

UNIVERSITY EXTENSION ADDRESSES

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ASPECTS OF MODERN STUDY

UNIVERSITY EXTENSION ADDRESSES



David Hutcheson.

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ASPECTS

OF

MODERN STUDY

BEING

UNIVERSITY EXTENSION ADDRESSES

BY LORD PLAYFAIR, CANON BROWNE, MR. GOSCHEN,
MR. JOHN MORLEY, SIR JAMES PAGET,
PROFESSOR MAX MÜLLER, THE DUKE OF ARGYLL,
THE BISHOP OF DURHAM, AND
PROFESSOR JEBB

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PREFACE

THE Addresses included in this volume were delivered to the students of the London Society for the Extension of University Teaching at the Annual Meetings held in the Mansion House from year to year by the courtesy of the Lord Mayor. These gatherings were first instituted in 1886, the tenth year of the Society's existence. By means of them the Council of the London Society sought to attain two chief ends. On the one hand they hoped through the medium of Addresses by men of distinction to hold before the students a high ideal of educational purpose, and on the other to promote and foster a sense of corporate educational life among the workers from the various Extension Centres in different parts of London. The importance of these objects will be readily acknowledged. Men and women desirous of carrying on studies in which they are interested, but unable to give their whole time to education, find at the University Extension Lectures stimulus, guidance, and oppor-

tunities for intellectual training which the conditions of adult life render it impossible for them to seek at a College. The Annual Meetings have brought these scattered workers together, and have helped them to realise that they are taking part in a great movement. That the opportunity of hearing the Addresses was highly valued could not be doubted by any one who witnessed the crowded state of the hall on each occasion, and the Council hope by the publication of this volume to extend the inspiring and helpful influence of the Addresses to a larger audience and over a wider area.

The growth and development of the University Extension movement, since it was inaugurated by the University of Cambridge twenty-one years ago, has been remarkable, and its history is peculiarly interesting and instructive. The purpose of the originators was to promote the development of student life side by side with business life—to create a new type of students, carrying on into mature years their higher education concurrently with the occupations of everyday life. The members of the London Society are able to recall with satisfaction that the foundation of that Society in 1876 was the first step taken outside Cambridge to follow the lead of that University in this new sphere of educational activity. Two years

later similar work was undertaken by the University of Oxford, and since then other Universities in the United Kingdom, notably Victoria, have followed in the same path. England is now covered with a network of Centres, and something has been done in the same direction in other parts of the kingdom. The movement has been introduced into English-speaking countries all over the world, and has aroused great interest on the Continent of Europe, where schemes are being started on similar lines. This rapid progress proves that the system is well adapted to meet certain pressing educational needs of the time. At the present moment educational interest in London gathers largely around the proposed Teaching University. Had London possessed a Teaching University in 1876 the formation of the London Society would, in all probability, have been unnecessary, as the work would doubtless have been undertaken by the University itself. As it was the University of London did all that was possible under its constitution by consenting, in conjunction with the Universities of Oxford and Cambridge, to appoint a Universities' Joint Board to co-operate with the Council of the Society in carrying on the work. The Council look to the eventual establishment of a University which will have power to take up and carry on into higher stages of efficiency

and perfection this work, the necessity for which their operations during eighteen years have abundantly proved. They feel that the results of the educational experiments of the last two decades in the extension of University Teaching amply justify a belief in the possibility of an active trained intellectual life for all who are willing to pursue it, without question of age, social position, or condition of life, and they regard the development of adequate educational opportunities for evening students as a matter of prime national importance.

The Addresses, with the exception of those by Lord Playfair and Canon Browne, are arranged in chronological order. These two, unlike the others, deal with the University Extension movement itself rather than with special aspects of study, and it has, therefore, seemed natural to place them together at the beginning of the volume.

R. D. ROBERTS,

*Secretary of the London Society for the
Extension of University Teaching.*

CHARTERHOUSE, LONDON, E.C.

4th June 1894.

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THE EVOLUTION OF UNIVERSITY EXTENSION AS A PART OF POPULAR EDUCATION

BY THE RIGHT HON. LORD PLAYFAIR, K.C.B., LL.D., F.R.S.

1894

RECENTLY the London University Commission, of which I was a member, has made its report, and during its sitting we received much evidence in favour of the University Extension Scheme, as well as some evidence hostile to it. I think the opposition arose from a misunderstanding of its origin and purposes, and upon these I should like to address you. The extension of University knowledge and educational methods to the people who are unable to attend University courses during the day, is one of the processes of evolution of popular education which has been trying to organise itself for about a century.

Universities in former times used to be more largely attended than now. Bologna University was said to be attended by 20,000 students, and Paris and Oxford by 30,000. These numbers are open to doubt, though, as there were few grammar schools, and

as students entered at ten and eleven years of age, the Universities were no doubt more frequented than they are now, and by a poorer class of students, who often begged their way to the University from monastery to monastery. Chaucer alludes to this when he says :—

Busily gan for the souls to pray
Of them that gave him wherewith to scolay.

Education, in the sense we are now considering it, as attainable by the people at large in their hours of leisure after their day's work, is the product of the present century. Let us consider the conditions under which the demands for it arose.

Up to the last quarter of the eighteenth century the learned class and the working class were separated by a high impassable wall, because each spoke in a language that the other could not understand. For about two thousand years the learned class spoke, thought, and talked in Latin, and for about two centuries Greek had been raised as a second wall of separation between the learned and the people. No doubt the people were creating knowledge of another kind by enlarging their conception of things, while the learned were dealing with literature and philosophy through words. I do not allude to the early days when Rome and Greece spoke their own vernacular, and when their writers and philosophers largely recruited themselves from the people. The learned class were then the sons of citizens, and were in possession of the accumulated experiences of the people. I refer to a much later period, after the dark ages, when the light gradually illuminating the darkness was the

borrowed light of Rome and Greece. It was then that the learned linked themselves to the past, and separated themselves from the present. Then it was that they adopted the ancient languages as the expression of their thoughts and teaching, while the people went on their way without caring for the pedants whose very language was incomprehensible to them.

Among the people the industries were growing by experience, and modern science was being evolved as an outcome of their enlarged conceptions. Working men then made journeys to enlarge these experiences, and the memory of the old habit still survives in the industries under such familiar names as "journeyman carpenter," "journeyman blacksmith," and so on; for the tyro was a mere apprentice until he graduated to his full position as a working man by an education not got at school but obtained in journeys, which enlarged his experiences and knowledge. When I was a student in Germany in 1838, I recollect constantly meeting parties of these journeymen on the way from one town to another. An old German saying, freely translated, explains how technical education was attained in this way:—

Who shall pupil be? Every one.

Who shall craftsman be? Who good work has done.

Who shall master be? He whose thought has won.

By the end of the fifteenth century most of our present industries were fairly established in this way. During that century the printing press was introduced, and knowledge was ultimately widely spread as well as conserved. In the sixteenth century newspapers were published in the vernacular, and the people got a

powerful means of recording their mental conceptions, which were chiefly those of developing science. In England, however, newspapers did not fully establish themselves till the period of the Civil war, and then they were poor in quality. They scarcely came into the life of the nation till the reign of Queen Anne, during Marlborough's victories. The learned class still adhered to their Latin and Greek, and kept themselves outside these great movements. Latin was, in fact, the universal language for learning, being a sort of glorified volapuk. Sometimes a treatise was written in the vernacular, as when Bacon wrote in English *The Advancement of Learning*, though he asked his friend Dr. Playfair to translate it into Latin, because, he says, "The privateness of the language, wherein it is written, limits my readers," and its translation into Latin "would give a second birth of that work." So also when Bacon sends his *De Augmentis Scientiarum* to the Prince of Wales, he says it is in Latin, "as a book which will live and be a citizen of the world, as English books are not." The vernacular was, however, being introduced into our schools, though it was not generally used till the close of the eighteenth century. Learned papers and discourses were now published in English, although at first they were duplicated into Latin. A general use of the vernacular made a common road on which both the learned classes and the working classes could again travel, as they had done in the grand old days of Greece and Rome, when Plato and Aristotle and Cicero and Horace spoke and wrote and thought in the common languages of the people.

Now began the desire for popular education, of which University Extension is one of the signs. Let

us see how that form of popular education became evolved in this movement among the people, who were shut out from the possibility of attending colleges of learning. Working men know that one of their two hands must always be employed in earning their daily bread, but they have another hand with which they could work for their own improvement, and for that of the community, if they only had the opportunity and knew how to employ it. Before the age of printing books were necessarily costly, so the ancient method of obtaining knowledge was to attend public lectures or discourses, and they became the chief mode of higher education. It was so in classical times, when people flocked to the market-place in Athens to hear Socrates, and to the groves of Academus to hear Plato, or joined the Peripatetics in the walks of the Lyceum to listen to the scientific teaching of Aristotle. So it continued in every country where learning was cared for at all, and poor students went, begging on the way, to listen to lectures by Abelard in France, Chrysoloras in Italy, or Erasmus in Oxford and then at Cambridge. When printing presses multiplied books, knowledge could be acquired by those who could read, and was no longer confined to the few who could discourse. Public libraries for the people are, however, only inventions of our own day, and at the beginning of this century did not exist.

The people readily co-operated with Birkbeck and others in founding institutes of their own where they could read and hear lectures. One of the earliest of these exists in the City under the well known name of the "Birkbeck Institute," which has now a new lease of active life as a systematic school of science and

commerce. The people in the early part of the century were only groping in the dark for the kind of higher education which they desired. The Mechanics' Institutes supplemented small and defective libraries by single and unconnected lectures. In fact, the associated members of these institutes scarcely knew what they wanted. Some joined the institutes for amusement, some for instruction. Both were proper objects of desire, but were difficult to amalgamate, so a strange mixture was made, often not very wisely, by the inexperienced managers of the New Mechanics' Institutes. One of the most prosperous of them asked me to give a single lecture on Chemistry, in the year 1846, and sent me its programme for the preceding year. It was as follows: "Wit and Humour, with Comic Songs—Women Treated in a Novel Manner—Legerdemain and Spirit-rapping—The Devil (with illustrations)—The Heavenly Bodies and the Stellar System—Palestine and the Holy Land—Speeches by Eminent Friends of Education, interspersed with Music, to be followed by a Ball. Price to the whole, 2s. 6d. Refreshments in an Anteroom." Compare your programme of sound work with this motley assemblage of Professors, Ventriloquists, Conjurors, and Musicians, and you will see how much the scheme of University Extension has moulded the demand for knowledge among the people, and turned it into channels which will refresh and irrigate the various districts through which it passes. The Mechanics' Institutions where they still exist have altered themselves into systematic schools, either scientific, technical, or artistic, but they have still left outside the people who have not been trained to use schools.

The universities associated to supply this want. In the universities there are always a number of zealous graduates who desire to extend to others the knowledge possessed by themselves. They are animated by the spirit of the famous Loup de Ferrieres, who, a thousand years ago, wrote to Charles the Bold : "I desire to teach what I have learned and am daily learning." This spirit led to the scheme of University Extension. Gradually, not yet completely, but surely, the people who demand your courses of lectures appreciate and follow them because they are systematic and in proper sequence ; and because the lecturer also becomes the tutor to each student who really desires to understand and profit by the subject taught. In ordinary popular lectures the lecturer treats his audience as a mass, throwing his information broadcast over it, ignorant as to where it may fall, and careless as to whether the seed falls on fertile soil or on stony places, where it can take no root. When the lecturer acts also as a tutor he looks upon his audience as individuals, he drills his seed into productive soil, taking care that the ground is prepared to receive it, and that each seed gets its proper proportion of food-giving manure. The minds of the teacher and the taught get into an intellectual grapple, and as the former should be the stronger man, he is enabled to drag the mind of the student from the dark holes in which it may lurk into the broad light of day. In a college or technical school a tutorial system ought always to be combined with the lectures. Under your system of peripatetic lectures it is more difficult of application, but you do much by the weekly exercises and final examination as well as by making the courses consequential in series.

The examiners for the certificates, who are not the lecturers, testify by their University experience to the good results which are attained.

To understand the object of the promoters of University Extension it is important neither to exaggerate these results nor to depreciate the value of the system. The main purpose is not to educate the masses, but to permeate them with the desire for intellectual improvement, and to show them methods by which they can attain this desire. Every man, who acquires a taste for learning and is imbued with the desire to acquire more of it, becomes more valuable as a citizen, because he is more intelligent and perceptive. As Shakespeare says :—

Learning is but an adjunct to ourself . . .
It adds a precious seeing to the eye.

It is this addition of “a precious seeing to the eye” which produces progress in science. Of the five gateways of knowledge, the “eye gate” is not opened indifferently to all. The range of vision of the bat and of the eagle is very different. The most familiar objects to man, like air and water, are nothing more to the untutored intellect of man than the primrose was to Peter Bell :—

A primrose by a river's brim
A yellow primrose was to him,
And it was nothing more.

Before the mind of man learns to question Nature, he is apt to look for the explanations of phenomena to the intellectual conceptions of his own untutored mind. When he knows how to put an experimental question

to Nature he is on the high road to knowledge—*prudens quaestio dimidium scientiae est.*

Thales, who flourished in the seventh century before Christ, was among the first philosophers to speculate upon the constitution of the universe. He thought everything was made out of water. The sun dipped in the evening below the western wave, and rose out of the ocean in the east mightily refreshed by its huge drink—so the sun was made out of water. Water, as the river Nile, overflowed the land of Egypt and crops grew in luxuriance—so plants were made out of water. The ocean, when it was stormy, was engaged in the manufacture of earth, and the proof is that after a storm new sand and pebbles are heaped on the shore. The real nature of water was only discovered at the end of last century.

How little our ancestors knew about air, and how little we yet know about it in the nineteenth century! Yet, if mere observation could suffice to know a thing, air should be better understood than anything in the world. When the first man drew his first breath, he began his familiarity with air. In each phase of his life man meets it at every turn. It fans him with gentle breezes, and it buffets him with storms. It is never absent from every act of his existence, and the last act of his life is his inability to respire it. The first philosopher who studied air in a scientific way was Anaximenes. He lived 548 years before Christ, and men have been studying air ever since, and have laboriously brought up our knowledge to our present position. Aristotle brought his shrewd powers of observation upon air, and established that it was a material and not a spirit. A wonderful Saracen, called Alhazen, found that it had

weight, and showed that it was heavier at the bottom of a mountain than at its top. Galileo again took up the study of air in 1630, and made important discoveries which led Torricelli and others to the discovery of the barometer. It is scarcely more than a century since mankind gave up air as an element, and it is only during my lifetime that we have been taught the true chemical nature of air, and that its relations to the great phenomena of vegetable and animal life have been explained. When I was first a student of chemistry, air consisted of nitrogen and oxygen with watery vapour. During my life carbonic acid, ammonia, nitric acid, ozone, and the wide range of bacteria and like organisms have been discovered. We now know that all the foulness of the living and the products of the dead pass into air, and are changed into the food of plants, so that the great abounding atmosphere becomes the grave of organic death and the cradle of organic life. Plants and animals mutually feed on each other, and the death and dissolution of one generation is needful for the growth of a succeeding one.

You see how slowly intellectual conceptions of the most common object gather round it. When we give a lecture to an ignorant audience on such subjects as air and water, we treat them from the platform of our own times—the nineteenth century. But our audience is not yet on that plane. In my old professorial days, in lecturing to classes of working men, I sometimes put myself on the platform on which Anaximenes stood 548 years before Christ, and argued as he did for the theory of the nature of air, and then mounted the ladders, taking my hearers with me, from platform

to platform of discovery, till I reached that of the present day. This historical mode of illustration gave the working men a better notion of the methods of scientific discovery, and taught them more completely that science consists of conceptions obtained by a slow but steady questioning of Nature. In ancient times there was little science, because philosophers put the questions to their own minds and not to Nature. The rapid progress of science in recent times is due to our questioning Nature by means of experiment. This is the true foundation of science, as well expressed by Wordsworth :—

. . . To the solid ground
Of Nature trusts the mind which builds for eye.

This need of experimental inquiry does not apply to mathematics, which was a product of the opening of Greek civilisation, and the achievements of the Greek geometers, Euclid, Archimedes, and Apollonius are still admirable at the present day.

If the untutored senses be sufficient to appreciate and understand what you see with your own eyes, and hear with your own ears, it would not have required many thousand years for mankind to acquire our present imperfect knowledge about air or water. In explaining to our students the knowledge of to-day, I think it would often be useful to show how it has been attained, and how our crude faculties have become tutored faculties by close thinking, observation, and experiment upon the most familiar objects about us. Theories of the past have fallen as the leaves of trees fall, but while they existed they drew nutriment to the parent stem of knowledge. The theory of

to-day is the error of to-morrow. Error in science is nothing but a shadow cast by the strong light of truth. Theories, as they arise, are an absolute necessity for the progress of science, because they collect in a common focus all the light which is shed upon a subject at a particular period. The descriptions of and arguments for the old theories I found very useful as ladders let down from the nineteenth century platform, which enabled my uneducated audience to mount to it by graduated steps, until they came to the same level of the science which I was trying to expound to them.

The world is still young, and science is never old. It is sheer vanity for any generation to suppose that their state of knowledge represents the final triumph of truth. I think it is always useful in educating in modern science to show how much we owe to our ancestors by their laborious efforts to build it up. We have inherited so much from the past. Roger Bacon, writing so long ago as 1267, said: "The ancients have committed all the more errors just because they are the ancients, for in matters of learning *the youngest are in reality the oldest*; modern generations ought to surpass their predecessors because they inherit their labours." This thought, three centuries later, Francis Bacon put into his famous apothegm—*Antiquitas Seculi, Juventus Mundi*.

It is no small object in view that your purpose is to permeate the mass of people with the desire for knowledge. It is chiefly among them that great discoverers in science and great inventors in industry arise. I would refer you, as an illustration, to the past discoverers who have adorned the lecture table of the Royal Institution in Albemarle Street. With

scarcely an exception they have sprung directly from the people. The original founder was Benjamin Thompson, afterwards Count Rumford, a provincial schoolmaster from New England; and the Institution has had as successive professors Sir Humphry Davy, the son of a wood-carver; Young, illustrious in optics, the son, I think, of a yeoman; Faraday, a news-boy; and Tyndall, who was of humble origin. All of these men sprang from the people. Among inventors this origin from the people is still more marked. Watt was an instrument maker; Wheatstone, who invented our telegraphs, was a maker of musical instruments; and Bell, who added the telephone, was a teacher of deaf mutes; Stephenson, the inventor of locomotives, an engine-tender at a colliery; Arkwright, who revolutionised the cotton industry, was a barber. These instances might be multiplied indefinitely both from modern and ancient history.

