

instil a standard of values, in itself not easy in a society by no means sure what values it wanted instilled; secondly, by emphasizing that a school was a community, to prepare boys for the wider community into which they would grow up. Boys had to learn to obey and to give orders, and to understand the importance of persuasion and something of the force of popular opinion. An important part of this lesson was responsibility for others. They must also learn to answer for their mistakes.

The vast majority of children, however, left school at 15 or 16—and would continue to do so in any foreseeable future. This made a major problem. Although school could do much for these children, it could not do so much as if it had those extra three years. It was a question of education outside formal schooling. Mr. Lee suspected that in dealing with this problem the old-fashioned prescription of less ready cash and more discipline might be found to be effective.

Freedom and Organization

With freedom the basic issue was clear. You could not hold a man responsible—answerable—unless his action had been freely chosen. You did not blame a man who was acting under compulsion or under orders. Any narrowing of the area of choice meant a narrowing of the area of responsibility.

A peculiar type of irresponsibility, neither careless nor flippant, was that of the "official"—the man who in the last resort was always prepared to fall back on authority. In an age when officials were multiplying this was a particular problem. At the individual level the issues were clear enough; at the corporate level they were more difficult. How far could bodies of individuals be left to conduct their activities without interference or regulation by public authority? And if regulation was necessary, how much must there be? This his audience would recognize at once as the major political problem of the modern state. An association might well feel a less responsible body if its decisions were subject to external review and control. All associations had to operate within the limits of the law. But there was all the difference between that and control by public authority; public control meant in practice control by officials and politicians. Commenting on this situation, Mr. Lee quoted a sentence from Hayek, "We shall never prevent the abuse of power if we are not prepared to limit it, even if such limitation may occasionally prevent its use for desirable purposes."

However, the more particular issue was, How much does a profession lose if it is transformed into a Government service? In asking this question it was necessary to be realistic. Education on the scale now needed could hardly be financed or organized privately. The vast majority of the teaching profession were already paid from public funds—though it should be noted that the controlling authority was local, not central. Similarly, it was doubtful if the mechanism of the National Health Service could work entirely without public funds, entailing in turn public supervision. There were some who argued that Leviathan, having taken a bite at the medical profession, had better finish the job, swallow it completely, and transform it into a full-time salaried service. "Few of you regard that argument with enthusiasm," said Mr. Lee. But if both they and he disliked the idea of complete absorption in Leviathan, if they were prepared to agree that much of their professional work must be done for public authority but maintained that the element of public control should be kept to a minimum, then they must be prepared to justify their belief.

Time was too short to do that in detail. He would merely make one short point about independence in education. Why so much fuss about it? Any good local authority would give the largest measure of essential independence to its schools, it was said. This was a specious and self-refuting argument, for it assumed the value of independence. Its value could only lie, so it appeared to him, in the possibilities that independence gave of greater achievement, which in turn meant higher standards. And that brought them

back, very nearly, to where he had begun—"to the standard of values without which the idea of responsibility is meaningless."

Responsibility, said Mr. Lee in conclusion, included the idea of choice. And since society consisted not only of individuals but also of individuals grouped into associations and enterprises, freedom of choice should—if we valued responsibility—be left as far as possible with groups as well as with individuals.

BRITISH MEDICAL STUDENTS' ASSOCIATION

SYMPOSIUM ON MEDICAL EDUCATION

On April 21 the London Region of the B.M.S.A. held a symposium on medical education at the London Hospital Medical College, under the chairmanship of Dr. R. D. LAWRENCE. Requested for its views on the medical curriculum by the G.M.C., the B.M.S.A. has undertaken the task of seeking and presenting student opinion on the subject, and a report on the First M.B. course is now being prepared. The B.M.S.A. intends to survey the remainder of the course as soon as possible. The objects of the symposium were to stimulate student interest in the review of the curriculum and to provide for an exchange of views between teachers and students in the London Region. The basis of discussion was kept as broad as possible, the main theme being the aims of medical education.

