

## THE UNIVERSITY OF MALAYA

By SIR SYDNEY CAINE, K.C.M.G.  
Vice-Chancellor

THE University of Malaya is now five years old. What are its achievements, its opportunities and its problems? Created by the amalgamation of two Singapore institutions, the King Edward VII College of Medicine and Raffles College (covering arts and science), its first tasks were to merge these two units and secure recognition of their standards; to extend the range of teaching; to get assured finance for maintenance and growth; and to create an adequate physical centre for itself.

During all its early years the University has been troubled—some would say bedevilled—by the last problem, of siting. It had been agreed by the Governments of Singapore and the Federation of Malaya that the University should be moved out of Singapore to a site some twenty miles away in Federation territory, across the Strait of Johore. This project had many attractions, especially politically; but as time passed it became very clear that such a move would meet many obstacles, would cost vast sums of money and would take many years. Doubts accumulated of the inherent wisdom of removing from close contact with the life and culture of the leading city of Malaya. Growth in numbers—much more rapid than had been expected—produced pressing demands for more facilities now on the Singapore site rather than alternative facilities years hence elsewhere; but action was paralysed by the prospect of ultimate removal.

The financial position was equally inimical to long-term planning. The two Governments had met without demur the annual demands of the University as presented but had made no specific promises for the future as to either recurrent or capital expenses, leaving the academic staff in doubt whether money would always be forthcoming so readily and so unconditionally.

During the past year both site and finance have been publicly discussed and reviewed by the University and the Governments. Three main conclusions have been unanimously accepted: the project of removal to Johore is abandoned; the University will retain its home in Singapore where it has considerable space for development, but will also, with growth in student numbers and in technical studies in mind, begin a second university centre at Kuala Lumpur, the Federation capital; and finance is assured by a promise of annual Government grants over a five-year period on an escalator basis, plus a minimum capital grant. The money promised is less than the University asked for; but the minimum annual grant is to rise from £640,000 for 1954–55 (against £560,000 in 1953–54) to £780,000 in 1958–59. For capital the University will be largely dependent on further assistance from the Colonial Development and Welfare Fund (from which £1,000,000 is already promised) and from private benefactions. These decisions give a firm basis for further progress, and urgently needed new buildings will be started almost at once.

What, on the other side, is the academic basis for progress? The existing faculties are in arts (including English, oriental studies, geography, history, economics, education and mathematics), science and medicine, making a total of twenty-seven depart-

ments. Staff has expanded from the 60 taken over from the Colleges to 140 at the beginning of the 1954–55 session. Student numbers have grown in five years from 450 to 1,050. New departments added since 1948 include education, Malay studies, Chinese language and literature, philosophy, social medicine, parasitology and orthopaedic surgery. Social studies, in which a diploma is awarded, has been added as a sub-department of economics, and independent lecturerships have been established in the history of art and in child health. Although additional buildings are needed, the University is already fortunate in having good and well-equipped laboratories, a large and progressive teaching hospital and substantial general accommodation. By a wise decision, the one important building put up since 1949 has been a well-equipped library which houses a good collection of English books and one of the largest collections of Chinese books in Asia outside China itself.

In maintaining degree standards, the University relies very much on the distinguished scholars from the United Kingdom and elsewhere who act as external examiners and pay regular visits. Its M.B., B.S., like the medical diploma of the former College, is a registrable qualification in the United Kingdom and, more significantly for the reputation of the Medical School, the Malayan diploma in public health begun last year was at once recognized by the General Medical Council. No equally clear-cut 'recognition' is available for non-medical degrees; but students with a University of Malaya honours degree are accepted for higher studies at leading universities and professional institutions elsewhere.

Academic standing is judged not only by the first degrees awarded but also by the output of research. Here, after five years, it is fair to look at the promise rather than the achievement. Recognizing the importance of research, the University immediately provided for a full range of higher degrees. To date it has awarded seventeen M.A.s or M.Sc.s, three Ph.D.s and five M.D.s. At the commencement of the 1954–55 session, twenty-seven students were registered for higher degrees. Much research work is also being pursued by senior members of the staff without formal registration, and there is a steady flow of papers published in learned journals. A research unit for social research has been set up, and several research students have been attached under Fulbright arrangements.

The University is thus a functioning mechanism, sending a regular stream of graduates into the professions and public services of Malaya—some 70 doctors and dentists a year and 120 non-medical graduates; and prosecuting specific research in all its main branches of study. What are its opportunities?

First are its teaching opportunities. Malaya is progressing steadily towards self-government; the senior Government services, the professions and local business managements will soon be recruiting scarcely any but local men and women. They need not all be locally educated; but the University of Malaya ought certainly to provide a high percentage of the university-trained personnel of the Malaya of the

future. To do that it must broaden the scope of its teaching. It must add departments or faculties in engineering, agriculture, law and the complex group of social studies which includes government and political science, applied economics and social anthropology. A start is to be made on all these within the next quinquennium, besides developing existing departments.