The great humanising movements of the world have sprung from the people. The Founder of our religion did not disdain to be called the son of Joseph the carpenter, and He took His disciples from among the working men around Him. Paul the tentmaker and Peter the fisherman found time to earn their daily bread and to diffuse the religion of Christ. The growth of philosophy in Greece depended upon men who were using one hand to win their daily bread, and the other to mould humanity. Socrates was a sculptor; Plato and Zeno were actively engaged in commerce; Aristotle was the son of a physician. They founded schools of thought, but they themselves were the products of Athens and Corinth when they were active seats of industrial activity.

I hope I have made myself intelligible when I argue that the University Extension Movement is doing work of its own kind most valuable, not as an education of the people but as a means of permeating the people with a desire to be educated, and by giving them methods and subjects which they can use in continuing their education. Your opponents still object to the need of doing this, because they quote cases, such as I have mentioned, like Faraday, Watt, and Stephenson, where men of the people, even in the absence of schools, educated themselves without aid from others and became great discoverers; so they say it is much more easy now to do likewise when technical schools are covering the country. I have spent a large portion of my life in helping to found these technical schools, and, therefore, I fully appreciate their importance, but they do not even touch the ground covered by your movement. Such schools look to the education of the man for his daily work, and only give what the Germans call *brodtstudien*, while the University Extension Movement professes to give mental culture, or what the Germans might call *verstandniss-studien*. No doubt one of your triumphs will be that the University Extension Scheme will tend largely to feed schools of science and technical schools with students incited to learn through your permeating influence in creating a taste for knowledge. This is as it should be.

During my life I have enjoyed the friendship of many men who have risen by their own great talents, such as Dalton, Faraday, Stephenson, Wheatstone, and Livingstone. I knew the great African discoverer, when he rested his book on a spinning-jenny, snatch-

ing sentence after sentence as he passed it at work ; and I attended the evening classes with him in Glasgow, and saw him pay the pennies he had saved during the day as a cotton-spinner. As I am recalling old memories, I may say that three companions studied together in those days. One was James Young, a carpenter ; Livingstone, a cotton-spinner ; and myself, the son of a physician. Young the carpenter established a new industry, and became very rich. His purse was always open to Livingstone for his African explorations ; and, although he would never acknowledge it, my election committees never lacked funds from some mysterious donor, who I always believed was my old friend, for the contributions ceased at his death. Were my old friends now alive, I would call them all as witnesses as to how much trouble and suffering would have been saved to them, had they been able when young to enjoy the advantages which you now offer to the youth of this country by giving them the materials and methods of education. It is quite true that men of genius will cut out steps for themselves in the toilsome ascent of knowledge. The mistake of the argument is obvious. All the dwellers in a plain do not surmount the mountain which frowns upon them at the end of the valley. A few daring spirits may reach the summit unaided and pass into the world beyond, but the great mass of men remain in the lowlands where they were born. We can induce many of these to make excursions which will brighten their existence, by making roads and showing them how to use the roads. Perchance in doing so we may come upon a genius and put him on his way, and wish him God-speed ! The case

should not be argued by contrasting a heaven-born talent with ordinary ability. All systems of education try to draw out the mental abilities of the scholar, but they do not profess to give the gifts of God, or to create special abilities in man. Such great men as I have mentioned are discoverers of new truths in science, and the bulk of mankind must be content to live on a lower plane, but their life is made the happier, more graceful and dignified, by helping them to acquire some of that knowledge which shows them how the world has advanced and how society has been improved by the advances made in science, literature, and philosophy.

In our own time science has been the great civilising agency. Within my own memory, I have seen the origin of five inventions, which have had more profound effect than revolutions in altering the condition of kingdoms and nations throughout the world. I allude to steam locomotion, telegraphy, telephony, photography, electric lighting, and electric locomotion. The discoverers in science are the artisans of civilisation, their laboratories are the workshops, and their instruments of precision and experiment are the tools with which they perform their world labour. By the system which you pursue the people are made to take an intelligent interest in these modes of civilisation. The most intelligent nation will in future be the greatest nation, and your work is do your part in permeating the people with this general intelligence, which is so necessary for their prosperity in the competition of the world.

THE FUTURE OF UNIVERSITY EXTENSION IN LONDON

✓
BY THE REV. CANON BROWNE

Browne (George Fowler) of Bristol

1892

MY subject is, "The Future of University Extension in London." Before we come to the future, and before we deal specially with London, let us consider what we mean by "University Extension."

In the first place, it is not a phrase used originally by those who created the thing. That, at least, is my recollection. When my friend Professor Stuart persuaded Dr. Lightfoot and Dr. Westcott, and two or three other Cambridge men, to join with him in developing the system which he had devised, we called it by a name analogous to that of another system which we were working. We had local examinations, and we called Professor Stuart's system Local Lectures.

There was a special fitness in this resemblance of name. The Universities had for some years been engaged in holding examinations at a number of places in various parts of the kingdom, for such students as entered for examination at these local centres. The question then came, Cannot the University teach at

local centres, and not examine only? As the function of the old Universities was specially to teach, within their own walls, and only as a subsidiary work to examine, it was evident that the request for teaching at local centres, and not examination only, came to us with much to recommend it. It is a matter of history how rapidly the desire grew, how one body and another took up the idea and worked it out. It is a matter of common knowledge how large the work now is, how many able men it has enlisted in its service, how many thousands of men and women are its attached and grateful supporters.

Now note, if you please, two points. The teaching was to be of a University type. It was not to be a set of popular lectures, delivered by a lecturer or lecturers whose work ended when the last sentence of the lecture was spoken. The sort of work which was done in a college lecture-room was to be the type,—that is to say, a lecture of a solid kind, on scientific principles, conveying definite information on some special point or points, and accompanied by some endeavour on the part of the lecturer to ascertain how far the class had followed him, and how far they had got hold of the point or points to which he had addressed himself. The audience were expected to work quite as hard as the lecturer. The difference between this and a popular lecture, however able, is one not of degree but of kind. This is no attack upon the popular lecture, which is an institution excellent in its place and for popular audiences; it is merely an assertion of the fact that the University local lecture from the first professed to be something of another kind. Often not nearly so attractive in itself as a

popular lecture, often not nearly so well delivered as by a popular lecturer, often attended by a few scores only, in a room which the popular lecture would crowd with as many hundreds, it still stuck to its principle of solid information on a scientific method, and maintained that for students it was a more valuable, if often a less brilliant thing, than the popular lecture. It was what the student wanted, and what the student ought to want, and for the student it was meant.

The other point is this. There was no use coming to the University to ask for able men to be sent down to local centres, to teach subjects taught already in the schools of the place, or dealt with by a system of private tuition. I have seen it remarked that we do not teach Latin and Greek, Euclid and Algebra. The simple reason is, that, as from the first it was our aim to teach on a method different from that adopted in ordinary lectures, so we determined that it was not our business to handle subjects for the teaching of which provision was already made in the place. That there shall be the means of acquiring a knowledge of these subjects, easily accessible to the students who may desire to remedy their deficiencies in these respects, will, I think, in the course of time, become a care of the local committees in important districts. Many of us, no doubt, have taken part in work of the kind. I always remember with great pleasure a class of working men which I had for some two or three years in French,—men most of them connected with a great printing business. And there is plenty of room for a great deal of such work. But I have no doubt that the central managing bodies have been wise in their practice of not themselves providing the teaching. You

must be careful, however, to see, that when it is said that Latin and Greek, and French and German, and Euclid and Algebra, have practically no place in our system, it is clearly understood what the real position of the statement is.

And for whom was this higher type of teaching intended? The simple answer is, for all who wished for teaching of the higher type, and could not get it elsewhere. As a fact, I believe that the first calls came from a group of ladies in a great town—now a city—in the north-west of England; from co-operators at a great industrial centre; and from workmen at a great focus of railway works. I think that among those who took a lead in the first of these calls, now quite twenty years ago, one was foremost whose loss the cause of women's education all over the world is now mourning, at whose funeral, with its unique and striking accompaniments, I was officiating a fortnight ago at this hour,—I mean Miss Anne Clough, of Newnham. Women have since that time worked out the problem of their highest education in a very remarkable manner indeed, and their educational zeal and success in direct University work are one of the features of the age. But those who have managed the local lectures have found that there is no limit of sex, age, occupation, or position, among those who invoke their aid for the supply of guidance and instruction in study of an earnest character. They have found, too, that the rise in the standard of elementary education, and the many means young people have now of carrying their elementary education further, have very largely increased the numbers of those who can profit by the system of University Extension.

We come, then, to this, that the local lectures were an extension of the University in two respects. First, in geographical area—we took our University methods into all parts of the kingdom to which we were asked to take them; and, secondly, in the kind of persons taught—we extended University teaching to whole classes of persons who were altogether outside the classes from which most of our resident University students were drawn.

But it soon became evident that there was to be yet another meaning in University Extension. I have said that we did not teach such things as Latin and Greek, Euclid and Algebra, the ordinary basis of education of the higher kind, because it was for others to do that. But was it impossible to apply what I have called University methods to subjects which did not ordinarily form part of the studies of the University? The three sets of people whom I have mentioned, as making the first calls for University Extension, or Local Lectures as I always called the system officially, and as my University still officially calls it, asked, I think, for lectures in Astronomy, Political Economy, and Mechanics. Those were all of them subjects of University study, and able men were found willing to go. But a large number of those who invoked our help begged for assistance in studying subjects which were scarcely or not all included among what were called University subjects. Now I have seen since my undergraduate days a very remarkable extension in the number and character of University subjects—subjects, that is, whose study is encouraged and rewarded at the Universities. When I went up to Cambridge, Latin and Greek and Mathematics were

the great subjects, the only subjects in which degrees in honours could be taken ; and for men who were not ambitious of intellectual honours there were added, to a modicum of the subjects mentioned, Evidences of Christianity, and some simple Moral Philosophy, and some parts of the Old and New Testaments. It is forty years since I first became a member of the University, and in those forty years the following subjects have been added to those in which men can take a degree in honours:—Moral Sciences, Natural Sciences, Theology, Law, History, Semitic Languages, Indian Languages, Mediæval and Modern Languages. That is, I suppose, a much larger area of University Extension, within the University itself, than all the previous history of the University can show. And for men who are not ambitious of intellectual honours as the result of their Cambridge course, there are many avenues to a degree, when once the common requirements of Latin, Greek, Euclid, Algebra, and Mechanics have been met, which were not open to men when I was an undergraduate. Indeed, many of them date from very recent times. The man who does not read for honours can now devote the second and larger part of his three years to any one of the following subjects, by any one of which he can proceed to the ordinary B.A. degree, and not one of which was open to men at the time I speak of:—Theology, Logic, Political Economy, History, Chemistry, Geology, Botany, Zoology, Physiology, Mechanism and Applied Science, Music, Modern Languages. There are, besides, other avenues to the ordinary degree—Mathematics, Classics, Law. Thus we have in all, in place of the two triposes for honour men, and the one common poll examina-

tion for all poll men, of forty years ago, no less than ten triposes, and fifteen avenues to the ordinary B.A. degree.

Nor does this exhaust the Extension to which I am calling your attention. Many of the tripos examinations have become themselves a sort of nest of triposes. The old classical tripos, for instance, was an examination in scholarship. But now the scholar is invited, after having given proof of the sufficiency of his scholarship, to specialise in one of five branches of study, namely, Pure Scholarship, the Philosophy of Greece and Rome, the History of Greece and Rome, the Archæology of Greece and Rome, the Language of Greece and Rome. And in any of these branches the able student can obtain the highest honours the University can bestow. And so I might go through one and another of the ten triposes, and show what a hydra-headed thing the three-legged creature has become.

That is a marvellous University Extension, within the walls of the University itself; and who shall say that we have reached finality? It is true that in each case we demand from the student evidence that he has acquired knowledge to a certain extent of Latin and Greek and Mathematics—and the minimum standard is not so low as it is sometimes supposed to be—but we allow the student to give this evidence at the very beginning of his University course, or before he has entered upon his course at all, and we regard the honour student as spending practically the whole of his course, and the poll student as spending quite half his course, in studying that one of the many other branches which he selects. University Extension, as

we use the phrase in our society, becomes pregnant with the possibility of meanings, when we regard it in the light of such considerations as the recent history of the Universities themselves afford. He would be a bold man who would venture to say that University Extension has not large developments yet in store for us or our successors. To go no further than the present, in my own University they are considering the establishment of a Physical Sciences and Mechanical Sciences tripos, in principal connection with the School of Engineering. And I need not tell you with what valour and pungency a number of our friends are demanding that English literature shall be treated by the universities as an educational subject of the highest value, its scientific study worthy of the best encouragement and reward they can give.

It is as well to remark, in passing, that it is not every English University that requires from all its students a preliminary knowledge of all these subjects, Latin, Greek, Euclid, and Algebra. With us, in Cambridge, I daresay the requirement indicates the sort of men we wish to have as students within our walls, rather than suggests that, in our opinion, a man cannot be a serious student, worthy of being recognised as such, who has not a preliminary knowledge of all of those four branches of learning. For myself, I hope that we shall not cease to require this from the students who come to Cambridge to prepare for a degree. But that does not in the least interfere with the respect I feel for the earnest student whose school-days gave him no opportunity for learning what other boys of his age learned as a mere matter of course. He turns, as an adult man, to the study of that which

is within his reach, no doubt often with the wish that his reach were wider; and he turns to the study with a zest and a success which I heartily wish those others showed a little more than they sometimes do.

There is yet another sense in which experience has taught us that "University Extension" may be taken. In the resident Universities men come to us for three years, take their degree, and go. The great mass of them have no further connection with the University, so far as study is concerned. Now I take it that a considerable number of those who attend a course of University Extension lectures desire to continue to attend such courses, and see no reason why they should not for years go on attending them. Some, I know, regard attendance at these lectures as the most interesting feature in their lives, a feature of increasingly satisfactory interest. What a delightful meaning of "University Extension" it would be, that students extended the time during which they attended teaching of a University type from three years to six, from six years to nine; that students regarded this steady intellectual work not as the work of three years, to be followed by a degree and then abandoned for practical life, but as the constant companion of practical life; not as a happy memory of the past, but as a fresh and living integral part of a happy fruitful present. That, I know, is the meaning that many a University Extension student has found in the phrase University Extension.

And now as to our future in London. What can we hope for, what do we deserve?

We have a right to feel certain of the approval of the statesman. I suppose that among the objects and

aims of the true statesman, in these days of cheap newspapers and of free discussion, this must rank high,—that his countrymen should be able to form true judgments as to the bearing of the facts and the arguments which they read and hear. Do not imagine that I suggest that the true statesman will wish, as a matter of course, to neutralise the effects of a cheap press and free discussion. I am making no reference whatever to the character of that which people read and hear. I simply mean what I say, that the man who has the interests of his country at heart will wish that the people should be so trained as to be able to form fairly sound judgments on facts and arguments put before them. Now, as I cast my eye down the long lists of subjects in the reports on your work, I find a large number of subjects which are just such as are serviceable from this point of view. I suggested at the outset that if we are to understand the present of University Extension, and to prepare for its future, it is well to have an eye to the facts and the lessons of the past. I need not say that in no part of the work of your society is greater interest taken than in the history of special periods of our own national life; and I have observed that when a centre becomes practised in the study of such history, there arises a desire for some knowledge of comparative history. Classes who have studied the history of Elizabeth's time in England form a wish to study the contemporary history of the Low Countries; at a later date they desire to know something of the reign of Louis XIV. I feel sure that a real statesman would earnestly desire to see these two branches of history, our own history and comparative European history,

carefully studied by as many as possible of those for whose welfare he labours :—our own history, that they may realise the ceaseless drift, the continuous movement, of the nation's life ; comparative history, that they may learn of how many combining influences external to ourselves the statesman has to take account.

And, apart from the subject of study, the fact of study should ensure for us the sympathetic help of men who are—to whatever party in the State they incline—worthily in a position of authority and power. There are nations in Europe where the students are a body liable to dangerous explosions of political feeling. There are places nearer home where the students keep in fairly active habits of body and mind the officials who attend to their disciplinary well-being. But the students whom the statesman sees, when he glances our way, are men and women who spend the little leisure they have from their work in life in quiet, peaceful study ; students whose studies predispose them to orderliness, students who in times of disturbance would be found a nucleus of staidness ; students who can look beyond the excitement of the moment and analyse the forces that produce it, and estimate the mischief it will work ; students who to the warning lessons of history have added the civilising, softening charms of the noblest literature in the world. Not only so, but another of the most attractive and successful branches of your work should appeal strongly to the instincts of the statesman—I mean the work in natural science—work which is done on the University principle of making clear the reasons for observed facts, rather than centring the interest upon a description of the facts. When we

hear so much as we have to hear of industries in which we were pre-eminent falling gradually into the hands of other nations; when we hear of the inventions and applications of inventions which enable other nations to meet us in the open market; when we think of what it would mean to the destinies and to the civilising work of our Empire, if it fell behind in the material race,—I cannot conceive anyone, who understands the interests of the Empire, being indifferent to the fact that at scores of centres, to hundreds and thousands of men and women, we teach from a scientific standpoint the elements of the natural sciences.

We have a right to feel certain of the approval of the philanthropist. Very early in the experience of those who managed the first attempt at University Extension, it became evident that we were doing much more than an intellectual work. We were giving an interest in life, and an interest of a worthy kind, to many and many a one who sorely needed something outside and different from the ordinary routine of life. We were brightening existence to them. And many a solitary student, who had none to sympathise with his work, none to guide him, none to lead him to higher effort, came forth from his solitariness, and found companionship in study, found guidance, found breadth. Pleasant as are many of the evidences of real usefulness which abound in the experience of all who have helped on this work through a series of years, none have been to me more pleasant than the assurance that in doing a work educational, intellectual, we have done a work of true philanthropy.