Student and Teacher

After the Dean of the London, Dr. H. B. MAY, had welcomed the conference. Dr. J. R. ELLIS, the Sub-Dean, gave perspective to the proceedings by reviewing briefly the state of medical education up to 1935 and the developments since. He was followed by some 16 student speakers from St. Bartholomew's, Guy's, the London, St. Mary's, the Royal Free, St. Thomas's, University College, and the Westminster Hospital. They were concerned with medical education as it is now. They discussed the increase in factual knowledge and the dangers of facts becoming outdated; the comparative value of organized revision courses and individual methods of study in preparing for examinations; the student's responsibility towards patients and the importance of professional behaviour in dealing with them; the ease of relations between teacher and student and the need for loyalty to each other; the marked variation in the amount of clinical responsibility allowed at different medical schools; "neglected aspects of learning"—a contribution from the Royal Free; and a comparison by an American, who had chosen to study medicine in Britain, on the differences in medical education here and in the United States—his statement that the final examination in his country embraced all subjects taught in the preclinical and clinical courses brought little comfort, apparently, to his hearers. All speakers were at one in their criticisms of the present demands of examiners, but most thought that their schools were doing the best they could under the existing system.

In the afternoon the teachers had their turn. Dr. G. O. BARBER, lecturer in general practice at St. Mary's, and Professor CLIFFORD WILSON, director of the medical unit at the London, spoke on "The Aims of Medical Education." Dr. Barber pleaded for the integration of the profession, and asked that students, particularly the future consultants, should learn in their student days the importance of the general practitioner in the care of the community. Professor Wilson stressed that the medical training should consist in learning methods, not in hoarding facts. He went on to outline a medical course which might provide for this more satisfactorily than at present. The next two papers—on "The Teaching of Specific Subjects in Relation to Aims"—were by Professor RUTH BOWDEN, of the anatomy department at the Royal Free, and by Professor G. PAYLING

WRIGHT, professor of pathology at Guy's. The former insisted on the need to regard the body as a functioning whole instead of dissectable parts, while the latter emphasized the superiority of understanding pathological processes over an intimate familiarity with histological appearances. Dr. E. C. LONG and Dr. R. F. MOTTRAM (both of St. Mary's) then contributed a paper on "An Experiment in Examination Method."

The final session was a half-hour "quiz" in which Professor ROBERT CRUICKSHANK (St. Mary's), Dr. J. S. RICHARDSON (St. Thomas's), Dr. D. C. SINCLAIR (Oxford), and Dr. T. STAPLETON (St. Mary's), under Dr. R. D. LAWRENCE'S chairmanship, answered written questions. It then remained only for the chairman to sum up the day's proceedings. Dr. LAWRENCE said he had been impressed by the amount of thought that the student speakers had given to their education and by their skill at presenting their views. They had provided much food for thought and material for wider discussion. Finally he thanked the authorities of the London Hospital Medical College and in particular the two student organizers, Mr. D. T. HUGHES and Mr. P. A. FOGARTY, for their help in making the symposium possible.

ANCESTRY OF MAN

PHYSICAL ANTHROPOLOGISTS AT CHICAGO

[FROM A SPECIAL CORRESPONDENT]

The contribution that the anatomist can make to the science of anthropology was acknowledged by the holding this year of the meetings of the American Association of Anatomists and the American Association of Physical Anthropologists within 100 miles of each other and with overlapping dates. The anatomists met on April 4-6 at Milwaukee, Wisconsin, on the shore of Lake Michigan, while on April 6-8 the physical anthropologists assembled at Chicago, some 100 miles to the south, for theirs.

The highlight of the anthropologists' meeting was a symposium, presided over by Professor S. L. WASHBURN, of Chicago, on the Australopithecines, the man-like creatures whose fossils have been unearthed in South Africa. The stage had already been set by Dr. PHILIP TOBIAS, of the University of Witwatersrand, who had finished the previous session with a stimulating paper on the evolution of the South African Bushman. After reviewing the culture and physique of these simple people, Dr. Tobias made the unorthodox suggestion that evolution was not necessarily a progression to higher forms, but that in the case of the Bushman *Homo sapiens* might be reverting to a more primitive form.

