

Universities and Their Function*

by
Alfred North Whitehead

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I

The expansion of universities is one marked feature of the social life in the present age. All countries have shared in this movement, but more especially America, which thereby occupies a position of honour. It is, however, possible to be overwhelmed even by the gifts of good fortune; and this growth of universities, in number of institutions, in size, and in internal complexity of organization, discloses some danger of destroying the very sources of their usefulness, in the absence of a widespread understanding of the primary functions which universities should perform in the service of a nation. These remarks, as to the necessity for reconsideration of the function of universities, apply to all the more developed countries. They are only more especially applicable to America, because this country has taken the lead in a development which, under wise guidance, may prove to be one of the most fortunate forward steps which civilisation has yet taken.

This article will only deal with the most general principles, though the special problems of the various departments in any university are, of course, innumerable. But generalities require illustration, and for this purpose I choose the business school of a university. This choice is dictated by the fact that business schools represent one of the newer developments of university activity. They are also more particularly relevant to the dominant social activities of modern nations, and for that reason are good examples of the way in which the national life should be affected by the activities of its universities. Also at Harvard, where I have the honour to hold office, the new foundation of a business school on a scale amounting to magnificence has just reached its completion.

There is a certain novelty in the provision of such a school of training, on this scale of magnitude, in one of the few leading universities of the world. It marks the culmination of a movement which for many years past has introduced analogous departments throughout American universities. This is a new fact in the university world; and it alone would justify some general reflections upon the purpose of a university education, and upon the proved importance of that purpose for the welfare of the social organism.

The novelty of business schools must not be exaggerated. At no time have universities been restricted to pure abstract learning. The University of Salerno in Italy, the earliest of European universities, was devoted to medicine. In England, at Cambridge, in the year 1316, a college was founded for the special purpose of providing 'clerks for the King's service.' Universities have trained clergy, medical men, lawyers, engineers. Business is now a highly intellectualized vocation, so it well fits into the series. There is, however, this novelty: the curriculum suitable for a business school, and the various modes of activity of such a school, are still in the experimental stage. Hence the peculiar importance of recurrence to general principles in connection with the moulding of these schools. It would, however, be an act of presumption on my part if I were to enter upon any consideration of details, or even upon types of policy

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affecting the balance of the whole training. Upon such questions I have no special knowledge, and therefore have no word of advice.

II

The universities are schools of education, and schools of research. But the primary reason for their existence is not to be found either in the mere knowledge conveyed to the students or in the mere opportunities for research afforded to the members of the faculty.

Both these functions could be performed at a cheaper rate, apart from these very expensive institutions. Books are cheap, and the system of apprenticeship is well understood. So far as the mere imparting of information is concerned, no university has had any justification for existence since the popularisation of printing in the fifteenth century. Yet the chief impetus to the foundation of universities came after that date, and in more recent times has even increased.

The justification for a university is that it preserves the connection between knowledge and the zest of life, by uniting the young and the old in the imaginative consideration of learning. The university imparts information, but it imparts it imaginatively. At least, this is the function which it should perform for society. A university which fails in this respect has no reason for existence. This atmosphere of excitement, arising from imaginative consideration, transforms knowledge. A fact is no longer a bare fact: it is invested with all its possibilities. It is no longer a burden on the memory: it is energising as the poet of our dreams, and as the architect of our purposes.

Imagination is not to be divorced from the facts: it is a way of illuminating the facts. It works by eliciting the general principles which apply to the facts, as they exist, and then by an intellectual survey of alternative possibilities which are consistent with those principles. It enables men to construct an intellectual vision of a new world, and it preserves the zest of life by the suggestion of satisfying purposes.

Youth is imaginative, and if the imagination be strengthened by discipline this energy of imagination can in great measure be preserved through life. The tragedy of the world is that those who are imaginative have but slight experience, and those who are experienced have feeble imaginations. Fools act on imagination without knowledge; pedants act on knowledge without imagination. The task of a university is to weld together imagination and experience.

The initial discipline of imagination in its period of youthful vigour requires that there be no responsibility for immediate action. The habit of unbiased thought, whereby the ideal variety of exemplification is discerned in its derivation from general principles, cannot be acquired when there is the daily task of preserving a concrete organisation. You must be free to think rightly and wrongly, and free to appreciate the variousness of the universe undisturbed by its perils.