We have a right to claim the approval and support

of all who are versed in educational work, and take a broad view of the possibilities of such work. Here, in London, we present to the consideration of such persons a problem quite different from that of Oxford and Cambridge, quite different from that of any non-University town, however large. We offer for his consideration the existence of thousands of earnest students, living the ordinary course of their lives within the area of what we call London, not living here because they are students, but students because they live here. This is an adjunct to the ordinary work of a University such as no other University possesses. It has grown up of itself, without encouragement, grown to its present dimensions by the sheer force of the principle which is its life. To what it may not grow if it is encouraged, systematised, who shall say? Who shall venture to impose a limit upon its growth, upon its possibilities? Of this I feel sure, that no important educational step, affecting the higher education of and in London, will be taken successfully, which does not in some way or other make use of this great means. And if the time should ever come when men rise to a really bold conception of a great educational system for London, which shall unite for the common end the many educational institutions now in existence here, shall unite them without interfering with the individuality of any one of them—for that alone is a reasonable union,—I take it as certain that in that great comprehensive system, laid on lines that allow for developments, dim as yet in the distant future, this system of yours will play—it may be a subordinate—but it will be an integral part.

It is, of course, the aspiration of such of you as are continuous students, that in some way or other a crown should be set upon your work. If you are true students, study itself is your aim, study itself is your reward. But taking, as I will in your name, that highest ground, it is a legitimate aspiration that some public recognition should be accessible to you. Who would venture to say that young men would flock in hundreds and thousands as they now do to Oxford and Cambridge, if those Universities offered only, as an inducement to come there and study, the charms of a studious life, the attractions of able teachers? They are degree-giving bodies, as well as teaching bodies, and the two functions, the two ideas, have become inseparably connected in men's minds. It was not always so. In the early middle ages, when we read of very large numbers of persons attending the Universities, a large majority of them did not contemplate proceeding to a degree. They came for a time to attend the teaching of some man of great reputation; and then they passed on. But now, there are very few cases of men coming with any more transient purpose than to get a degree. Are we, then, to limit our meaning in the phrase "University Extension" to one of the two great functions of a University, the most important, no doubt, from an intellectual point of view, but still only one of the two? That, I understand, is a question that is exercising the minds of many of you. It is a question which it is impossible to avoid when we give even a very slight amount of thought to the future of University Extension.

I feel fairly clear as to the answer. But I am not at all so clear as to the answer, which the facts of the

case telegraph to me, being an answer which will be wholly satisfactory to you. This is not a case where you would proceed in a bargaining spirit, asking for more than you really aim at, in the hope of at least getting what you want. It is emphatically a case for facing the position frankly, and formulating your hope, wish, request, demand,—call it what you will,—in accordance with the result of that frank consideration.

To put first the extreme demand, it would be this, that those who pursue for a certain period, with success, your course of study, should be able, on that course of study, to obtain in the end the degree of Bachelor of Arts or Bachelor of Science. And that without fulfilling the conditions which are in ordinary cases attached to candidature for those degrees, in the way of preliminary examination in other subjects specified by the University.

Now I am not at all prepared to say that an excellent training cannot be obtained without a knowledge of those preliminary subjects. It may well be that as time goes on, University Extension may lead to an extension of the University idea, so that there may come about a University curriculum which differs largely in the character of its common requirements from those which now prevail. I could understand, for instance, a University in a great centre of population taking a position essentially different from that of the old Universities. They draw their students from other places, and educate them apart from the great busy centres, in subjects which, as they believe, are best calculated to draw out the highest powers of the intellect, in those who have the leisure to give the whole day to such work, and have the preliminary

acquirements which are given in schools of the highest grade. I could understand this, while still believing that for those who could resort to that other teaching it would continue to be the best of all. And if any such development should occur in our time, I regard it as certain that what we call University Extension would find that its time of full recognition had indeed come. But so long as the University idea remains what it has now for some considerable time been, I am inclined to deprecate the demand that the degrees given on the well known and understood principles which now prevail, should be given equally on principles quite different,—quite different, though, as many think, much better suited to the circumstances of many students than the others are. And I happen to know this, that the Council of the Society deprecates such a demand.

Another method is to have some special degree devised, to be conferred upon those who go through your course with success. It has never seemed to me that this would be a satisfactory method. The degree would not compete on equal terms with the degrees whose reputation is already established. It would be regarded as meaning less than they, though no doubt in some cases it would mean more. The intention would be only to denote by it something different from the other degrees; in public acceptance this would be misunderstood, and it would be supposed to be not different only, but inferior. And I feel sure that if earnest, determined students, such as many of you are, once got such a degree, they would never rest till they got what people would call the real thing. And this in itself would belittle the special degree.

I would not ask for a degree on easier terms than other people. I would not ask for a degree inferior to other people. I would ask for a fitting recognition of worthy work. My own idea would be that an arrangement of this kind might be made. It should be possible for you, on fulfilling some stringent conditions as to continuity and sequence and blending of study, to obtain some such title as Associate of a University. The conditions should be such that persons who understand what higher education is and means should be able to recognise them as securing attainment sufficient for a degree, so far as it goes, but not sufficient in so far as it does not reach the preliminary subjects, without which a degree is not given.

If that could be arranged, if the breadth and depth of the work done were such as to be really worthy of this recognition, this Associateship would be a highly-prized achievement, and would be recognised as such. The man or woman would be marked as a person of attainments and culture, would be entitled to regard himself or herself as a serious student, a successful student; and nothing could be more likely than that to make of him or her that which I so much desire to see many men and women made,—a continuous student, one who does not know what it is to talk of education being finished, but, on the contrary, only finds each new pleasure of knowledge an incitement to yet another entry upon that boundless field.

Beyond this Associateship there would be one simple step to the degree. The associate would have to qualify in the preliminary subjects common to all candidates for a degree. He would earn his degree by his University Extension work. That would be his

honours. He would proceed to his degree by the qualifying process of passing the preliminary requirements. That would be his poll.

There would be one great gain to you in federation under some comprehensive educational system. It is your difficulty, it is your privilege, to be self-supporting. The fees paid by the students, low as they are, have to provide for the payment of the lecturers, low as it is. If you look at the accounts published last December, you will see how very curiously close the relation is between the amount that is paid in fees and the amount that is paid, directly on your account, to lecturers, examiners, and printers. The receipts for lecture fees, examinations, and syllabuses are £2076:18:6; and the payments to lecturers, examiners, and printers are £2077:2:6, being an excess over receipts of four shillings. All the rest of the numerous expenses, for management, general printing, and so on, are met by voluntary contributions. This is much about the state of things in Cambridge also; that is to say, the receipts from those attending the lectures do not meet the expenses of central management, and funds for those expenses have to be found elsewhere. So when we say that the system is self-supporting, we only mean, that, roughly speaking, the receipts from students and local committees about cover the payments to the lecturers and examiners. Now it is clear that the fees of students must play an important part in this adjustment; and this means that the students, each of whom pays a very small fee, must be numerous. What does that in its turn mean? It means that the subjects must be such as draw and interest a considerable

number of people. That every lecture should be interesting to those who are studying the subject of the lecture, I hold to be of the greatest importance; but it is a very serious thing that in consequence of financial pressure you must, as a rule, have subjects which are interesting to a considerable number of people. What is to be done for the more advanced students, who desire to push on to subjects, or parts of subjects, which choke off, and ought to choke off, those who are not sufficiently advanced to attend the lectures with profit? How, that is, are you, consistently with the two conditions—that the fee is to be low and that the lectures are to be self-supporting—how are you to procure lectures in subjects which appeal to only a few? As far as I can see, only by federation. If you were part of a great educational system, with its hands upon the whole of London and its mind open to your wants, we should soon have centres for the delivery of lectures on what I may call as a matter of definition non-paying subjects. To these centres advanced and determined students, scattered in twos and threes at points round the circumference, could converge in sufficient numbers to float the lectures. In that way, and only in that way, I think, you could have courses of lectures in subjects rising in difficulty as your preparedness rises. But while that device might answer, the fact is that, to have this worked properly, you very much need to have access to some central institution. You want some important body which has a life of its own, independent of you to lend itself, or a part of itself, to the furtherance of your higher interests as advanced students. Some four years ago it fell to my lot to return thanks, in

the Mercers' Hall, for the Governors of St. Paul's School, of whom I have for some years had the honour of being one. And I should like to remark that the full share in the management given by the Mercers to their University colleagues, the full weight given to the views of the University governors, render my governorship of that magnificent school one of the very pleasantest educational offices I hold. On that occasion I ventured to call the attention of a distinguished company of guests to the problem which we have been discussing this afternoon; and I ventured still further to name the institution which, as it seemed to me, was marked out by its conditions and principles in a very singular manner for putting itself at the head of this educational work. It was the Gresham College. If you could have Sir Thomas Gresham standing among you this afternoon, I cannot but think that he would find in you the kind of students for whom he exercised so much forethought and liberality. If it were possible that, besides the educational apparatus at the command of the Gresham Grand Committee, a great site in the city could be secured, which is to be vacated by one of our great schools, with a noble hall, which it will be a scandal to London for London to lose, with residential blocks of buildings erected in the foreground, arranged as homes for advanced students from all the scores of active local centres which are dotted thickly about the suburbs, homes for such of them as can do the daily work of their life as well from one lodging as from another, with it may be a Gresham professor, or a Gresham lecturer, or a Gresham assistant lecturer—for when you once begin to develop you must build your ideal

system large—living in each block, then, I think, your system would be complete, and London would be doing a work of University Extension in the fullest sense of the word such as no other city in Europe, as far as I know, is doing.

What should your present attitude be, in view of the rumours which are floating about somewhat anxiously in the educational world? I think it should be one of quiet hopeful expectancy. If I may presume to offer counsel at so grave a conjuncture as this, the counsel I would give is this, that you should insure the future by your good use of the present, and should have the faith and confidence that come of such insurance. Take care that at whatever time the judicious eye of the educationally-disposed statesman falls upon your work, you are seen to be a compact body of earnest students; students for study's sake; students moving on, moving up, in the path of study; resolute, self-respecting, and self-denying. If that is what the judicious eye sees, be sure the judicious mind will give you a worthy place in his system. You have not buildings, appliances, endowments, to put at his disposal; silver and gold you have none. But you have that to give him which he will most value—a stout and stalwart and numerous band of students ready equipped. As I am addressing University Extension students, and not University students, I can assume an acquaintance on your part with English literature. Do you remember the wager that Allan M'Aulay made when he was shown the massive silver candelabra of the Musgraves down in England? He bet two hundred merks that he had more candlesticks, and better candlesticks, in his own castle at home in

Perthshire than were ever lighted in a hall in Cumberland. When the English went north and tested his grounds for the wager, they found behind each chair in the banquet-room a tall Highlander fully armed, bearing a blazing pine torch. "Those," M'Aulay said, "those are my candlesticks." The wager was clearly won. Men, and such men, were worth more than silver.

HEARING, READING, AND THINKING¹

BY THE RIGHT HON. G. J. GOSCHEN, D.C.L., M.P.

1886

HAVING undertaken to address you on "Hearing, Reading, and Thinking," I must begin by defining my terms. By "hearing" I mean the process of taking in intellectual food by the ear; by "reading" that of taking it in by the eye; and by "thinking" a form of mental activity which sometimes accompanies hearing and reading, and which can also be set at work separately, but which, I fear, listeners and readers do not always summon to their aid. Honestly, I must say I believe that a vast number of readers do not allow what I may call the frenzied current of their eyes, as they read, to be stopped for even a moment of calm reflection or thought. Outside the charmed circle of students who are studying under the auspices of our Society, and as to whose habit of following the lectures with reasoning and continuous thought, I would not venture to breathe a doubt, I expect there are a great many who will not go through the fatigue, the great fatigue, of giving a continuous critical

¹ This address was delivered *extempore*, and is therefore more colloquial and less carefully expressed than most of the addresses of this series.—G. J. G.

accompaniment of thinking to the words of the lecturers to whom they listen.

I shall say something about "thinking" by and by. In the first instance I wish to give you my reasons for believing that those of you who come to our lectures, derive benefits from hearing which you could not derive from reading. Of course we must compare like with like, a good book with a good lecture, an indifferent book with indifferent oral instruction. Now in the latter case I am not sure that the balance of advantage lies with the lecture. For with a dull book you have, at any rate, the remedy in your hands. You can put on the pace. But, oh ! the penance of having to sit out a dull lecture, or, indeed, a dull oral performance of any kind, when you can apply neither whip nor spur, but must listen to the end. On the other hand, I shall claim, when you come to compare excellence with excellence, that the excellence of the spoken teaching offers delights which the perusal of written teaching will scarcely ever afford.

The particular form of hearing to which, in addressing an audience largely composed as this is of University Extension students, I naturally direct attention, is the hearing of lectures. The word "lecture," it is interesting to note, means, literally, a reading, or rather a reading out ; and you may regard it from two points of view—substance and form. In substance, a lecture is primarily a condensation. It represents in brief space the final result of a vast amount of study on the lecturer's part. It is his business to collect from the number of books dealing with his subject the salient facts and ideas, and to present them in the manner most suitable to his

hearers. The lecturer is thus primarily a condensing machine. Or, if I may be allowed, in deference to the fairer portion of my audience, a more pleasing simile, the lecturer presents you with a bouquet of cut flowers; he plucks the flowers for you and blends the colours. But, alas! for my simile, cut flowers die soon, and crammed facts fade rapidly from the memory. Perhaps, therefore, I may take another simile, more complimentary and more appropriate. Let me rather put it that the lecturer is a herbalist, who collects the perfume and the strength of a variety of herbs and flowers, and condenses them into a phial, where they may be preserved, and whence they can be taken in small doses and in such a manner as to vivify and to strengthen the constitution of those who appropriate the results of his labours. But whatever simile you adopt, you will see that the first function of the lecturer is to bring together, in a short form, that which it would be a great difficulty for you to collect, if you had to do the work entirely for yourselves.

But I have not only to speak of the lecture as a form of literary work; I have to establish the claim of the lecturer to be heard rather than read. Would it not be shorter, simpler, and less troublesome if his lectures were simply printed and circulated? What do you gain by coming to lectures, instead of reading them? You gain some advantages which are independent of the character of the lecturer. The first is the stimulus of intellectual companionship. There is an incentive to study in the mere knowledge that others are studying with you; the search after truth becomes easier when you have comrades on the road. In reading a book you are alone; in hearing a lecture you are one

of an intellectual company. And then there is the infectious excitement of a large audience. Besides, the mere regularity of the lecture, once a week or as often as it may be, is of great advantage. "What is the good of going to a lecture," people say, "when we could read a book which would tell us just the same things?" You *could* read a book, no doubt; but the question is, *would* you? In this desultory and distracting age the compulsion of a weekly lecture—a compulsion which is self-imposed, it is true, but which might not be forthcoming if there were no lecture to go to—is of itself a great aid to serious and systematic study.

These advantages are, I say, more or less independent of the lecturer. But, beyond these, the spoken lecture has, if the lecturer be a master of his art, the following advantages over the lecture which is merely read. In a well-delivered lecture you find, first of all, light and shade. The voice and manner of the lecturer will do more than can be done by any arts of style. Emphasis is better than italics. The human voice can recall the wandering attention, while the printed word has no such means of self-assertion. I know there are people whose intellectual appreciation is so keen and fine, that reading affords them a luxurious enjoyment which the finest speech or lecture cannot give. Some musical people, I am told, by reading the score of an opera, can taste the full joy of its performance by an orchestra. To some people reading brings so rich a store of intellectual association, such a "corona" of clear thought, that they do not need inflection of voice and change of manner to realise the full force of the meaning to be conveyed. But these are exceptions. To most men, even intellectual men, how great a

contrast there is between reading ten lines of Shakespeare and hearing them delivered by a first-rate actor ! I appeal to the experience of any man, however intellectual, whether, when he takes up his Shakespeare and reads a passage of ten or twenty lines, he sees the thoughts that cluster around them as vividly as when he hears those lines recited by a master of the dramatic art, and whether, when he hears them so recited, he does not find that Shakespeare had put into them infinitely more than is ever dreamed of by the reading student.

These advantages of hearing over reading are not confined to great dramatic performances. I say, without fear of being challenged, that, when you read, you cannot get the whole of what is spoken. Besides the active language of the lecture, sermon, or speech, a vast deal is conveyed in emphasis,—in what I may call the *rallentando* and the *crescendo* of the speaker,—which cannot be understood by any other means than by listening. I remember hearing an excellent sermon upon the text, “How old art thou ?”—in which the preacher modulated this phrase in every possible way, so as to adapt it to every illustration which he gave. Sometimes he put the accent upon “old”—“How *old* art thou ?” At the most striking times he put the accent upon “thou,” and, addressing himself to each of his hearers, he asked—“How old art *thou* ?” I would defy the most skilful of the reporters sitting at the table before me so to have reported that sermon as to convey to the readers of it the same ideas which the speaker conveyed to the congregation. Again, let me give you an illustration from the House of Commons. A member makes an apology to another,

and the latter says: "I accept the apology in the spirit in which it was made." Now, according to the inflection of the voice, that sentence may be either a genial compliment, or an ironical insinuation, or a ferocious insult. It depends upon the voice, and what could even the reporters, who accomplish marvels in the way of reproducing the most slipshod speeches, make of cases such as this? It has happened to me that a friend who was passing out of the House of Commons, said, "I will not wait to hear you speak; I will read you to-morrow." No, he will not read *me*; he will read my speech. He will know my thoughts to a certain extent, but he will not know in a hundred ways the impression I intended to convey, for there are tones, pauses, innuendoes, gestures, forms of inflection of mind and of thought, which can be rendered in a speech but cannot be rendered in a report, however able and accurate.

