

THEORIA

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ALAN PATON

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A NATIONAL PROBLEM**

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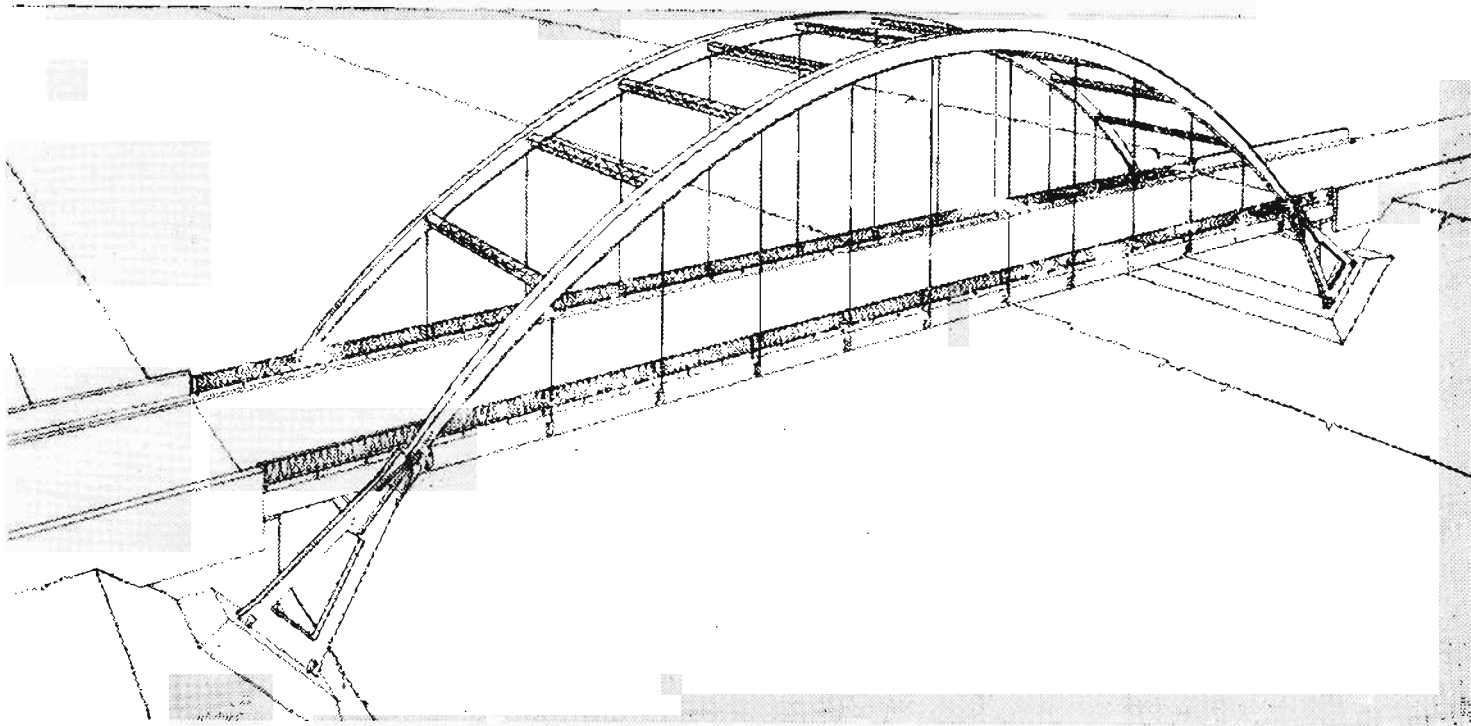
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THEORIA

A JOURNAL OF STUDIES

in the Arts, Humanities, and Social Sciences

Edited by W. H. GARDNER

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The editor wishes to thank Professor B. Notcutt, Dr. Lindsay Young, and other members of the Editorial Board for their suggestions and other practical help in the editing and production of this issue.

While acknowledging the interest shown by those subscribers who have promised their continued support to *Theoria*, we should like to call the attention of these and all other readers to the notice at the back of this number.

EDITORIAL

In the words of its first editors, *Theoria* “seeks to promote an outlook of humane criticism in as many fields, and as many groups of people, as possible.” Like the University itself, it is concerned with the advancement of theoretical knowledge: not only with the accumulation of facts, and the “logical deductions” from verified data, but also with the *interpretation* of facts, a process which, whether rigorously logical or not, usually determines our attitudes, our beliefs, and, in short, our ultimate scale of values. Most of the articles which follow are statements of those significant general ideas—suitably brought out by reference and example—which present themselves to a trained mind after the observation and sifting of a mass of detail. Intermediary between the specialist and the educated layman, this journal will continue to be, for the most part, a collection of expositions or *standpunte* which demand and stimulate thought, which may suggest lines for further research, and which probably will, in some instances, provoke opposition.

The inclusion of original poems is an innovation that we hope to extend, when space permits, to other forms of creative writing. Moreover, as an addition to the direct survey of current trends and criteria, there is a need for more specific reviewing of a certain number of new books of importance—books, that is, which clearly impinge upon our pattern of life and basic standards. Hence our present beginning—with Professor Hattersley’s comment and variation on a theme previously elaborated by a Rhodian colleague, Dr. Horton Davies.

Many *alumni* who will admit the appropriateness of Professor Petrie’s memoir of the late Dr. R. B. Denison will perhaps wonder why *Theoria* has not yet memorialised the first Principal of the N.U.C., Dr. J. W. Bews. The reason is that a full-length tribute to Dr. Bews is now almost completed and will in due course be published by the University Press. Dr. Denison’s shorter transitional period of office is now fittingly commemorated by a fellow Scot who was his full contemporary and friend.

Since all the articles, with one exception, are quite independent contributions, it seems desirable to say a word about that exception. Dr. Pratt Yule's stimulating essay was not written as polemic, but as a straightforward historical exposition. With her kind permission, however, each of two specially qualified readers, Professor D. J. O'Connor and Dr. R. D. Kennedy, was invited to submit his personal reaction. The former agreed so completely with Dr. Pratt Yule's statement that no further comment could be evoked; and Dr. Kennedy's script, though it suggests a different interpretation of many facts, was accompanied by the assurance that he too was in substantial agreement with her main psychophysiological position.

Readers of *Theoria* will already be familiar with some of the work of Dr. O. Davies in the field of South African prehistory. We record therefore that the paper here presented serves as a relatively popular introduction to his important booklet, *Natal Archaeological Studies*, which has just been published and particulars of which will be found on a later page.

MEMOIR OF
DR. ROBERT BECKETT DENISON

Principal of Natal University College
(1938-1945)

WHEN I was notified, early in 1910, that I had been appointed Professor of Classics at the recently established Natal University College and was due to sail from Southampton by the "Kenilworth Castle" on the 26th of March, I was also informed, to my considerable comfort, that I would have a fellow passenger in the person of Dr. R. Beckett Denison, who had been appointed to the Chair of Chemistry and Physics. Denison, I found, was a married man of four days' standing, for whom the voyage was also serving as a honeymoon trip: I myself was setting out as a bachelor, though perhaps, if all were known, in a state of salvation.

During the voyage we were naturally much together, exchanging some of our experiences in the country we were leaving and speculating on what might await us in that for which we were heading. We participated in the regulation deck sports, and one of the first things I remarked in my colleague was a seemingly natural aptitude for games of any kind. The break at Cape Town was sufficiently occupied with sight-seeing; but at Port Elizabeth—or was it East London? (at both of which places shore-going passengers, in those days, were let down, like St. Paul, in a basket, into an awkwardly bobbing steam-launch alongside the ship) we took our golf clubs with us for an airing. And here I recall a somewhat curious sensation, which I suppose we shared: tees, greens and fairways appeared to be gently rising and falling in harmony with the movement of the ship which had been our home for nearly three weeks, and the effect of this was to introduce—at least, as I thought, in my own case—a corresponding undulation into one's strokes. But this my first taste of a South African course, such as it was, was enough to show me that, as a golfer, I wasn't in the same class as Denison.

By the time we reached our destination we had learned a good deal of each other's academic history and of the causes which had led us to seek our fortunes oversea. A Yorkshireman by birth, Denison had distinguished himself as a student at the Yorkshire College (later the University of Leeds), where he graduated first-class as a Bachelor of Science and was later awarded the coveted "1851 Exhibition Research Scholarship". Proceeding to the Continent, he studied electro-chemistry and electro-metallurgy at Aix-la-Chapelle under Borchers, and later specialised in Physical Chemistry under Abegg at Breslau, where he obtained the degree of Doctor of Philosophy. Receiving an exceptional renewal of

the 1851 Scholarship for his work on the migration velocity of ions in aqueous solutions, he studied further at Berlin under Van't Hoff, and in London, under Sir William Ramsay, adding to his distinctions the Doctorate of Science of the University of Leeds. The results of his research work—some part of which had been conducted in collaboration with his friend, B. D. Steele, who later followed him abroad to a similar post in the University of Queensland (Brisbane)—had been embodied in a considerable number of published papers. The post which he had vacated to take up his Natal appointment was that of Lecturer and Demonstrator in Chemistry at the Heriot-Watt College, Edinburgh. It was here that Denison got first-hand insight into the dour determination with which the often impecunious Scottish youth strove to better himself educationally, largely by attendance at evening classes which frequently involved considerable travel at the end of a hard day's work. Those students evidently won both his sympathy and his admiration, and it was a topic to which he often reverted in conversation.

On Sunday, 17th of April, we duly landed at Durban, and travelling to Maritzburg by train the same evening we presented ourselves at the Maritzburg College the following morning—under escort of Sir Henry Bale, first Chairman of the N.U.C. Council—and met the members of our future classes who had been receiving tuition in our respective subjects from the College staff pending our arrival. So we started work, and a certain stimulus deriving from the very novelty of the conditions under which it was conducted at the College served to offset the limitations which those same conditions imposed upon it. But, of the two of us, Denison had naturally the harder row to hoe. My own modest wants—other than the texts prescribed for the end-of-the-year examinations (then, of course, those of the old Cape University), with which I found my students already provided—were easily supplied: they were mainly a blackboard and a piece of chalk, and, given these, I was not unduly dismayed by the contrast between the “tin shanty” in which I was housed and the “halls of learning” of the old country. Denison, however, was set the problem of adapting such school material as he found available to practical teaching of more ambitious university standard, and it was a problem which must often have taxed his resourcefulness and ingenuity to the utmost. Nevertheless the work went on, in some fashion, and we were sustained by the prospect of better things when the University College, beginning, by the end of the year, to show above the veld at Scottsville, should be ready to receive us, which it did in the course of 1912. The occupation of our new quarters, however, meant for Denison, as indeed for the other heads of Science departments, much hard spade-work, as only those who have had the planning and equipping of a laboratory from zero know. Still, the spade-work was got over in due course, and the excessive teaching load which his two subjects involved was considerably lightened—as it was imperative

that it should be as soon as possible—by the institution (also in 1912) of a separate Lectureship in Physics. During the decade which followed, the Chemistry department achieved, and enjoyed, a comparative degree of stability, but it had still to find its permanent resting-place. By the end of that period the accommodation provided by the back wing of the original College quadrangle, which housed Chemistry and Physics together, was proving inadequate to meet the demands made upon it, and Chemistry was transferred to the spacious Science Block (completed in 1923) erected in close proximity at the south-western angle of the main building. But the transference, of course, was no mere moving of furniture from one room to another: the new building brought its own special needs, and the business of planning, estimating, requisitioning had to be faced all over again.

It will thus be seen that during a considerable part of Denison's professorship his department was still in the process of settling down; it will also be readily understood that he had little time or opportunity for prosecuting his investigations in the fields he had tapped with such promise before coming to Natal. Denison, in fact, had to pay the price which most others have to pay, and must count on paying, who take up similar posts in a comparatively young country: research had to give place to teaching, pure and simple. Fortunately he was as capable in the latter rôle as in the former: he was known as an excellent teacher, and it was no secret that science students were attracted to the N.U.C. from beyond what might have been considered its legitimate "sphere of influence" through the reputed goodness of its Chemistry department. The subsequent careers of not a few of his students, and the posts which they would be found occupying today, both in South Africa and elsewhere, bear testimony to the soundness of the foundations laid under Denison's direction.

Outside the strict duties of his Chair, Denison acted, at least on occasion, as Borough Analyst, in which capacity he was presumably mainly concerned with milk-testing. About the year 1914 his expert knowledge was invoked in connection with the patents which were being sought, and after some trouble were obtained, for a new motor fuel which was given the name of "Natalite". "Natalite" was essentially a cane by-product, which was claimed to be able to compete, economically, with the petrol of the day, and possibly to supersede it: eventually, when petrol became cheaper, "Natalite", as a motor fuel, disappeared from the market. As it was, the patent rights were very soon (1917) purchased by Natal Cane By-Products, Ltd., by whom "Natalite" is still produced, for certain purposes, though the circumstances in which it was first heard of by the public, and the considerable stir which it created, are now largely forgotten.

In his leisure time, which must often have been scanty, Denison found his relaxation in his favourite game of golf. For some twenty years he was a regular member of the inter-town (Maritzburg v. Durban) team, and his name may be read as the winner

of sundry trophies and competitions on the honour boards of the Scottsville Club House. He was also prominently associated with College sport and athletics, being for some time President of the Athletic Union, while his interest in rugby, in particular, is commemorated by the trophy which bears his name and which is the subject of competition between the Maritzburg and Durban branches of the University.

Besides filling his Chair with distinction, Denison had discovered considerable administrative ability, and shortly after the death, in November, 1938, of Principal J. W. Bews, for whom he had acted during his last illness as well as on previous occasions, he was appointed as his successor: like Bews before him, he had, as it were, grown into the position. For some time he combined the duties of Principal with those of his Chair, until he was relieved of the latter by the appointment of Professor Warren in 1940. His tenure of office thus practically coincided with the duration of the second of the two world wars that the N.U.C. had to face in the course of its comparatively short history. It was a time when a policy of cautious conservatism rather than of spectacular expansion was dictated by force of circumstances, even if it had not happened to be that which was most congenial to Denison's own character: he was essentially a "safe" man. This does not mean, however, that things stood still. Concurrently with a steady growth in the academic activities of the College, particularly in Durban, important additions were carried out to the Howard College there, while at Maritzburg the Women's Residence was enlarged to practically double its original size. As Chairman *ex officio* of the College Senate—an immensely larger body than when he first presided over it in 1913—Denison showed himself courteous and patient in debate beyond the point at which, as some of us thought, he would have been justified in applying the guillotine. And while a speaker was "holding the boards" on some thorny topic, he himself, though the official minutes were being taken all the time, would be observed making copious and careful notes for his own satisfaction and reference.

As Principal, Denison represented the College Senate on the Council of the University of South Africa, with membership of several of its standing committees, while he also rendered valued service, for considerable periods, on the Scholarships Committee and on the Joint Matriculation Board. He was also an ex-Dean of the Faculty of Science. In recognition of these services he had conferred upon him the honorary degree of Doctor of Science (S.A.).

In the course of 1944 Denison, who was beginning to feel the strain, expressed his wish to be relieved of his duties as Principal at the end of the year: as it was, he carried on until Dr. E. G. Malherbe arrived to succeed him in April, 1945. On demitting office he was designated Professor Emeritus in Chemistry. Since then he had lived quietly in the City, but the record of his retirement was destined, unfortunately, to be largely a record of failing health. Recurring spells of illness, which showed itself first in the

form of arthritis, incapacitated him for golf, but against this he developed an interest in philately. He also maintained an active interest in the Rotary Club, of which he was a past president. Towards the end of 1950 his illness took a serious turn, and after some months of increasing weakness the end came on the 27th of March following—41 years, almost to a day, since we had weighed together from Southampton.

That initial voyage into the unknown constituted something of a bond between us which lasted through the years. The 26th of March, the date of our sailing, and the 17th of April, the date of our landing in Natal, acquired a degree of consecration and were the occasions of mild anniversary celebrations when we would recall some of the episodes, and also some of the humours, of the cradle days of the N.U.C. And the bond was drawn closer, and the dates more religiously observed, as our colleagues of 1910 passed one by one into the silence until only the two of us were left. It was a coincidence, indeed, on which we frequently remarked, that the two who were probably the first to be appointed should also have been the last survivors of the original college of eight. And I believe we were the only ones who lived to see the University of Natal.

That, to be sure, was no small privilege, for was it not the achievement of the goal, dimly envisaged at first, and then more clearly as time went on, towards which we had long been striving? And yet I think we did not consider it a matter of regret that our official careers did not, in fact, overlap it. We had "assisted", so to speak, at the birth of the N.U.C.: it had grown up with us, as we with it; its passing, as we told ourselves, was, in a sense, the end of an epoch, and there was a sentimental appropriateness in passing out along with it. "The old order changeth, yielding place to new." But whatever greater things the new order may witness—whatever heights the University of Natal may attain to, and may it go from strength to strength!—it is to be hoped that the pioneers of 1910 who bore the burden and the heat in the day of small things—our Bews's and our Denisons—will not be forgotten.

A. PETRIE.

A STEP FORWARD

Introductory Remarks delivered at the opening of the Conference on The Administration of Justice and The Treatment of offenders, held in Durban, October, 1951.

IT is the proper thing that this Conference should be held at the University, and under the auspices of one of its Departments. This Conference has as its subject, to put it briefly, *The Courts, the Laws, and the offender*, and such a subject brings together such a diversity of talents and professions that only a University can play host to them all. The old giants of Penal Reform were humanitarians, and they were crying out against inhuman conditions; today a penal reformer must also have knowledge, and it is his duty to protest against the mistakes as much as against the crimes of society and its penal administration.

This great change is due, not only to the work of the great reformers themselves, but to the increase in our knowledge, notably the knowledge made available by the human sciences, and most notably by psychology, which has given us a new understanding of human behaviour, and while it has shaken the foundations of belief, yet has taught us the folly of censoriousness, and the deep meaning of the saying "there but for the grace of God go I."

This new knowledge has not only taught us the folly of censoriousness, but it has also taught us the difficulty of judging. Whereas once all individuals were held responsible before the law, this is no longer true. We make special provision for the insane, for the mentally defective, and for children; in other cases we find extenuating circumstances. There is on the one hand a tendency to widen the area of non-responsibility, and on the other a tendency to resist any further widening. Any widening of the area of non-responsibility is resisted by the Courts, by religious bodies, by moralists, and by countless numbers of ordinary men and women; it is felt to be a weakening of the reign of law, in times that are already unstable enough. It is interesting to note that we ourselves are more tolerant towards the person who has offended against others than towards the person who has offended against ourselves. So also a country where crime is not a serious social problem is more willing to effect far-reaching penal reforms; and in some such countries you will find a greater tolerance towards the murderer who is rare, than towards the drunken driver who is relatively common.

All this shows that we are really turning away from the moral standard of judgement, not because we reject morality, but because we are less certain of our ability, and indeed our right, to set up such a standard and to judge by it. No one wishes to return to a

debate on free will, where one extremist argues for complete responsibility, and another for complete non-responsibility, with every kind of extremist in between. More and more we tend to use the practical criterion of what is best for the protection of society; and to that we are quite willing to add, provided it is always subordinate to the first, the criterion of what is best for the offender. We tend more and more to prescribe that treatment which will best serve society, and not that which will best punish the offender. If we compare the court judgements of 1900 with those of 1950, we shall find less tendency to call an offender an *evil man*, and more to call him a *dangerous one*.

Now the effect of this change of criterion is to shift the emphasis, *especially in cases of serious crime*, from the offence to the offender. This change of criterion therefore does not make easier the task of a Court, it makes it more complicated. If the protection of society is the supreme duty, it seems more important to know more about the offender. To *convict* may be as easy as before but to *prescribe treatment* may be much more difficult.

Now the idea has taken hold, and would seem to be growing stronger not weaker, that in prescribing treatment the Court should have the advice of some competent expert body, who while perhaps knowing little of the law, might know quite a lot about human beings. An extreme view is that the prescribing of treatment should be no longer done by the Court, but by the expert body; this extreme view is strongly resisted by the Courts, and indeed by much other opinion. So strongly has it been resisted that the value of the proposal has been largely lost sight of.

There are I think two important reasons for this resistance, one good, one bad. The first is that by long tradition *which has worked well*, there have been entrusted to the Courts certain grave duties, to be performed openly and according to tried procedure; one of those duties is to try, convict, and sentence, and the public wishes to see no part of this duty handed over to some other body, no matter how erudite. But the second reason is bad, and it is simply that the Courts fear this intrusion after centuries of undisputed authority.

The truth is however that this long period of undisputed authority would never have been disturbed at all but for the fact that in this 20th century a new factor entered the situation, and this new factor is new knowledge; and to the pressure of new knowledge all institutions must in the end accommodate themselves.

But in any case the difficulty is easily overcome. In certain cases let it be compulsory for a Court to set up an expert body, whose composition shall be defined by law, and whose opinion and recommendation must be submitted openly to the Court; and should the Court depart in any substantial manner from the opinion and recommendation, then let the matter of sentence be automatically referred to a higher Court.

One difficult question will arise, and that will be this: just in what cases is this expert body to be set up? Quite clearly it

should be set up only for *serious* cases, but even these are many in number. I would suggest that in the first instance it be set up only for *dangerous* cases.

There are three good reasons for this. One is that here is the best testing-ground for the new piece of machinery, and we shall soon see what it is worth, and whether its use should be extended. The second reason is that the public is intensely concerned about dangerous cases, and would be reassured to see the Courts paying special attention to them, and would no doubt stop its own clamour for harsher punishment. The third reason is that it is the lack of special provision for the dangerous case which most hinders reform in penal institutions, and which most prejudices the public against penal reforms in general. The architecture and regulations of prisons are planned with the eye on the dangerous prisoner. It is time that the dangerous offender was withdrawn from the ordinary prison, and it is time that treatment was prescribed for him in a more scientific manner.

When a Court declares an offence to be dangerous, it should then set up the expert body; if the offender is convicted, he then becomes a *dangerous offender*. The expert body will then advise the Court as to the treatment to be prescribed. But after passing sentence the Court will have yet another duty.

In this country we view with disfavour the practice of many American states in which the Courts lay down a minimum and maximum period of detention; that is to say, they can prescribe, for example, a period of six to twenty years. In this country we should give the Courts, after the expiry of the period of detention of a dangerous offender, the power of recommittal, after consultation with the expert body. Such power should be to recommit for a period of one year or longer, and such power should be renewable. Thus we should be able to escape the recurring experience of many countries, that an offender, not an insane person or a mental defective or a child, is released with the very high probability that he will commit another terrible offence, and that he does in fact commit it. Not till we have done this can we expect any appreciable reforms in our stricter penal institutions, nor any public support for such reforms.

I repeat that the real fear of the public is of the dangerous offender, and until we take steps to meet this fear, we shall not remove the general public distrust of penal reform. But at the same time we should be introducing in acceptable guise a fundamental change, that of using the great advance of scientific knowledge in the interests of justice.