These reflections upon the general functions of a university can be at once translated in terms of the particular functions of a business school. We need not flinch from the assertion that the main function of such a school is to produce men with a greater zest for business. It is a libel upon human nature to conceive that zest for life is the product of pedestrian purposes directed toward the narrow routine of material comforts. Mankind by its pioneering instinct,

and in a hundred other ways, proclaims the falsehood of that lie.

In the modern complex social organism, the adventure of life cannot be disjoined from intellectual adventure. Amid simpler circumstances, the pioneer can follow the urge of his instinct, directed toward the scene of his vision from the mountain top. But in the complex organisations of modern business the intellectual adventure of analysis, and of imaginative reconstruction, must precede any successful reorganisation. In a simpler world, business relations were simpler, being based on the immediate contact of man with man and on immediate confrontation with all relevant material circumstances. Today business organisation requires an imaginative grasp of the psychologies of populations engaged in differing modes of occupation; of populations scattered through cities, through mountains, through plains; of populations on the ocean, and of populations in mines, and of populations in forests. It requires an imaginative grasp of conditions in the tropics, and of conditions in temperate zones. It requires an imaginative grasp of the interlocking interests of great organisations, and of the reactions of the whole complex to any change in one of its elements. It requires an imaginative understanding of laws of political economy, not merely in the abstract, but also with the power to construe them in terms of the particular circumstances of a concrete business. It requires some knowledge of the habits of government, and of the variations of those habits under diverse conditions. It requires an imaginative vision of the binding forces of any human organisation, a sympathetic vision of the limits of human nature and of the conditions which evoke loyalty of service. It requires some knowledge of the laws of health, and of the laws of fatigue, and of the conditions for sustained reliability. It requires an imaginative understanding of the social effects of the conditions of factories. It requires a sufficient conception of the role of applied science in modern society. It requires that discipline of character which can say 'yes' and 'no' to other men, not by reason of blind obstinacy, but with firmness derived from a conscious evaluation of relevant alternatives.

The universities have trained the intellectual pioneers of our civilisation - the priests, the lawyers, the statesmen, the doctors, the men of science, and the men of letters. They have been the home of those ideals which lead men to confront the confusion of their present times. The Pilgrim Fathers left England to found a state of society according to the ideals of their religious faith; and one of their earlier acts was the foundation of Harvard University in Cambridge, named after that ancient mother of ideals in England, to which so many of them owed their training. The conduct of business now requires intellectual imagination of the same type as that which in former times has mainly passed into those other occupations; and the universities are the organisations which have supplied this type of mentality for the service of the progress of the European races.

In early mediaeval history the origin of universities was obscure and almost unnoticed. They were a gradual and natural growth. But their existence is the reason for the sustained, rapid progressiveness of European life in so many fields of activity. By their agency the adventure of action met the adventure of thought. It would not have been possible antecedently to have divined that such organisations would have been successful. Even now, amid the imperfections of all things human, it is sometimes difficult to understand how they succeed in their work. Of course there is much failure in the work of universities. But, if we take a broad view of history, their success has been remarkable and almost uniform. The cultural histories of Italy, of France, of Germany, of Holland, of Scotland, of England, of the United States, bear witness to the influence of

universities. By 'cultural history' I am not chiefly thinking of the lives of scholars; I mean the energising of the lives of those men who gave to France, to Germany, and to other countries that impress of types of human achievement which, by their addition to the zest of life, form the foundation of our patriotism. We love to be members of a society which can do those things.

There is one great difficulty which hampers all the higher types of human endeavour. In modern times this difficulty has even increased in its possibilities for evil. In any large organisation the younger men, who are novices, must be set to jobs which consist in carrying out fixed duties in obedience to orders. No president of a large corporation meets his youngest employee at his office door with the offer of the most responsible job which the work of that corporation includes. The young men are set to work at a fixed routine, and only occasionally even see the president as he passes in and out of the building. Such work is a great discipline. It imparts knowledge, and it produces reliability of character; also it is the only work for which the young men, in that novice stage, are fit, and it is the work for which they are hired. There can be no criticism of the custom, but there may be an unfortunate effect prolonged routine work dulls the imagination.