If it is said that this applies more to political speeches than to lectures, no doubt it is true. But, in the presence possibly of one or two lecturers—I am not criticising them—let me express the hope that the lecturers imitate public speakers at least to this extent, that they avail themselves to the full of those advantages which the power of addressing audiences *viva voce* gives them. I would, on the other hand, express the hope to public speakers that they will imitate lecturers by packing more thought and substance into their speeches. Let public speakers remember how strenuously lecturers work in order to secure that condensed substance of which I have spoken, to their hearers, while I repeat that lecturers will increase the interest of their lectures the more

they remember the power possessed by voice and delivery to excite and maintain the interest of those whom they are addressing. I wish the majority of political speeches were more like lectures in wealth of thought, and the majority of lectures more like good political speeches in effectiveness of delivery.

Now, these physical advantages of voice and manner may attach, if not to the full extent, to a written lecture simply read out by the lecturer. But the lecturer may claim another advantage, if he is sufficiently self-confident, if he is sufficiently master of his subject, and sufficiently ready of speech to rely for his expressions, to some extent, on the inspiration of the moment. I am not saying anything against the most careful preparation. I believe in the coining of phrases by care. I believe in the most careful arrangement of the subject. But while I believe in arrangement and in the careful choice of phrases, the lecturer must not be the slave of either. He should be able to adapt himself to the understanding and humour of the audience; to *expand*, when they are slow of comprehension; to *illustrate*, when they are dull; to *curtail* or *omit*—a most important object—when they have had enough of a particular point.

Further, the lecturer — if he has the necessary gift—has a third advantage, that of exciting interest in, and enthusiasm for, his subject by his inspiring personality. True, a book may have a similar effect, but personal contact is more likely to produce it. Inspiring writing is rarer than inspiring speech. There are more men who can interest you in their subject by talking about it than who can do so by writing about it. Of course it is not every one who has the

former gift; but I claim that many of our lecturers do possess this inspiring personality, and excite your interest and arouse your enthusiasm, not only by what they say, but also by what they are themselves. At any rate I hold that lecturers have not fulfilled their full functions unless they impress their hearers by establishing a strong personal influence over their intellectual sympathies.

If this is true of all lectures, it is especially true of our University Extension lectures. For they are not, primarily, lectures on what I have elsewhere called bread-winning subjects. In the case of such studies the art of the lecturer is of less moment, because the interest is already supplied by the necessity of winning a livelihood. But with lectures which are directed to culture, it is of the highest importance that the lecturer should be able to inspire enthusiasm in his subject. And, besides, the amount of time which our students—many of whom are busily engaged all day—can spend in these lectures is so short, that unless they carry away such an interest as will lead them to study on their own account, they will not benefit much. There are two kinds of teaching—the teaching which simply conveys information, and the teaching which, besides conveying information, supplies the impetus and the means to self-improvement. You will see the drift of my meaning if I compare these two kinds of teaching with two kinds of charity. The former kind of instruction is like the charity that is content with a dole. It supplies, for the moment, a mental need, fills the mind for a time, and there is an end of it. It resembles the charity which fills the stomach for the time, but then

leaves its recipient as it found him. The higher kind of instruction not only supplies information but stimulates interest, and points the way by which the student may develop himself and become self-reliant. It resembles the charity which gives tools, or teaches a new trade, or finds new means of employment—which aims, not merely at alleviating want, but at creating independence. I hope our lecturers will be able to supply our students, not with mere doles, but with tools by which they themselves will become workmen in the cause of education, in the cause of culture, and, therefore, in the cause of civilisation. The aim of our teaching is to increase the number of self-reliant workmen.

“Hearing,” in the case of our lectures, ought, therefore, to lead to “reading”; and with regard to reading, you may ask two questions, What to read? and how to read? I do not mean to discuss what to read to-day. I will only remind you that if you read well, you will not be able to read over-much. Sir John Lubbock has lately given a list of the Best Hundred Books, and many different authorities have criticised him. Perhaps the best criticism was that which was sent to the *Pall Mall Gazette* by a leader of thought at Oxford (Mr. Jowett), to this effect: “I don’t think I can improve on Sir J. Lubbock’s list. Neither have I any objection to make to it, except that it is too long.” “Too long!” I think I hear you exclaim: “Why, we all of us read far more than a hundred books—novels of course included—every two or three years.” Yes, that is just the great danger to genuine study in our time. We all read, in a way, far more than we can read properly. The mere multiplicity of books

threatens to kill reading. It is not the multiplicity itself which is the evil. On the contrary, when the books are good, it is an advantage. The evil lies in the idea that one must read everything, especially all the new books that come out. "Have you read such and such a book?" "No." "Then order it from the library at once." This is the course that people constantly take. They do not ask, "How does the book fit into a course of systematic reading?" Besides, they think they have read that book when they merely cast their eyes over its pages. I presume they read it in a fashion; but do they think at all of what they read? I would very earnestly put it to our students that it is not necessary to read everything that comes out; that systematic reading will give more enjoyment and secure more profit, than this desire to read everything. Do not imitate the practice which prevails at German *tables d'hôte*, where the guests partake of every dish that is offered, and go through the whole, however long it may be. I would rather say—order your books, as you may dine, *à la carte*, in such quantities as you wish, and of such quality as you wish, and do not go through a long list of books merely because it is the fashion to read them.

This multiplicity of books, joined to the belief that you must read so much, leads, in the first place, to excessive condensation on the part of authors. As people's powers of reading are limited, and still they want to read everything, the condensing process is attempted more and more. Formerly, we had Quarterly reviews which criticised and analysed books, and gathered together all the current literature on any subject, and many people thought, when they had

read an article in a Quarterly, that they had done enough, and need not read the books themselves at all. The articles in the Quarterlies extend to thirty or more pages, but thirty pages is now too much. So we witness a further condensing process, and we have the *Fortnightly* and the *Contemporary*, which reduce thirty pages to fifteen pages, so that you may read a larger number of articles in a shorter time and in a shorter form. As if this last condensing process were not enough, the condensed articles of these periodicals are further condensed by the daily papers, which will give you a summary of the summary of all that has been written about everything. This appears to me to have a very deleterious effect on serious reading in many ways. In the first place, it tends to destroy the taste for it. Those who are dipping into so many subjects, and gathering information in a summary and superficial form, lose the habit of settling down to great works which, while they might not give them so much contemporary information, would do much to lift them out of their daily lives, and give them access to the high and noble thoughts which have been uttered by the chief authors of all countries. Ephemeral literature is driving out the great classics of the present and the past. That is one evil, and another is the inevitable hurry. Hurried reading can never be good reading. Yet we are all tempted to hurry, in reading as in everything else, not only because the pace of life is actually greater, but because it has become the fashion to hurry. If the Lord Mayor were now to ask all those in this hall who were habitually in a hurry, to hold up their hands, how many of us—if we were

candid—would be in a position to keep our hands down? Why, even young ladies, with plenty of time on their hands, gallop through novels as if they had as little time as a Cabinet Minister. There must always be a few people who are really much engaged; but there is no reason at all why the rest of us should hurry, simply to avoid being regarded as out of the swim.

But you may say to me, "You tell us a great deal about how not to read, but you do not tell us how to read." It would be as reasonable to complain, if I had been commenting on unwholesome methods of eating, that I did not explain how to eat. The answer in both cases is simple, and is the same with regard to mental as with regard to bodily nourishment: Do not bolt your food. Read with thought, and slowly enough to take in all in your author that is best. But, on the other hand, do not be too dainty and merely pick a bit here and there. A good, healthy appetite, nourished on good, substantial food, leisurely taken—that is the way to thrive on books. For, after all, what do you read for? Is it for wisdom? Then, how can you profit by what you do not digest? Or is it for enjoyment? Even from that point of view, I say a perpetual scamper is not the best form of amusement. What class has most enjoyment from the society of their friends—those who visit few people and manage to know them, or those who rush in and out upon a great number, just to exchange platitudes? Well, you will best enjoy your books, as your friends, by a long *tête-à-tête*. We are sacrificing real enjoyment to hurry in every department of life. This hurry has further affected one of the most enjoyable things in

reading—style. Just as with the fast travelling of modern days, nobody has time to look closely at the more delicate beauties of scenery, so with the fast reading of modern days, nobody looks closely enough to appreciate the more delicate beauties of expression. Some people, it is true, in reaction against the prevailing tendency, make a specialty of niceties of expression; but the work of these literary æsthetes is, again, rather an exaggeration. In the main, style is neglected, and, as demand affects supply, and readers no longer care about a good style, authors seldom produce one. Speaking generally, first-class style is being neglected owing to the extraordinary pace at which everybody is anxious to read.

But this habit of haste, which is fatal to sound reading, and fatal to style, is no less fatal to thinking—the most important of the three intellectual processes to which my title refers. As I said, thinking *may* be carried on simultaneously with hearing or reading, or, again, as a separate process. Consider it as an accompaniment to reading. There are some persons who disagree with everything they read. At all events, they think, and so far that is to the good. A larger number—a much larger number—agree with everything they read. If that agreement is really an intellectual assent as the result of thinking when they are reading, then I have nothing to say against it. But the largest class of all probably consists of those who read without thinking at all, who allow themselves to be carried on, possibly remembering a portion of what they read, but not really carrying on any intellectual process during the operation. And if this is the case when you read,

what is the case when you do not read, and when you come to original, spontaneous thought? I am sorry to say I think it one of the great faults of the age, extending almost to all departments of industry and of life, that really sustained and continuous thought is going very much out of fashion, and that people think less and less. At present how few of us ever think for ourselves at all? It is so much easier and pleasanter to drift, and then there are such handy ways all round us of getting our opinions! We have only to read the newspapers and we find them ready-made for us!

We are glad to avail ourselves of these substitutes, because thinking is a very difficult process. I mean original, constructive thought—the thought which creates its own materials—not that which, having materials before it, picks holes in them or pieces them together. There is negative thinking—criticism, a process which many people enjoy very much. That is not so difficult. You have your materials before you, and you begin to work upon them. But the difficulty is to create your materials. It is there that you find much mental indolence. Men do not like to set to work to think out a difficult problem. That is one of the mental operations which more than any other tries a man. One of the most difficult forms of thinking is to make a plan. Suppose any one is going to read an essay, or to make a speech, to deliver an address, or to write a sermon. The great difficulty is to construct what I may call the backbone of the work. Many men will enjoy sitting down to write some beautiful passages,—they will enjoy coining some striking phrases; but they dislike to sit down and think

out a plan—to make a backbone. I am sure all the clergy and all the public speakers who are present here, will admit that, above all, it is essential in every speech and in every sermon to have a backbone—a line marked out along which you are going. I know of some Oxford tutors who will never allow their pupils to sit down to write an essay without having beforehand settled in their minds what the general outline and arrangement are to be. That is the right plan, but it is very unlike what most of us do. What is the ordinary form of thinking? We do not choose the line of thought; we drift from point to point; we allow ourselves to be carried down the stream; and then we seek to excuse our drifting by a complimentary word,—the word “suggestive.” “This is a most suggestive remark.” What does that mean? Not that you are thinking out the problem, but that something is suggested to you by something else—that creation has to come from association, and not from any form of original and spontaneous thought. How many men ever sit down to think out a problem? How many men sit down, for instance, to probe to the bottom how any of those great social questions which now crowd upon us are to be solved? There, again, we have that superfluity and handiness of materials to which I have before alluded. Instead of thinking, men rush to the newspapers to see what other men have said, or open the cupboard where they keep their pamphlets. They gather what has been written by others on the subject. And, instead of careful thought from stage to stage, a man makes his mind a summary of other men’s thoughts, and his results a digest instead of a creation. And why? It is so extremely difficult to think.

Again, there are many who cannot work without pen and paper. A leading statesman once told me that unless he had pen and paper, he could not fairly think out a subject. Why not? I suppose in consequence of want of concentration; the use of pen and paper—mechanical appliances—supplied a stronger impulse than any of the living intellectual forces in him. This is a strange phenomenon, to my mind not an entirely satisfactory phenomenon, although I am bound to say—and I say it to my shame—I myself can better think out a problem with pen and paper than I can without them. Another man, again, will tell you, “If I want to think out a subject, I get a friend,—I talk to him, and he talks to me, and so we work it out between us.” But he does not like to work it out by himself. Why not? Because, if he does, he has to do double work—to think of the objections as well as the arguments in favour, of the *pros* as well as the *cons*. So in his indolence he calls in a friend, who has to do the *cons* while he does the *pros*—to submit the objections to a proposition while he may find arguments in its favour. That is not the way in which the great thinkers of former days have laboured to produce the results which are the heritage of the present generation. If we are to hand down to other generations similar productions, away with that indolence which is content with the reflex action of other men’s minds instead of the original results of our own! Some men’s minds are like flints, from which you cannot get a spark unless you strike them one against the other. I have cross-examined acquaintances on their powers of continuous, satisfactory thought. I have asked—

and it is a good test — Can you, on a long railway journey, think out a problem on a great social subject? Will you begin to think out that problem when you have before you two hours in a railway carriage? One friend, indeed, told me that if he wanted to write some fine passage in a book which he was producing, he would get into an express train, because its motion helped his thoughts; but he was an exception. Most men have told me that they cannot think in these circumstances—I am not speaking entirely of ordinary men; I am thinking of intellectual men—and that when they have finished their daily or weekly paper, they then find themselves reading anything they can lay hands on, rather than embark upon any intellectual problem at all. This is simply a form of mental indolence; they cannot concentrate themselves and bring their thoughts sufficiently together, to do spontaneous work. This again is partly due to their not giving themselves time; thus they lose the habit of steady thought, and so are unable to dwell long upon one subject.

I bespeak, therefore, for reading and for thinking greater deliberation, more careful choice of material, more consecutiveness and continuity, and, above all, no haste, no hurrying through anything, whether it be lecture, or book, or problem. We of this Society hope that we carry into its Centres habits of thorough study, of more leisurely study, of study more calculated than the hasty reading I have described, to secure both benefit and amusement. Amusement is not to be found in scampering through books, any more than in scampering through a country, but you will

find more intellectual amusement the more you devote yourselves to thorough and continuous exploration. We hope that our lecturers and our courses of lectures may lead you on in this process. We believe in the talents of our lecturers to inspire you with that enthusiasm of which I have spoken; and if their lectures be suggestive—suggestive in a better sense than that to which I alluded—if they are not only sign-posts pointing towards the direction in which you ought to go, but guides to see you safely started on your journey, they will take you to wider fields of literature and new worlds of thought. If we succeed in producing these results, we shall believe it has not been in vain that we have founded this Society, members of which you are, and the members of which, both present and absent, will, I trust, look to the Society as a link which has created for them some of the most pleasant associations of their intellectual lives.

THE STUDY OF LITERATURE

BY THE RIGHT HON. JOHN MORLEY, M.P.

1887

WHEN my friend Mr. Goschen invited me to discharge the duty which has fallen to me this afternoon, I confess that I complied with very great misgivings. He desired me to say something, if I could, on the literary side of education. Now, it is almost impossible—and I think those who know most of literature will be readiest to agree with me—to say anything new in recommendation of literature in a scheme of education. But, as taxpayers know, when the Chancellor of the Exchequer levies a contribution, he is not a person to be trifled with. I have felt, moreover, that Mr. Goschen has worked with such extreme zeal and energy for so many years on behalf of this good cause, that anybody whom he considered able to render him any co-operation owed it to him in its fullest extent. The Lord Mayor has been kind enough to say that I am especially qualified to speak on English literature. I must, however, remind the Lord Mayor that I have strayed from literature into the region of politics; and I am not at all sure that

such a journey conduces to the soundness of one's judgment on literary subjects, or adds much to the force of one's arguments on behalf of literary study. Politics are a field where action is one long second-best, and where the choice constantly lies between two blunders. Nothing can be more unlike in aim, in ideals, in method, and in matter, than are literature and politics. I have, however, determined to do the best that I can; and I feel how great an honour it is to be invited to partake in a movement which I do not scruple to call one of the most important of all those now taking place in English society.

What is the object of the movement? What do the promoters aim at? I take it that what they aim at is to bring the very best teaching that the country can afford, through the hands of the most thoroughly competent men, within the reach of every class of the community. Their object is to give to the many that sound, systematic, and methodical knowledge which has hitherto been the privilege of the few who can afford the time and money to go to Oxford and Cambridge; to diffuse the fertilising waters of intellectual knowledge from their great and copious fountain-heads at the Universities by a thousand irrigating channels over the whole length and breadth of our busy indomitable land. Gentlemen, this is a most important point. Goethe said that nothing is more frightful than a teacher who only knows what his scholars are intended to know. We may depend upon it that the man who knows his own subject most thoroughly is most likely to excite interest about it in the minds of other people. We hear, perhaps more often than we like, that we live in a democratic age. It is true enough, and I

can conceive nothing more democratic than such a movement as this, nothing which is more calculated to remedy defects that are incident to democracy, more thoroughly calculated to raise democracy to heights which other forms of government and older orderings of society have never yet attained. No movement can be more wisely democratic than one which seeks to give to the northern miner or the London artisan knowledge as good and as accurate, though he may not have so much of it, as if he were a student at Oxford or Cambridge. Something of the same kind may be said of the new frequency with which scholars of great eminence and consummate accomplishments, like Jowett, Lang, Myers, Leaf, and others, bring all their scholarship to bear, in order to provide for those who are not able, or do not care, to read old classics in the originals, brilliant and faithful renderings of them in our own tongue. Nothing but good, I am persuaded, can come of all these attempts to connect learning with the living forces of society, and to make industrial England a sharer in the classic tradition of the lettered world.

I am well aware that there is an apprehension that the present extraordinary zeal for education in all its forms—elementary, secondary, and higher—may bear in its train some evils of its own. It is said that nobody in England is now content to practise a handicraft, and that every one seeks to be at least a clerk. It is said that the moment is even already at hand when a great deal of practical distress does and must result from this tendency. I remember years ago that in the United States I heard something of the same kind. All I can say is that this tendency, if it

exists, is sure to right itself. In no case can the spread of so mischievous a notion as that knowledge and learning ought not to come within reach of handicraftsmen be attributed to literature. There is a famous passage in which Pericles, the great Athenian, describing the glory of the community of which he was so far-shining a member, says, "We at Athens are lovers of the beautiful, yet simple in our tastes; we cultivate the mind without loss of manliness." But then remember that after all Athenian society rested on a basis of slavery. Athenian citizens were able to pursue their love of the beautiful, and their simplicity, and to cultivate their minds without loss of manliness, because the drudgery and hard work and rude service of society were performed by those who had no share in all these good things. With us, happily, it is very different. We are all more or less upon a level. Our object is—and it is that which in my opinion raises us infinitely above the Athenian level—to bring the Periclean ideas of beauty and simplicity and cultivation of the mind within the reach of those who do the drudgery and the service and rude work of the world. And it can be done—do not let us be afraid—it can be done without in the least degree impairing the skill of our handicraftsmen or the manliness of our national life. It can be done without blunting or numbing the practical energies of our people.