Such a widening of scope is not too ambitious if full university stature is to be attained, and there is adequate reason to expect a flow of students sufficient to fill these courses and, incidentally, to justify the beginning of university teaching in Kuala Lumpur. There are to-day more Malayan young men and women studying at university-level outside the country than there are at the University of Malaya; most of them are studying subjects not yet taught in Malaya, and a good proportion would no doubt have come to Singapore if these subjects had been offered there. Furthermore, a very rapid expansion in secondary education is taking place in Malaya. Even allowing for some brake on expansion at the higher levels imposed by shortage of teachers capable of maintaining the necessary standards, the numbers seeking a university education look like doubling in the next decade.

Relevant to the question of numbers is the fact that the University to-day draws very little upon the 'Chinese' schools, which provide a self-contained system of primary and secondary education distinct from the 'English' schools and relying mainly on Chinese as a medium of instruction and on Chinese inspiration in general subjects. Pupils from such schools qualified for a university education formerly went to China for it. There is now a project to create for them a separate institution, to be called the Nanyang University, although they are only a fraction of those from the English schools and could scarcely support a separate university of Western academic standards. It is important that they should not be denied entry to the University of Malaya, and means are now being examined by which the language difficulty can be surmounted and a regular channel of entry from these schools established.

A university is not, however, just a machine for turning out highly trained professional men. Equally important are the spirit, the philosophy and the culture they carry with them. Here the prospective political and social development of the country makes the role of the university even more vital. Maintaining the values of life as we see them in the West, and the standards of political and public life, will make great calls on the young men and women who will be filling the public services, the law and other professions in the next five or ten years. In living up to its responsibilities in this field, the University has to steer a delicate course in the teaching, encouragement or toleration of political thought and discussion; still more delicate are the susceptibilities in the religious field when students are drawn from so many faiths—Moslem, Confucian, Hindu, Buddhist and Christian. In so far as political, philosophical or religious ideas are taught, they tend to become vague distillations of the essential truths of many creeds and to lack sharpness and punch. The widely realized problem of how to instil some real philosophy of life in a secular university is particularly difficult in a country of such varied make-up and in which almost all identifiably Western doctrines except Communism are liable to be suspected of a 'Colonial' taint. None the less, difficult as the task is, the handing on of the

essence of Western culture is one of the greatest of the opportunities of the University of Malaya.

So much for what can be taught. What of the things to be learned, the research opportunities? In natural science special opportunities arise from the physical situation of Malaya. Singapore is barely 1° from the Equator. In physics, although claiming no special facilities for pursuing the main lines of current physical research, Singapore is uniquely situated for the study of equatorial meteorology; Malaya can also offer its own special contribution in rock magnetism. Probably no other university offers as good facilities for the study of equatorial marine fauna. In botany there is the basic study of the behaviour of plants in a virtually seasonless climate, as well as much scope for further systematic work on the rich equatorial flora; and chemistry can, *inter alia*, supplement the work of the botanist with systematic study of the properties of that flora.

The geographical situation also opens opportunities of special research in the medical field. The distinguished tradition of research in Malaya is still carried on in the Institute for Medical Research at Kuala Lumpur, and is now being supplemented by work in the University. Among many special topics attention is being paid to parasitology, local virus diseases and to physiological reactions to the heat conditions of the equatorial tropics.

In human or sociological studies, special opportunities arise less from the equatorial situation than from history and economics. South-east Asia has always been a meeting-place of cultures, and the ordinary complications of mixed societies are given a special flavour in Malaya by the fact that the diverse races are mixed in such proportions that each one is, statistically speaking, a 'minority'. The very newness of the country—by the standard of the date of effective opening-up to close human settlement most of it is newer than the United States—makes its sociology a living study of pioneering and of the absorption of mass immigration. In economics, Malaya provides an outstanding case of the 'export economy' and of dependence on highly fluctuating world markets, and much of the special reaction on the local economy has still been only superficially studied. As background to all this, more complete study of the history and geography of both Malaya itself and the surrounding countries is being systematically tackled by enthusiastic teams in the respective University departments. In all fields the geographical situation and communication facilities of Singapore justify hopes of its becoming a major centre for the study of South-east Asia as a whole.

A third field of opportunity for the University lies in extra-mural work in a much wider sense than usual, implying not merely (indeed scarcely at all) formal teaching outside the University's walls but also encouraging, stimulating and assisting whatever local initiatives develop in the fields of art, music, literature and general study. Already the University is establishing itself in this way as one of the centres where the public may hear good music, watch plays or look at exhibitions of visual art, and as the headquarters or inspiration of national societies such as the Malayan Historical, Science or Mathematical Societies.