I conclude by putting forward one minor but important suggestion. We are all anxious to remove from our prison institutions those classes of offenders whose offences do not really justify imprisonment. In South Africa two of these classes, the greatest, are those of African statutory offenders and African offenders against the liquor laws, excluding drunkenness. If these two classes could be otherwise dealt with, the composition and problems

of our prison population would change overnight, but other speakers are to deal with these matters. I myself plead particularly for a third class, namely older offenders. It is becoming increasingly recognised that the advent of age diminishes the seriousness of offences. It is painful to visit a penal institution, and to find in it prisoners of relatively advanced age, whose offences cannot justly be classified as dangerous to society. It is even more painful to be told that they are happier in prison than they would be anywhere else. I throw out a challenge to our humanitarian organisations to establish an institution of a home rather than a prison character, to which such offenders could be committed, in the knowledge that no penal objective was envisaged. There would be wastages, no doubt, but there would be successes as well, and the intention should be that such persons could stay there as long as they wished. I believe that even at such an advanced age, and in spite of any previous history, most of our older offenders wish for nothing more than security and peace. It is a blot upon society that they should under present circumstances find these more readily in prison than anywhere else, and I suggest this way of erasing it.

ALAN PATON.

THE SHORTAGE OF TEACHERS

A National Problem ¹

THE shortage of teachers is usually seen in relation to existing educational services and even in that context it is a shortage of disturbing proportions. Seen in its proper context, seen in its relation to the educational needs of South Africa, the shortage is still more disturbing.

Many overseas observers have recorded favourable impressions of South African education; and South Africans, conscious of continuous expansion, have as a rule been fairly complacent about the total achievement, however critical they may have been of particular aspects. When one considers, for example, that organised education in this province of Natal began only 100 years ago, one may well be impressed by what has been done rather than depressed by the thought of what has been left undone. We have compulsory schooling up to the age of 15 years for all European and Coloured children, and about one European in five in the government schools stays at school to complete the secondary course at the age of about 17 years. 50,000 Indian children and 160,000 Native children are also at school. Secondary education is available to European and Indian pupils in practically every considerable centre of population, and the still predominantly rural Native population is served by 30 secondary schools and 8 technical and industrial schools. There are technical colleges for Europeans in Pietermaritzburg and Durban, and there is one for Non-Europeans in Durban. For Europeans university education is available in many fields, for Non-Europeans in a smaller but growing number. The basic training for all the main professions is available at home, if not in Natal then in one of the other provinces. So far so good. South Africa has been spending about 3 per cent. of its annual income on public education—about the percentage spent by Great Britain in the depressed 1930's—and it has had fair value for the money spent.

But we must ask ourselves whether we have been spending enough, and whether there is flowing from our educational institutions the stream of trained intelligence and skill which we need. Let us think carefully about our natural resources in relation to our peoples; and let us ask ourselves how well our peoples are fitted by their education to use our resources with economy and efficiency.

Let us first look at our soil. In this University I propose to take for granted a lively awareness of the erosion taking place

¹ Based upon a lecture given in the Pietermaritzburg centre of the University on October 17, 1951.

over wide areas, and of the need to conserve our soil if we are to continue to feed ourselves; and I think too that you will agree that the problem of conserving our soil is primarily an educational problem. We need highly trained agriculturalists and engineers. We need even more a realistically educated and adaptable working community on the eroded farms and in the reserves; and we need most of all such a level of general education that we may have the healthy and informed public opinion in town and country without which no effective conservation policy will be consistently carried out. The choice is between more education at all levels, and progressive deterioration.

Many will say, "Why worry? We can always import food. We have enormous mineral wealth." But let us consider this more carefully. South Africa is a land of great mineral wealth. Yet it is not wealth easily won. Gold has been the foundation of our material welfare, but gold-mining is both a wasting asset and a vulnerable one. The industry must sell its product at a fixed price, so that every penny necessarily or unnecessarily added to working costs decreases the reserves of payable ore, and so the life of the mines. The very life of the industry thus depends directly on the degree of efficiency of managers, engineers and miners, that is to say on the efficiency of general, professional and technical education as available in South Africa.

We have also massive reserves of coal and iron and useful quantities of other minerals. We are, indeed, one of the limited number of countries in which the essential minerals for heavy industry are present in large quantities. A high general level of education is required for the healthy development of such industries anywhere and particularly in South Africa, where so much of our coal is of such low calorific value that it can be beneficially used only if processed, as, for example, in the projected scheme for the manufacture of motor spirit. Thus our mineral reserves indeed hold promise of wealth, but only as a reward for the application of the highest technical skill, backed by an informed and adaptable labour force.

Our manufacturing industries now enjoy the natural protection of this post-war adjustment period (or pre-war preparation period, if you prefer it that way), but in due course they must expect keen competition, in the face of which their fate will depend on the human quality and on the technical skill of their staffs.

It would seem, therefore, that *our natural resources provide the basis of physical prosperity to an intelligent, skilled and industrious population, and to such a population alone.*

Now, while I have stressed this fact, I have not meant to suggest that our educational requirements are entirely, or even mainly, in the field of technical education. Nothing could be farther from the truth. A democracy stands or falls by the quality of its leadership, and by the general social and political maturity of its citizens. Democracy demands more of its citizens than any other form of government, even in a country of homogeneous population and in

settled times. We are not a homogeneous population and we are not living in settled times. Our European population, barely able to compose its own differences, has to regulate its own affairs and its relations with 10 million Non-Europeans ranging from primitive peasants to city merchants and artisans. As if that were not enough, we have an industrial revolution thrown in which is breaking down the traditional ways of living of great sections of all races; and this in a continent the political future of which becomes more and more problematic, and in the face of another continent, over the Indian Ocean, which is in process of total revolution. Truly, few democratic peoples have ever found themselves in a situation which made such demands on their intelligence and character as our situation makes on us to-day.

South Africa is at present in a stage of rapid economic transition. Our industrial development, however, is hampered by a chronic shortage of all kinds of trained people. The shortage of teachers is only one case among many. Research institutes and industrial laboratories are demanding graduates in chemistry, physics, botany, zoology and other sciences, and cannot find enough. Faculties of Engineering, Medicine, Agriculture and Architecture are filled to capacity, but the supply of graduates does not meet the demand. Municipalities and other corporations are looking for graduates in Arts, Science, Commerce and Law. The banks need clerks. Commerce needs typists. The Public Service, the Services and the Railway Administration cannot find the men and women they need. The Chamber of Mines recruits learners from places as remote as Dublin and the Rhine. Industry, a Minister tells us, requires 20,000 artisans. Industry, the Chairman of the Chamber of Industries tells us, requires 130,000 new workers of all kinds, skilled and unskilled.

Now let me repeat my questions. Have we been spending enough on education? Is there flowing from our educational institutions the stream of trained intelligence and skill that we need?

Being a public servant I shall answer the financial question by a discreet reference to the de Villiers report, which indicated that an educational expenditure, by 1956, of 4½ per cent. of the national income would not be excessive. The present expenditure is about 3 per cent. As to the second question, it is abundantly clear that we have not been producing the numbers of trained young people we need. There are, of course, reasons. A comparatively undeveloped country going through a period of rapid industrial expansion needs two things badly: it needs equipment and machinery; and it needs skilled management and labour. Usually the government of such a country is quick enough to see the need for begging, borrowing or stealing—by devaluation for example—in order to facilitate the raising of capital for the industrial plant and machinery required. Usually it is slower to realise the need for capitalising its man-power, for the expenditure on general education and on professional and technical education involved if its people generally are to benefit by participation in the new activities.

There is another reason more peculiar to ourselves. The part that the different races are to play in new industries in different parts of the Union is a constantly recurring economic and political question which puts difficulties in the way of any very comprehensive plans for vocational education. And while the debate goes on decisions are postponed.

Now I see the teacher shortage as being not mainly a particular shortage reflecting some malaise peculiar to the teaching profession—it may be this to some extent—but as being essentially part of the general shortage of trained professional and skilled workers, of educated persons.

If this is the case, then, I suggest, the fundamental remedy is not for the different professions to try to outbid each other for the people available, but for us to set about increasing the total supply of potential professional workers.

We can survey potential new sources of supply quickly enough. Let us look at the Non-Europeans. One of the reasons for our shortages is our situation with 2½ million people providing most of the professional, administrative and managerial services, and doing most of the skilled work, for a population of 12½ million. The Government's declared policies envisage Non-European professional workers and skilled tradesmen serving their own communities. As far as professional workers are concerned, however, the number of European teachers required in Native Training Colleges and High Schools will exceed, for some time to come, the number of Natives equipped to embark on higher professional studies.

Immigration is another possibility. The importation of professional workers offers great economic and other advantages. Immigration schemes, however, have their limitations, from the point of view of both the importers and the exporters. We must therefore rely, in the first place, on the products of our own schools and, for the immediate future, on the products of our European schools.

While the Provinces give much encouragement to the able pupil to continue his education to the end of the secondary course, there is some wastage of academic ability after Standard VIII, particularly among girls. Many boys and girls who leave after Standard VIII are of good intelligence. Such young people should be encouraged to complete the secondary school course. At the Matriculation stage there is a further and more considerable loss of young people with the ability and the aptitude for higher professional training. To some extent this loss is due to economic reasons. South African universities are not, on the whole, well-endowed with bursary funds. Serious consideration should be given to a system of state scholarships such as that which has brought so many students from working class families to the universities of Britain. Such provision, adapted to our circumstances, could increase South African university enrolments, and the number of recruits to all the professions, very usefully.

There is one weakness in these suggestions. If the most effective way to solve the problem of the general shortage of professional workers is to encourage more young people to remain longer at school, and to embark on a planned expansion of our entire educational programme, then we shall need more teachers than ever before. At present we are not getting more than ever before. We are recruiting fewer European teachers now than before the war.

You may be interested to know exactly how many fewer. From 1940 to 1950 the number of children in European Government Schools in Natal increased by 33 per cent, approximately. Simultaneously the number of European teachers employed (including those employed in Coloured and Indian Government Schools) rose from 1,472 to 1,906. But although the total number of teachers employed increased, the number on the permanent establishment actually decreased from 1,375 to 1,298, the difference being made up by "temporary" teachers. In 1940, of 1,472 teachers, 453 men and 922 women were on the permanent staff, and 5 men and 92 women were "temporaries." In 1950, of 1,906 teachers, 658 men and only 640 women were on the permanent staff, and 50 men and 558 women were "temporaries." While the growth of the male permanent staff kept pace with the growth of pupil population, *the female permanent staff showed a thirty per cent. drop.*

Certain aspects of our actual recruitment deserve closer attention. Of the 142 teachers recruited in 1940, 114 were recruited in Natal, and 28 elsewhere in South Africa or overseas. In 1950, of 145 recruits, 76 were trained in Natal, 63 elsewhere in South Africa and 6 overseas. The number of Natal-trained teachers has not only not grown with the number of pupils but has substantially declined. And, to analyse further, while the number of men in the service has increased, the proportion of Natal-trained men would appear to be decreasing. In 1950 we appointed 82 South African women, 48 from Natal and 34 from the other provinces; we also appointed 57 South African men, of whom 28 were from Natal and 29 from the other provinces. The shortage of recruits is particularly a shortage of Natal recruits and, very particularly, a shortage of recruits from the University of Natal. We must not, of course, think the position worse than it really is. Many of the 600 "temporary" teachers are permanently available for service. Clearly enough, however, the situation is such that vigorous steps must be taken to improve it.

Now so far, I have dealt with recruitment purely on a quantitative basis. It is not less necessary to pay attention to the qualitative aspect, and it is disquieting to find that although teaching continues to draw some very able students, it does not draw the proportion of very able students which it did formerly. This deterioration, moreover, is not confined to Natal. It is the experience of the more important universities in the other provinces. Indeed, it is the experience of other countries as well, though not

to such a disquieting extent. Early this year (1951) the National Advisory Council on the Supply and Training of Teachers in Britain expressed uneasiness at the same situation. Immediately before the war, the Council pointed out, 66 per cent. of the graduates in their professional year of training in Britain had first or second class honours degrees, but by 1949 the percentage of students with such degrees had fallen to 55 per cent.

In Natal, in the pre-war years for which statistics are available, 30.5 per cent. of graduate students taking the Education Diploma course had gained a distinction in at least one of the two major subjects taken for the Bachelor's degree. For the four years 1948—1951 the proportion was 9.5 per cent, and in these years no diploma student had had two major subject distinctions.

Again it is necessary to look at these figures in perspective. There are other qualities besides scholarship which are desirable in teachers; and whilst all teachers should be intelligent people with the power of clear presentation, it is not necessary that all should be outstanding scholars. It is however, necessary, if the present quality of our high school staffs is to be maintained, that teaching should obtain a fair proportion of the abler students. Should it fail to do so, the failure must inevitably be reflected in the work of the schools, in the quality of the students who come from the schools to this university and in the general depression of our educational standards.

While I have indicated that I believe the present shortage of teachers to be, very largely, a particular instance of the general shortage of professional workers, I must also state that I believe it to be affected, to some extent, by certain aspects of teacher employment; and it is satisfactory to note that the authorities concerned are aware of the need for adjustments. The question of salaries is a case in point. Most people will agree—the teachers' professional organisations certainly did agree—that the 1947 salary scales reflected a genuine attempt to put salaries on a satisfactory basis. It is not the fault of the Provincial Administrations that money has depreciated since 1947. The Administrations however have now, on their own initiative, set up a national committee to recommend, among other things, such new salary adjustments as may be desirable. That, I think, indicates their appreciation of the situation and their willingness to make just financial provision. Moreover, as most readers will know, committees are investigating other aspects of the conditions of service which require consideration in the light of present-day circumstances.

Other agencies might also play a useful part. The Press could do much to improve the situation or, at any rate, to avoid aggravating it. Young people do not always appreciate the conditions under which the Press works—that it is always working against time, that it has to convey its messages in broad strokes and stereotypes. They do not realise that a hundred competent teachers doing their work with interest and satisfaction do not make news, while a misfit with a grievance, well or ill-founded,

is always a story. I admit that the Press must use stereotypes, but I believe that the stereotype "disgruntled teacher" should be used with more restraint and with more appreciation of its effect on recruiting for an essential service.

I think, too, that it is reasonable to look to the universities for some assistance. It is hardly within my province to make detailed suggestions as to how this assistance should be given, but I ask that students and staff alike should regard teaching as a national service of critical importance, as a service whose healthy functioning is a condition of our national well-being, as a service which cannot be starved in numbers or, more insidiously, in quality, without the most undesirable consequences.

In closing I should like, very briefly, to take this opportunity of expressing the appreciation of the Natal Education Department of the work done at this University over the past 30 years by Professor J. G. W. Ferguson. In that time Professor Ferguson has prepared about a thousand teachers, mainly for the schools of Natal. His students form the greater part of our high school staffs, and many of his older students, now headmasters, headmistresses and administrative officers, have become valued leaders in the educational life of the Province. If I had to point to a family characteristic common to many of these men and women as I have known them, I should say that, to a greater degree than people from many other Education Schools, they have had balance and perspective, and have appreciated and pursued the enduring things in education rather than the educational fashions of the moment. It is a valuable characteristic in these days of changing standards; and while these men and women continue to serve in the schools of Natal we shall have reason to feel grateful for Professor Ferguson, for his deep scholarship and for his lifetime of devoted work in the service of education.

W. G. McCONKEY.

THE BABEL OF SCIENCE

"And they said, Go to, let us build a city and a tower whose top may reach unto heaven. Therefore the name of it is called Babel, because the Lord did there confound the language of all the earth". Genesis, 11.

THE world output of articles and papers in all branches of zoology shows a progressive increase from the latter half of the last century, a state of affairs interrupted only by the periods of the two great wars in the first half of the present one.

A series such as the *Zoological Record*, commenced by the Zoological Society of London in 1865, while providing an indispensable tool for the scientific worker, also represents a scientific archives and a fascinating source of material for the economist and student of world affairs during the great period of scientific expansion in the nations of the west. These annual compilations of the achievements of zoological science, when set out in series on a library shelf, are a painful reminder of the effects of war on scientific progress. No human activity is more sensitive to the cold blasts of economic adversity than science, and the numerical records of scientific publications perhaps represent as good an index as any of world material prosperity on the one hand and the depressive effects of world wars on the other; the *Records* for the two six-year periods of 1914-1919 and 1940-1945 are lean and shrunken when compared with the stout and prosperous looking volumes of the preceding and intervening years.

The general trends examined in this article should also show themselves with equal clearness in all other biological sciences where records are kept, if not in the world contribution of science in its total aspect.

The figures used in this compilation have been derived from the *Zoological Record*, a journal which collates and arranges a yearly list of all zoological contributions in the form of books, articles and papers which have appeared in recognised scientific and medical journals, or in those of a popular and semi-popular nature; articles from newspapers are not as a rule included. The units recognised thus consist of articles listed as separate items under the various branches of the animal kingdom, which have been published during the appropriate year in the various countries in the languages used by their authors; the language however may not necessarily be that of the country to which the writer belongs.

It will be readily understood that such a compilation cannot be entirely and finally complete for a given year; some items may be overlooked but included in the later records for a subsequent year, or may be omitted altogether. In exceptional cases, such as

during a period of upheaval in the affairs of a nation, they may be impossible to obtain. After the 1917 revolution for instance, few Russian scientific publications were included in the *Record*, and for the year 1920 there are none at all, though from 1921 onwards, works produced by Russian scientists were again appearing fairly regularly.

In one other respect all journals which devote themselves to the task of surveying the zoological or biological field as a whole will suffer from a bias. The language of the country in which the record is compiled will be favoured, owing to the fact that the home products will be more familiar and more accessible to the collators than those written in a foreign language. Articles and papers appearing in the less well known of the foreign journals will be more easily overlooked, especially in those of smaller countries which do not have a long tradition of scientific research behind them. This applies especially to the smaller countries of Eastern Europe which have recently emerged from minority status to the rank of full nationality.

In recent years other journals for recording the output of biological science have been founded, the most notable being *Biological Abstracts* in 1926, a more comprehensive American publication which has the added advantage of being a quarterly rather than an annual periodical.

The world output of Zoological Science.

As will be seen from Table I, counts have been made of the annual number of zoological publications from 1880 at ten-yearly intervals, from the beginning of the present century at five-yearly intervals, except the final figure (for 1948), which represents the most recently published volume of the *Zoological Record*. Each number represents a thousand published items.

Table I

1880	1890	1900	1905	1910	1915	1920	1925	1930	1935	1940	1945	1948
1.4	2.9	4.9	6.8	9.5	6	5.4	9.7	11.3	13.5	7.7	11.3	11.7

There has thus been an almost continuous yearly increase in the total number of publications except for the two marked recessions during the first and second world-wars, while the total has increased tenfold between the years 1880 and 1935. It will be noted also that by 1948 the output had not yet caught up with the interwar scientific production of 1935; by the end of 1951, for which figures are not available, it may have done so.

It is however the part played by the various scientific languages of the world as vehicles of scientific expression that should be of most interest to biologists; five major languages have accordingly

been chosen to illustrate their comparative importance in this respect. The figures given in Table II represent the total annual number of publications in these languages shown as percentages of the world output; the contribution for 1948 has again been included to show the most recent trends.

Table II

	English	German	French	Spanish	Russian
1880	42	31.5	16.8	1.6	0.4
1890	41.9	26.5	20.2	0.5	0.4
1900	45	25.8	18.3	1.1	0.5
1905	42.3	22.8	18.3	1.5	0.3
1910	40.9	33	12.5	1	4.5
1915	57.2	13.3	12.8	1.9	4.6
1920	52.5	21.4	16.2	1.7	—
1925	43.4	22.8	17.6	2.4	2.2
1930	43	24.8	15.1	3.3	2.6
1935	46.1	22.2	15.3	3.7	3
1940	66.7	10.6	6.7	4.5	2.2
1945	51.1	12.7	16	6.9	3
1948	57.8	9.1	14.6	5.6	2

With the decay of Latin as an international scientific medium, the languages of the three scientifically and politically dominant countries of Europe came naturally to be accepted as the primary vehicles for scientific expression; world science, for the last hundred years at least, has been European and American science, so that since the middle of the nineteenth century, English, French and German have been the media for from 80 to 90 per cent. of the total number of publications throughout the world. The great weight of prestige exerted by these three languages attracted much of the scientific publication in other smaller countries to themselves so that throughout Europe scientists of these smaller nations denied their mother tongues and wrote in French, English or German, the choice usually depending on which had exercised the most influence on their early training at school and university.

No scientists of the smaller national groups seem yet to have chosen, at least of their own accord, to write their papers in Russian or Spanish and these languages have been chosen for their national rather than for their international importance; the influence of both of them as scientific languages is however increasing and the cultural attainments of the peoples which use them are also growing; the populations of the national groups which they serve are moreover among the largest in the world. Portuguese and Spanish have for the purposes of this article been grouped as a single language. Italian, though of considerable importance as a language of science, has not been included; its numerical status

lies midway between French and Spanish, but unlike the latter it shows little indication of further growth while serving only a moderate-sized cultural group.

The major scientific languages.

English. Since at least as early as 1880, English has been the predominant language of zoological science, the number of publications never falling below 40 per cent. of the world total; this figure has been steadily maintained up to the outbreak of the first world war. The abnormally high figure of 57 per cent. for 1915 cannot be taken as significant, as international communications, especially with such productive countries as Germany, were by that time uncertain. The figures for 1935 and 1948 however, under the comparatively favourable and stable scientific conditions of the time, seem to show that English as a scientific language has not yet reached the peak of its ascendancy.

The scientific predominance of English, disproportionate as it is to the number of people who speak it, approximately 225 millions, must be ascribed in large measure to the immense economic prestige and industrial power of the United States, without which its importance on the world stage would be very greatly diminished. Before the first world war however, it was the British Empire that made the weight; up to 1914 its scientific contribution in numbers of publications exceeded that of the United States; after some preliminary fluctuations before and immediately after the war, the American output finally outstripped that of the British, and from 1919 onwards the margin between the two English speaking groups has grown steadily wider.

The increasingly high percentage of scientific publications in English since the close of the second world war has almost assumed the proportions of a monopoly and is largely due to the innumerable institutions of a scientific nature which have arisen in the United States; during the next decade it will almost certainly rise still higher but whether the present ascendancy will be of long duration is another matter; by the end of this century the picture may well be very different.

A factor which has contributed very substantially to the rise of English as a major scientific language is the increasingly high level of education among the Anglo-American peoples. It is well known that the production of popular expositions of science to meet the lay demand has reached a higher level in the United States than anywhere else in the world, although in this respect a very high standard was also set by Germany before and after the first world war. The technological culture of the United States is almost part of the air its citizens breathe, but the theoretical education of the man in the street by means of museum pamphlets, guide leaflets, agricultural circulars and bulletins and many other special publications, has also long been recognised as an important function of both private and state-aided scientific

bodies; numerous popular journals devote themselves wholly to the interpretation of science, and especially of natural history, for the benefit of the general public, but more especially for the school age groups. In all these activities the United States has been imitated, and for the most part successfully, by the various members of the British Commonwealth.

German and French. German has for long been the second language of science, occupying a position not very far below that of English and always considerably above that of the contribution in French; this position was steadily maintained up to 1914, with a peak period round about 1910. The German recovery from the first world war was much more rapid than that of France but the second war created far greater havoc in German science; after it her output dropped below that of France for the first time during a hundred years and there seems little immediate prospect of German regaining the proud place it once held among the scientific languages of the world.

Russian and Spanish. The Russian contribution has been an uneven one; up to 1905 or 1907 the output of scientific publications in the Russian language was quite insignificant; it was the custom however to publish in the more widely used scientific languages and many papers were thus written wholly in German or French. The years 1910 to 1915 seem to have been a high water mark in Russian science and the number of Russian papers listed for the year 1910 has apparently never been equalled or exceeded since, while the annual output from 1915 to 1948 is consistently below that figure. Unless some of the work in Russian has not been disclosed to other countries and the number of published papers is much greater than that listed in the *Zoological Record*, the results of more than 30 years of state-aided and state-planned science in a socialist framework are disappointing. It may however be that matters are very different with regard to other branches of science.

