practice of certain professions. The last of these is not exclusively a university problem, and the Section may, therefore, not wish to discuss it.

Wide differences in academic standards, both within countries and between countries, have made the search for generally applicable criteria of equivalence a most complicated task. A number of bilateral agreements between countries have, however, been reached; and some countries have set up special offices to evaluate foreign qualifications and degrees.

On the international level, the Institute of Intellectual Co-operation gave much thought to the problem; and in recent months the International Association of University Professors and Lecturers have, at the request of Unesco, made a special study of equivalence. They will submit a paper to the Conference on the subject, and will raise specific questions which the Section may care to consider.

III. *University Staff*

1. Is there a world-wide shortage of adequately qualified men and women to take up university teaching? In which departments is the shortage most acute?

2. Can the university successfully compete for staff with industry, government service, and special research institutes? In which

faculties is this competition felt most keenly? What is being done to meet it?

3. Is it necessary to improve the status of university teachers in the matter of salary, promotion, tenure of employment, and pensions?

4. Should university staff be appointed, and be free to continue their work, without discrimination on racial, political, and religious grounds?

5. What methods of recruitment of university staff are at present being employed? Could they be improved? What is the relative importance given to research qualifications and teaching ability?

6. What constitute satisfactory ratios of students to teachers in the various faculties? What is the present position in this respect?

7. What can be done to make it easier to recruit university teachers from other countries?

IV. *Teaching Methods*

1. What responsibility has the university for the training of university teachers (*a*) before appointment, and (*b*) after appointment? How common is the granting of the sabbatical year?

2. What training do university staffs get in teaching methods? Are the members of the Section satisfied with the teaching methods employed in their universities? How could they be improved?

3. What use is made of modern audio-visual aids, such as films, filmstrips, and recordings? Through what means can information on significant developments in the use of audio-visual aids in one institution or one country be made known in others? Is it desirable and feasible for handbooks of films or other visual materials, suitable for use in the university, to be prepared and distributed? If so, by what organization should it be done?

4. Should further efforts be made, in co-operation with film and radio producers, to prepare films and recordings specifically designed for use at the university level? Who should take the initiative?

V. *University Equipment*

1. Is the shortage of university buildings world-wide? What effect is it having on academic standards? What is being done to meet the demand for more accommodation?

2. Is there a general shortage of teaching equipment, or is the problem mainly one of finance and distribution? What forms of equipment are in shortest supply?

VI. *The Effects of the War*

It is hoped that, throughout its discussions on academic standards, the Section will give special attention to the problems of universities in war-devastated countries, and to ways in which the universities in the rest of the world can help them.

VII. *The University and the Preparation of Secondary School Teachers*

1. If it is conceded that standards in the university ultimately depend upon the quality of the teaching done in the secondary school, what implications does that have for the university as regards the preparation of teachers?

2. What should an adequate preparation of a secondary school teacher include? Is it simply a study of academic subjects plus methods of teaching? Or does it cover a broader ground, e.g. an outlook on society and its problems, an educational philosophy, an understanding of the place and function of secondary education in society and in the educational scheme, and an understanding of adolescence?

3. (*a*) Should the professional preparation of secondary school teachers start after the university academic preparation in separate institutes?

(*b*) Or should it be carried out in special institutions where both academic and professional training are integrated?

(*c*) Or should it take place at the university where academic and professional studies go side by side?

4. Secondary education is rapidly changing under the pressure of social forces. Does the university have a responsibility in the study of the changing secondary education in a changing society? Does it have a responsibility in conducting research and experimentation in this field? In short, is the study of secondary education worthy of university status?

Section III

FINANCING AND PROVIDING BASIC SERVICES FOR HIGHER EDUCATION

INCREASED COST OF UNIVERSITY EDUCATION

The following factors have tended of recent years to increase the cost of university education:

1. The general rise in costs throughout the world.
2. The increase in the number of students.
3. The increasing complexity of many fields of study, with a consequently growing demand for more expensive accommodation and equipment and for more highly specialized teaching staffs.

4. The increasing importance of the natural science departments, which are relatively expensive to equip and maintain.
5. The demand by some communities for more graduates from certain expensive types of professional schools (e.g. medicine and engineering).
6. The increase in the general community services given by some universities.
7. War devastation.

Unfortunately, in spite of the vast sums invested in university buildings and grounds, and of the very large operating budgets of institutions of higher education, there is relatively little information available on comparative costs, and almost none on the effects of different methods of financing upon the operating policies of universities. Yet there are certain issues that are probably of common concern to most universities.

I. *Securing Adequate Financial Support*

Sources of university income may be grouped into four general types: appropriations by governments; gifts and grants from private sources, including income derived from endowments; student fees; and the sale of services such as research, consultation and housing accommodation. Conclusions reached regarding institutions supported wholly or mainly from public funds may have little application to those which derive their income from other sources. Some of the following questions, therefore, may not have direct reference to all universities.