The result is that qualities essential at a later stage of a career are apt to be stamped out in an earlier stage. This is only an instance of the more general fact, that necessary technical excellence can only be acquired by a training which is apt to damage those energies of mind which should direct the technical skill. This is the key fact in education, and the reason for most of its difficulties.

The way in which a university should function in the preparation for an intellectual career, such as modern business or one of the older professions, is by promoting the imaginative consideration of the various general principles underlying that career. Its students thus pass into their period of technical apprenticeship with their imaginations already practised in connecting details with general principles. The routine then receives its meaning, and also illuminates the principles which give it that meaning. Hence, instead of a drudgery issuing in a blind rule of thumb, the properly trained man has some hope of obtaining an imagination disciplined by detailed facts and by necessary habits.

Thus the proper function of a university is the imaginative acquisition of knowledge. Apart from this importance of the imagination, there is no reason why business men, and other professional men, should not pick up their facts bit by bit as they want them for particular occasions. A university is imaginative or it is nothing - at least nothing useful.

III

Imagination is a contagious disease. It cannot be measured by the yard, or weighed by the pound, and then delivered to the students by members of the faculty. It can only be communicated by a faculty whose members themselves wear their learning with imagination. In saying this, I am only repeating one of the oldest of observations. More than two thousand years ago the ancients symbolised learning by a torch passing from hand to hand down the generations. That lighted torch is the imagination of which I speak. The whole art in the organisation of a university is the provision of a faculty whose learning is lighted up with imagination. This is the problem of problems in university education; and unless we are careful the recent vast extension of universities in number of students and in variety of activities - of which we are

so justly proud - will fail in producing its proper results, by the mishandling of this problem.

The combination of imagination and learning normally requires some leisure, freedom from restraint, freedom from harassing worry, some variety of experiences, and the stimulation of other minds diverse in opinion and diverse in equipment. Also there is required the excitement of curiosity, and the self-confidence derived from pride in the achievements of the surrounding society in procuring the advance of knowledge. Imagination cannot be acquired once and for all, and then kept indefinitely in an ice box to be produced periodically in stated quantities. The learned and imaginative life is a way of living, and is not an article of commerce.

It is in respect to the provision and utilisation of these conditions for an efficient faculty that the two functions of education and research meet together in a university. Do you want your teachers to be imaginative? Then encourage them to research. Do you want your researchers to be imaginative? Then bring them into intellectual sympathy with the young at the most eager, imaginative period of life, when intellects are just entering upon their mature discipline. Make your researchers explain themselves to active minds, plastic and with the world before them; make your young students crown their period of intellectual acquisition by some contact with minds gifted with experience of intellectual adventure. Education is discipline for the adventure of life; research is intellectual adventure; and the universities should be homes of adventure shared in common by young and old. For successful education there must always be a certain freshness in the knowledge dealt with. It must either be new in itself or it must be invested with some novelty of application to the new world of new times. Knowledge does not keep any better than fish. You may be dealing with knowledge of the old species, with some old truth; but somehow or other it must come to the students, as it were, just drawn out of the sea and with the freshness of its immediate importance.

It is the function of the scholar to evoke into life wisdom and beauty which, apart from his magic, would remain lost in the past. A progressive society depends upon its inclusion of three groupsscholars, discoverers, inventors. Its progress also depends upon the fact that its educated masses are composed of members each with a tinge of scholarship, a tinge of discovery, and a tinge of invention. I am here using the term 'discovery' to mean the progress of knowledge in respect to truths of some high generality, and the term 'invention' to mean the progress of knowledge in respect to the application of general truths in particular ways subservient to present needs. It is evident that these three groups merge into each other, and also that men engaged in practical affairs are properly to be called inventors so far as they contribute to the progress of society. But any one individual has his own limitation of function, and his own peculiar needs. What is important for a nation is that there shall be a very close relation between all types of its progressive elements, so that the study may influence the market place, and the market place the study. Universities are the chief agencies for this fusion of progressive activities into an effective instrument of progress. Of course they are not the only agencies, but it is a fact that today the progressive nations are those in which universities flourish.