The outlook for Spanish is somewhat different and definitely more promising; up to 1920 the output, though extremely small in relation to that of the three primary scientific languages, was steady; since this date there has been a marked annual increase which has been progressively maintained. Spanish as a scientific language seems at the moment to have rather greater potentialities than either French or German, which are both losing ground to English, and it will be interesting to see how far these are realised in the second half of our century.

The minor scientific languages.

As has been already said, up to the outbreak of the first world war three scientific languages held the field, English, French and German, while smaller countries in the political and cultural spheres of these nations generally used one or other of them. A limited but significant number of papers however were also

published in the languages of these smaller countries, especially for the purpose of giving information of a more local interest, such as descriptions of the national faunas, papers on wild life preservation and kindred subjects. Such contributions were designed more for the education of the national populations than for the wider forum of scientific knowledge. Many treatises thus appeared in Dutch and the Scandinavian languages while, to a surprisingly large extent, Finnish, Magyar, Polish and Czech were used by the lively minorities of the Russian, German and Austro-Hungarian empires.

At the end of the first world war when these minorities became fully nationalised states, with the pride in their ancient languages and cultures stimulated by the early raptures of political independence, a babel of scientific tongues was loosed throughout Europe and beyond the seas. With some creaking of the joints, old languages such as Greek and Hebrew were made to assume the disciplines of exact expression, and young ones such as Afrikaans made their first unabashed appearance as vehicles of descriptive science. Europe was followed by Asia; the Japanese, and to a much less extent the Chinese, began to employ their own in preference to a foreign language. The second war completed what the first had begun and still other streams of language were added to the main flood; so numerous are the languages which have appeared in the *Zoological Record* during the last 30 years that they deserve an alphabetical arrangement. Together with the languages in use before 1914, they make up a grand total of twenty-nine. They are:

Afrikaans	Croat	Hebrew	Serbian
Armenian	Esthonian	Japanese	Slovak
Bulgarian	Georgian	Latvian	Turkish
Chinese	Greek	Rumanian	Ukrainian

The scientific articles written in these languages usually include a summary of their contents in either English, French or German and in giving them the writers have acted in the best traditions of scientific usage. Biologists who are fortunate enough to employ English as a medium seldom reflect how extremely fortunate they are to have at their disposal what is for practical purposes almost the *lingua franca* of science, with the very solid advantages which it confers. How much more difficult would be the life of the English speaking worker if a summary in Russian or Polish had to be made for each of his papers; yet this is what the Russians, the nations of Eastern Europe, and the Asiatic peoples have done for many years and still are doing.

But even a good summary is far from supplying what can be obtained from the original source, and the reader may, as sometimes happens, be more unfortunate still in finding the paper which particularly interests him written in Ukrainian with a Russian summary, both of course in the Cyrillic alphabet.

In this matter the civilised attitude of the Dutch and Scandinavian countries cannot be too highly commended and admired. These old and democratic states seem to have been able to draw a distinction between what may be called the parochial and that which belongs to the international field of science. They have voluntarily and deliberately chosen to adopt a rational rather than a national attitude by publishing much of their important work in a foreign but more widely read language than their own. They have thereby set an example of good sense to the rest of humanity which has not only benefited themselves but restored to science a measure of the life blood of internationalism without which it cannot live.

The sum total of scientific papers in the languages of all the smaller nationalities is still a minute fraction of those written in the three primary languages, but the dangers of unrestrained nationalism in scientific writing are so obvious as to be self-evident. Though science is still an activity, perhaps the only one, where nation can speak unto nation with moderation and objectivity, this cloud on the horizon, now no larger than a man's hand, may eventually blacken and obscure the scientific relations of the countries of the world.

There is a real danger that without a curb on the growing volume of tongues, confusion, delay and wasted effort will hold back the advance of the peoples of the world, and that the structure of science itself, built by so many hands, will suffer irreparable damage.

"Let us . . . confound their language, that they may not understand one another's speech. So the Lord scattered them abroad: and they left off to build the city".

R. F. LAWRENCE.

THE ROLE OF THE CHILDREN'S INSTITUTION IN A PROGRAMME OF FOSTER CARE

THE importance of the family as a basic social unit and its rôle in determining the character and structure of society are today fully accepted, and need not be elaborated. The function of the family consists in the main of the conditioning of the newborn to the norms and patterns of the civilisation concerned. It is the most appropriate conveyance of the traditions and conventions to be impressed upon the offspring whose future life and work are determined by the norms thus transmitted. The transmission of patterns of speech is a good example, and what is true in relation to language is equally valid with respect to the conveyance of religious, political, aesthetic, and other patterns. The family is, therefore, the institution shaped by society to prepare the younger generation for successful social living; any deviation from this prescribed pattern is looked upon as abnormal and undesirable.

In every society there is, however, bound to be a certain proportion of families which are, for some reason or other, unable to perform their functions satisfactorily. In the various children's institutions in South Africa there are about 20,000 inmates whose parents are either deceased or for some reason unable or unfit to care for them. The children's institution has, in other words, taken over the function of transmitting culture, and of guiding the children as well as possible into useful social living. It is obvious that even the most ideal institution cannot replace the family in the culturally prescribed sense of the term, and a growing institutional population may, therefore, become a factor in social disorganisation.

The children's institution cannot be looked upon as an end in itself, as an ideal treatment in the event of a breakdown of the natural-family functions. Recent trends in institutional policy are in the direction of short-term institutionalisation with the institution personnel taking a more active part in planning for the children's futures. The institution then becomes a study home, a sorting house where children can be classified according to their particular needs—the only real determinants of the type of treatment they are going to receive. A careful study of the health, habits, and temperament, etc., of the child will serve to ascertain whether he will benefit more by adoption, foster-placement, or by group living in an institution. This implies that the institution will assume a more complete responsibility for the children committed to its care. If, for example, adoption is indicated it would

be the responsibility of trained personnel of the institution to ensure that the child is placed with suitable parents, and to carry out the necessary after-care programme.

The success of such a programme of child study, and of placement with adoptive or foster parents will depend largely on the staff and services that an institution has at its disposal. A social worker, who has specialised in child care, would be responsible for studying applications and referrals from outside agencies, and for making recommendations regarding such referrals. He should, if possible, have some contact with the child and its family before the child's placement in the institution. He will be responsible for maintaining family ties; he will act as a link between the institution and the outside world.

During the child's stay, the social worker will collect and co-ordinate the reports of the psychologist, the teacher, nurse, medical practitioner, and others. These reports, coupled with his own observations, as well as with other relevant information that may be available, will form the basis for discussions and decisions concerning the child's future. If foster care is indicated, he and his associates try to find a home that will meet the particular needs of the child, and arrange for the transfer. This is followed up by regular after-care visits of a supervisory nature. If, on the other hand, it appears that institutional care better meets the needs of the child, then the social worker still maintains his relationship with the child, assisting him in his adjustment to his new way of life, and eventually preparing him for, and arranging, his discharge.

In this country arrangements for adoption are very often made at least partially by children's institutions, although they usually work in conjunction with a local family or child welfare society. Adoption would appear to be the ideal solution for many children deprived of their natural homes, and the question may well arise why, when there are so many children leading unnatural lives in institutions, it should be so difficult for prospective adoptive parents to find children. The main reason for this anomaly is that few of the children in need of care are completely orphaned or abandoned. Approximately five per cent. of the children at present in institutions are full orphans, while about fifteen per cent. of them have at least one parent alive and concerned about their welfare to a greater or lesser degree. Often it is through no fault of their own that parents are unable to provide a suitable home.

Where the removal of the children from their homes is the result of neglect and anti-social behaviour on the part of the parents, such children are seldom available for adoption. Even when the parents show little inclination to mend their ways and win their children back, they are reluctant to give up all claim to them. Illegitimate children are in much the same position. The unmarried woman may be only too eager to arrange for the adoption of her unborn child, but once the child is born, and more especially once the mother has been responsible for its care (even just for the brief period required by most shelters dealing with this type of social problem) she finds it extremely

difficult to relinquish all claim to the child. Orphans are seldom entirely without relations, and grand-parents, aunts or uncles, though themselves not in a position to care for the children, are not easily persuaded that the best solution might be adoption.

Foster-home placement, the potentialities of which have barely been uncovered in this country, may be the answer to the problems of many children in need of care. This does not mean that foster-care is always preferable to institutional care. Each case must be judged on its merits. Under a system whereby the institution assumes full responsibility for each child's future it is possible by careful study and observation for the needs of each individual to be assessed and then dealt with accordingly. This would mean that those children who are ready for foster homes could be placed out as soon as possible, and that those who need assistance in the institution will be treated there and transferred when they are ready for foster placement. When foster-home placement is an integral part of the institution programme there is a much better chance that the children will receive the type of treatment they need.

Temporary institutional care at least is almost imperative for those children who are in need of training. Many of the children referred for placement in an institution have been referred because of problems arising in part from lack of proper training and supervision in their own homes. Their home life lacks the controls that are necessary to fit every human being for normal life in the community. Before placement with foster parents is attempted such children should be assisted in conforming to the normal routines of daily living, and they should learn to accustom themselves to a regular and disciplined mode of life.

Secondly, children showing behaviour problems can under certain circumstances respond to the group influence in the institution and learn to temper their behaviour and adapt themselves to a normal mode of life. Supervision and guidance by persons trained in the understanding of and dealing with "difficult" children can assist in this process. Very often serious emotional disturbances preclude from foster care the very children who need the individual attention and affection of foster parents. The value of the institution to these children for whom family placement is difficult to find is in its atmosphere of tolerance rather than in any measure of affection or warmth that is supplied.

Provision must also be made in our institutions for those for whom foster-home placement does not materialise because of such handicaps as low mentality, physical deformity or general physical and social unattractiveness. Although these children undoubtedly crave for, and would benefit by, the care and affection of an individual family, where such care is not forthcoming the institution must step in and fill the breach.

Obviously in cases where committal resulting from ill-health of a parent or other such cause is of a temporary nature and family ties are not broken there is small need to seek foster care for the children. Such cases should, however, be watched, for the cause

which was temporary may drag out to be permanent, and different arrangements may be necessary for the care of the child.

Perhaps the strongest case in favour of the institution lies in its value for the adolescent. At this period the child usually seeks companions of his own age, and independence from adults. He is suspicious of the motives of foster parents. Typical of the adolescent are his efforts to break away from family ties. Dyson¹ says: "Psychologically their need of family relationships is less acute, for the father/mother images are already formed." For these children more or less permanent care in the institution should be arranged.

The group for whom foster care is especially necessary—almost a pre-requisite—is made up of children of pre-school age. Young children require a degree of individual care and attention which cannot possibly be given in any institution. It is doubtful whether those raised in institutions will ever adjust themselves to normal social living, since they have had no opportunity to learn something about family relationships at the most formative and impressionable age. The mental, emotional and social disadvantages of babies in institutions have become so obvious to certain groups of workers in the United States that they seem to favour legislation raising the age of acceptance and forbidding institutions to care for children under three or four years of age.² Group activities constitute a strain for the majority of children below these ages, and the indications are that those in institutions do not respond in the same degree as those reared in their own or in foster homes where individual attention and affection are possible.

During the 19th century foster-home care became an important factor in the treatment of neglected and dependent children in the United States. The institutional population in that country has shown a persistent tendency to decrease, while foster home placements show a strong tendency to increase. At present workers in the field of child welfare tend to prefer foster-home placement to institutional care.

Although private agencies carry a large part of the responsibility in foster-home placement, the Departments of Public Welfare of the different states currently maintain responsibility for children in need of care. As regards state-administered child care, foster-home placement has become so popular that in some states (e.g. Michigan) it is the only method of care. Some states assume financial and administrative responsibility, while the actual responsibility for placement and supervision rests with the local authorities.

Prominent among recent advances made in foster care in the United States is the tendency to erect "study homes"—i.e. institutions where children committed for care are housed and observed for short periods prior to their placement elsewhere.

¹ D. M. Dyson, *The Foster Home and the Boarded-out Child*. London: Allen and Unwin, 1947, p. 46.

² Cf. for example Cecelia McGovern, *Services to Children in Institutions*. Washington: National Conference of Catholic Charities, 1948.

In South Africa, as in other countries, the child's own home is regarded as most suitable for giving him aid when in need. The first aim of state programmes is to assist the natural family in caring for the children. All children cannot, however, be cared for in this way, and the alternatives are foster placement and institutionalisation. Responsibility for placement in foster homes and the subsequent supervision is in the hands of private agencies, with the state giving some financial assistance. Unfortunately in this country foster-home placement is far divorced from institutional care. The authorities responsible for committing children to institutions have so much other work to do that they are seldom able to give adequate consideration to the ultimate future of the children. It is gratifying to note that some agencies have social workers whose sole duties concern placement in foster homes. It would, however, seem more logical for such workers to be directly attached to the institutions where they are in constant contact with the children to be placed.

The evidence in favour of foster-home placement is convincing. Nevertheless, the children's institution fills an important rôle in society and its services must at no time be underrated. Perhaps the interests of the community will best be served when foster home placement becomes an integral part of the institution programme.

C. J. and M. H. JOOSTE.

THE PLACE OF NATAL IN AFRICAN ARCHAEOLOGY

HUMAN pre- and proto-history, the domain of the archaeologist, may be divided into two principal phases, food-gathering barbarism and food-producing culture. The boundary is the point where man learnt to make himself master of his environment, being no longer dependent for survival on the caprices of nature. As a food-gatherer man was little better equipped than the animals. He had, it is true, learnt highly specialised techniques; he knew how to supplement the weakness of his limbs with stone tools and the slowness of his pace with missile weapons; being a gregarious creature, he gained strength by co-operation; he could warm himself, defend himself, and make his food easier to digest by means of fire. But if seasons or climate were adverse, his only remedy was emigration; he had to follow the game or find the plants on which he depended; he could build up no reserves, and his power of multiplication was severely restricted. In the second phase man rapidly became master of nature. By keeping animals under constraint and by growing and storing vegetable food he could tide over at least temporary shortages; he could build permanent habitations and accumulate capital; he could find sufficient leisure to learn new arts, most of which were not immediately needed for survival; and he could breed to an almost unlimited extent.

The food-gathering stage is called generally by European students the Palaeolithic or Old Stone Age. As a food-producer, man entered the neolithic period; and although his subsequent history is divided into several ages, marked by the discovery of various useful metals, man has since the neolithic revolution invented no vital techniques until he has learnt in modern times to isolate and harness latent powers of nature, chemical, physical and biological. During the last couple of centuries we shall probably be found to have been entering a new era, in which the discovery and development of new skills is as revolutionary biologically and sociologically as the change from the Palaeolithic to the Neolithic; but with this phase archaeology is not yet concerned.

The African archaeologist is bound to be interested mainly in man's food-gathering stage. Except near the Mediterranean, man in Africa has only recently adopted the neolithic arts; and owing to climatic and geographical circumstances, his production of food has remained on the lowest level until the European settlement. His crops were raised by methods of garden-culture which in the Near East were rapidly discarded because they were inefficient; his domestic animals, apart from the slaves of the cannibals, were regarded more as symbols of wealth than as reserves of food or

assistants in heavy labour; he depended largely on wild products for his daily sustenance; a warm climate and frequent migrations did not encourage the building of substantial habitations; and he remained at the mercy of natural forces,—rainfall, insects, parasites, large animals and so on, which discouraged any feeling of security and inhibited social development.

Thus neolithic and post-neolithic Africa offer little to the archaeologist trained in the cultures of Europe and western Asia. When he trespasses south of the Mediterranean fringe or of Egypt with its cultural offshoot in the northern Sudan, he will find few of those structures, few of those superposed habitations which in Europe afford stimulating problems of chronology: when he does find them, like the stone ruins of Rhodesia, they are infantile in conception and illogical in plan. The less perishable material products of post-neolithic Africa are equally tantalising; pottery-styles in many regions change kaleidoscopically; metal objects are scarce, and the metal most used is the most perishable of all, iron; and the greater part of his collection may be those least satisfactory of material remains, beads, objects which are so light that they can move far within the strata of the soil, so prized that they may have been in use for several generations before being lost or buried, and often so atypical in form that they are with extreme difficulty datable.

The study of palaeolithic archaeology was developed in Europe. In Asia it has in general attracted little attention, owing to the wealth of more impressive recent remains; so despite some extremely important discoveries, we have not yet the material for even an outline of the palaeolithic development of the continent. But to the African archaeologist the rich palaeolithic sequence is of primary importance, and with few distractions he can give full attention to it.

The palaeolithic student deals with vast periods of time. Whereas the first glimmerings of the Neolithic in Palestine can hardly be more than 9,000 years ago, the Palaeolithic extends for hundreds of thousands of years, and a date between 500,000 and 1,000,000 B.C. may reasonably be postulated for man's first manufacture of stone tools; how much earlier creatures recognisably of the human species were walking this earth we do not know. Thus for the palaeolithic student chronology is vague and elastic; he is little interested in dates like 55 B.C. or 1066 A.D., or even in definite centuries and millennia. The techniques he studies were static, and it does not matter to him if a certain hand-axe were made 200,000 or 205,000 years ago. Man could control his material little more than his environment. A bronze-age smith might have a vivid conception of the object he wanted to make; the metal he used could be shaped by hammering, the mould into which it was cast was formed of plastic material. But palaeolithic man, in making a hand-axe, depended on the size, shape, material and homogeneity of the pebbles available; he can have had but a general conception of the tool he needed, and if it did not chip

right, his only resource was to throw it away and try another.

Consequently, to the palaeolithic student material products are of secondary importance; he must work primarily on stratification, not cultural but geological. It is true that many late palaeolithic caves contain a series of culture-levels; but in order to distinguish them one cannot rely on man-made floors, as one can in even a neolithic village; one is compelled to resort to sterile layers, accumulated naturally during periods when the cave was abandoned; and these sterile layers are often referable to geological causes, for instance, stalagmite in periods of high rainfall, dust and desert-sand during aridity, rock-falls perhaps due to frost or earthquakes, and so on. Moreover, inhabited caves account for only a fraction of human history. In western Europe the severity of the last glaciation drove men from the open into caves; the oldest of them may be as old as 100,000 years. In Africa few cave-deposits have been found older than the advanced Middle Stone Age, perhaps 10,000 or 20,000 years ago. There may have been older caves, and they may have been occupied; but either they have been filled with silt, or they have disappeared by erosion of the rock.

Apart from deposits in long inhabited caves, the archaeologist has to depend on soil-accumulations, gravels left by rivers which have deepened their beds, shingle-beaches abandoned by receding seas or lakes, and similar evidence primarily geological; in such deposits he may find ancient tools, left on old land-surfaces, made by people squatting on river-gravels, and so on. Europe has offered favourable conditions for such stratification. It is true that the ice-cover of central Europe has removed more than it has deposited; but on the margins of the ice-fields there are many river- and morainic-gravels and sands, which it is difficult but interesting to sort out. Often the archaeologist, geologist and palaeontologist must combine to decide in which major glaciation such and such a patch of gravel was laid down, and in which stage of that glaciation. Farther from the ice-margin the variations of climate have been so strongly marked that it is comparatively easy to assign deposits to their proper place in the rhythm of the glaciations.

Africa has not been under ice within the human period; so our recent deposits are much thinner than the European. A soil of ours five feet thick may have accumulated in the time that hundreds of feet of boulder-clay have been dumped on a European landscape. At the same time our sequence is simpler and easier to interpret.

It is particularly towards the coast of southern Africa, where the high plateau breaks away towards the sea, that stratigraphical evidence is available; and among the coastal regions Natal plays an outstanding rôle, partly because it has been better explored, partly also because it has undergone a peculiar history. It has been better explored because most of it has been opened up by European settlement; it is not too tropical, too densely forested;

and much of it must always have been park-land and bush-veld, inviting to primitive man. The coast-lands of Kenya and South-West Africa, for instance, are difficult of access; round the Cape coast regional studies have been made, but no coherent picture has yet been published.

As the archaeologist makes much use of the rapid erosion of valleys by rivers, the detailed work carried out on the high veld, along the Vaal, in Rhodesia and Kenya, has yielded a less satisfactory general sequence than Natal promises to do. The flow of the rivers is fairly level, and they have had little opportunity for deep dissection; on the other hand, their ancient gravels have been left more intact, and the fortunate discovery of diamonds on the Vaal has enabled the archaeologist to study the diggings which he himself could never have had the resources to carry out. Detailed work round the Victoria Falls has revealed a local sequence, which however has not been matched in Rhodesia, where on the whole the evidences for stratification are poor. The rifting in Kenya has given incomparable information; for not only have land-surfaces carrying human industries been violently affected by earth-movements, but lakes have formed whose rise-and-fall has been a very sensitive indicator of climatic change.

But these areas of detailed study are small in comparison with the province of Natal, with which we may associate Swaziland and Pondoland because they belong geographically to it. Natal will be able to provide a coherent picture not of one river-valley but of a territory comprising marked geographical contrasts, open veld traversed by big rivers in the north, high mountains on the west, tropical plain on the east and steep dissected slopes on the south; of a territory also which lies near the margin of summer and winter rainfall, and so is likely to reflect a great complexity of climatic variations.

Since before the beginning of the Pleistocene period the African plateau has been rising and the sea receding. This process has left round the coast a series of old beaches, the pebbles of which were often utilised by man; at the same time, the rivers deepened their already deep gorges, and gravel-deposits survive, especially on the loops where erosion has been oblique, to mark the levels of their old channels.

Old beaches and river-terraces have been found in the Cape Province, and they must exist along the west coast, though its remoteness has left this area an archaeological blank. Even to the diamond-diggings at the mouth of the Orange, where remains are extremely likely, archaeologists have been unable to penetrate. The diggings of the Angola rivers have yielded a rich series, which however has not yet been correlated with coastal movements. Along the east coast, practically nothing is known about Portuguese East Africa, and little more about the coast-lands as far as Cape Gardafui; a recent study on Somaliland may, when published, throw valuable light. In the northern half of Africa, the Red Sea has been greatly disturbed by earth-movements during the

Pleistocene; if its desert shores were reached by man, it should provide a most interesting but hardly a typical sequence. Much of the coast of West Africa is low-lying swamp; there must be raised beaches and river-terraces here and there, but they remain to be found. It is only along the Mediterranean, on the Atlantic coast of Morocco and in the lower valley of the Nile that a sequence has been worked out which to some extent corresponds to that of South Africa. A series of beaches indicates a steady rise of the land; it is believed furthermore that the Mediterranean beaches represent maxima of sea-level, when the northern hemisphere was free from ice and the oceans full of water; in intermediate periods much water was locked up in the glaciers and the oceans sank.

In this extremely important field the exploration of Natal has already provided a series of early beaches and corresponding estuarine deposits which is more complete than those of the Mediterranean and far more informative than any yet described in other parts of Africa. We cannot yet link Natal with the Mediterranean; we must appeal to our colleagues, especially on the west coast, to find the connecting evidence; but assuming that the Natal beaches also represent maxima of ocean-level, we may very tentatively put forward the following scheme:

Glacial period (northern hemisphere)	Mediterranean, beach-stage and height above modern sea-level.	Natal, beach-stage and height above modern sea-level near Durban.
Pre-glacial	Sicilian 300'	pre-human 500'
First glaciation	Low	sea level
First interglacial	Milazzian 180'	pre-Chellean culture 320'
Second glaciation	Low	sea level
Second interglacial	Tyrrhenian 100'	A number of beaches close together, shewing a continuous rise of the land with halts. Stellenbosch I-II culture. 200' — below sea-level.

