

PRESIDENTIAL ADDRESS

By SIR GEORGE CLARK

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IN our *Annual Report* there are three lines which announce a new kind of benefaction to the Academy. The name of the donor is not printed in the *Report*, but it need be no secret; it is that of one of our own number, Dr. Goodhart. Once a year for seven years through his generosity we are to dine together in a dignified way and to entertain distinguished official guests. We are sincerely grateful for these new opportunities of enjoying the company of our colleagues and of returning the hospitality which has been extended to the officers of the Academy by several eminent bodies.

Hitherto we have lived very quietly. We celebrated our twenty-fifth and fiftieth anniversaries with banquets, but that name could not be applied to the meals which have recently become a very welcome accompaniment of some of our meetings here. In the future some commentator, perhaps one of our own number, may discuss a passage, in an almost forgotten play of the year 1911 by Bernard Shaw, about 'the new Academic Committee' which was to have a uniform like the French Institute. I fear he will conclude, not that the dramatist was alluding to this Academy, but, on the contrary, that although he was very well informed and had more than one friend among our Fellows, he did not know of its existence. Our founders had grown up in a period less rich in colour and ceremonial than perhaps any other in British history. They may have believed (though it seems unlikely) that it was as meritorious for an institution as it was for a man to be undemonstrative and unassuming. Whatever the reason may be, we have been the least ostentatious of learned societies. We have no mace like the Royal Society or the Society of Antiquaries; no silver-headed stave like the Trustees of the British Museum, no such chain of office as is worn by the Presidents of the Royal Academy and of many less august societies. We have no armorial bearings. We have no motto. It may be possible to devise a motto expressing a positive determination to search for truth and not merely, like the Royal Society's Horatian line, repudiating one of the ways to error. That may come with time. We may acquire our full share of symbols and ritual. At any rate we are to begin now with this

welcome innovation of an annual dinner. I am sure you will all approve of it very warmly, and you will wish me to express your thanks to the donor, as I have already expressed those of the Council.

I feel confident that you will all regard the *Annual Report* as a whole with satisfaction. It shows that the Academy continues to carry on its work effectively and to grow more active and more influential. A large share of the credit for this must be ascribed once again to the Secretary, the Treasurer, and the two ladies who constitute our office staff. It is one of my duties as President to make sure that they receive their due recognition, and I do it very gladly, having had the best opportunities of observing and appreciating their work. I must also, on your behalf and my own, thank the two retiring Vice-Presidents, Mr. Ashmole and Professor Knowles, for their unfailing readiness to take my place on occasions when it was impossible for me to fulfil my obligations here. Much of the work of the year has, of course, been the continuation of what was well begun in former years, and here I must specially mention my immediate predecessor, Sir Charles Webster. It wants only twelve months of the time when I shall be able to boast that my friendship with him has lasted for half a century, and for most of that period he has been both a very productive historical writer and one of the statesmen of learning. In his four annual addresses Sir Charles has stated or restated, and illustrated and applied, some of the principles which must be maintained if scholarship is to be enriched and not impoverished by the material support which it receives from the State and from private organizations. Since you have done me the great honour of re-electing me for a further year of office, I may perhaps look forward to taking up these themes again in the light of another year's experience. Today I intend to confine myself to a more limited subject. I do not propose to discuss the financing or co-ordinating of our studies, nor the protection and professional advancement of scholars. I wish to speak to the Academy as a society which is not directly concerned with education, nor with political or economic affairs. There was a time when, on such an occasion as this, a speaker was expected to take as his theme 'the state of learning'. If that is unusual now, if we turn our attention more readily to grants or committees or conferences, we may be well advised occasionally to revert to the older practice. One aspect of the state of learning, the extreme specialization of studies, is indeed often, if ineffectively, discussed, and it is about this that I wish to offer some observations.

It is an established commonplace that there is a regrettable lack of mutual understanding between specialists in different intellectual spheres, and in particular between the practitioners of the natural sciences and those of the studies for which this Academy is responsible. Our own composition illustrates this. When our current list of members was compiled one Fellow was a member of four sections, there were two who were each members of three sections, thirty-five who were members of two, and 151 of whom each was a member of one section only. In four of the eleven sections fewer than one-third of the members also belonged to one or more of the others, but every section had at least one such member. Now we need not take these figures very seriously. Our eleven sections are unequal in their numbers; some cover wider ranges of studies than others; it is the nature of some to attract scholars who have already earned distinction in other departments. They differ in so many ways that it would be easy to mistake the significance of the figures. It would serve no purpose to compare them with similar figures for former years. But it must mean something that about one-fifth of our number have been elected into more sections than one, especially if we place it in contrast with the fact that only a single one of our Ordinary Fellows is also a Fellow of the Royal Society.

There have often been Fellows of our Academy in the past who have been Fellows of the Royal Society. That illustrious body has a custom, which I sometimes envy, of electing a small number of Fellows who are not scientists but who are distinguished in other ways and have rendered services to science. Most of them have earned their election in public life, and that, I suppose, is the explanation of nearly all the names which appear in both lists down to that of our Honorary Fellow, Sir Winston Churchill. This does not apply, however, to Professor Trevelyan, who may be called a friend, though a candid friend, of the scientists, but who must owe his place among them to their regard for letters and learning. Sir James Frazer's work in anthropology and folk-lore lay rather nearer the borderline of natural science, but cannot have been supposed to cross it. There have, however, been a few great men who have become members of both bodies because they were eminent in studies on both sides of the line. At present, I believe, our Honorary Fellow Lord Russell is the only one. Sir Thomas Heath's studies in Greek mathematics required mastery of widely separated matters. Mathematics is also in its way near the frontier; there have been statisticians who have worked on both sides of it, though

none of them has received this double commendation, which also has not been attained by any of the historians of science.