I know they say that if you meddle with literature you are less qualified to take your part in practical affairs. You run a risk of being libelled a dreamer and a theorist. But, after all, if we take the very highest form of all practical energy—the governing of the country—all this talk is ludicrously untrue. I

venture to say that in the present Government, from the Prime Minister downwards, there are three men at least who are perfectly capable of earning their bread as men of letters. In the late Government, besides the Prime Minister, there were also three men of letters, and I have never heard that those three were greater simpletons than their neighbours. There is a Commission now at work on a very important and abstruse subject. I am told that no one there displays so acute an intelligence of the difficulties that are to be met, and the important arguments that are brought forward, and the practical ends to be achieved, as the Chairman of the Commission, who is not what is called a practical man, but a man of study, literature, theoretical speculation, and University training. Oh no, gentlemen, some of the best men of business in the country are men who have had the best collegian's equipment, and are the most accomplished bookmen.

It is true that we cannot bring to London with this movement the indefinable charm that haunts the gray and venerable quadrangles of Oxford and Cambridge. We cannot take you into the stately halls, the silent and venerable libraries, the solemn chapels, the studious old-world gardens. We cannot surround you with all those elevated memorials and sanctifying associations of scholars and poets, of saints and sages, that march in glorious procession through the ages, and make of Oxford and Cambridge a dream of music for the inward ear, and of delight for the contemplative eye. We cannot bring all that to you; but I hope, and I believe, it is the object of those who are more intimately connected with the Society than I have been, that every partaker of the benefits of this Society

will feel himself and herself in living connection with those two famous centres, and feel conscious of the links that bind the modern to the older England. One of the most interesting facts mentioned in your Report this year—and I am particularly interested in it for personal reasons—is that last winter four prizes of £10 each were offered in the Northumberland mining district, one each to the male and female student in every Term who should take the highest place in the examination, in order to enable them to spend a month in Cambridge in the Long Vacation for the purpose of carrying on in the laboratories and museums the work in which they had been engaged in the winter at the local centre. That is not a step taken by our Society; but Cambridge University has inspired and worked out the scheme, and I am not without hope that from London some of those who attend these classes may be able to go and have a taste of what Oxford and Cambridge are like. I like to think how poor scholars three or four hundred years ago used to flock to Oxford, regardless of cold, privation, and hardship, so that they might satisfy their hunger and thirst for knowledge. I like to think of them in connection with this movement. I like to think of them in connection with students like those miners in Northumberland, whom I know well, and who are mentioned in the Report of the Cambridge Extension Syndicate as, after a day's hard work in the pit, walking four or five miles through cold and darkness and rough roads to hear a lecture, and then walking back again the same four or five miles. You must look for the same enthusiasm, the same hunger and thirst for knowledge, that presided over the

foundation of the Universities many centuries ago, to carry on this work, to strengthen and stimulate men's faith in knowledge, their hopes from it, and their zeal for it.

The progress of the Society has been most remarkable. In 1876 there were, I find, five centres and seven courses. This year there are thirty-one centres and sixty courses. But to get a survey of this movement, you must look not only at London, but at Oxford and Cambridge. You find there that Oxford has twenty-two centres and twenty-nine courses, and Cambridge has fifty centres and eighty courses. I say that the thought of all this activity, and all the good of every kind, social, moral, and intellectual, which is being done by means of it, is in the highest degree encouraging, and not only encouraging, but calculated to inspire in every man who has ever felt the love and thirst for knowledge the deepest interest in the movement and the warmest wishes for its further success.

Speaking now of the particular kind of knowledge of which I am going to say a few words—how does literature fare in these important operations? Last term out of fifty-seven courses in the Cambridge scheme there were ten on literature; out of thirty-one of our courses, seven were on literature. Well, I am bound to say I think that that position for literature in the scheme is very reasonably satisfactory. I have made some inquiries, since I knew that I was going to speak here, in the great popular centres of industry in the North and in Scotland as to the popularity of literature as a subject of teaching. I find very much what I should have expected. The professors all tell

very much the same story. This is, that it is extremely hard to interest any considerable number of people in subjects that seem to have no direct bearing upon the practical work of everyday life. There is a disinclination to study literature for its own sake, or to study anything which does not seem to have a visible and direct influence upon the daily work of life. The nearest approach to a taste for literature is a certain demand for instruction in history with a little flavour of contemporary politics. In short, the demand for instruction in literature is strictly moderate. That is what men of experience tell me, and we have to recognise it. I cannot profess to be very much surprised. Mr. Goschen, when he spoke—I think in Manchester—some years ago, said there were three motives which might induce people to seek the higher education. First, to obtain greater knowledge for bread-winning purposes. From that point of view science would be most likely to feed the classes. Secondly, the improvement of one's knowledge of political economy, and history, and facts bearing upon the actual political work and life of the day. Thirdly, —and I am quite content to take Mr. Goschen's enumeration—was the desire of knowledge as a luxury to brighten life and kindle thought. I am very much afraid that, in the ordinary temper of our people, and the ordinary mode of looking at life, the last of these motives savours a little of self-indulgence, and sentimentality, and other objectionable qualities. There is a great stir in the region of physical science at this moment, and it is, in my judgment, likely to take a chief and foremost place in the field of intellectual activity. After the severity with which science was

for so many ages treated by literature, I cannot wonder that science now retaliates, now mightily exalts herself, and thrusts literature down into the lower place. I only have to say on the relative claims of science and literature what the great Dr. Arnold said: "If one might wish for impossibilities, I might then wish that my children might be well versed in physical science, but in due subordination to the fulness and freshness of their knowledge on moral subjects. This, however, I believe cannot be; wherefore, rather than have it the principal thing in my son's mind, I would gladly have him think that the sun went round the earth, and that the stars were so many spangles set in the bright blue firmament."¹ I am glad to think that one may know something of these matters, and yet not believe that the sun goes round the earth. But of the two, I for one am not prepared to accept the rather enormous pretensions that are nowadays sometimes made for physical science as the be-all and end-all of education.

Next to this we know that there is a great stir on behalf of technical and commercial education. The special needs of our time and country compel us to pay a particular attention to this subject. Here knowledge is business, and we shall never hold our industrial pre-eminence, with all that hangs upon that pre-eminence, unless we push on technical and commercial education with all our might. But there is—and now I come nearer my subject—a third kind of knowledge which, too, in its own way is business. There is the cultivation of the sympathies and imagination, the quickening of the moral sensibilities, and the enlarge-

¹ Stanley's *Life of Arnold*, ii. 31.

ment of the moral vision. The great need in modern culture, which is scientific in method, rationalistic in spirit, and utilitarian in purpose, is to find some effective agency for cherishing within us the ideal. That is, I take it, the business and function of literature. Literature alone will not make a good citizen; it will not make a good man. History affords too many proofs that scholarship and learning by no means purge men of acrimony, of vanity, of arrogance, of a murderous tenacity about trifles. Mere scholarship and learning and the knowledge of books do not by any means arrest and dissolve all the travelling acids of the human system. Nor would I pretend for a moment that literature can be any substitute for life and action. Burke said, "What is the education of the generality of the world? Reading a parcel of books? No! Restraint and discipline, examples of virtue and of justice, these are what form the education of the world." That is profoundly true; it is life that is the great educator. But the parcel of books, if they are well chosen, reconcile us to this discipline; they interpret this virtue and justice; they awaken within us the diviner mind, and rouse us to a consciousness of what is best in others and ourselves.

As a matter of rude fact, there is much to make us question whether the spread of literature, as now understood, does awaken the diviner mind. The figures of the books that are taken out from public libraries are not all that we could wish. I am not going to inflict many figures on you, but there is one set of figures that distresses book-lovers, I mean the enormous place that fiction occupies in the books taken out. In one great town in the North prose fiction

forms 76 per cent of all the books lent. In another great town prose fiction is 82 per cent; in a third 84 per cent; and in a fourth 67 per cent. I had the curiosity to see what happens in the libraries of the United States; and there—supposing the system of cataloguing and enumeration to be the same—they are a trifle more serious in their taste than we are; where our average is about 70 per cent, at a place like Chicago it is only about 60 per cent. In Scotland, too, it ought to be said that they have what I call a better average in respect to prose fiction. There is a larger demand for books called serious than in England. And I suspect, though I do not know, that one reason why there is in Scotland a greater demand for the more serious classes of literature than fiction, is that in the Scotch Universities there are what we have not in England—well-attended Chairs of Literature, systematically and methodically studied. Do not let it be supposed that I at all underrate the value of fiction. On the contrary, I think when a man has done a hard day's work, he can do nothing better than fall to and read the novels of Walter Scott or Miss Austen, or some of our living writers. I am rather a voracious reader of fiction myself. I do not, therefore, point to it as a reproach or as a source of discouragement, that fiction takes so large a place in the objects of literary interest. I only insist that it is much too large, and we should be better pleased if it sank to about 40 per cent, and what is classified as general literature rose from 13 to 25 per cent.

There are other complaints of literature as an object of interest in this country. I was reading the other day an essay by the late head of my old

College at Oxford—a very learned and remarkable man—Mark Pattison, who was a book-lover if ever there was one. Now, he complained that the bookseller's bill in the ordinary English middle class family is shamefully small. He thought it monstrous that a man who is earning £1000 a year should spend less than £1 a week upon books—that is to say, less than a shilling in the pound per annum. Well, I know that Chancellors of the Exchequer take from us 8d. or 6d. in the pound, and I am not sure that they always use it as wisely as if they left us to spend it on books. Still, a shilling in the pound to be spent on books by a clerk who earns a couple of hundred pounds a year, or by a workman who earns a quarter of that sum, is rather more, I think, than can be reasonably expected. I do not believe for my part that a man really needs to have a very great many books. Pattison said that nobody who respected himself could have less than 1000 volumes. He pointed out that you can stack 1000 octavo volumes in a bookcase that shall be 13 ft. by 10 ft., and 6 inches deep, and that everybody has that space at disposal. Still the point is not that men should have a great many books, but that they should have the right ones, and that they should use those that they have. We may all agree in lamenting that there are so many houses—even some of considerable social pretension—where you will not find a good atlas, a good dictionary, or a good cyclopædia of reference. What is still more lamentable, in a good many more houses where these books are, they are never referred to or opened. That is a very discreditable fact, because I defy anybody to take up a copy of the *Times* newspaper—and I speak in the presence

of gentlemen well up in all that is going on in the world—and not come upon something in it upon which, if their interest in the affairs of the day were active, intelligent, and alert, as it ought to be, they would consult an atlas, dictionary, or cyclopædia of reference.

I do not think for a single moment that everybody is born with the ability for using books, for reading and studying literature. Certainly not everybody is born with the capacity of being a great scholar. All people are no more born great scholars like Gibbon and Bentley, than they are all born great musicians like Handel and Beethoven. What is much worse than that, many are born with the incapacity of reading, just as they are born with the incapacity of distinguishing one tune from another. To them I have nothing to say. Even the morning paper is too much for them. They can only skim the surface even of that. I go further, and I frankly admit that the habit and power of reading with reflection, comprehension, and memory all alert and awake, does not come at once to the natural man any more than many other sovereign virtues come to that interesting creature. What I do submit to you and press upon you with great earnestness is, that it requires no preterhuman force of will in any young man or woman—unless household circumstances are unusually vexatious and unfavourable—to get at least half an hour out of a solid busy day for good and disinterested reading. Some will say that this is too much to expect, and the first persons to say it, I venture to predict, will be those who waste their time most. At any rate, if I cannot get half an hour, I will be content with a quarter. Now, in half an hour I fancy you can read

fifteen or twenty pages of Burke ; or you can read one of Wordsworth's masterpieces—say the lines on Tintern; or say, one-third—if a scholar, in the original, and if not, in a translation—of a book of the Iliad or the Æneid. I am not filling the half hour too full. But try for yourselves what you can read in half an hour. Then multiply the half hour by 365, and consider what treasures you might have laid by at the end of the year ; and what happiness, fortitude, and wisdom they would have given you for a lifetime.

I will not take up your time by explaining the various mechanical contrivances and aids to successful study. They are not to be despised by those who would extract the most from books. Many people think of knowledge as of money. They would like knowledge, but cannot face the perseverance and self-denial that go to the acquisition of it, as they go to the acquisition of money. The wise student will do most of his reading with a pen or a pencil in his hand. He will not shrink from the useful toil of making abstracts and summaries of what he is reading. Sir William Hamilton was a strong advocate for under-scoring books of study. "Intelligent underlining," he said, "gave a kind of abstract of an important work, and by the use of different coloured inks to mark a difference of contents, and discriminate the doctrinal from the historical or illustrative elements of an argument or exposition, the abstract became an analysis very serviceable for ready reference."¹ This assumes, as Hamilton said, that the book to be operated on is your own, and perhaps is rather too elaborate a counsel of perfection for most of us. Again, some great men—

¹ Veitch's *Life of Hamilton*, 314, 392.

Gibbon was one, and Daniel Webster was another, and the great Lord Strafford was a third—always before reading a book made a short, rough analysis of the questions which they expected to be answered in it, the additions to be made to their knowledge, and whither it would take them.¹ I have sometimes tried that way of steadying and guiding attention; I have never done so without advantage; and I commend it to you. I need not tell you that you will find that most books worth reading once are worth reading twice, and—what is most important of all—the masterpieces of literature are worth reading a thousand times. It is a great mistake to think that because you have read a masterpiece once or twice, or ten times, therefore you have done with it. Because it is a masterpiece, you ought to live with it, and make it part of your daily life. Another practice which I commend to you is that of keeping a common-place book, and transcribing into it what is striking and interesting and suggestive. And if you keep it wisely, as Locke has taught us, you will put every entry under a head, division, or subdivision.² This is an excellent practice for concen-

¹ “After glancing my eye,” says Gibbon, “over the design and order of a new book, I suspended the perusal until I had finished the task of self-examination; till I had resolved in a solitary walk all that I knew or believed or had thought on the subject of the whole work or of some particular chapter: I was then qualified to discern how much the author added to my original stock; and if I was sometimes satisfied by the agreement, I was sometimes armed by the opposition of our ideas” (Dr. Smith’s *Gibbon*, i. 64).

² “If I would put anything in my Common-place Book, I find out a head to which I may refer it. Each head ought to be some important and essential word to the matter in hand” (Locke’s *Works*, iii. 308, ed. 1801). This is for indexing purposes, but it is worth while to go further and make a title for the passage extracted, indicating its pith and purport.

trating your thought on the passage and making you alive to its real point and significance.

Various correspondents have asked me to say something about those lists of a hundred books that have been circulating through the world within the last few months. I have examined some of these lists with considerable care, and whatever else may be said of them—and I speak of them with great deference and reserve, because men for whom I have a great regard have compiled them—they do not seem to me to be calculated either to create or satisfy a wise taste for literature in any very worthy sense. To fill a man with a hundred parcels of heterogeneous scraps from the *Mahabharata*, and the *Sheking*, down to *Pickwick* and White's *Selborne*, may pass the time, but I don't think it would strengthen or instruct or delight. For instance, it is a mistake to think that every book that has a great name in the history of books or of thought is worth reading. Some of the most famous books are least worth reading. Their fame was due to their doing something that needed in their day to be done. The work done, the virtue of the book expires. Again, I agree with those who say that the steady working down one of these lists would end in the manufacture of that obnoxious product—the prig. A prig has been defined as an animal that is overfed for its size. I think that these bewildering miscellanies would lead to an immense quantity of that kind of overfeeding. The object of reading is not to dip into everything that even wise men have ever written. In the words of one of the most winning writers of English that ever existed—Cardinal Newman—the object of literature in education is to open the mind, to correct it, to

refine it, to enable it to comprehend and digest its knowledge, to give it power over its own faculties, application, flexibility, method, critical exactness, sagacity, address, and expression. These are the objects of that intellectual perfection which a literary education is destined to give. I will not venture on a list of a hundred books, but will recommend you to one book well worthy of your attention. Those who are curious as to what they should read in the region of pure literature will do well to peruse my friend Mr. Frederic Harrison's volume, called *The Choice of Books*. You will find there as much wise thought, eloquently and brilliantly put, as in any volume of its size and on its subject, whether it be in the list of a hundred or not.

Let me pass to another topic. We are often asked whether it is best to study subjects, or authors, or books. Well, I think that is like most of the stock questions with which the perverse ingenuity of mankind torments itself. There is no universal and exclusive answer. It is idle. My own answer is a very plain one, and it is this. It is sometimes best to study books, sometimes authors, and sometimes subjects; but at all times it is best to study authors, subjects, and books in connection with one another. Whether you make your first approach from interest in an author or in a book, the fruit will be only half gathered if you leave off without new ideas and clearer lights both on the man and the matter. One of the noblest masterpieces in the literature of civil and political wisdom is to be found in Burke's three performances on the American War—his speech on Taxation in 1774, on Conciliation in 1775, and his letter to the

Sheriffs of Bristol in 1777. I can only repeat to you what I have been saying in print and out of it for a good many years, and what I believe more firmly as observation is enlarged by time and occasion, that these three pieces are the most perfect manual in all literature for the study of great affairs, whether for the purpose of knowledge or action. "They are an example," as I have said before now, "an example without fault of all the qualities which the critic, whether a theorist or an actor, of great political situations should strive by night and by day to possess. If their subject were as remote as the quarrel between the Corinthians and Coreyra, or the war between Rome and the Allies, instead of a conflict to which the world owes the opportunity of the most important of political experiments, we should still have everything to learn from the author's treatment; the vigorous grasp of masses of compressed detail, the wide illumination from great principles of human experience, the strong and masculine feeling for the two great political ends of justice and freedom, the large and generous interpretation of expediency, the morality, the vision, the noble temper." No student worthy of the name will lay aside these pieces, so admirable in their literary expression, so important for history, so rich in the lessons of civil wisdom, until he has found out something from other sources as to the circumstances from which such writings arose, and as to the man whose resplendent genius inspired them. There are great personalities like Burke who march through history with voices like a clarion trumpet and something like the glitter of swords in their hands. They are as interesting as their work. Contact with them

warms and kindles the mind. You will not be content, after reading one of these pieces, without knowing the character and personality of the man who conceived it, and until you have spent an hour or two—and an hour or two will go a long way with Burke still fresh in your mind—over other compositions in political literature, over Bacon's civil pieces, or Machiavelli's *Prince*, and others in the same order of thought. That is my answer to the question whether you should study books, subjects, or authors.