1. In the countries represented at the Conference, how far has the income of universities kept pace with rising costs? In those universities where income has lagged behing rising costs, what have been the consequences?
2. What has been done to meet this situation? Has there been any alteration in the relative proportions of university income derived from State and private sources respectively?
3. Have any difficulties been experienced in keeping a balance (*a*) between funds available for the various faculties or departments in the university, and (*b*) between funds for research and funds for instruction? How have the difficulties been met?
4. If the work of universities is suffering from lack of money, what can be done to increase their income (*a*) from public funds; (*b*) from private sources?
5. Should all existing institutions of higher education receive support from public funds? Should all such institutions also seek support from private sources?
6. Are institutions of higher education justified in charging more than the actual cost for non-instructional services, such as applied research, consultations, testing, and the housing of students?

7. Is there need for the standardization of statistics on university finance, in order to make possible comparisons between different institutions and between different countries?

II. *The relation of Finance to the Control of Higher Education*

Fundamental problems of university control are involved in the questions asked above. It is, however, almost impossible to ask questions on the relations between the control of higher education and its financing that have the same significance for all countries.

1. From the point of view of university control and academic freedom, what are the special problems of those universities financed entirely by the State? To what extent does State financing involve State control of academic policy?
2. What are the special problems of control and academic freedom arising in those universities that depend heavily on private sources for their income?
3. In those countries which have a tradition of university autonomy, has the increasing dependence of universities on State aid meant an increase in State control? If so, how has this control been exercised and what have been its effects? What has been done to maintain university autonomy?
4. To what extent should university affairs be controlled by university teachers themselves?
5. How can the university recognize the legitimate interests of professional organizations and industrial interests without being dominated by them?
6. To what extent can the university accept from the State or from private sources, funds for special research and still retain the freedom of enquiry essential to university research?

III. *Student Fees and Financial Aid to Students*

As a result of the demand for increased educational opportunity and the need for more university-trained people, some countries have recently abolished student fees and granted living allowances to those studying at the university. Other countries are considering afresh the whole question of student fees, loans, scholarships, and allowances. The Section may wish to discuss the following:—

1. Should higher education have as its goal the complete elimination of economic status as a basis of university attendance?
2. Should the ideal be for scholarships, fellowships, and bursaries to cover fees, student living expenses, and the cost of essential supplies? Should the financial needs of students be taken into account in awarding scholarships, fellowships, and bursaries? If so, what "means test" can be used?
3. Are loans to students as effective in eliminating economic selection as are scholarships and bursaries?
4. To what extent should the State be responsible for providing financial assistance to students attending institutions of higher

education? Should such assistance be limited to students preparing for public service, or should it be available to all students?

5. To what extent should the university be responsible for providing scholarships?
6. What are the implications of allowing private organizations and individuals to provide scholarships?
7. Since the costs of travel and of living away from home are often heavy financial burdens for students who do not receive allowances, should the number of institutions of higher education, especially in urban centres, be increased?
8. Can a university be regarded as having met its obligations to economically handicapped students when it has established facilities for part-time study? Is part-time university study to be regarded as satisfactory? If so, under what conditions?

IV. *Planning in Higher Education*

Higher education has developed in many countries without overall planning or design. This sometimes means that students living in certain areas have little opportunity for higher education, while institutions in other areas are competing for students. It is also true that, in some instances, too many institutions are offering preparation in certain fields of study and others are almost wholly neglected.

However inadequate may be the amount of planning of higher education within States, there is certainly much less on the international level. Instances do occur, however; and the section may wish to discuss whether an extension of such planning is desirable and feasible.

1. Are members of the Section statisfied with the amount of planning of higher education that has occurred within their own countries? What has been done in each country to bring about a more rational distribution of universities and specialized institutions? What difficulties have been met?
2. Has the State a legitimate part to play in the planning of higher education within a country? Who should take the initiative for planning?
3. What are the useful limits of planning in higher education? Under what conditions, and in what fields of specialization, is the distribution of responsibility for teaching and research between different universities wise and economical?
4. Under what system of university control does over-all planning take place most easily?
5. What examples do members of the Section know of the planning of higher education at the international level, of bi-lateral or regional agreements, for example, under which the institutions of one country provide specialized training for the students of other countries which are unable to develop such training themselves? Is there need for this kind of planning to be extended?

By what means could it be most effectively organized? What special difficulties would it have to surmount? Has Unesco any contribution to make in this regard?

V. *The Provision of Basic Services*

Any discussion on the financing of higher education must take into account the provision of such basic and expensive facilities as libraries, museums, laboratories, and student buildings. It is anticipated that one or more special reports on these facilities and on the services they provide will be given by participants at the Conference; and that they will raise detailed questions. The Section may wish to consider how far the provision of these facilities and services has kept pace with increased university enrolments.