It is only, let me repeat, with the state of learning that I am concerned, not with the relations of the two societies. If there were only one society, or if there were three or more, the facts of the separation or overlapping of studies would remain the same. We are all familiar with those series of publications of foreign academies which are divided into scientific and philological-historical classes. The academies may not all draw the line in exactly the same place, but we should all agree that, even if there is a more or less extensive debatable land, it separates two very different realms.

There are now, and there always have been, students whose investigations lead them from one side to the other. In an article in vol. XXXIX of our own *Proceedings* I was surprised to find a word which does not appear either in the *Oxford English Dictionary* or in the *Supplement* to it which was published in 1933, the word 'biome'. By considering the first syllable and the context I was able to make a fairly good guess at its meaning, and I have since learnt that it is familiar among ecologists. Everybody knows that not only words and devices of procedure but also major ideas which originate on one side of the barrier sometimes prove fruitful on the other. The most famous instance is Charles Darwin's application of the Malthusian principle of human population, more than half a century after it was published, to natural selection in general. This instance is doubly significant, for scarcely was the movement completed when it was followed by another in the reverse direction. It was not from Malthus but from Darwin that Herbert Spencer and many other writers, more or less closely related to him, on anthropology and sociology and related subjects, derived the idea of evolution, which they regarded as a master-key to the interpretation of human society and of human activities in the present and the past.

We must, however, ask whether these mutual influences are more than occasional and peripheral occurrences in the play of modern thought. Specialized branches of study, that is to say all branches of advanced study, are necessarily carried on by people who accept the results of other workers without question and often without knowing how they were arrived at. It is to the lawyers that we owe the maxim 'cuilibet in sua arte perito est credendum'; but it seems to describe an attitude which any specialist might reasonably adopt towards any other. In practice indeed we are told that the good estate of thought is compatible

with an even more complete separation between its branches. In the course of their daily tasks the workers in some one science may justifiably make assumptions which are contrary to the accepted results of research in another science. It seems that in the past scientists have made great additions to knowledge on the basis of theories which have been rightly rejected, not only subsequently but sometimes even beforehand, by philosophers. Conversely historians have done useful work although they have started from assumptions which ethnologists or biologists or geologists or experts in some other science could disprove. The same may be true even of philosophers. May we not reply to the complaints about the isolation of the two great regions of thought, that either of them may thrive quite independently of the other?

Such an answer is not likely to commend itself. In a recent lawsuit it was made known that one of the purposes of a certain society, as stated in its charter, was to promote fuel technology 'as an end in itself and as a means of furthering' various improvements in industrial practice. It is evident that even the most disinterested study of fuel technology must involve economic and sociological factors. In this instance there are inquiries belonging to the two domains which are complementary, indeed necessary, to one another. Technology and applied science on the one hand, and the social sciences on the other, afford many such instances. So long as we confine ourselves to these regions it is easy to see that the two great branches of thought are not competing alternatives in the sense that time and energy spent on either must inevitably be withdrawn from the other. When we consider the basic sciences and the more recondite fields of scholarship we can hardly maintain that the case is so obvious. Even there, however, it would appear that any great change in one hemisphere of thought must set new problems, and may presage new advances, in the other.

Even if the several sciences can flourish without agreeing with one another, it will always be an improvement when the state of knowledge becomes more coherent. It may be impossible for every investigator to understand the aims and methods and results of every other. It may be impossible to draw up a classification of the sciences on the once familiar lines, showing the place of each in human knowledge as a whole. Research is not simply acquiring information and interpreting it continuously until no mysteries remain. We do not expect ever to dissolve any section of the Academy on the completion of its task. As each of

us knows in his own department, the concrete universe is inexhaustible. If it were not, if each of us had before him merely a limited subject, it would not matter who advanced first and who lagged behind. There would be many alternative routes and any movement along them would help a general advance. As it is, a road may be open only once and only for a moment. Some of us may not like to think of scholarship as ministering to the contemporary, and therefore transitory, needs of man as an individual or social being; but, however rigid our definition of its nature, we must admit that it should watch for opportunity, that our work will gain in value if it is opportune.

When we are reproached for paying too little attention to the current developments of the physical and biological sciences, the complaint does not always take the same form. Sometimes we are urged to revise our principles in the light of scientific discoveries, but sometimes to assert our principles against the irreconcilable contentions of scientists. It is not inherently impossible for both these counsels to be justified at the same time. If I were to allow myself to move away from the restricted subject with which I have been engaged, it would be easy to find practical problems of the greatest importance which hinge on these questions. If we are to give appropriate and effective advice when they are under consideration, we must have the grounds of our action well prepared. There is no need, however, to depart from the restriction that I have imposed on myself. If we are considering only the state of learning, the present relations between its two wings constitute not an invitation but a peremptory summons to inquiry. That inquiry is in progress, and it is for us as an Academy to foster it as best we can.