This points to the right answer to another question that is constantly asked. We are constantly asked whether desultory reading is among things lawful and permitted. May we browse at large in a library, as Johnson said, or is it forbidden to open a book without a definite aim and fixed expectations? I am for a compromise. If a man has once got his general point of view, if he has striven with success to place himself at the centre, what follows is of less consequence. If he has got in his head a good map of the country, he may ramble at large with impunity. If he has once well and truly laid the foundations of a methodical, systematic habit of mind, what he reads will find its way to its proper place. If his intellect is in good order, he will find in every quarter something to assimilate and something that will nourish.

Now I am going to deal with another question, with which perhaps I ought to have started. What is literature? It has often been defined. Emerson says it is a record of the best thoughts. "By literature," says another author, I think Mr. Stopford Brooke, "we mean the written thoughts and feelings of intelligent men and women arranged in a way that

shall give pleasure to the reader." A third account is that "the aim of a student of literature is to know the best that has been thought in the world." Definitions always appear to me in these things to be in the nature of vanity. I feel that the attempt to be compact in the definition of literature ends in something that is rather meagre, partial, starved, and unsatisfactory. I turn to the answer given by a great French writer to a question not quite the same, viz. "What is a classic?" Literature consists of a whole body of classics in the true sense of the word, and a classic, as Sainte Beuve defines him, is an "author who has enriched the human mind, who has really added to its treasure, who has got it to take a step farther; who has discovered some unequivocal moral truth, or penetrated to some eternal passion, in that heart of man where it seemed as though all were known and explored; who has produced his thought, or his observation, or his invention under some form, no matter what, so it be great, large, acute, and reasonable, sane and beautiful in itself; who has spoken to all in a style of his own, yet a style which finds itself the style of everybody,—in a style that is at once new and antique, and is the contemporary of all the ages." At a single hearing you may not take all that in; but if you should have any opportunity of recurring to it you will find this a satisfactory, full, and instructive account of what is a classic, and will find in it a full and satisfactory account of what those who have thought most on literature hope to get from it, and most would desire to confer upon others by it. Literature consists of all the books—and they are not so many—where moral truth and human passion

are touched with a certain largeness, sanity, and attraction of form. My notion of the literary student is one who through books explores the strange voyages of man's moral reason, the impulses of the human heart, the chances and changes that have overtaken human ideals of virtue and happiness, of conduct and manners, and the shifting fortunes of great conceptions of truth and virtue. Poets, dramatists, humorists, satirists, masters of fiction, the great preachers, the character-writers, the maxim-writers, the great political orators—they are all literature in so far as they teach us to know man and to know human nature. This is what makes literature, rightly sifted and selected and rightly studied, not the mere elegant trifling that it is so often and so erroneously supposed to be, but a proper instrument for a systematic training of the imagination and sympathies, and of a genial and varied moral sensibility.

From this point of view let me remind you that books are not the products of accident and caprice. As Goethe said, if you would understand an author, you must understand his age. The same thing is just as true of a book. If you would comprehend it, you must know the age. There is an order; there are causes and relations. There are relations between great compositions and the societies from which they have emerged. I would put it in this way to you, that just as the naturalist strives to understand and to explain the distribution of plants and animals over the surface of the globe, to connect their presence or their absence with the great geological, climatic, and oceanic changes, so the student of literature, if he be wise, undertakes an ordered and connected survey

of ideas, of tastes, of sentiments, of imagination, of humour, of invention, as they affect and as they are affected by the ever-changing experiences of human nature, and the manifold variations that time and circumstances are incessantly working in human society.

It is because I am possessed, and desire to see others possessed, by that conception of literary study, that I watch with the greatest sympathy and admiration the efforts of those who are striving so hard, and, I hope, so successfully, to bring the systematic and methodical study of our own literature, in connection with other literatures, among subjects for teaching and examination in the Universities of Oxford and Cambridge. I regard those efforts with the liveliest interest and sympathy. Everybody agrees that an educated man ought to have a general notion of the course of the great outward events of European history. So, too, an educated man ought to have a general notion of the course of all those inward thoughts and moods which find their expression in literature. I think that in cultivating the study of literature, as I have rather laboriously endeavoured to define it, you will be cultivating the most important side of history. Knowledge of it gives stability and substance to character. It furnishes a view of the ground we stand on. It builds up a solid backing of precedent and experience. It teaches us where we are. It protects us against imposture and surprise.

Before closing I should like to say one word upon the practice of composition. I have suffered, by the chance of life, very much from the practice of composition. It has been my lot, I suppose, to read

more unpublished work than any one else in this room, and, I hope, in this city. There is an idea, and I venture to think, a very mistaken idea, that you cannot have a taste for literature unless you are yourself an author. I make bold entirely to demur to that proposition. It is practically most mischievous, and leads scores and even hundreds of people to waste their time in the most unprofitable manner that the wit of man can devise, on work in which they can no more achieve even the most moderate excellence than they can compose a Ninth Symphony or paint a Transfiguration. It is a terrible error to suppose that because you relish "Wordsworth's solemn-thoughted idyll, or Tennyson's enchanted reverie," therefore you have a call to run off to write bad verse at the Lakes or the Isle of Wight. I beseech you not all to turn to authorship. I will go further. I venture, with all respect to those who are teachers of literature, to doubt the excellence and utility of the practice of over-much essay-writing and composition. I have very little faith in rules of style, though I have an unbounded faith in the virtue of cultivating direct and precise expression. But you must carry on the operation inside the mind, and not merely by practising literary deportment on paper. It is not everybody who can command the mighty rhythm of the greatest masters of human speech. But every one can make reasonably sure that he knows what he means, and whether he has found the right word. These are internal operations, and are not forwarded by writing for writing's sake. I am strong for attention to expression, if that attention be exercised in the right way. It has been said a million

times that the foundation of right expression in speech or writing is sincerity. It is as true now as it has ever been. Right expression is a part of character. As somebody has said, by learning to speak with precision, you learn to think with correctness; and the way to firm and vigorous speech lies through the cultivation of high and noble sentiments. I think, as far as my observation has gone, that men will do better if they seek precision by studying carefully and with an open mind and a vigilant eye the great models of writing, than by excessive practice of writing on their own account.

Much might here be said on what is one of the most important of all the sides of literary study. I mean its effect as helping to preserve the dignity and the purity of the English language. That noble instrument has never been exposed to such dangers as those which beset it to-day. Domestic slang, scientific slang, pseudo-aesthetic affectations, hideous importations from American newspapers, all bear down with horrible force upon the glorious fabric which the genius of our race has reared. I will say nothing of my own on this pressing theme, but will read to you a passage of weight and authority from the greatest master of mighty and beautiful speech.

“Whoever in a state,” said Milton, “knows how wisely to form the manners of men and to rule them at home and in war with excellent institutes, him in the first place, above others, I should esteem worthy of all honour. But next to him the man who strives to establish in maxims and rules the method and habit of speaking and writing received from a good age of the nation, and, as it were, to fortify the same round with a kind of wall, the daring to overleap which let a law only short of that of Romulus be used to prevent. . . . The one, as I believe,

supplies noble courage and intrepid counsels against an enemy invading the territory. The other takes to himself the task of extirpating and defeating, by means of a learned detective police of ears, and a light band of good authors, that barbarism which makes large inroads upon the minds of men, and is a destructive intestine enemy of genius. Nor is it to be considered of small consequence what language, pure or corrupt, a people has, or what is their customary degree of propriety in speaking it. . . . For, let the words of a country be in part unhandsome and offensive in themselves, in part debased by wear and wrongly uttered, and what do they declare, but, by no light indication, that the inhabitants of that country are an indolent, idly-yawning race, with minds already long prepared for any amount of servility? On the other hand, we have never heard that any empire, any state, did not at least flourish in a middling degree as long as its own liking and care for its language lasted.”¹

The probabilities are that we are now coming to an epoch, as it seems to me, of a quieter style. There have been in our generation three great giants of prose writing. There was, first of all, Carlyle, there was Macaulay, and there is Mr. Ruskin. These are all giants, and they have the rights of giants. But I do not believe that a greater misfortune can befall the students who attend classes here, than that they should strive to write like any one of these three illustrious men. I think it is the worst thing that can happen to them. They can never attain to it. It is not everybody who can bend the bow of Ulysses, and most men only do themselves a mischief by trying to bend it. We are now on our way to a quieter style. I am not sorry for it. Truth is quiet. Milton's phrase ever lingers in our minds as one of imperishable beauty—where he regrets that he is drawn by I

¹ Letter to Bonmattei, from Florence, 1638.

know not what, from beholding the bright countenance of truth in the quiet and still air of delightful studies. Moderation and judgment are more than the flash and the glitter even of the greatest genius. I hope that your professors of rhetoric will teach you to cultivate that golden art—the steadfast use of a language in which truth can be told; a speech that is strong by natural force, and not merely effective by declamation; an utterance without trick, without affectation, without mannerisms, and without any of that excessive ambition which overleaps itself as much in prose writing as it does in other things.

Now, ladies and gentlemen, I will detain you no longer. I hope that I have made it clear that we conceive the end of education on its literary side to be to make a man and not a cyclopædia, to make a citizen and not a book of elegant extracts. Literature does not end with knowledge of forms, with inventories of books and authors, with finding the key of rhythm, with the varying measure of the stanza, or the changes from the involved and sonorous periods of the seventeenth century down to the *staccato* of the nineteenth century, or all the rest of the technicalities of scholarship. Do not think I contemn these. They are all good things to know, but they are not ends in themselves. The intelligent man, says Plato, will prize those studies which result in his soul getting soberness, righteousness, and wisdom, and he will less value the others. Literature is one of the instruments, and one of the most powerful instruments, for forming character, for giving us men and women armed with reason, braced by knowledge, clothed with steadfastness and courage, and inspired by that public spirit

and public virtue of which it has been well said that they are the brightest ornaments of the mind of man. Bacon is right, as he generally is, when he bids us read not to contradict and refute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and to consider. Yes, let us read to weigh and to consider. In the times before us that promise or threaten deep political, economical, and social controversy, what we need to do is to induce our people to weigh and consider. We want them to cultivate energy without impatience, activity without restlessness, inflexibility without ill-humour. I am not going to preach to you any artificial stoicism. I am not going to preach to you any indifference to money, or to the pleasures of social intercourse, or to the esteem and good-will of our neighbours, or to any other of the consolations and the necessities of life. But, after all, the thing that matters most, both for happiness and for duty, is that we should habitually live with wise thoughts and right feelings. Literature helps us more than other studies to this most blessed companionship of wise thoughts and right feelings, and so I have taken this opportunity of earnestly commending it to your interest and care.

SCIENTIFIC STUDY

BY SIR JAMES PAGET, BART., F.R.S.

1888

THE subject of scientific study in its full range would be far beyond my power and your patience. I shall believe, therefore, that I may speak of only some parts of the study, and of these only as they may be pursued within the range and in the manner designed by this Society, and as they may be followed by the majority of those who attend the lectures and the classes. Moreover, I can have no choice but to select my illustrations from the parts of scientific study with which I have myself been occupied. In comparison with the whole field, these parts are very small, but they may serve well for supplying examples of what I chiefly wish to speak of, namely, the utility of scientific study for the education of some portions of the mind; its utility, not only for the teaching of truth, but for the teaching of the methods by which truth has been attained.

I should like, first, to meet an objection which I have often heard made to the teaching that is given by the Society, and which is summed up in what is

regarded as a very wise proverb—that “a little knowledge is a dangerous thing.” As with most of the merely popular proverbs, the very opposite, if stated unconditionally, would be quite as true and quite as false; but in the present instance the objection may be met by observing that, in the Society’s teaching, they who will may learn far more than can fairly be called a little knowledge. As I looked through the syllabus of such subjects as I can estimate, I could see that the amount of teaching in each of them is enough for a good beginning for some who may intend to make that subject a chief study for their lives, and enough to form an important part in the teaching of any one who wishes to be, in the fairest sense, generally well educated.

But, really, as for the proverb, any one observing facts may often see that, in all practical life, a little knowledge is far less dangerous than is complete ignorance. Whether either of them be dangerous depends on a man’s temper and general character, not on his intellect; it depends on whether he is habitually rash or prudent, humble or conceited; and seeing that, as a rule, none have so few doubts as they that are quite ignorant, and as their ignorance includes a total want of self-knowledge, so there are none more dangerously rash than the very ignorant are apt to be.

Now, scientific study may be so pursued as to help to the acquirement of self-knowledge as well as of the knowledge of other facts. Its utility is, at least, twofold: direct, in the facts and general principles which may be learned; and indirect, in the cultivation and refreshment of the mind.

As for the use of knowing the chief facts of science, or of any branch of it, this may seem to be

proved in every hour that we live. For the practical applications of science extend into every occupation of life; into the provision of every kind of food; into the management of the air we breathe, and of the light and heat in which we are to work; they are so influential in every form of business, in every art and manufacture, that it might seem impossible to live in safety without some scientific knowledge. It may, indeed, be said, and often with much truth, that all these applications of science are best left to those who have studied them as the chief business of their lives, and who must know best about them. This is often true; but even experts can best guide those who know something of their language, and they may best be controlled and assisted and most safely trusted by those who know the real value of scientific study and of the truths to which it can attain; by those who, while studying the facts of science, have studied also, as I have said, the methods by which the facts have been acquired and made sure.

Now I will speak of four chief portions of this education of the mind; but let me say that they are only a part of all that may be gained. They are educations (1) in the power of observing; (2) in accuracy; (3) in the difficulty of ascertaining truth; (4) in proceeding from the knowledge of what is proved to the thinking of what is probable; and for all these ends I shall try to illustrate the value and the need of very careful study by showing their difficulties. The glories and the triumphs of science are often celebrated; some of its failures and difficulties may better illustrate the necessity for earnest study by those who would be successful in it.

(1) By education in the power of observing, I mean not only the power of seeing things, but that of seeing and observing them in their various relations to things around them. Many suppose that this is easy; really it is very difficult, and few overcome the difficulty except those who are either naturally endowed with an unusual power of observing accurately, or have been carefully trained and are constantly training themselves.

The difficulty of observing is proved by nearly every discovery; for, in nearly every instance, the discovery is made by the accurate observation of facts which have been within the reach of many, but have been overlooked by all except the discoverers.

In my own profession, with its hundreds of careful observers, not a year passes, scarcely a month or a week, in which there is not made known some form of disease, or some symptom of disease, previously unobserved; and when it is thus made known it is at once evident to many who had overlooked it; they may have seen it, they did not observe it. And the same might be said, I think, of nearly every scientific pursuit, in natural history, in chemistry, and physics. Look at the proceedings of any scientific society; see the new facts of which they tell. Could not many of them have been observed long ago? Obvious as the facts are now, why were they not sooner ascertained? Because observation is really very difficult even to those who are keen and watchful and ambitious of discovery, and many of whom have been well trained.

This is equally evident in the study of the works of those who have been most successful, and whom we

justly count amongst the greatest observers. Look at the works of Darwin; and here let me say that every scientific study should include the reading, not only of the best manuals, but of some of the works of at least one great master; for even if the facts he tells have become part of popular knowledge, yet the method of his work may be a lesson for all ages. I say, read Darwin's works or his life; see the constant repeated looking for facts that they might be observed again and again; the looking for them in all changing circumstances; the tests applied; the doubts that would have made a less patient man nearly hopeless; and from all these things reckon how great must be the difficulty of accurate observation, how great the need of careful cultivation of all the power of observing which we may possess. And you may note that a large part of Darwin's observations were made on things that nearly every one could have seen. Any one of his contemporaries might have studied the work of earth-worms, say in Hyde Park, when again and again we could see the heaps of mould thrown up by them, and themselves crawling about in the mornings after showers. We saw them, but no more observed them, no more thought of them, than we did of the drifting clouds or of the dust-carts.

I mention this facility of opportunities for observation, because many are prone to think that for scientific study you must have laboratories and costly apparatus and hours every day to spare, and that these things are impossible to the vast majority of the students in this Society's classes. The city of London is a very good place in which, by one of many examples, to disprove this. You know Sir John

Lubbock and his charming scientific works on Ants and Bees, and in a wide range of natural history. It would be hard to find a better naturalist in this range of study; but it would be just as hard to find a better man of business, or one more earnest in political life, or in the kindly social purposes in which he uses all its opportunities; and it would be hard to find one more ready to promote by his own efforts all that is good in social and scientific work. Remember his example when you have to listen to the nonsense talked about the study of science being incompatible with a life in business.

And this reminds me to say that an intimate association of science with business may be very useful if it makes it more clear to some men of science that, by carrying on their researches till they attain an immediate practical utility, they may vastly increase the means for acquiring more knowledge. It is strange how often, and with what heavy loss, at least for a time, scientific men, as if for want of enterprise, have stopped short of this. Some years ago I studied and wrote on the history of the discovery of anæsthetics.¹ It is too long to tell now, but it shows that before the discovery was made, it was, as we may say, within reach of Sir Humphry Davy, Faraday, and others among the best men of science of their time. It was really made by such as may be called practical men using scientific facts. I can briefly tell another instance of such stopping short which may seem yet more remarkable. It was told to me by my brother, Sir George Paget, who, more than fifty years ago, attended the lectures on chemistry

¹ *Nineteenth Century*, Dec. 1879.

at Cambridge by Professor Cumming. The Professor, when describing to his class the discovery by Ørsted of the power of an electric current to deflect a magnet, used to say—"Here, then, are the elements which would excellently serve for a system of telegraphy"; and yet neither he nor any of the active and cultivated men who heard him moved onward to the discovery and invention by which not only the use, but the knowledge of electric science has been so increased.¹

All these things may show the difficulty of observation and the need of earnestness and watchfulness in observing. Of course it cannot be learned without practice, and you may ask, Where can we practise scientific observation here in London? I might answer, anywhere—even in natural history, you may study the habits of the London wild birds; there are many besides the sparrows; or you may study the wild plants on any piece of ground left undisturbed for two or three years. Long ago, when I studied botany, there was such a piece of ground, scarcely bigger than this hall, near my father's house in Yarmouth, and there I found more than fifty species. The origin of such plants, whether from seeds in the ground or from those in the air, how far one can exclude another, the influence of London atmosphere, their attraction of insects, and many other things, would be worth observing. At least, in these and the like things you may learn how to observe, and then you will love to observe, and then some good will come of it.