If Natal is thus able to provide a sequence which can be correlated with the opposite end of the continent, a great advance has been made in constructing a chronological scaffold on which future study of other regions may be built. But as Natal lies on the east coast, during the later stages of the Pleistocene it became affected by the earth-movements which caused the Rift Valleys, and can no longer be compared with the less seismic Mediterranean.

Everyone knows the great red dune on which Durban is built;

it extends along the whole coast of Natal. There seems little doubt that it was laid down under water as a result of coastal slipping; and this slip was probably due to the crack in the earth's crust, which caused the Rift Valley in Palestine, the Red Sea, Kenya, Tanganyika and Nyasaland, continuing roughly parallel to and not far from our coast. The Rift Valley can be dated in Kenya by archaeological remains; we can assign our red dune to a corresponding date by the industry which flourished on it soon after it began to rise as a bar from the sea. Since that time the land has risen until the present day.

It is thus apparent that Natal forms a most important cornerstone in our reconstruction of the archaeology of the continent. The results here promise to be more significant than in almost any part of Africa, and it will be well worth while to continue our explorations.

For the last phase of prehistory Natal has less to offer. The Middle Stone Age was a time when man was developing more rapidly, albeit still very slowly; so human industries become more important than a record mainly geological. It is not unlikely that Natal may yield caves with deep habitation-deposits, offering a sequence comparable to some of the caves of Rhodesia and the Orange Free State; their excavation will be costly in time and money, but will have to be properly undertaken. There is promise also that the deep soil-sections of North Natal will prove illuminating; there are dongas twenty feet deep, in which one can trace the stages in which the soil has accumulated from about 100,000 years ago, and on each old surface tools occur. These sections too require careful excavation; for in a donga everything drops to the bottom, whereas we need to see each layer taken off and the objects from it separately preserved.

Such excavations should give a good idea of the sequence of events in Natal; they may also throw light on the vexed question whether several races and cultures occupied Natal more or less simultaneously. But Natal is geographically a backwater, into which fugitive populations may have been driven, to last long and fuse with one another. Nor was it in general the most suitable country for the food-quest of more modern man, armed first with the spear and then with the bow. Old Stone Age man, a grubbing parasite provided with massive tools which did little more than save his teeth and nails, could find in Natal edible roots, carrion and other lowly food, which his clumsy hand-axes and cleavers enabled him to secure; he may also have killed small game by throwing stones at them; but he can seldom have enjoyed better-class meals, especially buck, which he could not wound and was not swift enough to run down. But the spear greatly increased man's range; and the spear was the characteristic weapon of the Middle Stone Age. He could now hunt buck; and he would find them less in the deeply dissected valleys and hills of Natal than on the open veld. Consequently, the study of the Middle Stone Age in Natal is no longer of international importance; the cultures

here are likely to have been provincial copies of those in the interior.

For the earlier periods of human prehistory Natal, owing to its special geographical and geological conditions, can provide a pattern for studies in all parts of Africa south of the equator. To students in the northern hemisphere its importance is naturally less; but the correlations with Algeria and Morocco, lands of somewhat similar formation, provide a line which archaeologists throughout Africa may grasp. One small province cannot yield all the evidence; but this small province is able to give an unusually complete and clear record from days when man, as a tool-making animal, first became recognisably human, to the time when, with the invention of the bow, he rose above his brute-surroundings and donned complete humanity.

O. DAVIES.

DIE WOORD 'BOESMAN'

OOR die oorsprong van die woord Boesman is al veel geskryf en dit is miskien interessant om op 'n paar van die voorgestelde afleidings te let. Daarby wil ek my laat verlei om op 'n moontlikheid te wys wat veel van die vroeëre pogings insluit en tegelykertyd 'n aspek na vore bring wat m.i. die weg na 'n aanneemlike oplossing aandui.

Die belangrikste verklarings tot dusver is die volgende:

(a) Die naam is die Nederlandse vertaling van die Maleise *oerang oetan*; die eerste woord beteken *mens*, die tweede *bos*, saamgevoeg dus *bosmens*, *woudmens*. Uit die Ooste is die naam dan deur die blankes hierheen komparatief oorgedra. Prof. F. R. Lehmann het probeer bewys dat die Maleise naam in die Ooste oorspronklik op *mense*, te wete die onbeskaafde, primitiewe bosbewoners in woudryke gebiede, van toepassing was en „sekondêr” op die nou bekende aapsoort oorgegaan het (*'n Paar gedagtes oor die naam Boesman in Tydskrif vir Volkskunde en Volkstaal II afl. 1, bl. 4-5*). Hy vind dit verder opvallend dat reisigers wat met die Ooste goed bekend was, soos Tapp, Leguat, Thunberg en Le Vaillant, ons naam *bosjesman* met die Oosterse *bosman* in verband bring.

(b) Andere meen dat die benaming 'n onafhanklike, eie skepping is, so Lichtenstein wat oor die vorige afleiding glimlag. By die eerste kennismaking (1655) het die Nederlanders verneem dat die Boesmans *Sonquas* genoem word, en hiervandaan is hulle in die *Dagverhaal* ook so aangedui, veelal met die byvoeging „ofte *struyckroovers*.” die eerste keer op 15 Julie 1656, weer op 31 Okt. '57, 7 Maart '59 ens. (vgl. J. L. M. Franken: *Boesman in TWK, 16, 78-9*). Die *struikrowers* slaan waarskynlik daarop dat hierdie menses, as hulle nie in die klowe of kranse kan skuil gaan nie, vir hulle onder in die vlaktes tuis maak onder struie, tot 'n soort van skerm gedruk, en van daar uit op wild of vyande skiet. So 'n struik, sê Lichtenstein (*Reisen, II, 77*), „heist im africanischen Holländisch *boschje (bosje)*,” vanwaar dan *bosjesman*. Die naam kom veral op onder die koloniste wat die dwergvolklike se gewoontes goed leer ken het; een van die vroegste vermeldings is in die *Dagverhaal* van 31 Oktober 1685, waar gepraat word van „de Sonquaas in de wandeling Bossiemans genaamt” (VLV, II, 148 vn.). Ons het hier 'n treffende aanduiding dat die verkleiningsvorm *bossie* teen 1685 al sy *Afrikaanse* (of Kaapse) betekenisveld vir struikagtige gewasse moes gehad het, en dat 'n kolonis daarom nooit die benaming *bos-man* vir die Boesmans toe kon gebruik het nie, want die vlaktes waar hulle aangetref is, was onbebos, woudloos, sodat, sê Lichtenstein, 'n mens vir daardie reisigers moes glimlag wat *bossiesmans* vertaal as *hommes des forêts* of wat *bosch* (Gebüsch, Wald) verwar met *bosje*.

(c) Hoewel Nederlands *oe* met Afrikaanse kort *o* kan afwissel (*bloem-blom*), kom dit aan die ander kant nie maklik voor dat Nederlandse kort *o* in geslote lettergreep onder aksent met Afrikaanse *oe* afwissel nie, d.w.s. Nederlands *bos* en soortgelyke gevalle het geen wisselvorm *boes* e.d. in Afrikaans nie. Daarom het dit vir sommige onaanneemlik voorgekom om *Boesman* uit *bos(sies)-man* te verklaar, soos in (a) en (b) hierbo blykbaar stilswyend aanvaar is. Prof. J. L. M. Franken wil die fonetiese besware omseil deur die ou woord *boesman* (soos by Kiliaan in sy woordeboek van 1574 weergegee) ten grondslag hieraan te lê. Hierdie ou woord beteken 'n kinderskrik, 'n paaiboelie (bieteboew), ook in Duitse gebiede, en die koloniste het die naam dan aan die dwergvolk gegee omdat hulle so lelik soos paaiboelies lyk (TWK, 16, 78). Aan dié verklaring het ook prof. J. J. Smith sterk geglo, daarin versterk deurdat *bos* in al sy menigte samestellinge nêrens by ons tot 'n *oe* in sy vokaal orgaan nie, sodat *bos(sies)-man* nie as grondslag kan geld nie (vgl. sy artikels in *Die Suiderstem*, 11 en 18 Sept. 1937).

(d) Prof. Franken het in die Kaapse argief op soek na bewyse in die briewe van ongeletterde persone moes ontdek dat die naam *Boesman* tussen 1680-1830 nie 'n enkele keer opgeteken is nie. Dit het hom ernstig laat twyfel of sy afleiding as die enigste kan geld en hy het dit gewysig tot 'n saamgestelde opvatting. Hy verbind (a) en (b) en neem aan dat, sê gedurende die eerste vyftig jaar, *bos-* en *bossies-man* gebruik is; maar van 1700 af kom daar 'n toenemende aantal Duitsers as amptenare en vryburgers in die Kaap aan. Hulle sou dan *bos-man* (wat die eintlike grondslag vorm, en nie *bosjesman* nie!) uitspreek as *Buschmann*. Hierdie verduitsing word versterk (hier bring hy (c) te pas) deurdat die Duitsers *buss(e)mann* (paaiboelie) ook ken. So ontstaan dan deur Duitse invloed 'n newevorm *boes(e)man* wat gaandeweg die ander vorme in die volksmond verdring (t.a.p. 83-4).

(e) Mnr. L. C. van Oordt doen in *Die Huisgenoot* van 14 Maart 1941 verslag van sy sukses om 'n paar ou dokumenterings van *boesman* raak te loop. Die oudste is in 1752 waar in dieselfde brief voorkom *Bossies-* en *Boessiesmans*, in 1776 *bosse-* en *boesemans*, in 1783 *boesmans*, ens.; in 1790 is daar sprake van 'n *Boesmans Berg*. Mnr. Van Oordt het bevind dat dieselfde skrywers (ons merk op dat hulle almal voorposbewoners is) die twee name duidelik as dubbelvorme gebruik en hy sien m.i. tereg in die jare 1750-1800 die oorgangsperiode van *bossiesmans* tot *boes(sies)mans*, en omdat die Duitsers in getalle toe so oorheers het, meen hy dat die klankverskuiwing aan hulle invloed toe te skrywe is, maar hy gaan nie verder en verklaar die *boesman* uit *Buschmann* en *bussemann* tesaam soos prof. Franken nie. Daarom dat ek hom apart noem, as voorstander van Duitse invloed sonder meer.

(f) In die voorgaande is hier en daar dinge wat nog hinder. Ons kan as die vernaamste kernfeit wel neerlê dat die grondvorm van hierdie benaming vir die Sonkwas *bosjes-* of *bossie(s)mans* is,

d.w.s. die eerste lid van die samestelling berus op die *verkleiningsvorm*. In een of ander spellingvariant hiervan verskyn dit van 1685 af toe dit vir die eerste keer (sover ek weet) opgeteken is, en in die ou Kaapse geskrifte daarna loop ons dwarsdeur die reis van die 17de en die hele 18de eeu konstant die vorms *B/bos(ch)-je(s)mans*, of *B/bos(s)je(s)mans* raak. Tot ongeveer 1790 gebruik buitelandse reisigers dit omtrent net so konsekwent, bv. Sparrman spel *Boshiesman* (volgens die Engelse vertaling) en Thunberg *Boshiesman* in die Engelse vertaling, *Boshismän* in die oorspronklike Sweeds. Prof. Franken haal die volgende spelvorme voor 1800 uit boerebriewe aan: *Bostesmans* (1702); *bossismans* (1759); *bossiesmans* (1793); *Bossieman* (1795); *bossemans* (1799). Vir afwykings van hierdie grondvorm voor 1750 moet 'n mens soms letterlik jare soek, na mnr. Van Oordt getuig. Offisiële beskeide, reisigersberigte en boerebriewe stel ons in staat om die grondvorm vas te stel as *bosjesman* of 'n spelvorm daarvan.

Aanvaar ons die stelling, dan is die rede vir die handhawing van *bosjes-* of *bossies-* as eerste lid in teenstelling met *bos-* waarskynlik die een deur Lichtenstein verskaf in (b) hierbo.

Kom ons by *boesman*, dan is dit opmerklik dat die eerste dokumenterings *boessiesmans* is (1752), m.a.w. dat hulle by die verkleiningsvorm aansluit en as sodanig 'n suiwer doeblet van die grondvorm is. Nou is die interessante dat *boessie(s)-* duidelik nie meer as *bossie(s)-* gevoel word nie, waardeur die rede verdwyn om die lang vorm te bewaar, aangesien *boesies* geen teenstelling met *boes* vorm in die sin as *bossies* (struikagtige gewasse) hom distanseer van *bos* (woud) nie. Bygevolg is die weg oop dat *boessieman* vry kon ontwikkel tot *boesman*. Van ongeveer 1780 af wedwyer *boesman* met *bossiesman*, soos mnr. Van Oordt tereg aangetoon het, om eindelijk die oorwinning te behaal, vermoedelik weens sy kortheid.

Stel ons nou die vraag of die vokaalwisseling aan Duits toe te skrywe is, dan wonder 'n mens hoekom Duits so uitsoekerig was om net die woord *bos-* te kies, en nie ook byvoorbeeld *bors*, *dors*, *hond* (met die pragtige aansluiting by *Schweinhund*), *long*, *ons* e.d. nie, en hoekom is alle samestellings met *bos* onaangetas? Hoekom was die goeie Duitse burgers in die een geval so onmagtig om 'n gewone Nederlandse klank baas te raak? Die besware word nog groter as ons by die grondwoord *bosjesman* begin waarnaas *boessiesman* opgekrom het: die Duitse diminutief van *Busch* (met die *oe*-klank, waarom dit eintlik gaan) het tog in die reël 'n umlaut *ü*, sodat die verkleiningsvorm eerder *buussiesman* moes gewees het as dit onder Duitse inwerking was. Duitse invloed lyk my in hierdie geval onbewese en onwaarskynlik.

Ook staan ek skepties aangaande die geldigheid van die beswaar dat die kort *o* nie maklik in *oe* kon oorgegaan het nie. Ons weet heel weinig oor die klankwaardes van destyds, sodat ons ons weg moet soek. Ons het waarskynlik nog reste van 'n stryd wat destyds moontlik fel gewoed het in 'n voorbeeld soos *voort* (gaan), *vort* (met kort *o*) en *voert* (of *voertsek*, uit *voert*-seg-ik); vroeër het ons gehad *ook*, *ok* en *oek*, en naas *knots*, *knoets*, ens.; of om

'n paar voorbeelde uit die agtiende eeu te noem: die pleknaam *Duyvenhok* is soms geskryf as *Duyvenhoek*, die *Taalargief* bevat spellings soos *landroest* (1770 bf. 10, 1783 bf. 60 en 63b), *Stellen Boes* (bf. 63b), *voorschoet* vir 'n voorskot (1799) e.d.m. Verteenwoordig die spelwyse inderdaad die uitspraak, en indien wel, hoe algemeen was dit? Terloops kan opgemerk word dat behalwe in die geval van die dorpsnaam die *oe*-klank van hierdie woorde juis nie met gewone Duits in verband te bring is nie.

Nog erger is ons in die duister aangaande die uitspraak van die brabbeltaalvorme en veral aangaande die gevoelswaarde wat dit aangekleef het. Dr. J. H. Rademeyer deel ons in *Kleurling-Afrikaans* (Amsterdam, 1938) mee dat die Griekwas en Rehobothbasters van *oener*, *oens* en *toet* praat (bl. 45). Oor die algemeen lyk dit nog of die Hottentot se vokale vir die blanke se oor ook dikwels iets onbestemds gehad het, bv. by die *i* en die *o*. In die leenwoorde kan ons al die dubbelheid merk, so in *davi(b)* en *dawee*; *krie* en *karee*; of in *baroe* en *baro*, *kambroe* en *-bro*. In die eerste paragraaf van sy *Lehrbuch der Nama-Sprache* (Berlyn, 1909, p. 1) sê Meinhof: „Wenn die Vokale alleinstehen, kommen *e*, *i*, *o*, *u* nur in enger (geschlossener) Aussprache vor, weshalb der Anfänger leicht *e* als *i* und *o* al *u* hört. So erklärt sich der häufige Übergang von *e* in *i* bezw. von *o* in *u*.” Sulke neigings wat wel van streek tot streek kon verskil het, het die Hottentot m.i. in sy Nederlandse uitspraak oogedra; en so sien ek dan in *Boes(sies)man* 'n gewone Kreoolse wisselvorm by *bos(sies)man*, waar vanweë sy platter toepassing dié vorm deur die koloniste oorgeneem is.

Hierdie newe-uitspraak by gevalle soos *bos* is blykbaar nie net beperk tot die taal van die Hottentotte nie, oorgedra op hulle Afrikaans. Volgens die transkripsie van die in Arabiese letterskrif gedrukte Slamse Kategismus vir die Kaapse Maleiers, in Latynse skrif deur A. van Selms versorg (*Arabies-Afrikaanse studies*, nr. 1. 'n tweetalige . . . Kategismus, Amsterdam, 1951), is dit 'n vername kenmerk van hulle Afrikaans van 1869, en vermoedelik van vroeër, om die kort *o* as 'n kort *oe* uit te spreek (bv. *oef*, *oem*, *oens*, *oep*, *soen*).

Sulke oorwegings laat die gedagte by my opkom of *boessiesman* (en daaruit *boesman*) nie eerder die uitspraak van die Hottentotte en slawe weerspieël het nie. Omdat aan dié uitspraak dan 'n gevoel van onbeskaafdheid gekleef het, het die offisiële beskeide en die geleerde reisjoernalhouers die gebruik van die „plat” woord vermy.

Dit lyk my asof ons naas ons eerste grondstelling dat die beginpunt op die verkleiningsvorm van *bos*-berus, as tweede grondstelling moet aanneem, voorlopig altans, dat *boessies*- en *boes*-aanvanklik as gewone plat wisselvorme te beskou is, sodat geen dieper oorsaak hoef gesoek te word nie. Duits is bygevolg nie vir die dubbelheid in die eerste plek verantwoordelik nie, maar toe dit eers daar was en die blanketaal binnegedring het, byvoorbeeld deur die eiename Jager Boesman, Dirk Boesman (1795 en 1799 resp.) e.d., tóe kon Duitse koloniste of beamptes dit vanself baie maklik en natuurlik gevind het om die platter dubbelvorm

te gebruik en dit so te help verhef, net soos trouens van die einde van die 18de eeu af die Engelse gedoen het, omdat *boes-man* so direk *Bushman* suggereer, en nie andersom nie. Dit lyk immers duidelik dat hierdie Engelse benaming 'n Afrikanderisme is.

G. S. NIENABER.

THE INTERNATIONAL ORGANISATION OF CULTURE

Has Unesco Justified Itself ?

THE Specialised Agencies of the United Nations have not as yet made a real impact in a world still dominated by power politics. However, it is Unesco which has had to bear the brunt of the most violent criticism. That this should be so is inevitable, as on the one hand its activities are in the domain of strong nationalist sentiment and on the other it has to contend with the indifference of those for whom its work seems to be too academic and "high-brow." In the view of many of its critics it is attempting the inherently impossible and undesirable.

It is the C of the title that lends itself to misunderstandings and basic disagreement. Julian Huxley the first Director General, in a personal statement¹ defined "culture" as follows:

"First it embraces creative art, including literature and architecture as well as music and the dance, painting and the other visual arts . . . Then it can be used in the sense of cultivation of the mind . . . acquaintance with the artistic and intellectual achievements both of our own and of past ages . . . a certain capacity for good judgment, critical sense and independent thinking. In this sphere, we can speak of a high or low level of culture in a community. And finally it can be employed in the broadest sense of all, the anthropological or sociological one, as denoting the entire material and mental apparatus of a particular society."

And it is naturally part of the world humanism that Huxley advocates as Unesco policy that all peoples and individuals should be treated as equals in human dignity and respect. The implications of the acceptance of this point of view by the sixty-four Member States of Unesco would be very far-reaching. This would involve not only a negation of national claims to superiority within Western culture but also a negation of such claims in relation to Asia and Africa. In other words for Unesco the American way of life in Washington must have no greater validity than that in Delhi, Peking or Paris.

Huxley further suggested that Unesco should aim at "a unified pool of tradition for the human species as a whole . . . including the unity-in-variety of the world's art and culture" and "help the emergence of a single world culture, with its own philosophy and background of ideas."

This attempt at formulating a "philosophy" for Unesco led to heated discussion at the First Session of the General Conference

¹ J. Huxley, *Unesco: its purpose and its philosophy*. Paris, 1946.

which was held in Paris at the end of 1946. Huxley explained that he was not advocating a sort of "Esperanto" culture, as Unesco should always stress the diversity rather than the common denominator. None the less, the question of a Unesco policy has remained a basic problem, casting an ominous shadow on the work of the organisation. The major clashes and stormy sessions at each Annual Conference have arisen partly from the inherent difficulties of obtaining agreement on a working "philosophy." The appointment of Jaime Torres Bodet, a forceful Mexican diplomat, as Director General in 1949 led to a concentration of the programme and a greater emphasis on fundamental education, the elimination of illiteracy. However, the new Director was soon faced with the added difficulties of an ever shrinking budget.

The international organisation of cultural activities can be considered at two levels, the utilitarian day to day problems of intellectual co-operation across national frontiers and the more long-term efforts to give meaning and substance to the relevant sections of the Declaration of Human Rights and to stimulate the creative arts. The history of the first of these goes back to the creation in 1922 by the League of Nations of the International Commission for Intellectual Co-operation. (The names of Léon Bourgeois, Gilbert Murray and Henri Bergson will always be associated with this Commission.) In a few years it became clear that the work to be done was of such value that the International Institute for Intellectual Co-operation (hereafter I.I.I.C.) was opened in Paris in 1926 and mainly financed by the French Government. The Institute was in effect the Secretariat of the Commission. In spite of its small staff and budget and its inevitably European outlook, its record¹ of solid achievement is too little appreciated amidst the denunciations of the League's failure. At the first level mentioned above, Unesco is the immediate successor to the I.I.I.C. The Institute devoted itself to the fostering of the following types of activity:

- (a) Exchange of ideas among intellectuals by student and teacher exchange.
- (b) Co-operation between universities and learned institutions by exchange and by co-ordinating libraries, museums and art exhibitions.
- (c) Diffusion of the works of the mind by the translation of literary masterpieces, the development of bibliography and international inter-library loan.
- (d) International protection of intellectual property by copyright and similar protection in the fields of art and science.

There is no doubt that this sort of international co-operation can be organised very successfully. It is not very spectacular and the I.I.I.C. never had funds adequate for the purpose—nor, for that

¹ *L'Institut International de Coopération Intellectuelle, 1925-1946*. Paris, 1948. (A final report and summary of the work of the Institute with a detailed list of publications.)

matter, has Unesco now. Nevertheless the results will prove to be of abiding value.

From the beginning Unesco's aims were more broadly conceived. One aspect was underlined by Ritchie Calder¹ in an appraisal of its function:

"Intellectual co-operation in the League days meant the Co-operation of Intellectuals. That is not the assignment of Unesco. Unesco has to discover the idiom of the ordinary people. It is the People's Palace as well as the Acolian Hall; it is the Light Programme as well as the Third Programme; it is the Bazaar story-teller as well as Education in World Citizenship; it is Greer Garson as Madame Curie as well as High Altitude Research on the Jungfrauoch."

Persuasive as this view may have sounded at the time, it is doubtful whether Unesco can or should stimulate the popular arts of its Member States directly, because of the dangers of interfering in matters national. At best this stimulation can only be indirect and take the form of communication and interpretation of the cultural achievements of one nation to another.