VI. *Universities in War-Devastated Countries*

1. What are the special financial problems of the universities in the war-devastated countries?
2. What are their most serious needs? How are they being met?
3. What assistance have universities in other countries been able to provide? What more could they do? Could Unesco do more to make university needs better known?

(The effects of the war on academic standards will be discussed by Section II.)

Section IV

UNIVERSITY EDUCATION AND INTERNATIONAL UNDERSTANDING

It is little more than a commonplace to say that university studies should develop international understanding. The central questions before this Section are:

A. Are members of the Conference satisfied with the contribution the university is making towards international understanding?
B. If not, what further can universities do in this regard?
C. Is there any way in which this Conference can assist universities to develop this part of their work?

The rest of this paper raises questions on special aspects of the general problem.

I. *Preparation for Work in International Fields*

One of the greatest difficulties facing international organizations to-day is the shortage of men and women with the experience and

training necessary for work of an international character. On this point Unesco, in common with the United Nations and the other Specialized Agencies, can speak with both feeling and authority. The effectiveness of their work has often been threatened by the difficulty of securing geographically distributed staffs, with the necessary knowledge of languages and administration, and the quite essential understanding of countries other than their own.

The need for staffs with special training for international work is, of course, not confined to inter-governmental organizations. Diplomacy, national information services, commerce, air-transport, and international voluntary organizations, while each demanding special qualities of its own, all need officials whose basic training prepares them to work with people of different nationalities. It is to be doubted whether many institutions of higher education have deliberately set out to meet this rapidly growing need.

1. What responsibility has the university for providing education and training for work of an international character?
2. What is the best educational preparation for such work? How specific can training be?
3. How far do existing courses of study in universities meet the needs of students intending to take up international work? Could they be altered or expanded so as to serve this purpose more adequately?
4. Are entirely new courses required for the purpose? If so, of what should they consist, and in what sequence should they be given?
5. Could an international council on higher education, were it formed, encourage the provision of university courses preparing students for international works? Could it help by providing information on methods and materials used in different countries?
6. Would any resolutions passed by this Conference assist delegates in developing such courses in their own countries?
7. What could be done to assist in the satisfactory placement of students who had been especially prepared for work of an international character?

II. *Development of International Departments or Faculties within Universities*

The Second Session of the General Conference of Unesco, meeting in Mexico City, recommended that consideration be given "to the possibilities of organizing in certain universities throughout the world International Departments consisting of scholars, professors and educators from foreign countries".

This resolution is capable of at least four interpretations:

(*a*) The proposal might involve only the extension of programmes in International Studies, of the type already established in some universities; e.g. Schools of Slavonic, Oriental or African studies.

(*b*) The proposed International Departments might be specialized departments for the study of international relations.

(*c*) Another interpretation might involve the expansion of any one department (e.g. Philosophy, humanities, law, social studies) in a university to include advanced students, research specialists, and teaching staff from a number of countries. They would work on problems which depend for their solution on contributions from persons with different national backgrounds.

(*d*) The proposed International Departments might include foreign students and teachers in a wide range of subjects not necessarily related directly to international affairs.

1. What departments already exist that correspond to (*a*), (*b*), (*c*) or (*d*) above?
2. Is there a need for the establishment of further departments of any of the four types?
3. How would such departments be established and financed?
4. How should the teaching staffs be recruited, and for what terms?
5. How should the students be selected? Would scholarships and travelling grants be necessary? If so, by whom should they be provided?
6. Should these departments offer special degrees and diplomas?

III. *Development of International Understanding among all Students*

1. What responsibility has the university for assisting in the development of international understanding among all students? How far do members of the Section feel that the university is already meeting its responsibilities in this regard?
2. To what extent can international understanding be directly taught at the university level? Are special courses desirable? If so, should they be optional or compulsory? What relation should they have to degree requirements? Is there a need for some committee or administrative unit within the university with special responsibility for developing international understanding?
3. Can anything be done, outside formal courses of study, to develop international understanding among students? Can members of the Section quote special examples from their own experience?
4. Have institutions of higher education any special responsibility for training primary and secondary school teachers in techniques for developing international understanding in children?
5. Is further university research needed on the tensions affecting international understanding? Could an international council on higher education usefully stimulate and co-ordinate such research? (*Note*: Unesco has been particularly concerned with the problem of tensions. A paper on its work in this field will be submitted to the Conference.)

IV. *Exchange of Students and University Staff*

Students and university staff who seek opportunities for study or employment abroad are faced with many problems, and the Section may wish to consider the following:

1. In particular professions, e.g. teaching, medicine, engineering, it is often difficult to make reciprocal arrangements if the needs of the countries concerned are too disparate. How can this problem of reciprocal exchange be met? Can solutions be found on an international level to supplement bilateral arrangements?
2. What can be done to modify official regulations, such as those governing admission, employment, and length of stay in a foreign university?
3. Is more information needed to enable a student or professor to make a wise choice of a university abroad in which to study or seek employment?
4. What can be done to ensure that exchanges of students and university staff will lead to better international understanding? How important in this connexion is the briefing given them in their home countries before departure or in the host country on arrival?
5. Is it thought that students gain more in international understanding if exchange is made while they are between the ages of eighteen and twenty-two, or between twenty-two and thirty? What administrative changes are necessary if young students are to take part of their education in foreign universities without materially lengthening their courses of study?
6. What part could an international council on higher education, if formed, take in assisting and encouraging exchange?