¹ In the *Home Life of Sir David Brewster*, 1869, is an account of a method of electric telegraphy used in 1753 by Mr. Morison of Greenock, and published in the *Scots Magazine* of that year.

(2) Let me speak now of that second advantage of scientific study: its teaching of accuracy—accuracy not only in observing, but in recording, remembering, and arranging facts.

I hardly need say that accuracy is essential both to the maintenance and to the progress of knowledge. All would hold this, but different persons have very different standards of what they would call accuracy, and many have a very low standard of it. Here then, again, I would urge you to study and imitate the work of some true master in science. The works in exact science or in mathematics would, I suppose, be best; but of these I cannot speak, and I hope it is with no foolish pride in what has been best in my own studies if I believe that, in all the sciences of observation, there is nothing more accurate than is the description of the human body in the chief books on human anatomy. There is not a part visible to the naked eye, and within reach of the most minute dissection, which is not so exactly described that the description can bear the tests of close examination again and again repeated every year, in every anatomical school. And even beyond this, the minute parts of every structure have been examined with the highest powers of the microscope, and accurately described and drawn. Take this as the standard of accuracy to which you should try to attain.

And I think I can be nearly sure that a great part of this accuracy is due to the habit which many anatomists have of writing descriptions of what they observe while the objects are before them. I have had so much experience of this in the making of museum catalogues that I cannot doubt its utility.

Looking and writing, looking and writing, looking and correcting again and again; thus at length may come an accurate description. And, surely, this is only after the custom of every good painter of scenery or portraits. He may make clever sketches of what he remembers to have seen, but for a complete likeness he looks, may be, twenty times at everything, and paints exactly what he sees. So should all who would be accurate in scientific records; science should not be less accurate than art can be.

I think this scientific cultivation of accuracy cannot be too strongly urged. It may be one of the happiest means of teaching accuracy in speaking, and in thinking, and in designing new lines in which to continue one's course of study. And it may be very useful in ordinary life. Look at its opposite in the boundless mischiefs of inaccuracy, and these not always from dishonest people, but from the careless, the inconsiderate, the prejudiced. Do we not all know people, good people too, who would not for their lives tell a lie, but seem as if they could not for their lives tell the truth?

(3) All this may fairly lead to my speaking of the utility of learning in scientific study the difficulty of ascertaining truth. This difficulty is shown in all the facts I have been speaking of; yet in many of the ordinary affairs of life it is assumed to be trivial, or, more remarkably, there are very wide differences of custom due to different estimates of this difficulty. Any newspaper will illustrate these differences. See, first, what is done to ascertain truth in courts of law, say for a case of theft or in an action for slander. Every one who is to state the facts is examined on his

oath ; then he may be cross-examined, to detect wilful errors, lapses of memory, or any other inaccuracy. Facts on both sides must be thus heard. Then there follow pleadings for both sides, and each side may say the best it can for itself, the worst it can for the other ; then comes a careful recital of the evidence and an impartial summing-up by the judge ; and then the deliberation of twelve men deemed fit to decide what is true, and who have sworn on oath that they will do so if they can. Thus they decide, and yet there may be an appeal, and the whole question may be raised again.

Now no reasonable person would desire less care than this for finding what is true when justice is to be done, especially when, on one side or the other, there may be attempts to conceal the truth or to tell untruths. But surely the contrast is too great between this just care and the carelessness with which, under other conditions, statements are accepted as true. I might draw the contrast from any mere private reports of slander, or from any other part of a newspaper, say the report of a contested election, in which one may read how the opposite views as to matters of fact as well as of opinion are maintained by vehemently opponent pleadings, and then without any cool dispassionate summing-up, without much deliberation, each side is positive that it has the truth, and that even on matters of fact it is right and the other is utterly wrong. But I need not multiply instances ; let any one only think of the grounds on which he is ready to accept as true any ordinary statement, and compare these with what would be required if that statement were to be tested in a court of law.

Of course we cannot apply these legal tests to all the things that come before us, but at least we should educate ourselves towards the wish for similar accuracy, towards the habit of judging of probabilities according to the care given to find the truth. And this is just what scientific study may do for us, by showing us how truth is only reached by repeated observations, by experiments and tests, by records and revisions, by discussions in societies, in journals, in reviews, by all the means that may detect fallacies and bring out the mere truth.

It is thus that science may justify itself in claiming credit for encouraging the love of truth; and I think it may fairly do so; for the desire for truth in one department of the mind will usually tend to increase the desire for it in other parts, and the love of scientific truth does, I believe, sustain and increase the love of moral truth.

But the having spoken of the attainment of truth in courts of law suggests to me to remind you that the oath makes a witness promise to tell the truth, the whole truth, and nothing but the truth, and in large ranges of science, though the truth and nothing but the truth may be attained, yet the whole truth very seldom can be. This is especially the case with the sciences that have to do with living things; for in these everything is in relation with so many and variable conditions that it is very hard to arrive at an unconditional conclusion. Few things are absolute. A distinguished French surgeon used to say that there were two words that a surgeon should never use, namely, "jamais" and "toujours." The same principle is maintained, I think, by Mr. Gilbert in *H.M.S.*

Pinafore, "Never? what never? well, hardly ever." Certainly it is illustrated in biology.

Nothing might seem more constant than the likeness of offspring to their parents; but the likeness is with difference, and we know not why. The rule of likeness between the two lateral halves of many animals and leaves of plants is very general; but the likeness is very rarely exact, and we know not why. In the organic world nature is not mathematically exact—not uniformly constant—at least in so far as we can yet see; and we do not know the reasons of the deviations.

Now, it is well to bear all this in mind, and to feel that when we talk of exceptions and chances and the like, though we are very apt to persuade ourselves that we are talking of just and final conclusions, yet really we may be only shifting away from the confession of the imperfection of our knowledge; we may be wrongly persuading ourselves that we have not only the truth, but the whole truth. Scientific study will teach you that exceptions to admitted laws are really examples of other laws not yet accurately ascertained; and that the events which we refer to chance, as if it were a determining force, are only some of those of which we have not traced the precedents. Exceptions, chances, and such like words, relate entirely to things of which we have as yet very imperfect knowledge or none at all; our hope must be that the number of such things will be diminished by scientific study.

(4) And now let me say something of that last method of education of the mind by scientific study, which may teach it how to proceed from the knowledge

of what is proved to the thinking of what is probable. I shall not discuss the values or rules of safe induction or deduction from facts ; it should be done in the language of logic, but that is a language which I cannot speak ; and I suspect you may learn the rules better in the lives or works of some of the great masters in science. Say, again, if you like, of Darwin, or, if you have time, in such a book as Whewell's *History of the Inductive Sciences*. If you read Darwin, observe the immense quantity of facts he gathered before he enunciated his induction as to the law of natural selection, the doubts he felt and then slowly dispersed, the suspicions of error which preceded his conviction of the truth. And then study his caution as to what might be deduced from it ; his anxiety for facts which might test his belief or his guesses ; how different from the confidence with which some people seem to think it easy to explain everything.

I am sure I cannot too strongly urge you thus to study the difficulties of scientific thinking before you venture to practise it. I love to quote a saying of the greatest of all scientific workers in my profession—John Hunter. He used to say to his pupils, “ Don't think : try.” He meant, “ Don't think that you can safely decide that, because you know some things to be true, therefore some others must be true ; ‘ try ’ whether they are, test them, watch them ; do not be ready to say positively, ‘ From this it follows,’ or anything of that kind ; ‘ try ’ whether it does.” And the whole history of science proves his wisdom ; for, though it is a glorious history of progress in knowledge, yet every page is disfigured by the examples of

hindrances of that progress by errors; and the vast majority of these are errors, not of observation, but of thinking. Men have said that knowledge is power, and they have tried too soon to grasp it; and they have grasped at the shadows of it, at the shadows cast by themselves while by their erroneous thinking they obstructed the light of truth.

Now, you may ask, what is to be the reward of all this study? Would not some other knowledge, in the pursuit of which there is less risk of error, less need of all these cautions, serve as well? I do not believe there is? I do not believe there is one more useful or more happy-making than is scientific study. I have read the admirable address on the study of literature given here last year by Mr. John Morley, but it has not converted me. I must hold still to the preference for the teaching of science and to its utility for every part and manner of life. Surely there is no one in any calling who may not be the better for having studied and practised careful observation and accuracy, and the habit of ascertaining truth and of thinking cautiously; and in science all these and many other of the best mental qualities may be cultivated even while we are gaining the power and happiness of knowledge. And scientific knowledge *is* power. Think of the telegraph and telephone! look, when you leave this hall, at those wires overhead, and think of those underground; think of the incessant talking and writing that is going on along those wires—the carrying of questions and answers on all the interests of life over hundreds of miles in a few seconds—the bringing near of the minds of thousands who are far apart—the inestimable aids to happiness and utility.

It was the power of scientific knowledge that did this.

Think of the abolition of pain by anaesthetics, or of all the utilities of photography in its profoundest scientific researches, in historic records, in the domestic happiness that even the poorest may have while they can see around them the memorial portraits of those that are far off. It was the power of scientific knowledge that did this.

Nay, look anywhere ; see if you can find a place in all this land where there is not evidence that scientific knowledge is power for the welfare of men. And though we may not become of the number of those by whom great discoveries are made, yet it is no trivial thing to be members of the same class with them, to know their language, to be able to admire their power and skill and victorious work, even as it is a just pride to be among the people of a mighty nation, though we may add nothing to its power.

And scientific knowledge *is* happiness. Every one who possesses any fair share of it and uses it well will tell you so, and for those who are engaged in various daily occupations it may be the truest and best mental recreation ; for recreation is not mere idleness, not mere absolute rest after work ; the best recreation is a willing, active occupation in something quite unlike the ordinary business of one's life. And I think it may be said of scientific study that it is remarkably fit for satisfying some of the natural desires of the mind which are least likely to be satisfied in the regular business of life, or are only satisfied by being misused. There is the natural love of novelty, the desire for the satisfaction of curiosity. It is hard to satisfy them in

ordinary routine; very easy to do so in gossip and credulity; much better, surely, to do so in the unbounded stores and progress of science.

And there is the love of wonders; it is hard to satisfy it with anything, however marvellous and admirable, with which every day's work makes one familiar. We must all, I think, have seen this when we have been looking at some marvellous machinery, some machine working with such precision, such calculated accuracy, such definite purpose, that we might imagine the mind of its inventor to be dwelling in it. We have stood still in wonder, and yet the workman feels none; to him every movement is foreseen, the purpose is well known, there is no happiness of novelty, no strange sight, no thought of wonder.

To the scientific student there are new wonders everywhere. Let me tell the last that I observed. Mademoiselle Janotha was so good as to play on the piano, at my request, one of the swiftest pieces of music known to her, a presto by Mendelssohn. The time it occupied was taken, and the number of notes was counted. She played 5995 notes in four minutes and three seconds—rather more than twenty-four notes per second. We may from this estimate, approximately, the number of what we may call nervous vibrations transmitted during a given time from and to the brain; from the brain to the muscles; and from the muscles and the organs of hearing and of touch to the brain. Each note required at least two voluntary movements of a finger,—the bending down and the raising up; and besides these there were a very large number of lateral movements to and fro of the fingers, as well as many and various movements of

the wrists, elbows, shoulders, and feet. It was not possible to count these, but I think I can be sure that they were not less than at the rate of one movement for each note, making, altogether, not less than three voluntary movements for each note, even if we allow for the chords in which several notes were struck at the same instant. Certainly there were not less than seventy-two distinctive variations in the currents of nerve-force transmitted from the brain to muscles in each second, and each of these variations was determined by a distinct effort of the will. And observe, for herein may seem a chief wonder, each of these movements was directed by the will to a certain place, with a certain force and a certain speed, at a certain time; and each touch was maintained for a certain length of time. Thus there were, as we may say, five distinct and designed qualities in each of the seventy-two movements in each second.

Moreover, each of these movements, determined by the will and exactly effected by transmission of nerve-force from the brain along nerve-fibres to the muscles—each of these movements was associated with consciousness of the very position of each finger, each hand, each arm, and each foot, before it was moved and while moving it, and with consciousness of the sound of each note and of the force of each touch. Thus, there were at least four conscious sensations for each of the twenty-four notes in each second; that is, there were at the rate of ninety-six transmissions of force from the ends of nerve-fibres, along their course to the brain, in each of the same seconds during which there were seventy-two transmissions going out from the brain along other nerve-fibres to the muscles.

And then, add to all this, that during the time, in each second of which the mind was conscious of at least ninety-six sensations, and directed not less than seventy-two movements, it was also remembering each note to be played in its due time and place, and was exercised, with the judgment, in the comparison of the playing of this evening with those of times before, and with some of the sentiments which the music was intended to express. It was played from memory, but Mademoiselle Janotha assures me that she could have played it as swiftly at sight, though this would have added another to the four sensations associated with each note.

Surely, it is impossible to imagine what goes on in a brain thus occupied; I think it is most impossible, if that may be said, to one who has seen a brain and has carefully examined it. Really, it is inconceivable; and here I will end, for here is a lesson for the most serious thoughts. In facts such as these science achieves the knowledge of the reality of things more wonderful than the imagination can conceive; it sustains the faith which holds that many things that are inconceivable are yet surely true.

SOME LESSONS OF ANTIQUITY

BY PROFESSOR F. MAX MÜLLER, LL.D.

1889

A WELL-KNOWN student once expressed his admiration for Oxford by saying that it would be Paradise Regained if only the long vacation lasted the whole year. But remember, he was not an idle Fellow, but one of those who construe *vacare* with a dative, when it means to be free from all interruptions for the pursuit of study. Well, this peaceful sanctuary of Oxford was suddenly changed last summer into a perfect bee-hive. The colleges, the libraries, the gardens, the streets, the river were all swarming with visitors. As the clock struck, from ten in the morning till five in the afternoon, streams of gentlemen and ladies were seen coming out and going back to the lecture-rooms. Every lecture-room was as full as it could hold, and the eager faces and the quick-moving pens and pencils showed that the students had come on earnest business bent. It was, in fact, a realised dream of what a University might be, or what it ought to be, perhaps what it will be again, when the words of our President are taken to heart that "man needs knowledge, not

only as a means of livelihood, but as a means of life."

This sudden metamorphosis of Oxford was due to the first meeting of students under the University Extension system. They had been invited to reside in Oxford for the first ten days in August. Nearly a thousand availed themselves of this invitation, of whom about seven hundred were University Extension students from the Oxford, Cambridge, and London Centres. Sixty-one lectures were delivered during the ten days on Literature, History, Economics, and Science. Besides these lectures, conferences were held for discussing questions connected with Extended University teaching. All these lectures and conferences were remarkably well attended from beginning to end, and yet there was time for afternoon excursions and social gatherings. The antiquities of Oxford, the Colleges, Libraries, and Chapels were well explored, generally under the guidance of the Head or the Fellows of each college. The success of the whole undertaking, thanks very much to the exertions of Mr. Sadler and Mr. Hewins, was so brilliant that at the end of the meeting it was unanimously decided to repeat the experiment next year.

To my mind that gathering at Oxford, though it was but little noticed by the outer world, was an historical event, the beginning of a new era in the history of national education. And I rejoiced that this new growth should have sprung from the old Universities, because it had thus secured a natural soil and an historical foundation on which to strike root, to grow, and to flourish.

There is no doubt a strong feeling abroad that the

instruction which is given by the old Universities is antiquated and useless in the fierce struggle for existence. We are told that we teach dead languages, dead literatures, dead philosophy, as if there could be such a thing as a dead language, a dead literature, a dead philosophy. Is Greek a dead language? It lives not only in the spoken Greek, it runs like fire through the veins of all European speech. Is Homer, is Æschylos, is Sophocles a dead poet? They live in Milton, Racine, and Goethe, and I defy any one to understand and enjoy even such living poets as Tennyson or Browning without having breathed at school or at the Universities the language and thought of those ancient classics. Is Plato a dead philosopher? It is impossible for two or three philosophers to gather together without Plato being in the midst of them.

I should say, on the contrary, that all living languages, all living literatures, all living philosophy would be dead, if you cut the historical fibres by which they cling to their ancient soil. What is the life-blood of French, Italian, and Spanish, if not Latin? You may call French an old and wizened speech, not Latin. You may call Comte's philosophy effete, but not that of Aristotle. You may see signs of degeneracy in the mushroom growth of our modern novels, not in the fresh and life-like idylls of Nausikaa or Penelope.

Let me not be misunderstood. I do not want everybody to be a classical scholar or antiquarian, but I hold that it is the duty of all University teaching never to lose touch with the past. It seems to me the highest aim of all knowledge to try to understand what is, by learning how it has come to be what it is. That is the true meaning of history, and that seems to

me the kind of knowledge which schools and Universities are called upon to cultivate and to teach. I believe it is in the end the more useful knowledge also. It is safe and sound, and by being safe and sound, it not only enriches the intellect, but it forms and strengthens the character of a man. A man who knows what honest and thorough knowledge means, in however small a sphere, will never allow himself to be a mere dabbler or smatterer, whatever subject he may have to deal with in later life. He may abstain, but he will not venture in.

What is the original meaning of all instruction? It is tradition. It was from the beginning the handing over of the experience of one generation to the other, the establishment of some kind of continuity between the past, the present, and the future. This most primitive form of education and instruction marks everywhere the beginning of civilised life and the very dawn of history.