Australopithecus and Homo Sapiens

The symposium began with a geologist presenting the background to the finds of the fossils. Dr. CLARK HOWELL, of the University of Chicago, said he thought that Australopithecus belonged to the Lower Pleistocene. However, he took care to point out that this period was not necessarily synchronous in different parts of the world, and that therefore an approximate knowledge of the dating of the Lower Pleistocene in the Alpine region was no help in assessing the age of these fossils. In fact Dr. Howell refused to offer any approximation of the time when the Australopithecines had lived. Dr. KENNETH OAKLEY, of the British Museum, who had been specially invited for the symposium, was the next speaker. He described the geology of the sites where the fossils had been found, and said that he did not think that these creatures were cave-dwellers, but that the bones had been deposited in caves as a result of geological sedimentation. He showed slides of pebbles which had been found with the bones, and argued that, although these had probably been handled by the Australopithecines, it was most unlikely that they were fashioned by them. Dr. Oakley refuted suggestions that these primitive creatures were fire-burners, and was sceptical of the evidence purporting to show

that they had used the bones of other mammals as weapons. Dr. JOHN ROBINSON, of the Transvaal Museum, another invited speaker, described the finds in detail, illustrating his remarks with several of the actual fossil bones. He considered that these bones belonged to three distinct species, all bipeds. The oldest of these, Australopithecus, was the one most likely to be the ancestor of *Homo sapiens*. Of the other two, he thought it more likely that Paranthropus, the most recent geologically, was an antecedent of the great apes. The most complete skeletal remains of Australopithecus so far unearthed were those of a young mature female. She stood about 4 ft. (1.2 m.) tall, and her weight was estimated at about 45 lb. (20 kg.). Both sexes maintained an upright posture, and, although the dentition was much closer to that of *Homo sapiens* than was that of any ape to-day, the brain was probably little more than a third of the size of ours. Nevertheless the proportions of the anterior, middle, and posterior cranial fossae, together with the situations of the foramen magnum and pituitary fossa, bore a strong resemblance to those in *Homo sapiens*. In contrast to Paranthropus, who was probably vegetarian, Dr. Robinson thought the teeth of Australopithecus were those of an omnivor.

The question which stimulated most discussion from the floor was the significance of the large quantity of antelope and other mammalian bones which have been found with those of Australopithecus. Several speakers seemed to be more willing than Dr. Oakley to believe that these had been used as weapons; there was little sympathy for the suggestion that they were the remnants of kills by the hyena. However, it was the consensus that Australopithecus was a biped with an erect posture, and that he used stones as weapons, although he did not fashion them. The thesis that modern man and modern monkeys are, phylogenetically, two parallel lines, and are probably descended from a common ancestor even more ancient than the Australopithecines, met with wide approval.

POLIOMYELITIS VACCINATION

LOCAL REGISTRATION RATES

Figures released last week by the Ministry of Health and the Department of Health for Scotland give the numbers and percentages of those children "eligible for poliomyelitis vaccination" who have been registered under the Government scheme. In England and Wales 1,610,899 children were registered, which after excluding Wakefield and Burton-on-Trent—the only two authorities not to make returns—gives an acceptance of 29%. In Scotland returns were received from all the local health authorities; 299,144 children were registered, almost 42% of those eligible. What is remarkable about the returns is the wide variation in registration rate from different areas. For example, in England there are the County of Worcester and the Borough of Bootle, each with a registration of 1%, and at the other extreme Exeter, York, and the Soke of Peterborough with 50% or more registered; in Scotland a figure of 3.3% was returned by Clydebank, whereas Midlothian achieved 91%. No indication of the reasons for these large variations is given.

Method of Selection

The children eligible for registration were those born between 1947 and 1954, the 2- to 9-year-olds. As was expected, states the Ministry of Health, the number of applications exceeds the limited supplies of the vaccine that are likely to be available before the end of June. "If the present rate of progress of production of the new vaccine is maintained and it passes its safety tests," the Ministry statement continues, "it is hoped it will be possible to vaccinate over 300,000 children during the first phase of the programme in May and June." The remainder of those registered are to be given priority when vaccination is resumed in the autumn.