As Unesco is already six years old it is possible to discern the character of its organisation of cultural activities in the narrower sense. In principle there are three main lines of approach: the development of international co-operation by the support of professional associations, the dissemination of the cultural heritage of mankind, and the protection of creative artists and the works of the mind against the assault of time or man. In practice the work is broken down into what roughly corresponds to subject divisions: philosophy and humanistic studies, arts and letters, libraries, museums and historical monuments, and copyright.

In the natural sciences there is an old and tried tradition of international co-operation. Yet even the average scientist does not realise how much scientific research and an industrial civilisation depend on formal international agreement. For example not only abstruse atomic research, but most technological processes are vitally affected by the International Table of Atomic Weights agreed upon regularly by the International Union of Pure and Applied Chemistry. In the humanities such professional organisations are far less developed. Unesco from the beginning has stimulated their formation in fields where they seemed essential and has supported them financially during the formative period. In this way the International Council for Philosophy and Humanistic Studies (a co-ordinating council of ten international federations of subject specialists), the International Theatre Institute, the International Council of Archives and the International Music Council have been created during the past three years. At the last Unesco Conference a sum of over £50,000 was voted in subventions for 1952, to 17 such non-Governmental organisations.

¹ R. Calder, "Unesco's task." *Political quarterly*, v.18, p. 123-136. 1947.

A former senior member¹ of the Social Sciences Department of Unesco has criticised this practice. He contends that too close an identity is thus established between professional officials in the Unesco Secretariat and organised professional groups outside, which results in lobbying for funds, etc. While there may be some danger of such abuse, there are real advantages for Unesco in working with the recognised internationally representative spokesmen of each discipline. It is a sound and important principle that Unesco should have no official opinion on music, art or literature. It must be guided by the most reliable international opinion. It must see to it that money (which comes from national contributions) is passed on with the minimum of administrative delay to the professional organisations, which alone make international co-operation a reality.

A good example of Unesco's deliberate policy of refraining from primary creative activity is shown in the project for a Scientific and Cultural History of Mankind. A Committee of Experts met at the end of 1949. Their report was sent to all Member States for comment. Such comment as was received was submitted to the Annual Conference in 1950. Just about this time the first of a series of attacks on Unesco was made by the aged Italian philosopher Benedetto Croce, who poured scorn on this undertaking. The result of this criticism, however, was rather to widen its scope and limit Unesco's part largely to its administration. The International Council for Philosophy and Humanistic Studies and The International Council of Scientific Unions were asked to assist in appointing an independent International Commission to undertake on behalf of Unesco the preparation and publication of such a history. This Commission of nine scholars has now met and appointed 42 correspondents belonging to twenty-five different countries. The work is planned to appear in six volumes in 1957 at an estimated total cost of over £100,000. The Editorial Committee of the Commission will invite experts in every part of the world to deal with the various subjects. These articles will first be published in a new quarterly review, *Cahiers*, where they can be subjected to the widest appraisal by professional historians and other informed critics. The Commission will appoint a separate editor for each volume so as to ensure a unity of style and conception. From the material assembled each editor will be responsible for drafting his own volume in collaboration with the Editorial Committee, which will aim at a general uniformity.

It should now be clear to the most carping of critics that Unesco has taken unending care in its preparations for a great and difficult project. By all standards of human reckoning the Commission should in this way achieve as accurate and objective a synthesis of our present knowledge of man's history as it is possible to make.

In the fields of Music and the Visual Arts, Unesco has had to

¹ W. R. Sharp, "The rôle of Unesco: a critical evaluation." *Proceedings of the Academy of Political Science* (New York), v.24, p. 101-104; Jan. 1951.

start with the somewhat pedestrian work of bibliographical listing as a preliminary to the publication of catalogues. If there is to be any understanding of the works of art of the nations, a survey of what exists is the first step, before dissemination and interpretation can follow. The bibliographical chaos which exists is indeed a sad commentary on "commercial enterprise."

Therefore the Music Division started compiling a world index of music on records. From it was published¹ on the occasion of the 100th anniversary of his death in 1949, a complete annotated catalogue of all Chopin's recorded works. Catalogues are in preparation for Bach and Beethoven and for folk music of all countries. Similarly a catalogue of recorded Indian music has recently been published and one on the music of China is to follow. Now that the already mentioned International Music Council is functioning as an independent body, Unesco has turned over to its Documentation Centre in Paris the recorded music index. (It already contains 50,000 individual cards). The work of indexing all known musical works will be continued in five main fields: published music, manuscript, photographic or micro-film reproduction, and recorded music.

Just as the gramophone record has made the best in our musical heritage available to those who live far from the great cities, so colour reproduction has made visual art a reality to millions in our time. In the school, the community centre, even in the home, out of reach of great galleries and museums, the art of a van Gogh or a Dufy can now become a personal experience. Even the best colour prints, however, are only approximations, and the quality of reproduction varies within wide limits. Therefore Unesco asked all known publishers of colour reproductions to send samples of their products. From these an international committee of experts made a selection based on the "significance of the artist, the importance of the original painting and the fidelity of the colour reproduction." The results have been published in two catalogues giving for each choice full details of the original painting, the cost and source for purchase and a small black-and-white photograph of the reproduction. The need for careful selection can be gauged by the fact that for the one volume (paintings before 1860) about three-quarters of the prints submitted had to be rejected. These catalogues are also a stimulus to art publishers to fill in the many gaps which still exist. From the prints submitted travelling exhibitions were prepared and sent on request to Member States. Their success in many parts of the world is proof that the visual arts can be brought to the average man and woman in all countries.

Creative literature is so essentially a national and local activity that Unesco's function is only one of communication and interpretation, that is to say, translation. Here again action is two-fold, the bibliographical listing of translations and the widespread encouragement of good translations of the national classics at

¹ See select list of Unesco publications in arts and letters in Appendix.

present inaccessible to the majority of mankind. The former is carried out in the Secretariat by a continuation of the annual *Index Translationum*, started by the I.I.C. The translation of the classics has involved Unesco in much discussion with Member States so as to arrive at agreed lists of works meriting translation, both by subsidy or through normal commercial channels. Arabic works by Al Ghazali and Avicenna are to appear in English, French and Spanish, while works by Aristotle, Descartes, Shakespeare and Cervantes are being translated into Arabic. Latin American literature in the same way is being translated into English and French, in a number of instances under contracts with the governments concerned.

In music, the visual arts and to a lesser extent in literature, limited availability is the most serious bar to wider communication. Therefore Unesco must aim at making readily available the great achievements in all art forms of all countries. As yet it has not addressed itself to what is permanently valuable in the cinema.¹ This may be due to such difficulties as the ephemeral character of the medium itself and the great financial power of this monolithic industry. None the less since the film has become a dominant cultural factor, both for good and for evil, Unesco should not shirk its responsibility. Just as in music, the visual arts and literature, it must establish standards and ensure the widest dissemination of the best that each country can offer.

In no other form of public entertainment is performance so exclusively determined by purely commercial considerations. Even in the remoter areas of the world there is a better chance of hearing (if only on records) a symphony by Beethoven, an opera by Britten, or seeing a play by Molière or Ibsen, than of seeing a film like Jean Vigo's *Zéro de conduite* or even Olivier's *Henry V*. Admittedly for those who live near the national film archives and *cinémathèques*, especially in Europe, it is possible to see the film classics from time to time. Just as it is not necessary to go to Elsinore to see *Hamlet*, so it should not be necessary to have to go to Paris to see Vigo's masterpiece when it is shown once or twice a year. The paradox is all the more striking when one realises that the film provides an art medium more universally available than any other. Unesco has the international standing and the administrative machinery to select what is artistically valuable in the film and ensure that it is easily presentable in all countries and at all times.

Any assessment of value in cultural achievement on a world scale is beset with difficulties, as it presupposes taste, a broad vision and an appreciation of widely differing traditions. An international organisation of governments will tend to choose the average that does not offend, the competent but uninspired, the technically polished rather than the revolutionary. International sponsorship must not become identified with the uniformly

¹ There is a Film Division in Unesco, but it concerns itself mainly with the information film.

mediocre. However, Unesco has the prestige, the trained staff and the co-operation of informed professional opinion, and has on the whole shown itself able to avoid these obvious dangers.

Beyond this, Unesco has an even greater responsibility, namely to preserve a healthy balance so that the cultures of small or poor countries can be developed and not swamped by the cultural "dumping" of large countries. At one of the first meetings of Unesco, J. B. Priestley, speaking on behalf of the British delegation, said that "while accepting the ultimate ideal of unrestricted flow [he] insisted that Unesco's immediate concern should be to help the less privileged countries to develop film, press and radio facilities for the promotion and expression of their own cultures." In a few years Unesco has already done much to help such countries. What is much more difficult is to guard against the dangers of the film, the pulp magazine, and all the other debased products of a pseudo-culture springing from unrestricted commercialism.

Select list of Unesco publications in Arts and Letters.

MUSIC.

L'oeuvre de Frédéric Chopin. Discographie générale réalisée sous la direction de Armand Panigel. Paris, Ed. de la revue disques, 1949. (v.1 of the Unesco Archives of Recorded Music.)

Danielou, A. *A catalogue of recorded classical and traditional Indian music.* Unesco, 1951.

ART.

Catalogue of colour reproductions of painting from 1860 to 1949. Unesco, 1949.

Catalogue of colour reproductions of paintings prior to 1860. Unesco, 1950.

International directory of photographic archives of works of art. Paris, Dunod, 1950. (Information about 1225 photographic collections belonging to 67 countries.)

Films on art. An international catalogue. Brussels and Paris, Ed. de la connaissance and Unesco. v.1, 1949, v.2, 1950.

The care of paintings. Unesco, 1951. (Reprinted from *Museum*, vols. 3 and 4.)

LITERATURE.

Index translationum. International bibliography of translations. Unesco, 1949 (v.1 records 8,570 books translated in 26 countries for 1948; v.2 records 10,014 in 32 countries for 1949.)

Goethe, 1749-1949. Homage on the occasion of the two hundredth anniversary of his death. Unesco, 1949. (Thirteen contributors including B. Croce, T. Mann, G. Mistral, S. Radhakrishnan, J. Romain, S. Spender.)

Hommage à Balzac. Paris, Mercure de France, 1950. (Fifteen contributors, including Mulk R. Anand, F. Mauriac, R. Mortimer on the hundredth anniversary of his death.)

THEATRE.

World premières. A monthly bulletin. Paris, International theatre institute, 1949 ((Details of all new plays with summaries of plots and excerpts from press criticism).

World Theatre. A quarterly review. Paris, International theatre institute, 1950.

HERBERT COBLANS.

TWO POEMS

EXILE

Stranger to Europe, waiting release,
My heart a torn-up, drying root
I breathed the rain of an Irish peace
That afternoon when a bird or a tree,
Long known as an exiled name, could cease
As such, take wing and, trembling, shoot
Green light and shade through the heart of me.

Near a knotty hedge we had stopped.
"This is an aspen." "Tell me more."
Customary veils and masks had dropped.
Each looked at the hidden other in each.
Sure, we who could never kiss had leapt
To living conclusions long before
Golden chestnut or copper beech.

So, as the wind drove sapless leaves
Into the bonfire of the sun,
As thunderclouds made giant graves
Of the black, bare hills of Kerry,
In a swirl of shadow, words, one by one
Fell on the stubble and the sheaves,
"Wild dogrose this, this hawthorn berry."

But there was something more you meant,—
As if the trees and clouds had grown
Into a timeless flame that burnt
All worlds of words and left them dust
Through stubble and sedge by the late wind blown:
A love not born and not to be learnt
But given and taken, an ultimate trust.

Now, between my restless eyes
And the scribbled wisdom of the ages
Black hills meet moving skies
And through rough hedges a late wind blows;
And in my palm through all the rages
Of lust and death now, always, lie
Brown hawthorn berry, red dogrose.

HOMECOMING

Hearing noon-bells chime
Under my boyhood sky
I knew my heart had become
A metronomic drum:
Mere continual time,
Not moments, passed me by.

Not the larger stature of the trees
Nor the new road ruining the quiet hillside
Had muddled my clocks and maps;
But the heart itself, fogged with lies,
Afraid of being crucified
On hills where clouds collapse.

Yes, this is still the same dear place,
The identical sun that shone:
It's only the courage for the quest
And the relish for heights has gone.
The open hand is a fist.
Fear has hardened the face.

The street was once a bridle path
Where singing I strolled alone.
Mute on the kerb, mere aftermath
And wreck of a braver me,
I smart as the workmen fell the tree,—
Green ruin on disciplined stone.

GUY BUTLER.

WORDSWORTH AND THE SENSE OF FACT

Wordsworth's poetry is unfashionable, if great poetry can ever be said to be so. It has suffered much from the enthusiasm of the idealist critics of the last century, and even more from the neglect of the moderns, who have apparently thought Wordsworth insufficiently complicated to merit their scrutiny. The effect of both enthusiasm and neglect has been to suggest to young readers today that Wordsworth was a simple-minded "follower of Nature", a kind of premature *Wandervogel*, given to intent and vacant staring at trees and clouds. It is remembered against him that he declared of poetry that it is "the spontaneous overflow of powerful emotions", but the rest of that long sentence is often overlooked, and it is forgotten that he insisted that a poet not only must be "a man of more than usual sensibility", but that he also must have "thought long and deeply". Wordsworth will be fully restored to his place amongst the very greatest of our poets when we realise that he had indeed "thought long and deeply", and that his poetry has the power to penetrate behind the mere appearances of "Nature". Some disservice has perhaps been done to the understanding of Wordsworth by Matthew Arnold's tribute, for in saying that

"He laid us, as we lay at birth,
On the cool, flowery lap of earth,
Smiles broke from us, and we had ease,"

he suggests admirably the sense that we gain from this poet's work of being in touch with the primal powers of life, but he also suggests that this contact is instinctive and mindless. In the course of this essay I wish to show, not only that Wordsworth was an "intellectual" poet, acutely aware of the scientific and philosophical thought of his age, but also that his system of imagery is closely linked with that thought.

Wordsworth is the least excitable of poets, and allows his experience to sink quietly into the lucid depths of the mind, to be brought out again only when, like the birds' nests and leaves put in a calcifying well, it has been given its permanent form. In the process, however, the intellect is continually active, and the forms of abstract thought are incorporated into the poem along with a rich and subtle pattern of feelings. It may be said that all poets are interested in the *uniqueness* of each experience; it is this that makes them poets, and not scientists. But in Wordsworth's poetry this interest is balanced and enriched by a passion for universality, for making connections between the individual mind, with its

individual experience, and the greater unity of the whole world. To see individual instances in the full intensity of their particular selfhood, he sets them against the single order of the universe, and shows them emerging from the absolutely general. This polar vision may be seen clearly enough in *The Prelude*:

“I looked for universal things; perused
The common countenance of earth and sky:
Earth, nowhere unembellished by some trace
Of that first Paradise whence man was driven;
And sky, whose beauty and bounty are expressed
By the proud name she bears—the name of Heaven.
I called on both to teach me what they might
Or turning the mind in upon herself,
Pored, watched, expected, listened, spread my thoughts
And spread them with a wider creeping; felt
Incumbencies more awful, visitings
Of the upholder of the tranquil soul,
That tolerated the indignities of Time,
And from the centre of Eternity
All finite motions overruling, lives
In glory immutable . . .”

“I looked for universal things”. It is difficult not to connect this, and the metaphor of the “overruling” central principle of motion, with the lines that conclude the preceding paragraph of this Book of the *Prelude*:

“And from my pillow, looking forth by night
Of moon or favouring stars, I could behold
The ante-chapel where the statue stood
Of Newton with his prism and silent face,
The marble index of a mind forever
Voyaging through strange seas of Thought, alone.”

There can be no more adequate image of the Universal as it appeared in its most absolute form to the age that followed Newton. The “moon or favouring stars” are not mere poetical embellishments, but indicate the achievement of Newton, the conquest and ordering of the endless sea of the infinite. The very intensity of the poetry reveals long and passionate meditation upon this subject, and it is not surprising if in all Wordsworth’s poetry the Newtonian synthesis, and the poet’s vision of it, have left their unmistakable impression.

In a recent work,¹ Miss Maud Bodkin reminds us of two great primary myths, and of their persistence in poetry, religion, and philosophy. The Dionysian myth of sacrifice, bringing fertility and new life, is echoed in the Christian pattern of the crucifixion

¹ *Studies of Type-Images in Poetry, Religion, and Philosophy*, 1951. See also this author’s *Archetypal Patterns in Poetry*, 1934.

and the resurrection, with the renewal that these bring to the whole of mankind. The springing corn is the symbol of the cycle of life, forever turning in a pattern of growth and decay. The Apollonian myth, on the other hand, asserts the power rather than the goodness of God. Apollo is lord of space, and ruler of the heavens, the lawgiver. He stands apart from the cycle of life, remote in his awful grandeur. Similarly, in the distinction between these two principles, Nietzsche sees a division between two kinds of drama—one orgiastic, sacrificial, and enthusiastic; the other contemplative and calm.¹

Wordsworth's poetry may seem remote from these primary myths; but it is easy to be deceived, as some modern critics have been deceived, by the pure surface of Wordsworth's verse. There are no wild Maenads, no goat-legged satyrs, no dazzling Apollo in the world that he unfolds to us. But however familiar and apparently commonplace an expression has been given to them, it may not be fanciful to detect these myths in passages which reveal the twin principles described by Wordsworth at the beginning of the Thirteenth Book of *The Prelude*:

“From Nature doth emotion come, and moods
Of calmness equally are Nature's gift:
This is her glory; these two attributes
Are sister horns that constitute her strength.
Hence Genius, born to thrive by interchange
Of peace and excitation, finds in her
His best and purest friend; from her receives
That energy by which he seeks the truth,
From her that happy stillness of the mind
Which fits him to receive it when unsought.”

Since Wordsworth was conscious of this double source of poetic inspiration, it is not difficult to find passages of poetry in his work where the opposition between the two principles is plain, and where they are yet united by the fusing power of the imagination. Such passages are common in *The Prelude*, but there they might be taken as an illustration of what was at that time consciously in the poet's mind. Such a poem as the *Ode to Duty*, complete in a shorter compass, reveals more clearly the special interweaving of poetic “energy” and “happy stillness of mind”, of the organic life of nature with the grand order of the heavens, of the Dionysian with the Apollonian.

In this poem the “stern Daughter of the Voice of God” is an aspect of the Apollonian power of order and justice, and we should not be surprised to see how readily Wordsworth finds an astronomical image for his idea of Duty:

“Thou dost preserve the stars from wrong;
And the most ancient heavens, through Thee, are fresh
and strong.”

¹ I have made use of Nietzsche's terminology because it provides convenient labels for what might be called “fields of poetic attention.” I hope that this will not be taken to imply acceptance of his theory, or to have any anthropological implications.

The planets turn unceasingly and unwearied in their courses, moving with their own volition, yet in a path laid down for them by the unalterable power of "gravity". Newton's vision of the harmonious consort of the stars is here an image of the moral order. But there is another view of duty here, too, for it is not only rule and order as in the heavens; it is "natural piety," too—the acceptance of the patterns of growth and decay by which one part of life is bound to another, and by which life is eternally refreshed:

"Stern lawgiver! yet thou dost wear
The Godhead's most benignant grace;
Nor know we anything so fair
As is the smile upon thy face:
Flowers laugh before thee on their beds
And fragrance in thy footing treads"

The "yet" in the first line of the stanza indicates that what follows is antithetical to the idea of Duty as a "Stern lawgiver", and indeed the "Godhead", with its suggestion of a source of life-giving streams, prepares the way for the imagery of fertility and growth in the smiling face and the fragrance of the flowers emerging from their "beds" of earth. With the line "Thou dost preserve the stars from wrong" the Dionysian imagery gives way once again to the Apollonian, and justice takes the place of growth. At the same time, the intimate union of the two principles in a single personification achieves a complete poetic fusion in which Duty is shown as both life-giving and ordering, as a principle both of justice and of liberty. These lines touch chords of human experience that vibrate more richly than any purely abstract notion of ethical freedom and obligation. Poetic power of this order, we may well believe, is in itself a reason to suspect that the poet has not merely hit upon a happy phrase, but that upon this subject he has "thought long and deeply".

In the sonnet "A volant tribe of bards" the theme is the nature of poetry, and the need for the poetic language to grow from the soil of "Nature":

". To the solid ground
Of nature trusts the Mind that builds for aye;
Convinced that there, there only, she can lay
Secure foundations. As the year runs round
Apart she toils within the chosen ring;
While the stars shine, or while day's purple eye
Is gently closing with the flowers of spring;
Where even the motion of an Angel's wing
Would interrupt the intense tranquillity
Of silent hills, and more than silent sky".

The theme that is stated in the first few lines of this sonnet

is soon left behind for a consideration of the "nature" that the poet must observe. The first two lines quoted above are the motto on the cover of the science journal *Nature*; and that application of them is entirely just, for behind these lines there lies a passionate contemplation of the Newtonian order. The "chosen ring" within which nature "toils apart" reflects the mysterious but immutable powers that are most plainly revealed in the motion of the planets and stars, but which Wordsworth imagines working silently at the heart of all things. But there is more than Newton here. The "ring" is not only the ring of planets, and the ellipse described by the earth as she rounds the sun; it is also the cycle of the seasons, and the circle of gratified desire. The touches of sensual gratification in these lines are slight, but in a poem so delicately phrased they reverberate imperiously:

". . . While the stars shine, or while day's purple eye
Is gently closing with the flowers of spring . . ."

The primary meaning here is, of course, that the powers of Nature "toil" at all times, whether the stars are shining or whether the sun is setting as the flowers close. But this primary meaning is in no way inconsistent with an overtone of ambiguity, by which "closing with" suggests, however lightly, the day-long interplay of light and colour between the flowers and the sun that is the source of all life. The first phrase ". . . while the stars shine," insists upon the strict order of the heavens seen in all their grandeur at night. The words "or while" indicate a transition to an antithesis; — the "purple eye" of day — the suggestion is of triumphant completion — "is gently closing", in a motion of passionate tenderness, "with the flowers of spring" — of renewal, and of fresh growth. Here again the Dionysian is set against the Apollonian, but at the same time united with it in a single perception. The last lines insist upon the "stillness of the mind" which goes with poetic energy, and succeeds the movement of gratified passion. Here the slightest touch of "unreal" mythology — the very "motion of an Angel's wing" would echo falsely, and endanger a poetry that depends upon a pure and highly abstract vision. However longingly Wordsworth may at times turn to the Greek Pantheon, and wish to "have sight of Proteus rising from the sea", however much he may regret the mediaeval order of the heavens, with its crystal orbs and ministering angels, he turns away from them, as from "a creed outworn", to seek refreshment and strength in the great vision of a universe where only the pure laws of motion have a place, and where there is no room for gods and angels.¹ *Truthfulness* is the great principle of Words-

¹ "It is not, then, that any one, who holds that sublime notion of poet which I have attempted to convey, will break in upon the sanctity and truth of his pictures by transitory and accidental ornaments, and endeavour to excite admiration of himself by arts, the necessity of which must depend upon the assumed meanness of his spirit." Preface to the *Second Edition of Lyrical Ballads*, 1800. (Footnote continued at bottom of page 56.)

worth's poetry, and truthfulness, for him, implies the acceptance of Nature as a pattern of masses moving according to the laws of motion, yet at the same time giving birth miraculously to life. His poetry is universal because it appeals to the permanent and deeply-felt needs of human nature; but historically it may be seen as a bridge between the Eighteenth Century and the Nineteenth, between Newton's age and Darwin's. For whilst the Eighteenth Century is obsessed with the vision of a universe complete, harmonious and comprehensible (but "essentially dead"), the following age thought more often of the organic principle which strangely flowered amongst the mechanics of the physical world. Wordsworth is intensely aware of both the inorganic world of physics and the organic world of life, and is passionately interested in their interweavings.