Section V

MEANS OF CONTINUING INTERNATIONAL CO-OPERATION AMONG UNIVERSITIES

If the Conference should wish to consider the setting up of any kind of permanent organization for securing closer co-operation between the universities at the international level, it may find it useful to have a brief summary of recent efforts in this direction.

Recent Developments in International Co-operation

In 1921, the International Committee on Intellectual Co-operation, created by the League of Nations, set up a Sub-Committee on Uni-

versity Relations. When, two years later, the Institute of Intellectual Co-operation was established, its Section on University Relations became the executive agency of the Sub-Committee. In 1926, the Institute convened a meeting of thirteen Directors of (National) University Bureaux. A permanent Committee was formed, which met annually until 1932, and conducted several important studies. In 1929, the Committee urged that its scope of activity be extended, and that the help of the authorities in charge of higher education in various countries be sought. In consequence, the Institute convened, in 1932, a meeting attended by the Directors of Higher Education in the Ministries of France, Germany, Hungary, and Italy, as well as by the Directors of the American University Union and of the Universities Bureau of the British Empire. At its second meeting, held in 1933, this Committee drew up a programme of work and announced its aim as that of promoting "a living, and not merely a bookish, synthesis of university systems". It also proposed holding, in Paris, an International Conference of Higher Education. This University Conference was held in 1937. It was attended by the Directors of Higher Education in sixteen countries and by representatives of approximately 150 universities in forty-one countries. A report was published in 1938 under the title *Problèmes d'Université*. Another important outcome of the Conference was the formation in 1939 of a standing committee for higher education, including representatives of eighteen countries. The second world war prevented the development of its activities.

The Institute of Intellectual Co-operation fulfilled a two-fold function: it collected and disseminated information; and it stimulated both national and international activities in the field of higher education. Between 1924 and 1940, comparative surveys were made on the organization of higher education, on admission requirements, on the equivalence of degrees, and on the rôle of extra-university organizations for promoting scientific research. By spreading information about national institutes in foreign countries, the status of foreign teachers, scholarships, and summer courses for foreign students, the Institute stimulated the exchange of teaching staff and students. *Students Abroad*, a semi-yearly bulletin, was issued regularly from 1931 to 1939.

Joint action on problems that are common to all students was facilitated by the setting up of a Co-ordinating Committee of the major international student associations. This committee, which was supported by the Institute, organized at Luxemburg in 1938 an international "conversation" between students on Education in the Modern University. (1)

As early as 1923, and annually from 1925 onwards, the International Committee of Intellectual Co-operation undertook, jointly with the International Institute of Statistics, enquiries on "Intellectual statistics". (2)

(1) *Students in search of their University.*

(2) The two volumes published in 1936 and 1938 on *L'organisation de l'enseignement supérieur* contain a wealth of information, a large part of which is still valid.

In 1930, when the effects of the world-wide economic crisis were being felt in the universities, the Institute began preliminary work to meet the new needs that were arising. It co-operated with the Co-ordinating Committee of Students' Associations, the International Labour Office, and the International Bureau of Education in making studies of the intellectual labour market. (1) To provide a sound basis for such studies, the Institute of Intellectual Co-operation, established in 1937 (2) an International Office of University Statistics, with the dual purpose of assisting national bureaux of university statistics and of co-ordinating the collection of quantitative data on higher education. Information was gathered from thirty-five countries and a comprehensive report, *The Future of Graduates*, was published in 1940. The suggestions and recommendations it contains are still valuable and provide a basis for further work.

The history of the International Association of University Professors and Lecturers will be known to most members of the Conference. Four preliminary conferences, held between 1934 and 1937, were attended by representatives of national associations of university teachers. During the second world war, university teachers and research workers from many countries formed the Association of Professors and Lecturers of the Allied Countries in Great Britain. In 1944, the Organization adopted provisional statutes for an International Association of University Professors and Lecturers. The Association held a meeting in Paris from 30 March to 2 April, 1948. Unesco has kept contact with the I.A.U.P.L., and has invited it to undertake preliminary enquiries in connexion with the equivalence of degrees, making a financial grant to cover the expenses.

Existing International Organizations

There are a number of organizations of an international character with strong interest in university affairs. They may be roughly divided into four types:

1. Associations of university teachers not restricted to subject specialities. In addition to the International Association of University Professors and Lecturers, there may be other such organizations of a regional character, of which Unesco is at present unaware.
2. Associations of graduates or undergraduates representing no specialized fields, e.g. International Association of University Women, and the various international student organizations.
3. Associations or federations concerned with the interests of specialists, e.g. International Scientific Unions, world medical associations, and international teachers' organizations.