It must not be supposed that the output of a university in the form of original ideas is solely to be measured by printed papers and books labeled with the names of their authors. Mankind is as individual in its mode of output as in the substance of its thoughts. For some of the most fertile minds composition in

writing, or in a form reducible to writing, seems to be an impossibility. In every faculty you will find that some of the more brilliant teachers are not among those who publish. Their originality requires for its expression direct intercourse with their pupils in the form of lectures, or of personal discussion. Such men exercise an immense influence; and yet, after the generation of their pupils has passed away, they sleep among the innumerable unthanked benefactors of humanity. Fortunately, one of them is immortal - Socrates.

Thus it would be the greatest mistake to estimate the value of each member of a faculty by the printed work signed with his name. There is at the present day some tendency to fall into this error; and an emphatic protest is necessary against an attitude on the part of authorities which is damaging to efficiency and unjust to unselfish zeal.

But, when all such allowances have been made, one good test for the general efficiency of a faculty is that as a whole it shall be producing in published form its quota of contributions of thought. Such a quota is to be estimated in weight of thought, and not in number of words.

This survey shows that the management of a university faculty has no analogy to that of a business organisation. The public opinion of the faculty, and a common zeal for the purposes of the university, form the only effective safeguards for the high level of university work. The faculty should be a band of scholars, stimulating each other, and freely determining their various activities. You can secure certain formal requirements, that lectures are given at stated times and that instructors and students are in attendance. But the heart of the matter lies beyond all regulation.

The question of justice to the teachers has very little to do with the case. It is perfectly just to hire a man to perform any legal services under any legal conditions as to times and salary. No one need accept the post unless he so desires.

The sole question is, What sort of conditions will produce the type of faculty which will run a successful university? The danger is that it is quite easy to produce a faculty entirely unfit - a faculty of very efficient pedants and dullards. The general public will only detect the difference after the university has stunted the promise of youth for scores of years.

The modern university system in the great democratic countries will only be successful if the ultimate authorities exercise singular restraint, so as to remember that universities cannot be dealt with according to the rules and policies which apply to the familiar business corporations. Business schools are no exception to this law of university life. There is really nothing to add to what the presidents of many American universities have recently said in public on this topic. But whether the effective portion of the general public, in America or other countries, will follow their advice appears to be doubtful. The whole point of a university, on its educational side, is to bring the young under the intellectual influence of a band of imaginative scholars. There can be no escape from proper attention to the conditions which - as experience has shown - will produce such a band.

IV

The two premier universities of Europe, in age and in dignity, are the University of Paris and the University of Oxford. I will speak of my own

country because I know it best. The University of Oxford may have sinned in many ways. But, for all her deficiencies, she has throughout the ages preserved one supreme merit, beside which all failures in detail are as dust in the balance: for century after century, throughout the long course of her existence, she has produced bands of scholars who treated learning imaginatively. For that service alone, no one who loves culture can think of her without emotion.

But it is quite unnecessary for me to cross the ocean for my examples. The author of the Declaration of Independence, Mr. Jefferson, has some claim to be the greatest American. The perfection of his various achievements certainly places him among the few great men of all ages. He founded a university, and devoted one side of his complex genius to placing that university amid every circumstance which could stimulate the imagination - beauty of buildings, of situation, and every other stimulation of equipment and organisation.

There are many other universities in America which can point my moral, but my final example shall be Harvard - the representative university of the Puritan movement. The New England Puritans of the seventeenth and eighteenth centuries were the most intensely imaginative people, restrained in their outward expression, and fearful of symbolism by physical beauty, but, as it were, racked with the intensity of spiritual truths intellectually imagined. The Puritan faculties of those centuries must have been imaginative indeed, and they produced great men whose names have gone round the world. In later times Puritanism softened, and, in the golden age of literary New England, Emerson, Lowell, and Longfellow set their mark upon Harvard. The modern scientific age then gradually supervenes, and again in William James we find the typical imaginative scholar.

Today business comes to Harvard; and the gift which the University has to offer is the old one of imagination, the lighted torch which passes from hand to hand. It is a dangerous gift, which has started many a conflagration. If we are timid as to that danger, the proper course is to shut down our universities. Imagination is a gift which has often been associated with great commercial peoples - with Greece, with Florence, with Venice, with the learning of Holland, and with the poetry of England. Commerce and imagination thrive together. It is a gift which all must pray for their country who desire for it that abiding greatness achieved by Athens: -

Her citizens, imperial spirits,
Rule the present from the past.

For American education no smaller ideal can suffice.

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