So in the poem "She was a phantom of delight . . ." the word "machine" has sometimes been taken in the past as an unfortunate error, committed to make a rime with "serene". But the whole meaning of the poem is impoverished if the idea is lost that this delicate "Creature" of flesh, blood, and bones, may also be recognised, scientifically, as a *machine*. The wonder at the creation of life from purely physical processes—at the jumping of a gap that science has not yet bridged—is part of the sense of this poem. The poet's interest in the theme is to be seen again in another poem where the process is reversed, and life is absorbed again into the simpler physical patterns of the universe:

"A slumber did my spirit seal;
I had no human fears:
She seemed a thing that could not feel
The touch of earthly years.

No motion has she now, no force;
She neither hears nor sees;
Rolled round in earth's diurnal course,
With rocks, and stones, and trees."

The absoluteness of death is conceived here with such courage and force that the poem must be felt even by those who do not attend to its full implications. But it is enriched if it is understood as referring to the swallowing up of an individual life by the mighty forces that turn the earth around its axis and whirl it round the sun. "No motion has she now . . ." self-motion—the power that distinguishes the organic—has returned to its source, and what once was living is now moved by the impersonal laws that govern all matter. The suggestion of the astronomical is

The superior "truthfulness" of Wordsworth's poetic vision—his deliberate refusal of symbols that were not either scientific or a part of immediate and undeniable experience—may be compared, for example with the spurious mediaevalism of later Romantics. Rossetti's *Blessed Damozel* affords a good example of this difference, since it offers a fairy-tale cosmology in which Rossetti obviously disbelieves. The poetic effect is tawdry.

gently made with the phrase "earthly years", which in addition to its primary meaning in the first stanza prepares the mind for the idea of the earth's yearly circling. The second stanza, with the surprising word "diurnal", forces the astronomical implications to the reader's conscious attention. (What a striking refutation of Wordsworth's own theory of poetic diction! The common word "daily" would not do, even if it fitted into the rhythm.) The list of *things* that are similarly at the mercy of the grand laws of motion begins with a repetitive effect of *deadness*: "rocks, and stones,"; but even trees—an image here of life, or the organic—are swept away as though they too were dead. The full sense is incomplete if we do not notice the feeling of irresistible force that is conveyed by the rhythm, sound, and sense of:

"Rolled round in earth's diurnal course,"

in which the idea of mass and motion as the basic *facts* of the universe is given an intense poetic expression.

This poem is perhaps best understood if it is taken in close association with its companion poem, "Three Years she grew in sun and shower", a poem in which the theme is the emergence of human life, in its full delicacy and bloom, from the inorganic realm of matter. The Child—

" . . . a lovelier Flower
On earth was never sown"¹

combines two gifts of nature, "both law and impulse". If this poem is taken by itself, it is easy to overlook the full significance of the antithesis between the "impulse" that drives the child, who is

" . . . sportive as the fawn
That wild with glee across the lawn
Or up the mountain springs:"

and that other "law" that gives to her

" . . . the silence and the calm
Of mute insensate things."

It is clear that the whole poem depends upon the unity in human life of these two conflicting yet harmonising principles: the ordering laws of the universe, and the organic energy that miraculously springs from the world of dead matter.

In this poem, too, the "stars of midnight" appear, and are contrasted with the "wayward round" of the rivulets. Similarly, in "I wandered lonely as a cloud"—a later poem—the daffodils are "continuous as the stars that shine", but at the same time

¹ Compare the "flower" poetry of Perdita in *The Winter's Tale*, Act IV, Scene IV, where Shakespeare gives the profoundest expression in English poetry to the fertility myth, linking the growth of flowers with the renewal of human life.

“dance with glee” and represent momentary blossoming, only to be enjoyed in memory. The single reference in that poem to the celestial order is enough to create the polarity of meaning that makes this a “Poem of the Imagination” and not a “Poem of the Fancy”, for by this link with the total order of the universe the daffodils are made significant of the whole miracle of “jocund” life springing within the cold infinity of space. This poem is as little to be taken as mere “flower poetry” as Blake’s *The Tyger* is to be taken as a simple description of one of the larger cats. Both are significant of a much wider realm of experience. The power that this apparently innocent poem has to move the reader so deeply and so often is perhaps less surprising when we perceive the connection it has with the primary laws of order and of growth.¹

I will examine one more example only, since the reader who finds these hints significant will prefer to make his own discoveries for himself. In the *Mutability* sonnet, the theme is a difficult one, and it is most subtly stated:

“From low to high doth dissolution climb,
 And sink from high to low, along a scale
 Of awful notes, whose concord shall not fail;
 A musical but melancholy chime,
 Which they can hear who meddle not with crime,
 Nor avarice, nor over-anxious care.
 Truth fails not; but her outward forms that bear
 The longest date do melt like frosty rime,
 That in the morning whitened hill and plain
 And is no more: drop like the tower sublime
 Of yesterday, which royally did wear
 His crown of weeds, but could not even sustain
 Some casual shout that broke the silent air,
 Or the unimaginable touch of Time.”

All being, animate or inanimate, is subject to growth and decay, to the inexorable laws of dissolution. But even the process of dissolution may be perceived by the contemplative to be a part of a harmonious pattern. The suggestion in the first lines is quite inescapably of the music of the spheres, and, through that music, of the celestial order itself.

This is one of the profoundest and most difficult of Wordsworth’s sonnets, since he is here grappling with the interrelations between the laws that guarantee permanence, and those that impose growth and decay, between the realms of Apollo and Dionysus. The resolution is found in the notion that there is a common pattern

¹ “He always grasps the whole of nature as involved in the tonality of the particular instance. That is why he laughs with the daffodils, and finds in the primrose ‘thoughts that do often lie too deep for tears.’” A. N. Whitehead: *Science and the Modern World* Ch.V. “The Romantic Reaction.”

in all forms of decay, and in the perception of the pattern the wise man may rejoice.¹ But the poem also shows a close attention to the various details that make up the pattern. Decay may reveal itself in a silent vanishing, or in a spectacular collapse. In either case external pressures are not the chief cause; it is the subtle shifting of the tiny stresses, and the infinitesimal wearing away of particles of stone, that in the end bring the tower crashing down. The "unimaginable touch of Time" is the Law that lays its finger on all created things. "Truth fails not", even although every formulation of it, every human embodiment of it in churches, philosophies, and science, may be outworn.

Wordsworth's success in achieving a harmony between his feelings and his abstract knowledge is the true measure of his greatness. His poetry at its best bridges the gap that was torn, by natural science and by sceptical philosophy, between men's passions and their minds. It reverses that "dissociation of sensibility" which Mr. Eliot first pointed out, and which he is commonly thought to have overcome in his own writing. "The Romantic poets, for all their great gifts," writes Mr. Eliot, "did not know enough". The criticism is a cryptic one, but in one sense, at least, it is unjust to Wordsworth, who absorbed the knowledge of his time and included it within his poetry to a degree that few other poets have achieved since Milton (who himself has incurred a similar accusation from hasty critics). It may indeed be doubted whether any modern poet has yet fulfilled as Wordsworth did the aspirations which he pointed to in his *Preface*:

"If the labours of Men of Science should ever create any material revolution, direct or indirect, in our condition, the Poet will sleep then no more than at present; he will be ready to follow the steps of the Man of science, not only in those general indirect effects, but he will be at his side, carrying sensation into the midst of the objects of the science itself. . . ."

There can of course be little possibility of the poet's absorbing into his work the details of contemporary science, and there would probably be little point in it if he could. The task is somewhat different, as Wordsworth saw: it is to accommodate the individual vision to the world of Nature as it is known to man's intellect, and if possible to give human significance to the abstractions of science. This was a task that awaited a great poet from the time when, as Donne said, "the new Philosophie" called all in doubt. The breaking-up of the mediaeval world order is reflected in the freedom with which the "Metaphysical" poets assemble the broken fragments of mediaeval science, theology, and logic, and make them into images of private states of mind. This freedom could not last, for at the end of the Seventeenth Century a new order was firmly established in men's minds—an order that is represented by Descartes in philosophy and Newton in science. From that

¹ Cf. Yeats's "Lapis Lazuli." (*Last Poems*.)

time on, the task of the poets was to accommodate themselves to that order. To deny it with Blake, to go mad like Smart, were possible alternatives; but in much of the poetry of the Eighteenth Century we may perceive a struggle to unify the private world of feeling and the public world of knowledge. This struggle is unsuccessful, or only partially successful; until Wordsworth, discarding the poetical apparatus with which the Augustan poets had encumbered themselves, and resisting the temptation, to which later poets succumbed, to evade Reality in a Romantic dream of the past, or of an ideal Nature, or a Golden Age, turned his mind to the contemplation of the *facts* of Nature as they were then known. The tension between human aspirations and man's knowledge of the plain "facts" has always been a painful one. In Housman's words:

"To think that two and two make four,
And neither five nor three,
The heart of man has long been sore,
And long is like to be . . ."

But Wordsworth, in poetry which although very much "of its own time" is yet valid today, succeeded in uniting (in the kind of reconciliation that poetry can give) a vision of the human moral order with a clear perception of the external order to which men must somehow accommodate themselves and their hopes. It is this achievement, perhaps that gives rise to the feeling of many readers that Wordsworth in some way strengthens their sanity; for at his best he invites to no illusions, and in celebrating the flowering and decay of life he sets it calmly against the ineluctable laws of the universe. It is this vision of a universal order that consoles the reader for

". the fear that kills;
And hope that is unwilling to be fed;
Cold, pain, and labour, and all fleshly ills;
And mighty poets in their misery dead."

Over this human scene the Heavens preside, the stars of midnight, and the lonely clouds; and we forget the pain as we become absorbed in the pattern.

G. H. DURRANT.

RILKE'S CONCEPTION OF POETRY

with special reference to the
SONNETS TO ORPHEUS.

THE *Duino Elegies* and the *Sonnets to Orpheus*, both completed in February 1922, represent the climax and the fruition of R. M. Rilke's work. What came before was preparation, search, and groping; the few poems written in the last four years before his death in 1926 are merely elucidations. The attempt made here to define Rilke's conception of the function of the poet will therefore be based primarily on an analysis of the *Elegies* and the *Sonnets*.

In his early poetry and prose (of which the poet did not like to be reminded) Rilke shows remarkable technical skill and facility in expressing feelings and emotions that have been the subject matter of poets since the Romantic period.

The Book of Pictures (1898-1906) shows us the first hesitant steps away from traditional themes and techniques towards the incomparably precise and audacious language of Rilke's late poetry.

In the *Book of Hours* (1899-1903) poetry as expression of emotions and embellishment of life is completely outgrown. The title suggests religious poetry. The poems, however, are not prayers and they are not Christian in tone or content: they centre round the 'creative artist' and are religious only in the sense that the poet now assumes a secularised religious function. Rilke already grapples with problems which are not solved until twenty years later, in the *Sonnets to Orpheus*. He cannot accept the Christian conception of life in this world as a mere transitory phase of probation on which depends eternal salvation or damnation. The dualism of the here and beyond, of man and god, of animate and inanimate nature, of life and death is inexplicable to him. It is the task of the poet to reveal the unity that transcends this dualism. In the *Book of Hours* Rilke does not discover the unity; the meaning of death particularly remains an enigma, for if life in this world is all important, what is death other than meaningless annihilation? The *Book of Hours* ends with the vision of a future poet, who as a new Messiah—the Death-Messiah¹—will be able to make death comprehensible as the fulfilment, not the negation, of temporal life. Rilke himself strives to become this Death-Messiah-Poet.

To prepare himself for his self-set task he develops his craft. The musical lilt which enchants us in the *Book of Hours* is still too much of an attribute rather than an essential constituent of the thought processes. His language, he feels, must become more

¹ Translation taken from E. M. Butler.

precise, if he is to comprehend reality. In the *New Poems* (1903-1908) we see him as the pupil of the sculptor Rodin and the painter Cézanne. His aim is to give clear and definite form to his impressions of the outside world and to bind 'things' into poems. Even human beings and animals he sees as if they were objects—sculpture and painting—and as such they are transposed into poems. But Rilke is aware that the contour and the surface do not contain the whole of the 'thing,' and he tries to comprehend the essential nature of the object from within as well. For example, in *Der Panther* he says of the noble beast in captivity:

Der weiche Gang geschmeidig starker Schritte,
der sich im allerkleinsten Kreise dreht,
ist wie ein Tanz von Kraft um eine Mitte,
in der betäubt ein grosser Wille steht.

(The soft progression of his strong and sinuous paces,
revolving in the smallest possible circle,
is like a dance of force round a centre,
where a great will stands stupefied.)¹

The poet does not confine himself to the impressions of the higher senses, sight and hearing; Rilke speaks of the 'five fingered hand of the senses' which the artist must stretch out to encompass his environment. Rilke himself is wide open to all impressions and perfects his language to transpose them into poetry.

Malte Laurids Brigge (1904-1910) shows the dangers of seismographic sensibility which puts the individual at the mercy of all impressions. This novel in the form of a diary describes the anxiety of a hyper-sensitive man who has closed himself against God, does not comprehend death, and cannot master life. Fear of death and anxiety about life are the basic experiences of Malte. Love only can be the redeeming force. The sense in which Rilke uses the concept love here is, however, not the conventional one: love, he says, does not achieve its highest potentialities in the relationship between two lovers, but rather in the attitude of the lover who voluntarily renounces the reciprocation of his passion and thereby experiences such an intensification of feeling that the object towards which his love is directed becomes superfluous. Of such love women are more capable than men and Rilke praises Sappho as a great lover and rescues from oblivion Gaspara Stampa and Marianna Alcoforado. The *Malte* novel culminates in the story of the prodigal son who did not want to be the object of love, the beloved one, but the lover:

'To be loved is to perish in flames. To love is to illumine with inexhaustible oil. To be loved is evanescence. To love is eternity.' (*Malte Laurids Brigge*.)

To Malte as to Rilke this intensification of life through love is denied. For this reason the novel ends without reconciliation

¹ Adapted from Nora Wydenbruck.

and Rilke himself remains in a dilemma: although he can embody in his poems the myriad impressions to which he is over-sensitive they threaten to overwhelm him; the unity that would make the impressions intelligible eludes him.

He now laments the lot of man. In 1912 he wrote the first lines of *The Duino Elegies* at Duino on the Adriatic coast and continued them in Paris, Munich, Toledo and Ronda, until the First World War interrupted all his work. So radically is he confronted with the insecurity and the nullity of life that he cannot even compress his lament into the form of the elegy. Only after the war, and then in a few days, did he complete *The Duino Elegies* and in the same short spell of ardent creativity he wrote the *Sonnets to Orpheus*.

The *Elegies* continue the lament of the lot of man who must master a life and complete a death which he does not understand. Animal and plant, even an inanimate thing like a marionette, fulfil the purpose of their existence; animals and plants do so, because the mere processes of their growth, procreation and decay are embedded in the cycle of Being. Unlike mankind they have not the consciousness and the will which would enable them to reflect on the purpose of their existence and to give direction to their life. The puppet is in its very nature only representation—the whole essence of its being is in its appearance—and forever remains what it is, even if fate pulls it by its wire. Only we human beings are endowed with consciousness and will and therefore take responsibility for our life without comprehending it. We arrange all experience into past, present and future and are at home nowhere. We hope for eternity, but experience only our transitoriness.

There are only a few forms of intensified human existence which, as it were, step out of the threefold division of time into timeless being: lovers, the youthful dead and the hero. Duration may be achieved in a single moment of heightened intensity of living. The lovers who have renounced the reciprocation of their love, experience an intensification of feeling that is independent of time. Those who died young have a more meaningful existence in our hearts and our minds than a lengthy extension of life could have given to them. The hero needs no long preparation. In the moment of the heroic deed or heroic death the purpose of his life is achieved, and his future is assured in our thoughts.

In contemplating the youthful dead and the hero an idea is foreshadowed which is explicitly formulated in the Seventh Elegy and the Ninth: it is the task of man to transform that which has only a fleeting existence in the succession of time into inward enduring spiritual reality:

Nirgends, Geliebte, wird Welt sein, als innen. Unser
Leben geht hin mit Verwandlung. (Seventh Elegy.)

(Nowhere, beloved, can world exist but within. Our
life passes in transformation.)

Consciousness, which hitherto Rilke had regarded only as a curse, enables man to achieve this transformation. No longer therefore, does man have to yearn for a Fate that will give significance to his life:

warum dann
Menschliches müssen -und, Schicksal vermeidend,
sich sehnen nach Schicksal? . . .
. . . weil Hiersein viel ist, und weil uns scheinbar
alles das Hiesige braucht, dieses Schwindende, das
seltsam uns angeht. Uns die Schwindendsten.

Hier ist des Säglichen Zeit, hier seine Heimat.
Sprich und bekenn. (Ninth Elegy.)

(Oh, why
have to be human, and, shunning Destiny,
long for Destiny? . . .
. . . because being here amounts to so much, because all
this Here and Now, so fleeting, seems to require us and
strangely
concerns us. Us the most fleeting of all.

Here is the time for the Tellable, *here* is its home.
Speak and proclaim.)¹

This transformation does not introduce something new into the world, nor does it lead away from it, for all reality, according to Rilke, is fundamentally spiritual activity, and it is the inherent desire of all that exists to be transformed into the spiritual.

Was, wenn Verwandlung nicht, ist dein drängender Auftrag?
Erde, du liebe, ich will . . .

Namenlos bin ich zu dir entschlossen von weit her.
Immer warst du im Recht, und dein heiliger Einfall
ist der vertrauliche Tod. (Ninth Elegy.)

(What is your urgent command, if not transformation?
Earth, you darling, I will!

I've now been unspeakably yours for ages and ages.
You were always right, and your holiest inspiration
Is Death, that friendly Death.)²

Thus rejoicing breaks into the lament of the elegies and even death no longer arouses terror. Death is not annihilation but transformation; it gives meaning to life and should be desired with the same intensity of feeling as love that has renounced reciprocation.

¹ Translation by Leishman and Spender.

² Translation by Leishman and Spender.

Out of this certainty which has been tortuously achieved in the ten elegies, there arises spontaneously and unrestrainedly the jubilation of the *Sonnets to Orpheus*. From now on lament and praise belong together inextricably:

Nur im Raum der Rühmung darf die Klage
gehn, I, 8.
(Only in the realm of Praising may Lament
go . . .)¹

This explains why Rilke can regard the jubilant *Sonnets* as a monument for Vera Ouckama Knoop, the dancer who died young. The serious illness and the early death of the girl moved Rilke deeply, but it was the example of her existence that once more revealed to him the mystery of life and death. In two sonnets Rilke addresses the dancer herself and in a third one her identity is fused with that of Eurydice, but behind her there arises Orpheus, overshadowing her and all human beings.

The life and death of Orpheus, the legendary singer of Thrace, has a threefold significance for Rilke. Orpheus who penetrated Hades and was allowed to return with Eurydice from the land of the shadows is certain of the unity of life and death:

Ist er ein Hiesiger? Nein, aus beiden
Reichen erwuchs seine weite Natur.
Kundiger böge die Zweige der Weiden,
wer die Wurzeln der Weiden erfuhr. I, 6.
(Does he belong here? No, out of both
realms grew his wide nature.
More knowing would he bend the willows' branches
Who has experienced the willows' roots.)¹

The experience of both realms gives to his song insight and perspective:

Nur wer die Leier schon hob
auch unter Schatten,
darf das unendliche Lob
ahnend erstatten.
. . . .
Erst in dem Doppelbereich
werden die Stimmen
ewig und mild. I, 9.
(Only one who has lifted the lyre
among shadows too
may divining restore²
the infinite praise.
. . . .
Only in the dual realm
do voices become
eternal and mild.)¹

¹ Translation by M. D. Hurter Norton.

² Norton has 'render' in place of 'restore.'

In the second place, Orpheus the singer gives us an example of the transformation of the world from transient being to permanence, for this is attained most completely in song:

Wandelt sich rasch auch die Welt
wie Wolkengestalten,
alles Vollendete fällt
heim zum Uralten.

Über dem Wandel und Gang,
weiter und freier,
währt noch dein Vor-gesang,
Gott mit der Leier.

I, 19.

(Even though the world keeps changing
quickly as cloud-shapes,
all things perfected fall
home to the age-old.

Over the changing and passing,
wider and freer,
still lasts your leading-song,
God with the lyre.)¹

This should not be misunderstood as implying that poetry imposes an order on things. The Orphic song merely reveals the spiritual order that inheres in the world. Even Orpheus' ghastly death at the hands of the maenads proves this:

Du aber Göttlicher, du, bis zuletzt noch Ertöner,
da ihn der Schwarm der verschmähten Mänaden befiel,
hast ihr Geschrei übertönt mit Ordnung, du Schöner,
aus den Zerstörenden stieg dein erbauendes Spiel. I, 26.

(But you, divine one, you till the end still sounding,
when beset by the swarm of disdainèd maenads,
you outsounded their cries with order, beautiful one,
from among the destroyers arose your upbuilding music.)¹

The Orphic order is not rigid and static; change and metamorphosis are its outstanding characteristics. Even Orpheus himself only secures permanence through transformation. In every poet he arises anew. This is the third truth that Orpheus exemplifies:

Errichtet keinen Denkstein. Lasst die Rose
nur jedes Jahr zu seinen Gunsten blühn.
Denn Orpheus ist. Seine Metamorphose
in dem und dem. Wir sollen uns nicht mühen
um andre Namen. Ein für alle Male
ist Orpheus, wenn es singt.

I, 5.

(Set up no stone to his memory.
Just let the rose bloom each year for his sake.
For it is Orpheus. His metamorphosis
in this one and in this. We should not trouble
about other names. Once and for all
it's Orpheus when there's singing.)¹

¹ Translation by M. D. Hurter Norton.

But while metamorphosis in the *Duino Elegies* is conceived mainly as transformation of the visible into the invisible, the Sonnets show that metamorphosis is a basic principle in nature. Rilke delights in giving many examples; the most obvious are the change of the seasons and the life cycle of plants. Yet it is still the transformation into the spiritual which fascinates Rilke most. He shows us the transposition into a spiritual experience of impressions mediated by the lower senses of taste and smell:

.....
 Wagt zu sagen, was ihr Apfel nennt.
 Diese Süsse, die sich erst verdichtet,
 um, im Schmecken leise aufgerichtet,
 klar zu werden, wach und transparent,
 doppeldeutig, sonnig, erdig, hiesig—:
 O Erfahrung, Fühlung, Freude—, riesig! I, 13.
 (Dare to say what it is¹ you call apple:
 this sweetness, first concentrating, that it may,
 in the tasting delicately raised,
 grow clear, awake, transparent, double-meaning'd,
 sunny, earthy, of the here and now—:
 O experience, sensing, joy—, immense!)²

And in a similar way we experience the transfiguration of the fleeting aroma of the orange into music and dance:

Wartet . . . , das schmeckt . . . Schon ists auf der Flucht.
 . . . Wenig Musik nur, ein Stampfen, ein Summen—:
 Mädchen, ihr warmen, Mädchen, ihr stummen,
 tanzt den Geschmack der erfahrenen Frucht!
 Tanzt die Orange. Wer kann sie vergessen,
 wie sie, ertrinkend in sich, sich wehrt
 wider ihr Süssein. Ihr habt sie besessen.
 Sie hat sich köstlich zu euch bekehrt.
 Tanzt die Orange. I, 15.
 (Wait . . . , that tastes good . . . It's already in flight.
 . . . Just a little music, a stamping, a humming—:
 Girls, you warm, you silent girls,
 Dance the taste of the fruit experienced!
 Dance the orange. Who can forget it,
 how, drowning in itself, it resists
 its being-sweet. You have possessed it.
 It has been deliciously converted to you.)²

With this significant order of the Orphic world is contrasted, in several sonnets, the modern age of technology and mechanisation as a mere sham form of order and progress:

¹ 'It is' inserted by author of this article.