Lastly, what are the problems of such a university? One major problem already mentioned—how to influence the souls and the philosophical beliefs of its students as well as their minds and their technical

knowledge is bound up with the way the students live. To-day the University of Singapore is more like a British civic university than one of the ancient universities; true, a high proportion live in university residences, but those residences are properly called hostels rather than colleges and have scarcely any of the collegiate atmosphere. The development of that depends on physical facts and will necessitate extensive new building. A second problem is the recruitment of staff. Naturally it is the aim to recruit locally as much as possible, and more than 40 per cent of the staff (including five heads of departments) are Asian; but extensive reliance will be placed for many years on outside recruitment. To-day the non-locals are themselves a very mixed group, countries of origin including, besides the United Kingdom, every other nation in the Commonwealth, Ireland, the United States, Denmark, Sweden, the Netherlands, Switzerland, Germany, Austria, Czechoslovakia, China, Indonesia and Thailand. This diversity of origin broadens the University's scope, but adds to the problems of spiritual unity. The determination to attract staff of the right quality is shown by the very high salaries and allowances offered (for example, assistant lecturers starting at £1,490 per annum actual emoluments and lecturers ranging from £1,638 to £2,688).

Recruitment is linked with a third general problem—the danger of isolation. The fear of being cut off from the intellectual stream of the big universities undoubtedly deters many potential recruits and is a danger in the wider sense to a university the nearest Commonwealth neighbours of which, Hong Kong, Ceylon and Western Australia, are all more than 1,500 miles away. The University reduces the isolation by generous vacation and study leave, by the external examiner system and by seizing every opportunity of attracting distinguished visitors, who can often be caught in Singapore almost literally on the wing as they fly through *en route* to Australia or the Far East. None the less, the maintenance of contacts with Commonwealth, American and European universities is a constant problem, in the solution of which every possible outside help and sympathy are needed. The recent institution of scholarships for the children of United Kingdom staff of Colonial universities by Birmingham is an example of the sympathetic interest required.

Space does not permit of discussing here more localized problems—the administrative complexities of development in Kuala Lumpur as well as Singapore, the linguistic problem of teaching in English to students of diverse mother-tongues, the problems of school educational standards, etc.—but something must be said about costs. All the growing Colonial universities cost a good deal more per student than the average United Kingdom or Commonwealth university. Apart from the inevitable burden of overheads in small institutions, salaries have to be much higher to attract staff, passage and leave grants are expensive and the expenses of external examiners add further to the cost. It must sometimes seem, therefore, as if it would be no more expensive to maintain all the students overseas at older universities. That would be an exaggeration; but in any event this must be regarded as an initial phase of costliness which will pass as more local talent becomes available. The high current costs of operation are properly regarded as part of the capital costs of building up institutions which, in Malaya and elsewhere in the Colonial Empire, represent one of the

greatest, if one of the latest, of the contributions of Western influence to the full growth and development of these territories. No better use can be found for further United Kingdom assistance to Colonial development and welfare than a continuance of the generous grants which have made possible the initiation of these overseas university institutions.

## RECENT TRENDS OF GLACIER FLUCTUATIONS IN THE NORTH ATLANTIC AREA

A LARGE and varied audience attended a discussion on "Recent Trends of Glacier Fluctuations in the North Atlantic Area" held by the British Glaciological Society in the Department of Geology, Oxford, on November 19. This was the first meeting of the Society to be held in Oxford for some years, and it was opened by Mr. G. Seligman, president of the Society. The main part of the meeting took the form of five short papers given by Mr. C. W. M. Swithinbank (Pembroke College, Oxford), Dr. C. A. M. King (Department of Geography, Nottingham), Dr. M. M. Sweeting (St. Hugh's College, Oxford), Mr. M. F. W. Holland (St. Peter's Hall, Oxford), and Mr. H. Lister (Department of Geography, Cambridge). These papers were mainly concerned with the results derived from recent field-studies on glacier regime and fluctuations in areas around the North Atlantic, particular attention being paid to fluctuations during the past fifteen to twenty years. Prof. Gordon Manley (Bedford College, London) attempted the difficult task of summing up the very diverse contributions and of assessing the extent of the dependence of glacial variations upon present climatic developments. Dr. K. Sandford (Department of Geology, Oxford) was in the chair.

In the first paper, Mr. Swithinbank reviewed the latest work in Scandinavia, where practically every glacier has been in retreat for more than half a century. The rate of retreat increased during the 1930's and caused the disappearance of several small glaciers. The changes of the past ten to fifteen years did not, so far as can be seen at present, reflect either a significant increase or decrease in the prevailing high rate of retreat. We are hampered in a study of recent trends by the small number and indifferent quality of available measurements. A change in the 'state of health' of a glacier is best defined in terms of changing total ice volume and changing material balance. Accumulation and ablation measurements have been made since 1945 on one glacier in western Norway (Storbreen, Jotunheimen), and one in Swedish Lapland (Storglaciären, Kebnekajse)<sup>1</sup>. The marginal retreat of these two glaciers has not, however, been proportional in single years to the net deficit of their regime. Mr. Swithinbank was therefore distrustful of measurements which referred only to the snout recession of Scandinavian glaciers.

Though most glaciers show a time-lag of several years in their response to climatic change, and some appear to follow a rhythmical advance and retreat that is largely independent of short-period fluctuations, there is in Norway a fairly good correlation between the trend of annual mean air temperatures and the mean rate of recession of the glaciers. While