(1) Dr. WALTER F. KOTSCHNIG, *Planless Education*, 1935, and *Unemployment in the Learned Professions*, 1937. These two reports were published by the International Student Service.

(2) A first report on the co-ordination of university statistics was prepared in 1932 by Professor VINCENZO CASTRILLI, upon instruction from the Committee of Directors of Higher Education.

4. Organizations of an inter-governmental character e.g. Unesco, W.H.O., Pan-American Union.

The interest of some of these organizations in university matters may not go far beyond the maintenance of professional standards or the recruitment of personnel. Others have a broader field of interest, but there appears to be no international organization that can claim in any general sense to be representative of the universities of the world.

Possible Lines of Future Action

The main question before this Section is whether it is desirable and possible to set up some kind of international organization to secure closer co-operation between universities throughout the world. It is a question which cannot well be answered without some definition of the functions that such an organization might be expected to perform.

A minimum programme for such an organization might include the following:

1. Assistance to existing national and international agencies and institutions in order to facilitate the exchange of university teachers and students.
2. Standardization of university statistics as a basis for collecting and disseminating data of international concern.
3. Collection and dissemination of data regarding scholarships, fellowships, summer courses, and similar opportunities for students wishing to study in a foreign country.
4. Publication at intervals of a directory of universities.
5. Generally, the provision of a point of reference for further attempts to secure closer co-operation at the international level among organizations and institutions in the field of higher education.

It is estimated that this minimum programme might be begun by either one or two full-time staff members and a secretary, provided that they could call upon some of the servicing facilities of an already established organization.

If a more extended programme were decided upon, it might, in addition to the above, include the following activities:

6. Collecting and disseminating, either directly or through appropriate agencies, data on such subjects as:
   (*a*) the equivalence of entrance qualifications, degrees and diplomas
   (*b*) techniques for the selection of students
   (*c*) health and social life of students
   (*d*) academic freedom
   (*e*) university finance.
7. Furthering research in methods of teaching at the university level.

8. Assisting universities in their contribution to the development of international understanding.
9. Planning and conducting conferences of representatives of higher education to discuss problems of international interest. These conferences might be either world-wide or representative of a number of countries in a geographic area.

This programme, when in full operation, would require a much larger staff and a correspondingly larger budget.

Questions Arising :

1. *Should a new international agency be established in the field of higher education?*

If it is agreed that this should be done, and that the Conference should take some steps towards it, certain questions of policy and organization naturally follow.

2. *What activities, such as those described above, shall be undertaken and in what order of priority?*

Obviously, the organization cannot launch a comprehensive programme of activities during its first year; hence it is necessary to agree upon a limited programme that will enable the organization to meet the most urgent needs.

3. *How shall the organization be financed?*

The amount of money needed to finance the organization will, of course, be determined by the extent and complexity of the programme it is to undertake. There are at least three possible sources of funds: (*a*) membership fees; (*b*) private grants and gifts; (*c*) assistance from an existing international organization. While outside assistance may be secured in the early stages, or to support special projects, it cannot be depended upon very heavily, or over an extended period. In any case, the vitality of the organization will be indicated to a large degree by the extent to which it can be self-supporting, even during the first year. If this reasoning is sound, the determination of kinds of membership and the size of membership fees is of major importance.

4. *What types of membership shall be established?*

There are at least four possible types of members: international organizations interested in higher education; governments; national organizations in the field of higher education; and institutions of higher education themselves. These might be given different classifications such as: constituent members, affiliated members, and institutional members.

The problem of designating the organizations that are to be constituent members is especially difficult. If international organizations are given constituent membership, then some criteria will need to be established to select those which have a major interest in higher education. If individual universities become constituent members, there is the problem of defining a university, and the question whe-

ther membership shall be open generally to all universities in a country, whatever their constitutions or methods of control. There is also the possibility of national groups, either governmental or voluntary, which represent the universities in each country, becoming the constituent members of the new organization; but here the variety of such organizations and the complete lack of them in some countries present a major difficulty.

When the International Committee for Intellectual Co-operation was faced with a similar problem, it was proposed that national agencies participate directly in the work of international co-operation through regular meetings of responsible experts—directors of higher education, and, in countries in which the educational system is not centralized, representatives of organizations exercising influence, but not control, over the universities.

5. *What shall be the qualifications for membership?*

Once the types of membership have been decided, there arises the further problem of determining the exact qualifications for each. This is particularly difficult in the case of individual institutions, since standards vary so widely within countries as well as between countries. Apart from differences in quality, there are differences of kind. Technical schools and teacher training institutions, for example, which do some work at the university level, are, in many countries, not part of the university system. Because of the difficulty of an international organization appraising institutions in the various countries, it may be desirable to invite one or more national bodies within each country to make the initial recommendations.