² Translation by M. D. Hurter Norton.

Wir sind die Treibenden.
Aber den Schritt der Zeit,
nehmt ihn als Kleinigkeit
im immer Bleibenden.

Alles das Eilende
wird schon vorüber sein;
denn das Verweilende
erst weilt uns ein.

I, 22.

(We are the driving-ones.
O but the stride of time,
take it as trifle
in the ever remaining.

All that is hurrying
will already be over;
for only the abiding
initiates us.)¹

What we have said so far applies to the twenty-six sonnets of the first part, which were written in the days immediately preceding the completion of the *Duino Elegies*. The twenty-nine sonnets of the second part came to Rilke as a late harvest immediately after the conclusion of the elegies. Rilke recommenced, as it were, at a higher pitch of jubilation and with a more securely anchored certainty. It is still Orpheus and transformation and the unity of all being that concern him, but now Rilke does not invoke Orpheus or speak about him any more. Rilke identifies himself with the Death-Messiah-Poet in whose poetry the dualism of the here and beyond, the fleeting and the enduring, life and death, subject and object is transcended. He no longer depicts isolated observations, impressions; in all of them he sees the same unity. Even a simple biological process like breathing becomes in his sonnet an event of cosmic significance:

Atmen, du unsichtbares Gedicht!
Immerfort um das eigne
Sein rein eingetauschter Weltraum. Gegengewicht,
in dem ich mich rhythmisch ereigne.

II, 1.

(Breathing, you invisible poem!
World-space constantly in pure
interchange with our own being. Counterpoise
wherein I rhythmically happen.)²

Similarly the fleeting irradiation of a face in the mirror is not lost in the cosmos: it is essential to it and irreversible.

So wie dem Meister manchmal das eilig
nähere Blatt den wirklichen Strich
abnimmt: so nehmen oft Spiegel das heilig
einzige Lächeln der Mädchen in sich,

¹ Norton has 'first' in place of 'only' in line 7.

² Translation by M. D. Hurter Norton.

wenn sie den Morgen erproben, allein,—
oder im Glanze der dienenden Lichter.
Und in das Atmen der echten Gesichter,
später, fällt nur ein Widerschein.

II, 2.

(As sometimes the hurriedly nearer leaf
catches the authentic stroke from the master's
hand: so mirrors often take into themselves
the sacred single smile of girls,

when they assay the morning, alone,—
or in the gleam of the servient lights.
And into the breathing of their real faces,
later, only a reflection falls.)¹

The mirror in this sonnet is for Rilke not a symbol revealing something else which cannot be expressed otherwise. Rilke expects his poems to be taken literally. This also applies to the sonnet in which the cut flowers and the girls who arrange them are seen in a relationship that far transcends the actual situation. We sense in this poem the death that is, as it were, growing within the girls who are still in the bloom of their lives, and in the cut flowers which, though due to be revived by water, must inevitably die. But what Rilke shows us is not simply the identity of the fate of the girls and of the flowers; he is not thinking in terms of analogies that explain or illumine human life. What he sees and what the poem reveals to us is the contemporaneity of life and death which are conceived as being complementary to each other:

Blumen, ihr schliesslich den ordnenden Händen verwandte,
(Händen der Mädchen von einst und jetzt),
die auf dem Gartentisch oft von Kante zu Kante
lagen, ermattet und sanft verletzt,

wartend des Wassers, das sie noch einmal erhole
aus dem begonnenen Tod—, und nun
wieder erhobene zwischen die strömenden Pole
fühlender Finger, die wohlzutun

mehr noch vermögen, als ihr ahntet, ihr leichten,
wenn ihr euch wiederfandet im Krug,
langsam erkühlend und Warmes der Mädchen, wie Beichten,

von euch gebend, wie trübe ermüdende Sünden,
die das Geflückctsein beging, als Bezug
wieder zu ihnen, die sich euch blühend verbünden. II, 7.

(Flowers, kin in the end to those arranging hands,
(girls' hands of then and now),
you that lay on the garden table often from edge
to edge, drooping and gently hurt,

¹ Translation by M. D. Hurter Norton.

awaiting the water that once more was to recover you
from death already begun—, and now
lifted again between the streaming poles
of feeling fingers that are able to do

even more than you guessed, light ones,
when you came to yourselves in the pitcher,
slowly cooling and giving warmth of girls,

like confessions, from you, like dreary, wearying sins
committed by your being plucked, relating you
again to those who are your allies in blooming.)¹

Rilke's conviction that reality is essentially spiritual leads him
even to speculating on the possibility of producing new forms
of life by mental activity:

O dieses ist das Tier, das es nicht gibt.
Sie wusstens nicht und habens jeden Falls
—sein Wandeln, seine Haltung, seinen Hals,
bis in des stillen Blickes Licht—geliebt.

Zwar war es nicht. Doch weil sie's liebten, ward
ein reines Tier. Sie liessen immer Raum.
Und in dem Raume, klar und ausgespart,
erhob es leicht sein Haupt und brauchte kaum

zu sein. Sie nährten es mit keinem Korn,
nur immer mit der Möglichkeit, es sei.
Und die gab solche Stärke an das Tier,

dass es aus sich ein Stirnhorn trieb.

II, 4.

(O this is the creature that does not exist.
They did not know that and in any case
—its motion and its bearing, and its neck,
even to the light of its still gaze—they loved it.

Indeed it never was. Yet because they loved it,
a pure creature happened. They always allowed room.
And in that room, clear and left open,
it easily raised its head and scarcely needed

to be. They fed it with no grain, but ever
with the possibility that it might be.
And this gave the creature such strength,

it grew a horn out of its brow.)¹

What then is the function of the poet as Rilke sees it at the

¹ Translation from M. D. Hurter Norton.

climax of his poetic achievement? The poet is for Rilke an ordinary human being fulfilling through the medium of words and language the task of all men and the 'secret aim of all that exists': the transformation of the fleeting and visible world into the enduring invisible reality that is independent of the flux of time. But he can claim no credit for this. Indeed it seems almost as if Rilke denied any active participation of the poet in his work. In a letter to his Polish translator he writes about the *Duino Elegies*: 'Am I the one to give them their proper explanation? They pass infinitely beyond me.'

The poet thus has his secure place in the cosmos; he does not have to justify his existence. He is no freak of nature but an essential part of the eternal scheme of things. He is not building up in his poems a private dream world, into which others may peep out of curiosity; he is facing reality more squarely and unflinchingly than anyone else.

Poetry for Rilke is not the self-expression of a person but the self-revelation of the world. Indispensable though the personal experiences of the poet are, the poem exists in its own right. The search for the connection between an image or a word, or an idea expressed and the personal experience underlying it, is futile, for there is no such point-for-point correspondence. A poem arises out of experiences, many and varied, but it is a new constituent of reality. It needs no apologia. In *Malte Laurids Brigge* Rilke says:

For the sake of one verse one must see many cities, people and things; one must know the animals, feel how the birds fly and know the gesture with which the little flowers open themselves in the morning. One must be able to remember roads in strange countries, think of unexpected meetings and of partings that one had long anticipated,—of childhood days that are not yet understood, of the parents, whom one had to hurt when they brought pleasures which one did not recognise (they were pleasures for someone else), of childhood illnesses, of days in quiet contemplative rooms and of mornings by the sea, of the sea itself, of nights spent on journeys . . . —and it is not yet enough to be allowed to think of all this. One must have memories of many nights of love, of screams of women in labour . . . But one must also have been with the dying, one must have sat with the dead. And it is not enough to have memories. One must be able to forget them if there are many, and one must have infinite patience to wait for them to return. For the memories in themselves do not suffice. Only when they become blood in us, glance and gesture, nameless and no longer distinguishable from us, only then is it possible that in a very rare moment the first word of a verse arises in their midst and shapes itself.

M. SCHMIDT-IHMS.

DUALISM AND THE FREUDIAN CONCEPT OF MIND

*"But the circle of our understanding
Is a very restricted area.
Except for a limited number
Of strictly practical purposes
We do not know what we are doing."*

T. S. Eliot.

WRITING in 1929, Lovejoy characterised the first quarter of this century as the age of revolt against dualism, of the twentieth against the seventeenth century. Twenty years later, Ryle in *The Concept of Mind* can still say that body-mind dualism is so prevalent as to be describable as "the official doctrine". The revolt of which Lovejoy so confidently spoke has been slow in spreading. So far it remains the revolt of a minority composed of some people interested in the implications of modern physics, of some people interested in the exposure of tautologies, and others interested in the study of behaviour. In the former groups are included some philosophers, in the latter, some psychologists, psychiatrists and medical men.

The view held by many other scientists, even by those whose field of investigation touches very closely on the nature and place of mind, is either consciously or unconsciously dualist. In a symposium on *The Physical Basis of Mind* (Third Programme, 1949), physiologists and anatomists of the calibre of Adrian, Sherrington and Le Gros Clark clearly assumed the validity of the dualist position. On the other hand, Zuckerman, an anatomist interested in behaviour, two neurologists, a physician and two philosophers, Ayer and Ryle, either explicitly or implicitly rejected it. When not engaged in understanding people's behaviour for some practical every-day purpose, most laymen are of the same persuasion as Sherrington and Adrian. Although it is at least as old as Pythagoras and Plato, and despite early intimations of its mortality, dualism is still very much alive.

It is suggested by those who have reacted strongly against dualism that Galileo and Descartes together forged a set of preconceptions about the nature of Being by which the minds of reflective men have ever since been bound. Whitehead regards dualism as a "fons et origo malorum". Historically, this attack is not merited. It can be argued that dualism has had, in its time, a pragmatic value hard to overrate. It has been the prevailing metaphysical assumption, or, as Ryle would call it, the "myth" of the Western European tradition which emerged as an autonomous culture in and after the scientific revolution of the seventeenth and eighteenth

centuries. Thinkers as diverse as E. L. Woodward and Franz Alexander describe this tradition as "explosive". Alexander writes "this period of rapid transformation has assumed the almost explosive qualities of a biological mutation". The drive and vitality behind it have been unique in history. The cultures of the East are even now being recast in a Western mould and will always bear its impress.

No students of culture will deny that of all cultures the Western European is of a range and complexity which almost defies analysis, and that, indeed, its description involves the disentangling of a series of paradoxes, almost contradictions. Outstanding among these is the rapid advance of physical science and material technique, the exploitation of the concepts of quantity and analysis within a framework which is non-materialistic, with values often glaringly incompatible with materialism. "L'Europe," said Valéry, "avait développé à l'extrême la liberté de son esprit créé, par la recherche obstinée des résultats qui se pussent comparer exactement et ajouter les uns aux autres C'est là le point essentiel et la grande nouveauté". It is true that the unique contribution of Europe is the method of science, but it is equally true that Europe herself has always been a little afraid of her own offspring.

If it is justifiable to regard autonomous European culture as emerging in the seventeenth century, then, as a unique tradition, it stands as a monument not only to dualism, but to dualisms. A wealth of dichotomies lies imbedded in the matrix of European thinking of the last three centuries; the material against the immaterial, passivity against activity, freedom against necessity, deliberation against spontaneity, reason against instinct, will against desire, molar against molecular, dynamics against mechanics. But the master dichotomy, to which these others are directly or indirectly related, is the Cartesian two-world myth which divides the universe into two ultimate kinds of existent, the material and the mental or spiritual. The boundary line drawn by Descartes passes through the human organism, splitting it into a mind and a body, each of which is apportioned to a different system of Being, with different laws, and between which there cannot, logically, be any causal relationship.

It is curious that the dualist hypothesis, seemingly alien to the everyday experience of living, should have been so readily accepted and have enjoyed so long a reign. There are many reasons which might be suggested for this. One of the most obvious is that dualism proved itself a useful myth from the point of view of the physical sciences. By asserting the essential dichotomy between matter and mind and the laws operating in each sphere, it allayed anxiety concerning the implications of seventeenth century mechanism. It left the realm of value judgments untouched, and rendered them antiseptic from the point of view of the natural sciences, which were thereby set free to pursue the ideals of quantity, analysis and addition to the limits of their usefulness.

It was some time before these limits were reached, and meanwhile these concepts had stimulated an advance in material techniques which was such as to provide its own motive force. Thus, one important aspect of the creative vitality of Western Europe is directly due to the liberating effects of dualism on the physical sciences.

But at no time has the myth been of any value in understanding the other side of the dichotomy. Psychology was born under ill-fated stars. Having separated minds, as one sort of existent, from bodies as another, Descartes found he had none but negative terms with which to describe minds. They were *not* extended in space, *not* observable, but sizeless, weightless, motionless, invisible and inaudible ghosts. These, as the Society for Psychical Research has found, are difficult subjects on which to conduct convincing psychological investigations. The only positive quality which Descartes could find to attribute to minds was consciousness, and from Descartes onwards, mind and consciousness were thought of as co-terminous. Nothing remained which psychologists could do save to discriminate in the phenomenology of the mind between perceptions, feelings, intellectual processes and volitions. There were further effects which were subsidiary to this main evil. When the early psychologists sat in their arm-chairs devising a science of mind which would be as alien to the concepts of the ordinary man as the science of matter, they found the achievements of Newtonian physics and chemistry so impressive and compelling that they almost inevitably adopted the premises and methods of these sciences. The long line of academic psychology, stretching from Locke to Titchener, was hag-ridden by the concepts of elements and analysis. As late as 1910, we find Titchener contending that there could be no thought process which did not involve images . . . a curious demonstration of the blinding properties of the preconceptions stemming from the dualist myth. Preoccupied in devising ingenious escape routes from the impasse in which dualism had placed them, and involved in the logical manipulation of tautologies, it is scarcely surprising that psychologists made no progress in the understanding of behaviour until the last half-century. The ordinary man, of course, understood as much about behaviour then as he does now, and some novelists understood it very well indeed.

By the middle of the nineteenth century, all the trends of thought which have combined to make the Cartesian myth unacceptable to contemporary psychological theory were already gathering force. With the establishment of the biological sciences, the concepts of quantity, analysis and mechanics were no longer the sole paradigms of natural science. Biology brought with it the concept of the organism as a unique integral unity of forces. Emphasis shifted from structure to process, from the static to the dynamic and developing. Interest in the observation and classification of behaviour grew rapidly. The work of men like Fabre and Forel is significant because it illustrates the shift of interest to the

functioning of organisms. The myriad nineteenth century descriptions of the operation of instincts in insects and mammals formed one line of approach to the problems of human motivation. All such ideas provided a possible escape from the Cartesian duality. Even if one did deny him his internal ghost, man need not be just a complex machine. He might instead be some sort of animal.

There was another train of ideas which had been developing steadily since Hobbes. It is customary to put Hobbes and Locke in the same psychological bracket. But this gives a false idea of two very different contributions. Locke fathered the doctrine of "representative perception" in England, and the whole gamut of attitudes stemming from the dualist myth as they were expressed in the English Associationist tradition. Hobbes, as an objective, if somewhat cynical, observer of human behaviour, fathered a train of ideas which can be traced in Bentham, Marx and Freud. Politicians and administrators have never been able to afford the luxury of dualist speculation, but have simply considered human behaviour as such. In general, this train of ideas was concerned with human behaviour and the problem of its motivation, for all social and political theories imply and rest upon some theory of the nature of the forces driving men's actions. This train of thought assumed that men were very selfish and very rational, but this did not detract from its value in drawing attention to the central significance of motivation and the inadequacy of knowledge concerning it. Everyone interested in how people behave rather than in theories about how they behave, is aware of the grossly unsatisfying nature of the picture drawn by Bentham and Marx, but in fact no psychologist living before Freud's time would have done any better. That was left to the Butlers and Dostoievskys.

In any case, another set of ideas, loosely grouped under the term "Romanticism" and stemming from Rousseau's assumptions about human nature, took the opposite point of view; that the springs of human behaviour were instinctual and emotional, not rational. This trend, largely continental in its ideological development, subsumes the ideas of Le Bon, the immediate precursors of Freudian concepts of the nature of group behaviour. Le Bon not only saw clearly the nature of such behaviour, but also guessed at the potency of the unconscious factors involved.

It was, however, from a different quarter that the most disturbing attack on dualist assumptions eventually came. The neuroses were officially "discovered" in the early nineteenth century, although, behind this development of French psychiatry lay a long, if sporadic, series of insights into pathological behaviour. The clinical eye, whether of the sixteenth or the twentieth century, looks, not at ghosts within machines, but at the behaviour of individuals. The clinical records of Johann Weyer (1515-1588) are alive with "I saw a child . . .", "I knew a man who . . .". It is not surprising that nascent psychiatry came up against orthodox medicine, then in its most materialist phase and

most strongly under the influence of its own particular brand of dualism. The whole mind-body problem was raised in an exacerbated form by the rapid progress in understanding the nature and origin of symptoms. No brand of dualism, none of its escape devices seemed adequate to explain how ideas ("in the mind") could produce disorders ("in the body") such as paralyses or anaesthesias. There was also the disturbing fact that these changes were obdurate if attacked from the material side, and proved amenable only to methods (suggestion; hypnosis) which smacked of charlatanry and mysticism to the medical mind of the day. It was the preconceptions induced by dualism which prevented the recognition and scientific examination of the facts and implications behind the showmanship of Mesmer, or the phenomena of post-hypnotic suggestion. This nevertheless became the first psycho-therapeutic technique, and around its use grew up the first "schools" of psychiatry and therapy, that of Charcot at La Salpêtrière, and of Bernheim and Liébeault at Nancy.

A young neuropathologist came from Vienna, to learn what he could of these developments in France. "I witnessed", he wrote, "the moving spectacle of old Liéb. working among poor women and children. I was a spectator of Bernheim's astonishing experiments, and I received the most profound impression that there could be powerful forces at work which remained hidden from the consciousness of the individual." So Freud wrote, and with this clear statement of an idea which is fatal to the Cartesian myth, a new era in psychology could begin.

Freud's concept of unconscious motivation is one of those insights into the nature of things which occur rarely in the passage of centuries. He did not "invent" the idea any more than Newton or Darwin invented theirs. Apart from the sporadic historical insights of such men as Vives and Weyer, the concept is at least as old as Leibniz, and perhaps it is not an accident that Leibniz was no dualist. Herbart derived much from Leibniz, and Freud's early description of the unconscious might almost have come from Herbart, although in fact it did not. All the other basic Freudian concepts seem similarly to have crystallised out of the fluid matrix of nineteenth century thought. In Freud can be found the influence of Darwin, the stress on structurally determined functioning and development; the emphasis on emotion and instinct; the atmosphere of Utilitarian ethic with its bartering of pleasures. Psychology's one man of genius was a nineteenth century man, although in many way he transcended his own century, and in another significant sense was a rebel against ideas prevailing in it. Freud's belief in biological determinism and unconscious motivation are together completely incompatible with dualism.

There were, of course, some people who had some of the same ideas as Freud, but none who had all of them. Independently of Freud, William James wrote an essay called "Does Consciousness Exist?" in 1904, and William MacDougall wrote his "Social Psychology" in 1908. The persistent and astonishing popularity

of this text was due to its stress on dynamic and non-rational motivation of behaviour. It has been said that if there had been no Freud, MacDougall would have been Freud. But he would have been as pale and Presbyterian a ghost of Freud as his "Hormic" theory of behaviour is of Freud's. Freud not only had all the ideas together, he expressed them with force and clarity. Thus it was Freud who drew the fire, and bore the brunt of prolonged and bitter attacks on ideas which, as we have tried to show, were implicit in many contemporary trends of thought. These revolts against Freudian theory have been so intense and persistent as to warrant rather careful consideration. Freud, who had the objectivity to analyse the reactions against his own theories, took the view that the attacks on his theory of unconscious motivation were highly emotionally toned because they were bound up with human self-love (in Freudian terms, narcissism). It was not the first occasion on which scientific discoveries had come into conflict with human narcissism. Three centuries of European history provided parallels; the reaction to astronomy in the sixteenth century, to biology in the nineteenth, as well as to psychology in the twentieth.

Behind the savage opposition displayed to the new concepts involved, Freud detected an unmistakable note of fear. The forward march of science met with opposition because it progressively shattered men's illusions about themselves. Astronomy, biology and psychology have each in their time dealt serious blows to human narcissism. The first, or cosmological blow, forced man to admit that his world was not the centre of the universe, a view that had fitted in admirably both with the mediaeval socio-economic hierarchy, and his more private views of himself as lord of the world. The second, or biological blow, forced him to admit he was not a special creation, but structurally and functionally akin to animals. The third or psychological blow was most wounding of all. Man might have felt humbled in relation to the world and the animal kingdom, but at least, until Freud's time, he felt supreme within his own soul. Cartesian dualism assured him that he was indeed sovereign in this realm. Freud's theory of the unconscious nature of a large section of mind, and the forces which lie within it and outside the conscious control of the individual, meant the dethronement of man from the last territory of which he had felt himself master.

Of all Freudian concepts, it is the theory of unconscious motivation which arouses the most widespread and persistent opposition. The least bitter, but most universal form of this opposition is flat disbelief. It is a firmly rooted human illusion that we know our own minds. The illusion rests on the assumption that mind is the same thing as consciousness. To hold it, we must also believe that we act only on the basis of conscious motives. The evidence against this view, especially that obtained from experiments on post-hypnotic suggestion, is now irrefutable. Opponents of the theory of unconscious motivation continue, in spite of this, to

assert that they do not believe in the existence of unconscious motives because they themselves are not conscious of them. One might as well tell an astronomer that the earth does not move because we are not conscious of its movement, or a physicist that the table is not composed of electrons because we do not experience it in that way. The physicist will reply that his proofs depend on vast numbers of laboratory demonstrations, Freud replied that the tenets of psycho-analysis "are based on an incalculable number of observations . . . and no one who has not repeated those observations . . . is in a position to form an independent judgement". The position of psychology is exactly the same as that of any other natural science. Some, indeed a large proportion, of the processes with which it deals are unknowable in the ordinary sense of the word "know".

The fact that many processes with which physics deals are unknowable does not produce any violent emotional reactions against physics, but there is no doubt that the tenets of psycho-analysis are, and have been for fifty years, repellent to large numbers of highly intelligent people. It must be added that they are also repellent to large numbers of psychologists, and that even many of those who profess adherence to Freudian beliefs dilute and adulterate the mixture to suit their own emotional reactions. Karen Horney is a good example of this. Others, like Jung, who confess to dissentient views, will superficially endorse some Freudian concepts but employ them in such a way as to negate their force and significance.