6. *What should the organization be called?*

Although the name appears relatively unimportant, it should help to connote the character of the organization. Since membership probably will be of a diverse nature, including both organizations and institutions, the word "Council" seems more appropriate than "Association" or "Federation". The term "Council" also implies that the organization will stimulate and co-ordinate the activities of its members rather than usurp any of their functions or lessen their autonomy. Because of the different connotations of the word "university", it may be more advisable to use the phrase "higher education".

Possibly, therefore, the name, "International Council on Higher Education" might be most appropriate.

7. *What definite steps need to be taken by this Conference?*

This Conference might:

(*a*) Draw up and adopt a constitution, and select the officers of the new organization, *or*

(*b*) draw up a tentative constitution to be referred to appropriate bodies in the various countries. This would require the naming of a special committee with power to make revisions and prepare a final draft for later adoption by whatever means appear to be most feasible, *or*

(*c*) agree upon basic policies, and appoint a continuing committee to draft a constitution and to take whatever further action the Conference agrees upon, *or*

(*d*) appoint a committee to study the matter further and report at some later date; *and*

(*e*) assure means of financial support for whatever continuing activity is agreed upon prior to the meeting of another conference.

All of these, except possibly the first, imply the calling of another world conference. Consequently, definite action would be necessary to determine the auspices under which a later conference might meet, its size and scope, and its financing.

In all these discussions, consideration might be given to the most appropriate functions of Unesco in relation to such an organization and to higher education generally.

APPENDIX C

LIST OF PERSONS OFFICIALLY REGISTERED

AUSTRALIA

Participants:

Dr. G. A. Currie, Vice-Chancellor, University of Western Australia
Sir John D. G. Medley, Vice-Chancellor, Melbourne University

BELGIUM

Participants:

Professor J. Baugniet, Rector of the Free University of Brussels
Professor M. Florkin, University of Liège
Professor O. de Raeymaeker, University of Louvain

Observer:

Professor Ruyssen, University of Ghent

BRAZIL

Participant:

Professor Paulo de Berredo Carneiro, Permanent Delegate of Brazil to Unesco, Member of Unesco Executive Board

BURMA

Participants:

Dr. Htin Aung, Rector Magnificus and Administrator, University of Rangoon
Professor U Ba, Dean of the Faculty of Education, University of Rangoon

CANADA

Participants:

Professor D. H. Gillis, St. Francis Xavier University, Nova Scotia
Professor H. B. Mayo, University of Alberta

CHINA

Participants:

Professor Chen Yuan, Unesco Executive Board
Professor Cheng Chi-Pao, Ministry of Education, Nanking.
Professor C. C. Tan, University of Chekiang

CUBA

Participants:

Professor Dr. Francisco de la Carrera, Dean of School of Science, University of Havana

Professor Dr. Jose M. Gutierrez, Dean of School of Education, University of Havana

Observer:

Dr. Elias Entralgo, Dean of School of Philosophy and Letters, University of Havana

CZECHOSLOVAKIA

Participants:

Professor Jan Kozak, Dean of Philosophical Faculty, Charles University, Prague

Professor Dr. Karol Rebro, Slovak University, Bratislava

DENMARK

Participants:

Professor Dr. Carsten Høeg, University of Copenhagen

Professor Dr. Jakob Nielsen, The Technical University of Denmark

Observers:

Professor Dr. Andreas Blinkenberg, University of Aarhus

Professor Aksel Milthers, Royal Veterinary and Agricultural College of Denmark

DOMINICAN REPUBLIC

Participants:

Dr. Manuel Pastoriza Valverde, Minister, Dominican Legation, Paris

Dr. José Bienvenido Peynado, Counsellor to Dominican Legation in Paris

EGYPT

Participants:

Dr. Mohamed Sadek Gohar Bey, Rector of Farouk I University

Dr. Ibrahim Shawki Bey, Rector, Fouad University.

Observer:

Mohamed Mustafa Elkolaly Bey, Dean of Faculty of Law, Fouad University

FINLAND

Participant:

Professor Veli Kaarlo Merikoski, Professor of Administrative Law, University of Helsinki

FRANCE

Participants:

M. André Allix, Rector, University of Lyons

M. le Recteur Audra, Directeur de l'Office National des Universités et Ecoles françaises
M. Louis Landré, Professeur chargé de cours, Sorbonne

GERMANY (British Zone)

Observer:

Mr. R. H. Pender, Head of Universities Section of the Education Board of the Control Commission

GERMANY (U. S. Zone)

Observer:

Mr. Fritz Karsen, Chief, Higher Education, U. S. Army in Germany

HAITI

Participant:

Dr. Lucien Hibbert, Rector, University of Haiti

HONDURAS

Participant:

Dr. Antonio Vidal, Chargé d'Affaires of Republic of Honduras in France

HUNGARY

Participants:

Dr. Ladislas Kardos, Representative of Peoples Colleges
Professor Guyla Kockas, University of Budapest
Dr. Georges Szanto, Chief of the Section for Higher Education, Ministry of Education

Observer:

Dr. P. Lazar, Hungarian Ministry of Education

INDIAN UNION

Participants:

Sir Chandreshwar Prasad Narayan Singh, Vice-Chancellor, Patna University
Mr. M. Ruthnaswamy, Vice-Chancellor, Annamalia University
Mr. G. H. Sinha, Principal, Bhagalpur College

Observer:

Mr. M. S. Sundaram, Secretary, Education Department, India House, London

IRAN

Participants:

Dr. A. M. Maleki, University of Tabriz
Dr. Chahid Nourai, University of Teheran

IRAQ

Participant:

Dr. Matta Akrawi, Director General of Higher Education, Ministry of Education

Observer:

Dr. Mahomed Hussain-al-Yassin, Associate Professor, Higher Teachers College, Baghdad

ITALY

Participant:

Professor Gabriele Salvioli

Observer:

Professor Ch. Leoncio da Silva

MEXICO

Participant:

Dr. José Zozaya, Director, Graduate School, University of Mexico

THE NETHERLANDS

Participants & Observers:

Professor Dr. H. R. Kruyt, President of the Unesco National Commission
Mr. H. J. Reinink, Department of Education
Jhr. Mr. C. J. A. de Ranitz, Department of Education
Dr. F. Bender, Department of Education
Professor Dr. G. v/d Leeuw, University of Groningen
Mr. K. Wiersma, University of Leiden
Professor Dr. F. L. R. Sassen, University of Leiden
Professor Dr. L. J. Hijmans v/d Bergh, University of Utrecht
Professor Dr. A. G. M. van Melsen, University of Nijmegen
Mevrouw Mr. M. J. Koch Kylstra
Mr. H. J. Bannier (Alternate for Jhr. de Ranitz)

THE NETHERLANDS EAST INDIES

Professor Dr. W. Radsma, University of Batavia
Professor Dr. A. F. Beerling, University of Batavia
Professor Dr. C. O. Schaeffer, University of Batavia
Professor Dr. Tjang Hiang Thung, University of Batavia
Dr. E. A. Kreiken (Alternative for Dr. Radsma)

NEW ZEALAND

Participants:

Professor I. A. Gordon, Vice-Chancellor, University of New Zealand
Sir David Smith, Chancellor, University of New Zealand

NORWAY

Represented by Dr. Carsten Høeg of Denmark

PAKISTAN

Participants:

Dr. O. H. Malik, Vice-Chancellor, West Punjab University, Lahore
Dr. A. Waheed, Member of Senate of University of Lahore, and Member Secretary, Inter-University Board of Pakistan

PORTUGAL

Participant:

Professor Dr. Inocêncio Galvao Teles

SIAM

Participant:

Prince Rajadabhisek Sonakul, Rector of Chulalongkorn University, Bangkok

SWITZERLAND

Participants:

Professor Maurice Batelli, Faculty of Law, University of Geneva
Professor Victor Martin, University of Geneva
Professor André Mercier, Professor and Secretary to the Rector, University of Berne

TURKEY

Participants:

Professor Enverzia Karal, Rector of University of Ankara
Professor Tevfik Saglam, Professor de la 3e Clinique Médicale à la Faculté de Médecine, Istambul University
Professor Salir Murat Uzdilek, Head of the Department of Physics, Technical University of Istambul

Observer:

Professor Besim Darkot, Professor of Geography, University of Istambul

UNITED KINGDOM

Participants:

D. M. Balme, Principal Designate, University College of the Gold Coast
Dr. L. Ifor Evans, Vice-Chancellor of the University of Wales
Dr. J. F. Foster, Secretary of the Committee of Vice-Chancellors and Principals, and of the Universities Bureau of the British Commonwealth
Miss Margery Fry, formerly Principal of Somerville College, Oxford
Professor T. G. B. Osborn, University of Oxford

UNITED STATES OF AMERICA

Participants:

Jaime Benitez, Chancellor of the University of Puerto Rico
Martha B. Lucas, President of Sweet Briar College
Dr. Thomas R. McConnell, Dean of the University of Minnesota
Dean William F. Russell, Dean of Teachers' College, Columbia University
Dr. George F. Zook, President of the American Council on Education

Observers:

Mr. Lawrence Duggan, Director of Institute of International Education
Mr. Kenneth Holland, Permanent United States Delegate to Unesco

Rev. Edward B. Rooney, Executive Director of the Jesuit Educational Association.
Mr. Marten ten Hoor, Dean of the University of Alabama.
Dr. Howard E. Wilson, Assistant Director, Carnegie Endowment for International Peace
Mr. L. E. Loemker, Emory University, Georgia

Observers from International Organizations

International Association of University Professors and Lecturers
Professor R. C. MacLean, University College, Cardiff

International Bureau of Education
Professor Victor Martin, Swiss Federal Government, Geneva

International Federation of Library Associations
Dr. T. P. Sevensma, Former Librarian of Universities of Leiden and Amsterdam

International Federation of University Women
Miss (Maestra) E. C. Simons Alternate Miss J. Went

International Meteorological Organization
Mr. C. G. C. Schutte, Netherlands Meteorological Institute

International Student Service
Professor W. J. Rose, School of Slavonic and East European Studies, University of London

International Studies Conference
Professor C. A. W. Manning, London School of Economics and Political Science, University of London

International Union of Students
Mr. M. R. Audeoud

Pax Romana
Mr. Bernard de Hoog

World Federation of United Nations Association
M. Jean Pierre Martin

United Nations
Mr. Louis Gros

World Health Organization
Professor Edward Grzegorzewski

Speakers not included in Delegations

M. Georges Scelle, Professeur à la Faculté de Droit de Paris
Dr. George D. Stoddard, President, University of Illinois

Dr. J. J. Gielen, Minister of Education, The Netherlands
Jonkheer Bosch Ridder van Rosenthal, President, University of Utrecht
Dr. Julian Huxley, Director-General of Unesco
Dr. Walter J. Laves, Deputy Director-General of Unesco
Dr. C. E. Beeby, Assistant Director-General in charge of Education

The Netherlands Committee of Honour

His Royal Highness Prince Bernhard of the Netherlands, Patron
Dr. L. J. M. Beel, Prime Minister
Mr. C. G. W. H. Baron van Boetzelaer van Oosterhout, Minister of Foreign Affairs
Dr. J. J. Gielen, Minister of Education
Dr. L. C. Nemry, Dean of the Diplomatic Corps

The Local Committee

Dr. G. A. W. ter Pelkwijk, Chairman, curator of the University at Utrecht and former burgomaster of Utrecht
Miss F. H. M. Beumer, of the bureau of the Utrecht University
Mr. C. Bronkhorst, representing the student organizations
Prof. Dr. U. G. Bijlsma, Rector Magnificus of the Utrecht University
E. F. Baron van Haersolte, Secretary to the Netherlands Railways
Prof. Dr. H. R. Kruyt, President of the Central Board of Scientific and Industrial Research and President of the National Commission
Miss W. M. V. van Lanschot, Head of the Cabinet of the Burgomaster of Utrecht
Dr. J. Reinders, General Secretary of the Chamber of Commerce and Industry
Mr. H. F. Tecoz, Head of the Bureau of the Industries Fair.
Prof. Dr. H. Wagenvoort, Professor of Latin language and literature
Dr. J. H. des Tombe, Secretary of the Curators of the Utrecht University
Mr. J. C. Wilbrenninck, Director of the Tourist Bureau at Utrecht.

assisted by:

Dr. Franz Bender, Secretary of the National Commission

Secretary-General of the Conference:

Dr. Francis Brown, Education Department of Unesco.

Deputy Secretary-General:

Miss Monica Luffman, Education Department of Unesco.

APPENDIX D

EXPRESSIONS OF APPRECIATION

At the final plenary session of the Conference, the following motions of appreciation were separately introduced from the floor and enthusiastically adopted:

> The Conferences wishes to place on record its warm appreciation of the capable and continuous services of the President, Dr. Kruyt, whose sound judgment and unfailing good humour have contributed so greatly to the success of its meetings.

*
* *

> The Conference expresses its deep gratitude to the Government of the Netherlands, to the municipality and the University of Utrecht, and to the municipal authorities of the Hague, Amsterdam, Apeldoorn, and Wassenaar, for the most generous hospitality so freely accorded to its members.

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> The Conference is very specially indebted to the local committee at Utrecht for the admirable arrangements made for its reception, and for the many individual kindnesses received by its members. Particular thanks are due to Dr. ter Pelkwijk, Dr. des Tombe and Miss Beumer; to the Ladies Committee; the hosts; and to the many students and others whose ready assistance has been greatly appreciated by all.

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* *

> The Conference wishes to thank the press for its coverage of the meetings and to express its very deep appreciation to the editors and publishers of the *Utrechts Nieuwsblad* for daily issuing a special edition devoted to its proceedings and for so generously making the copies available to all members

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* *

The Conference is particularly indebted to Dr. Beeby, Dr. Brown, Miss Monica Luffman, and other members of the Secretariat of Unesco, not forgetting the Public Information representatives, interpreters and translators, secretaries and minute-writers, for the admirable work performed by them in preparation for the Conference, and in assuring the success of its meetings.

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* *

The Conference thanks the two Vice-Chairmen; and the Chairmen, Vice-Chairmen and Rapporteurs of the various sections for the devoted manner in which they have performed their duties.

Printed by G. Thone
Liege (Belgium)