It is unnecessary to underline the emotional factors involved or explain them further. No one could do this more adequately than Freud has done. We are merely concerned to extend one aspect of the Freudian analysis of the reactions against Freud. Our hypothesis is that many of these reactions arise directly from the realisation, which may be more or less inchoate, that all the basic Freudian tenets make nonsense of dualism, or beliefs and attitudes arising out of dualism. Since such beliefs and attitudes are firmly imbedded in our thinking, since they have in many cases become preconceptions, any ideas which undermine them cannot fail to provoke hostility. Freud's concept of unconscious motivation quite clearly abolishes mind in the Cartesian sense. If unconscious motives have been proved to exist, and the conscious and the mental are no longer co-terminous, then what is mental may be non-conscious. But consciousness was the one positive attribute which Descartes could find for mind in his dualist universe. If that is taken away, nothing is left. Even ghosts have other than negative characteristics.

Inextricably intertwined with Freud's rejection of a mind characterised only by consciousness, there are at least two other basic Freudian tenets which are highly displeasing to the majority of people. One of these is the view of mind with which Freud replaced the Cartesian one; the other is his determinism. One may either accept or reject these two theories. Neither dilution

nor partial agreement seems possible, for either of these can be shown, on logical analysis, to be tantamount to rejection. Freud is an uncompromising determinist. The fact that his system is dynamic and not mechanical makes no difference to this. As the last of the great nineteenth century rationalists, he had implicit faith in reason, and believed that only good could come of the extension of reason to every field, not only to the universe, as Galileo and Newton had done, to the organism, as Darwin had done, but to the region of human behaviour, to man's feelings, conscience, and values. He brought human behaviour in all its complexity and variety into the domain of scientific enquiry and insisted that all men do, think or feel can be explained on the basis of laws derived from observation and experiment. All that men preferred to think of as due to chance, "inspiration" or "free will", Freud thought of as having determining causes.

However the concept of determinism is refined—and it is being refined by the work of the neuro-physiologists—it remains determinism and must be accepted or rejected. It is the only possible assumption on which a science of behaviour can rest, and Freud believed psychology could be such a science. Many people who fully endorse determinism in the biological field react emotionally if it is applied to human behaviour, or to what they would consider as "mind". There is no mistaking the nature of the reaction to anything which undermines the assumption of free will. The presence of a psychiatrist in a criminal court does precisely this, and, as was recently pointed out to the Royal Commission on Capital Punishment, there is no other type of expert witness who is subjected to the same contradiction and derision as the psychiatric witness. This was very clearly seen in the Haigh case (1949) where there was no mistaking the emotional note in the attack on the psychiatrist giving evidence. What is really being attacked is the determinist view of human behaviour, and what is wrong with the determinist view of behaviour is that it runs counter to deeply imbedded preconceptions about the nature of acts of choice. The current lay doctrine of free will runs something like this: that an event, such as a choice between two actions, can occur "in the mind" which is not determined by events "in the body" and need not, in fact, be determined by past sequences of mental events. The whole concept involves the body-mind dichotomy of dualism, and it is quite clear that people find it very difficult indeed to think any other way, except in patches. The presence of a psychiatrist in an English court of law, if looked at against the background of the basic assumptions of that law, represents the thin end of a determinist wedge, and quite evidently causes discomfort.

To turn now to Freud's own concept of the nature of mind, this embodies some hypotheses which may be called "operational", and others which may be described as metaphysical. We know two things about mental life; we know the brain and nervous system, we know acts of awareness. Concerning acts of awareness nothing

more can be said. They are ultimate data, known, but not further explicable. Thus there is a series of acts of awareness and a series of somatic processes. These two series can be regarded as terminal points, and what lies between is unknown. Even if we knew that there was a direct relationship between the two series, this could do no more than supply exact localisation for the conscious processes. It could not explain them.

Most people assume that awareness alone is mental (the dualist hypothesis). At the same time, they are not prepared to say that acts of awareness constitute in themselves a complete and unbroken series. They obviously do not. There is, therefore, Freud says, "no alternative to assuming that there are physical or somatic processes which accompany the mental ones and which must admittedly be more complete than the mental series, since some of them have conscious processes parallel to them but others have not". Logically, then, the stress should be laid on the somatic processes and they should be regarded as what is essentially mental while conscious processes are accessory and transitory. Thus, mind and consciousness are not co-terminous: the essential attribute of mind is unconsciousness, and the idea that something which is mental may not be conscious is not self-contradictory. Such an idea will only be thought of as self-contradictory if we approach the problem with the preconceptions of dualism. Freud's meta-physical assumptions are not dualist. Mental life is to him "the function of an apparatus extended in space and giving rise to consciousness only at one particular point and under certain conditions". It cannot be supposed that he thought of the function as a different category of existence from the structure. The fact that we separate structure from function is an effect of the tyranny of words over thinking. Because we can characterise the functioning of a motor car in terms which we do not apply to the car engine, we think of the two as different . . . until something goes wrong with the functioning. Freud, whose life work was the study of faulty functioning, would not have made this mistake. He did not re-word the mind-body dichotomy as a structure-function one.

Concerning the ultimate nature of the processes which constitute mental life, Freud says little, but it is clear enough. "We assume", he says, "as other sciences have taught us to expect, that in mental life some kind of energy is at work". The view is harmless enough, and, on the surface, common enough. Spearman, acceptable to many who bristle at the name of Freud, held it. "Mental energy" is a stock phrase in nerve tonic advertisements. If, however, the concept is united with the rejection of dualism, it would receive less general assent. Freud means that the energy which expresses itself in mental life is the same sort of energy as that dealt with by the physicists. This idea is naturally disliked by those who still think (in terms of dualism) of a world of physical things governed by rigid mechanical principles on the one hand, and an immaterial conscious world on the other. It is

clear that this concept is incompatible with the findings of the last fifty years concerning the nature of mind. It is also incompatible with the findings of modern physics and astronomy, concerning the nature of matter. Along with a considerable number of other things, the atomic bomb has shattered what remains of the Cartesian universe. The full significance of the conversion of mass into energy has not yet worked its way into everyday philosophy, but the fact that we can now say with assurance that all mass is energy means the end of the dichotomy between the material and the immaterial, the inert and the active, structure and process. We return to ideas which existed before the sovereignty of the Cartesian myth and post-Renaissance classical physics. Thales suggested that everything had a common origin, that there was unity in the cosmos and a single kind of prime being. From the dualism which has been prepotent in Western thought for over three centuries, we must return to some sort of monism.

Everything that Freud said about the nature of mind, all the work which owes its impetus and vitality to his concepts, fits easily into the contemporary scientific Weltanschauung. It was no mean achievement for a nineteenth century man, working in the field of human behaviour where insight is most seriously hampered by prejudice, to have transcended the prevailing thought patterns of his century and anticipated those of the next.

E. PRATT YULE.

MIND OVER MATTER: AN IMPROPER FRACTION

*"Man's spirit will be flesh bound when found at best,
But uncumbered: meadowdown is not distressed
For a rainbow footing it nor he for his bones risen."*

G. M. Hopkins.

WHEN Thomas, in "The Lady is Not for Burning", hails clerical Richard as a "calculating piece of clay", he brings to the lists once more the ancient argument about Man's consistency. European philosophers from the days of Anaxagoras have wrangled over the dichotomy of living things; and science, like some questing beast, has probed with blind feelers into the ultimate particles of organic matter in search of a soul. The dualistic theory of the independent existence of mind and body arose primarily from the theological doctrine of the survival of the soul, and presumably of self-consciousness, after the somatic death of the person. But there is another explanation of the popular and almost universal acceptance of dualism: the human understanding is essentially finite and cannot readily grasp entireties. It is like the blind men who went to "see" the elephant: certain points and aspects capture its attention, but the whole eludes it. Thus we divide our study of the living organism into the two studies of Anatomy and Physiology, the study of form and the study of function. We do not seriously believe that form and function are ever really divorced, but it is more convenient for our imperfect faculties to make such an arbitrary distinction. So it is with the dualistic theory. As a working hypothesis it has served its purpose, and no amount of exploding or debunking will make it less useful than it has been, or more untrue than it probably is.

The question of the independent existence of matter and spirit cannot profitably be discussed until the protagonists are agreed on their definition of matter and spirit. In the 5th Century, B.C., Anaxagoras reached the conclusion that there must necessarily exist, besides the material elements of the world, a separate Intelligence to which the ordering of the universe is due. But it was left to Aristotle to adumbrate the animistic doctrine of the Scholastic philosophers, which regards the human being as a composite of two complementary and incomplete principles, one material and the other spiritual. In this respect dualism errs on the side of excess, because it holds that body and spirit are two substances, each complete in itself.

One fact seems to emerge clearly from the findings of physical science: that there is nothing very permanent or solid about

material things. The man who is in the habit of regarding himself as a practical down-to-earth fellow is going to find it increasingly difficult to call a spade a spade with any certainty or assurance. As F. J. Sheed puts it:

“Any material thing is in the constant peril of becoming something else; wood is burnt and becomes ash, oxygen meets hydrogen and becomes water, hay is eaten and becomes cow. In short, any material thing is what it is at any given moment, but precariously. A spiritual thing is what it is, but tenaciously.”¹

To which component of the body does mind belong? Is it spiritual or material; or is it spirit activating material to produce certain effects? Where do ideas come from, and how are they formed? When a modern philosopher once declared: “I philosophise as much with my big toe as I do with my cerebral cortex”, was he a wise philosopher or a foolish one? How would the mechanistic scientist answer these questions? One would fancy something like this:

“I see a man who moves and breathes, who talks and reasons, who laughs and loves, who hates and rages. I see this man struck down in death. I see a lifeless mass of rapidly disintegrating flesh and sinew, chemical fluids and putrefying bacteria. You tell me the spirit has fled from its bondage under the flesh, but still exists. I say . . . what else can I say? . . . that the mechanism is finished, the fuel exhausted, the energy dissipated.

“All life can be explained in terms of physico-chemical equations. Ideation is just another form of energy release like heat, sound, electricity or chemical interaction. An idea is simply the after-discharge that follows on a change of nervous potential in one of the complex conditioned reflexes which make up what we call experience. Your philosopher is talking rubbish when he says his big toe plays any part in his philosophising. It is the function of the brain to produce ideas and to store experience in the form of memory, as it is the function of the liver to secrete bile and to store carbohydrate in the form of glycogen. The existence of a spiritual component which has no substance, dimensions or sensible properties is inconceivable.”

And of course, he means unimaginable; because it is quite true that one cannot imagine anything which by its very essence has no image. But one can conceive of an abstract idea without the aid of imagination. Conception on that plane is the function of the intellect. Theology informs us that the faculties of the spiritual component of Man's make-up are two in number: understanding and will; and that these two faculties are the highest attributes of the mind, that raise the human organism above mere animalism to the higher level of animism. The emotions, instincts and appetites, which are also mental activities, are shared with the lower creation, but only Man, of all living things, can apply his intellect to the mysteries of the universe, and employ his will against the dictates of self-interest. The strongest instinct of all,

¹ *Theology and Sanity*, Sheed and Ward, London, 1948.

that of self-preservation, can be subordinated to the exigencies of duty or charity only by the exercise of the human will.

Such a tenet would seem to demand acceptance of dualism, were it not for another fact which argues cogently for the interdependence of mind and body: the existence of mental defect.

The philosopher who claimed to philosophise *as much* with his big toe as with his cerebrum, did not expect to be taken too literally. He meant to emphasise the non-entirety of spirit in a three dimensional world; to disabuse the lazy or hazy thinker of the notion that mind occupies the brain as a gas or fluid occupies space. Yet he would be the last to disagree with the suggestion that grey matter is necessary for intellectual activity. The idiot cannot cerebration adequately because his cerebral cells are defective. It does not necessarily follow therefore that the spiritual component of his personality is deficient. A defective engine will fail to function in spite of the fact that it is supplied with the same pure petrol that drives a brand new engine perfectly. The idiot, notwithstanding his defective cerebral powers, has developed often to a remarkable degree the emotions and appetites of the lower animals. The explanation of this can admittedly be turned to the credit of the mechanists.

The optic thalamus and primitive midbrain are now regarded as the "seat" of the emotions. What simpler explanation to offer for mental deficiency than to say that the cerebral cortex is the "seat" of higher thought, and inadequate development of the cortical grey matter inhibits the development of intelligence?

What indeed? Yet its very simplicity makes it suspect. The most materialistic among the scientists is at best an agnostic. All that he can do is hope that one day the veil will be lifted, and all the unexplained mystery of life will become apparent as a not-too-complicated mathematical formula; but in so doing he is betraying himself. In employing the supernatural virtue of hope he is denying his own scepticism. There comes a stage in the pursuit of any enquiry into the nature of existence when the enquirer must lay down his instruments and confess that "the rest is silence". Then is the acceptable time for faith.

Human faith is an interesting quality. Thousands upon thousands of people daily accept the truth of the existence of Indo-China without having been there or evincing any desire to verify the fact for themselves. Innumerable beliefs and traditions, some unimportant, some vastly important, are equally freely accepted on the same basis of human faith. It is almost as if some innate wisdom prompted the blind believer into his belief. From this faint shadow of a "common" sense, Jung developed his concept of the Universal Unconscious: the indestructible pool of human experience that has enveloped all generations since the first Man, sustaining legend and folk-lore among nations widely separated by space and time, impinging upon the Personal Unconscious of the individual, and bridging the gulf between the ancient mystics and the twentieth-century atomic scientists.

The prevalent assumption that an Unconscious does exist, whether in the Jungian sense, the Freudian sense, or the mechanistic sense of autonomic activity, has been held to show that intellectual self-awareness—Consciousness, in the fullest meaning of the word—cannot be a spiritual quality, or at least, that it cannot enjoy extrasomatic existence. Yet, harking back to Sheed's definition of spirit: spirit is the very essence of existence, *and the awareness of that existence*.

That this is incapable of scientific proof is obvious. It is a statement of pure belief, arrived at by the use of reason. It is metaphysical and supra-physical in its concept. But it does one thing not without value in this cynical and disenchanted age: it asserts the claim of intellect to be the final judge of reality in a world whose judgments all too often rest on the readings of the electro-encephalogram and the calorimeter.

"Man's spirit will be flesh bound when found at best," says Hopkins; and even in this life, where it is to be found only at a very tawdry second-best, the Mind of Man can and does dominate the mortal frame. It is the master, not the creature, of atomic energy.

R. DINGWALL KENNEDY.

THE MISSIONARY IN SOUTH AFRICAN HISTORY

IT was not until well on in the eighteenth century, with the arrival (1737) of the Moravian George Schmidt, that Protestant missions began to penetrate the interior of Southern Africa. In England, the impulse to cater for the spiritual needs of aboriginal peoples was an aspect of the evangelical revival in the early years of the last century, though the Baptists had reached Bengal in 1792. It was Wilberforce, assisted by Grant and others of the "Clapham Sect", who launched in 1799 the Society for Missions to Africa and the East, and, four years later, the British and Foreign Bible Society.

Lack of resources, and especially lack of men, was the chief obstacle. Originally no doubt the Protestantism of Northern Countries had rested on too narrow and nationalistic a scheme of salvation. The new sense of responsibility for the welfare of native peoples followed from the repudiation of slavery.

The time has come for an objective assessment of the work of Protestant missions in South Africa. In other fields, historians have contributed their discipline and their feeling of perspective towards an interpretation of the past. About few great problems have they differed more widely than in regard to the rôle of the missionary in the history of the Union.

Lack of the tools of scholarship has hindered reconstruction of the social and domestic background of South African history. There is as yet no dictionary of South African biography. Nominal rolls are to be found among the records in our archives—muster rolls in the Cape, lists of persons qualified for jury service, some electoral rolls. No detailed enumeration of the population occurred in the older Colony until 1865, and a great portion of the returns have been lost by fire. Natal had to wait until 1891 for its first census of the European population.

G. M. Trevelyan has remarked that biography, however limited in scope, is a method of writing history which has the advantage of being "personal, human and intimate". In the Union the output in this class of literature has been meagre. Now, however, we have a slender volume of concise studies of churchmen and missionaries, set out frankly in popular form and without the apparatus of critical scholarship.¹ Eighteen portraits are offered, not as symbols of the national spirit or as "typical South Africans", but rather with a view to presenting "diversities of Christian service" and (p. ii) "evoking admiration and imitation".

Underlying unity is provided by the recurring theme of mis-

¹ Horton Davies: *Great South African Christians*. Oxford University Press, 1951.

sionary achievement. No one is likely to challenge the conclusion that missionaries have been the principal media for the diffusion among the Bantu of western culture. The setting up of mission schools, the study of native languages and their reduction to writing, the translation of the scriptures and the provision of textbooks in the vernacular—these represent an achievement that is paralleled in the missionary annals of North America and the Far East. No doubt many were attracted to their educational institutions by the desire for knowledge of the skills and sciences of the West. A lively sense of gratitude for the relief afforded in sickness by white medicine explains many individual cases of conversion. Few would be likely to appreciate the superiority of the ethical and spiritual ideals of Christianity, inasmuch as it might come not as a faith but as a body of dogma, unfamiliar to the native mind, already confused by the disharmony of denominational bickering.

It is easier to estimate the value of the knowledge and the skill imparted. At scores of mission stations from Bechuanaland to the Cape frontier, natives were taught to plough, to grow cotton, to build neat cottages with thatched roofs, to read and to write, to make and to wear European clothes.

Such training, accompanied as it inevitably was by the activity of white traders, enormously increased the demand for western commodities and so contributed to disrupt the subsistence economy of tribal life. Men like Allison, Wesleyan missionary at Indaleni (who might well have found a niche in Dr. Horton Davies's little book) did what they could to maintain basket weaving and other Bantu industries. Iron smelting and pottery could not withstand the penetration of machine-made goods. At the same time, settler encroachment on Bantu land caused a further shrinkage of native resources. It is difficult to resist the conclusion that the advent of the missionary contributed to hasten the disruption of the whole Bantu economy, and perhaps without substituting for it any very deep realisation of Christian spiritual ideals.

Hostility to tribal conceptions should not however be imputed to all workers in the missionary field. Bishop Colenso was in agreement with Theophilus Shepstone in sustaining "that heathen custom" *lobola*; and, since it contributed to the stability of family life, urging magistrates to give a sympathetic hearing to *lobola* cases. No doubt in South Africa, as in Australia and North America, Christian missions subjected their converts to pressures that ultimately destroyed tribal culture without assimilating it to western civilisation. But the growth of monogamy was due, in the main, to abject poverty in native areas, few men being able to afford more than a single marriage dowry, rather than to missionary antagonism to polygamy. The wisest men in the mission field were those who realised that Bantu tenacity in rejecting certain aspects of the Christian way of life was due to unwillingness to abandon familiar institutions, such as *lobola*, that involved ethical considerations of profound significance in the tribal framework.

European settlers brought into immediate contact with the Bantu

and their missionary advisers belonged to a strongly individualist type that could cope with frontier conditions in all their austerity. Frugal and courageous, their instinctive reaction to a situation that called for taming of the wilderness was to expect the inevitable drudgery to be performed by native labour. Antagonism to missions was based on the belief that the stations held back natives from white employment. The American Daniel Lindley realised in 1840 that he must first minister to the Trekker congregation in Natal: otherwise "their prejudice against missions will increase". The colonists from early Victorian England had no such prejudice in the early stages. It was the prospect of an adventurous Christian life, "traversing Africa with a Bible in the pocket and a rifle in the hand" that appealed to many who settled in the eastern Cape and Natal. Some of them, men like John Mitford Bowker, became uncompromising critics of the missionaries. But there was much sturdy Christian altruism, William Josiah Irons' Natal settlers of 1849 conceiving themselves as "Verulam Pilgrims".

Theal and Cory condemned the "political activities" of South African missionaries. But, even the Wesleyan superintendent "Bishop" Shaw, who went out of his way to enjoin colleagues to "keep yourselves as far as possible from all political affairs of the tribes", would not have wished energies to be confined to evangelisation. The missionary could scarcely avoid the rôle of prophet and political adviser. "Neither civilisation nor Christianity", pronounced Livingstone, "can be promoted alone. In fact, they are inseparable."

W. M. Macmillan, whose task it has been to defend Dr. John Philip from disparagement as a "political missionary", had no difficulty in showing that the British authorities paid too little and not too much heed to Exeter Hall and to the missionary on the spot. What Philip pleaded for so strongly was greater control of the tribesmen and more practical measures for their civilisation. He was doubtless overconfident and, as Dr. Horton Davies admits (p. 17), "a trifle pompous". "I have the Home and the Colonial Governments", he once wrote, "both at my feet".

Civil administrators were often readier to experiment along novel lines, to work on the foundation of native institutions and yet to prepare the way for such changes in individual relationships as would follow from the introduction of individual title deeds or the gradual interposition of the European magistrate. Benjamin Pine in Natal thought that missionaries should not have been appointed to the first commission for locating the natives. The shrinkage in native resources and the disruption of traditional attitudes might have proceeded at a slower tempo, had the enthusiasm of many of the men in the missionary field been tempered by the practical insight of such lay administrators as Pine and Shepstone.

ALAN F. HATTERSLEY.

NOTES ON SOME CONTRIBUTORS

GUY BUTLER was educated at Rhodes University College, and after leaving the Army went to Oxford. From a lectureship at the University of the Witwatersrand he was recently appointed to the Chair of English at Rhodes. With Charles Madge he was first prizewinner in the recent S.A.B.C. poetry competition, and his verse play, *The Dam*, is to be performed at the van Riebeeck Festival.

DR. H. COBLANS, Librarian of the University of Natal, was recently seconded to Paris for over two years as Librarian of Unesco.

PROFESSOR A. F. HATTERSLEY came to N.U.C. from Cambridge and has for many years been Head of the Department of History and Political Science. His work as the leading historian of Natal culminates in *The British Settlement of Natal* (1951). He has also published standard 'Short Histories' of Western Civilisation and Democracy, and many other works.

DR. C. J. JOOSTE is Lecturer in Sociology and Social Work in the University of Natal. His collaborator, MRS. M. H. JOOSTE, is a trained Social Worker and a Master of Social Science of the University of Stellenbosch.

DR. R. D. KENNEDY took his medical degrees at Edinburgh University. Becoming interested in Jungian Psychology, he joined the staff of the Davidson (Family Guidance) Clinic, Edinburgh, as Honorary Physician (1942-47). He is now in the Mental Health Service of the Union.

DR. R. F. LAWRENCE is a Ph.D. of the University of Cape Town and Fellow of the Royal Society of South Africa. For many years Director of the Natal Museum (to which he has now returned as Acting Director), he is the author of over eighty publications, largely on the cryptic fauna of forests and the Arachnida of Africa.

DR. W. G. MCCONKEY took his M.A. and Diploma of Education at Queen's University, Belfast, and his doctorate at Stellenbosch. After twenty years as an Inspector of Schools, he is now Secretary for Education in Natal.

ALAN PATON, the well known author of *Cry, the Beloved Country*, graduated at N.U.C. and did important work as an educationalist and social reformer while he was Governor of the Diepkloof Reformatory. He is now at work on a biography of the late Jan Hofmeyr.

PROFESSOR A. PETRIE, 'emeritus' since 1948, read Classics at both Aberdeen and Cambridge. His books on Greek and Roman antiquities have gone into many editions. In 1950 he received the honorary degree of D.Litt. (Natal).

DR. E. PRATT YULE, Head of the Department of Psychology in the N.U.C. and University of Natal since 1935, received her M.A. and Ph.D. at St. Andrews University; she has also held Research Fellowships at both London and Yale Universities. Besides having published a number of papers in British psychological journals, she has recently organised a large survey of the intelligence of the Rhodesian school population.

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