History begins when the father explains to his son how the small world in which he has to live came to be what it is; when the present generation accepts the inheritance of the past, and hands down a richer heirloom to the future; when, in fact, the present feels itself connected and almost identified with the future and the past. It is this solidarity, as the French call it, this consciousness of a common responsibility, which distinguishes the civilised and historical from the uncivilised and unhistorical races of the world.

There are races for whom the ideas of the past and the future seem hardly to exist. We call them uncivilised races, savages, ephemeral beings that are born and die without leaving any trace behind them. The

only bond which connects them with the past is their language, possibly their religion, and a few customs and traditions which descend to their successors without any effort on either side.

But there were other races—not many—who cared for the future and the past, who were learners and teachers, the founders of civilised life, and the first makers of history. Such were the Egyptians and the Babylonians, and those who afterwards followed their example—the Persians, Greeks, and Romans. To us it seems quite natural that the ancient Egyptians and Babylonians should have erected monuments of an almost indestructible character, and covered them with inscriptions to tell, not only the next generation, but all generations to come, what they had achieved during their short sojourn on earth. Why should they and they alone have conceived such an idea? The common answer is, because they possessed the art of writing. But the truer answer would be that they invented and perfected the art of writing because they had something to say and something to write, because they wished to communicate something to their children, their grandchildren, and to generations to come.

They would have carried out their object even without hieroglyphic, hieratic, and demotic alphabets. For we see that even among so-called savage tribes, in some of the Polynesian islands, for instance, a desire to perpetuate their deeds manifests itself in a kind of epic or historical poetry. These poems tell of wars, of victories and defeats, of conquests and treaties of peace. As writing is unknown in these islands, these poems are committed to memory and entrusted to the safe keeping of a separate caste, who are, as it were, the

living archives of the island. They are the highest authorities on questions of disputed succession, on the doubtful landmarks of tribes, and the boundaries of families. And these poems are composed according to such strict rules and preserved with such minute care, that when they have to be recited as evidence on disputed frontiers any fraudulent alteration would easily be detected. Mere prose evidence is regarded as no evidence at all; it must be poetical, metrical, and archaic.

Whenever this thought springs up in the human mind, that we live not only for ourselves, but that we owe a debt to the future for what we have received from the past, the world enters upon a new stage; it becomes historical. The work which was begun tentatively in the hieroglyphic inscriptions of Egypt was carried on in the cuneiform records of Babylon, in the mountain edicts of Darius and Xerxes, till it reached Greece and Rome, and there culminated in the masterworks of such historians as Herodotus and Thucydides, Livy and Tacitus.

It may seem to you that these early beginnings of tradition and history are far removed from us, and that the knowledge which we possess and which we wish to hand down to future generations in schools and Universities is of a totally different character. But this is really not the case. We are what we are, we possess what we possess even in the very elements of our knowledge, thanks to the labours of the ancient Egyptians, Babylonians, Indians, Persians, to say nothing of Greeks and Romans.

What should we be without our A B C, without being able to write? Mere illiterate savages, knowing

nothing of the past except by hearsay, caring little for the future except for our own immediate posterity. Now whenever we read a book or write a letter we ought to render thanks in our heart to the ancient scholars of Egypt who invented and perfected writing, and whose alphabetic signs are now used over the whole civilised world, with the exception of China. Yes, whenever you write an *a* or a *b* or a *c* you write what was originally a hieroglyphic picture. Your L is the crouching lion, your F the cerastes, a serpent with two horns; your H the Egyptian picture of a sieve.

There is no break, no missing link between our A B C and the hieroglyphic letters as you see them on the obelisk on the Thames Embankment and on the much older monuments in Egypt. The Egyptians handed their letters to the Phœnicians, the Phœnicians to the Greeks, the Greeks to the Romans, the Romans to us. All the Semitic alphabets also, as used in Persian and Arabic, and the more important alphabets of India, Ceylon, Burmah, and Siam, all come in the end from Phœnicia and Egypt. The whole of Asia, except that part of it which is overshadowed by Chinese influence, Europe, America, Africa, and Australia, so far as they write at all, all write Egyptian hieroglyphics. The chain of tradition has never been broken, the stream of evolution is more perfect here than anywhere else.

Reading and writing, therefore, have come to us from ancient Egypt. But whence did we get our arithmetic? When I say our arithmetic I do not mean our numerals only, or our knowledge that two and two make four. That kind of knowledge is

home-grown, and can be traced back to that common Aryan home from which we derive our language, that is to say, our whole intellectual inheritance. I mean our numerical figures. There are many people who have numerals, but no numerical figures like our own. There are others, such as the Chiquitos in Columbia, who count with their fingers, but have no numerals at all; at least we are told so by the few travellers who have visited them.¹ There are others, again, who have a very perfect system of numerals, but who for numerical notation depend either on an abacus or on such simple combinations of strokes as we find in Egypt, Phœnicia, Babylon, China, India, and even among the redskins of America. There are others, again, like the Greeks and the Hindus, who under certain circumstances use letters of their alphabet instead of figures.

You may imagine that with such contrivances arithmetic could never have advanced to its present stage of perfection, unless some one had invented our numerical figures. Whence then did we get our figures? We call them Arabic figures, and that tells its own tale. But the Arabs call them Indian figures, and that tells its own tale likewise. Our figures came to us from the Arabs in Spain, they came to them from India, and if you consider what we should be without our figures from one to nine, I think you will admit that we owe as much gratitude to India for our arithmetic as to Egypt for our reading and writing. When I am sometimes told that the Hindus were mere dreamers, and never made any useful discovery,

¹ Brett, *History of the British Colonies in the West Indies*, 4th ed., London, 1887.

such as our steam-engines and electric telegraphs, I tell my friends they invented that without which mechanical and electric science could never have become what they are, that without which we should never have had steam-engines or electric telegraphs—they invented our figures from 1 to 9; and more than that, they invented the nought, the sign for nothing—one of the most useful discoveries ever made, as all mathematicians will tell you.

Let us remember then the lessons which we have learnt from antiquity. We have learnt reading and writing from Egypt, we have learnt arithmetic from India. So much for the famous three R's.

But that is not all. If we are Egyptians whenever we read and write, and Indians whenever we do our accounts, we have only to look at our watches to see that we are Babylonians also. We must go to the British Museum to see what a cuneiform inscription is like; but it is a fact, nevertheless, that every one of us carries something like a cuneiform inscription in his waistcoat pocket. For why is our hour divided into sixty minutes, each minute into sixty seconds, and so forth? Simply and solely because in Babylonia there existed, by the side of the decimal system of notation, another system, the sexagesimal, which counted by sixties. Why that number should have been chosen is clear enough, and it speaks well for the practical sense of those ancient Babylonian merchants. There is no number which has so many divisors as sixty.

The Babylonians divided the sun's daily journey into 24 parasangs or 720 stadia. Each parasang or hour was subdivided into 60 minutes. A parasang

is about a German mile, and Babylonian astronomers compared the progress made by the sun during one hour at the time of the equinox to the progress made by a good walker during the same time, both accomplishing 1 parasang. The whole course of the sun during the 24 equinoctial hours was fixed at 24 parasangs or 720 stadia, or 360 degrees. This system was handed on to the Greeks, and Hipparchus, the great Greek philosopher, who lived about 150 B.C., introduced the Babylonian hour into Europe. Ptolemy, who wrote about 150 A.D., and whose name still lives in that of the Ptolemaic system of astronomy, gave still wider currency to the Babylonian way of reckoning time. It was carried along on the quiet stream of traditional knowledge through the Middle Ages, and, strange to say, it sailed down safely over the Niagara of the French Revolution. For the French, when revolutionising weights, measures, coins, and dates, and subjecting all to the decimal system of reckoning, were induced by some unexplained motive to respect our clocks and watches, and to allow our dials to remain sexagesimal, that is, Babylonian, each hour consisting of 60 minutes. Here you see again the wonderful coherence of the world, and how what we call knowledge is the result of an unbroken tradition, of a teaching descending from father to son. Not more than about a hundred arms would reach from us to the builders of the palaces of Babylon, and enable us to shake hands with the founders of the oldest pyramids, and to thank them for what they have done for us.

And allow me to point out what I consider most important in these lessons of antiquity. They are not

mere guesses or theories; they are statements resting on historical facts, on evidence that cannot be shaken. Suppose five thousand years hence, or, let us be more merciful and say fifty thousand years hence, some future Schliemann were to run his shafts into the ruins of what was once called London, and discover among the *débris* of what is now the British Museum charred fragments of newspapers, in which some Champolion of the future might decipher such names as *centimètre* or *millimètre*. On the strength of such evidence every historian would be justified in asserting that the ancient inhabitants of London—we ourselves—had once upon a time adopted a new decimal system of weights and measures from the French, because it was in French, in primæval French only, that such words as *centimètre* or *millimètre* could possibly have been formed. We argue to-day on the strength of the same kind of evidence, on the evidence chiefly of language and inscriptions, that our dials must have come from the Babylonians, our alphabets from Egypt, our figures from India. We indulge in no guesses, no mere possibilities, but we go back step by step from the *Times* of to-day till we arrive at the earliest Babylonian inscription and the most ancient hieroglyphic monuments. What lies beyond we leave to the theoretic school, which begins its work where the work of the historical school comes to an end.

I could lay before you many more of these lessons of antiquity, but the Babylonian dial of my watch reminds me that my parasang, or my German mile, or my hour, is drawing to an end, and I must confine myself to one or two only. You have heard a great deal lately of bi-metallism. I am not going to inflict

on this audience a lecture on that deeply interesting subject, certainly not in the presence of our chairman, the Lord Mayor, and with the fear of the Chancellor of the Exchequer before my eyes. But I may just mention this, that when I saw that what the bi-metallists were contending for was to fix and maintain in perpetuity a settled ratio between gold and silver, I asked myself how this idea arose; and being of an historical turn of mind, I tried to find out whether antiquity could have any lessons to teach us on this subject. Coined money, as you know, is not a very ancient invention. There may have been a golden age when gold was altogether unknown, and people paid with cows, not with coins. When precious metals, gold, silver, copper, or iron began to be used for payment, they were at first simply weighed. Even we still speak of a pound instead of a sovereign. The next step was to issue pieces of gold and silver properly weighed, and then to mark the exact weight and value on each piece. This was done in Assyria and Babylonia, where we find *shekels* or pounds of gold and silver. The commerce of the Eastern nations was carried on for centuries by means of these weights of metal. It was the Greeks, the Greeks of Phocæa in Ionia, who in the seventh century B.C. first conceived the idea of coining money, that is, of stamping on each piece their city arms, the phoca or seal, thus giving the warranty of their State for the right weight and value of those pieces. From Phocæa this art of coining spread rapidly to the other Greek towns of Asia Minor, and was thence transplanted to Ægina, the Peloponnesus, Athens, and the Greek colonies in Africa and in Italy. The weight of the most ancient gold

coin in all these countries was originally the same as that of the ancient Babylonian gold shekel, only stamped with the arms of each country, which thus made itself responsible for its proper weight. And this gold shekel or pound, in spite of historical disturbances, has held its own through centuries. The gold coins of Croesus, Darius, Philip, and Alexander have all about the same weight as the old Babylonian gold shekel, sixty of them going to one *mina* of gold; and what is stranger still, our own sovereign, or pound, or shekel, has nearly the same weight, sixty of them going to an old Babylonian *mina* of gold. In ancient times twenty silver drachmas or half-shekels went to a gold shekel, just as with us twenty silver shillings are equivalent to a sovereign. This ancient shilling was again subdivided into sixty copper coins, sixty being the favourite Babylonian figure.

Knowing, therefore, the relative monetary value of a gold and silver shekel or half-shekel, knowing how many silver shekels the ancient nations had to give for one gold shekel, it was possible by merely weighing the ancient coins to find out whether there was then already any fixed ratio between gold and silver. Thousands of ancient coins have thus been tested, and the result has been to show that the ratio between gold and silver was fixed from the earliest times with the most exact accuracy.

That ratio, as Dr. Brugsch has shown, was 1 to $12\frac{1}{2}$ in Egypt; it was, as proved by Dr. Brandis, 1 to $13\frac{1}{3}$ in Babylonia and in all the countries which adopted the Babylonian standard. There have been slight fluctuations, and there are instances of debased coinage in ancient as well as in modern times. But for

international trade and tribute, the old Babylonian standard was maintained for a very long time.

These numismatic researches, which have been carried on with indefatigable industry by some of the most eminent scholars in Europe, may seem simply curious, but like all historical studies they may also convey some lessons.

They prove that, in spite of inherent difficulties, the great political and commercial nations of the ancient world did succeed in solving the bi-metallic problem, and in maintaining for centuries a fixed standard between gold and silver.

They prove that this standard, though influenced, no doubt, by the relative quantity of the two metals, by the cost of production, and by the demand for either silver or gold in the markets of the ancient world, was maintained by the common sense of the great commercial nations of antiquity, who were anxious to safeguard the interests both of their wholesale and retail traders.¹

They prove, lastly, that though a change in the ratio between gold and silver cannot be entirely prevented, it took place in ancient time by very small degrees. From the sixteenth century B.C., or, at all events, if we restrict our remarks to coined money, from the seventh century B.C. to nearly our own time, the appreciation of gold has been no more than $1\frac{2}{3}$,

¹ Some monometallist scholars have denied these facts, but I doubt whether they have read Dr. Brandis' learned work, "*Das Münzwesen*," or whether they have really taken the trouble of weighing once more the thousands of gold and silver coins which he has weighed. I knew the late Dr. Brandis, and I know that he was a careful and truthful scholar. Those who venture to differ from him must produce facts, not fads.

namely, from $13\frac{1}{3}$ to 15. If now, within our own recollection, it has suddenly risen from 15 to 20, have we not a right to ask whether this violent disturbance is due altogether to natural causes, or whether what we are told is the effect, is not to a certain extent the cause of it—I mean the sudden resolution of certain Governments to boycott for their own purposes the second precious metal of the world.

But I must not venture farther on this dangerous ground, but shall invite you, in conclusion, to turn your eyes from the monetary to the intellectual currency of the world, from coins to what are called the counters of our thoughts.

The lessons which antiquity has taught us with regard to language, its nature, its origin, its growth, and decay are more marvellous than any we have hitherto considered.

What is the age of Alexander and Darius, of the palaces of Babylon and the pyramids of Egypt, compared with the age of language, the age of those very words which we use every day, and which, forsooth, we call modern? There is nothing more ancient in the world than every one of the words which you hear me utter at present.

Take the two words “there is,” and you can trace them step by step from English to Anglo-Saxon, from Anglo-Saxon to Gothic; you can trace them in all the Teutonic, Celtic, Slavonic languages, in the languages of Darius and Cyrus, in the prayers of Zoroaster, finally in the hymns of the Rig Veda. Instead of *there is*, the old Vedic poets said *tatra asti*. It is the same coin, it has the same weight, only it has suffered a little by wear and tear during the thousands of years that

it has passed from hand to hand or from mouth to mouth. Those two words would suffice to prove that all the languages of the civilised races of Europe, the languages of Persia and India also, all sprang from one source ; and if you place before your imagination a map of Europe and Asia, you would see all the fairest portions of these two continents, all the countries where you can discover historical monuments, temples, palaces, forums, churches, or houses of parliament, lighted up by the rays of that one language which we are speaking ourselves, the Aryan language, the classical language of the past, the living language of the present, and in the distant future the true Volapük, the language of the world.

I have no time to speak of the other large streams of historical speech,—the Semitic, the Ugro-Altaiic, the Chinese, the Polynesian, the African, and American. But think what a lesson of antiquity has here been thrown open to us. We learn that we are bound together with all the greatest nations of the world by bonds more close, more firm and fast than flesh, or bone, or blood could ever furnish. For what is flesh, or bone, or blood compared to language ? There is no continuity in flesh, and bone, and blood. They come and go by what we call birth and death, and they change from day to day. In ancient times, in the struggle of all against all, when whole tribes were annihilated, nations carried away into captivity, slaves bought and sold, and the centres of civilised life overwhelmed again and again by a deluge of barbarian invasions, what chance was there of unmixed blood in any part of the world ? But language always remained itself, and those who spoke it, whatever their blood

may have been, marched in serried ranks along the highroad of history as one noble army, as one spiritual brotherhood. What does it matter whether the same blood runs in our veins and in the veins of our dark fellow-men in India? Their language is the same, and has been the same for thousands of years, as our own language; and whoever knows what language means, how language is not only the vestment, but the very embodiment of thought, will feel that to be of the same language is a great deal more than to be of the same flesh and blood.

With the light which the study of the antiquity of language has shed on the past, the whole world has been changed. We know now not only what we are, but whence we are. We know our common Aryan home. We know what we carried away from it, and how our common intellectual inheritance has grown and grown from century to century till it has reached a wealth, unsurpassed anywhere, amounting in English alone to 250,000 words. What does it matter whether we know the exact latitude and longitude of that Aryan home, though among reasonable people there is, I believe, very little doubt as to its whereabouts "somewhere in Asia." The important point is that we know that there was such a home, and that we can trace the whole intellectual growth of the Aryan family back to roots which sprang from a common soil. And we can do this not by mere guesses only, or theoretically, but by facts, that is, historically. Take any word or thought that now vibrates through our mind, and we know now how it was first struck in countries far away, and in times so distant that hardly any chronology can reach them. If anywhere it is

in language that we may say, We are what we have been. In language everything that is new is old, and everything that is old is new. That is true evolution, true historical continuity. A man who knows his language, and all that is implied by it, stands on a foundation of ages. He feels the past under his feet, and feels at home in the world of thought, a loyal citizen of the oldest and widest republic.

It is this historical knowledge of language, and not of language only, but of everything that has been handed down to us by an uninterrupted tradition from father to son, it is that kind of knowledge which I hold that our Universities and schools should strive to maintain. It is the historical spirit with which they should try to inspire every new generation. As we trace the course of a mighty river back from valley to valley, as we mark its tributaries, and watch its meanderings till we reach its source, or, at all events, the watershed from which its sources spring, in the same manner the historical school has to trace every current of human knowledge from century to century back to its fountain-head, if that is possible, or at all events as near to it as the remaining records of the past will allow. The true interest of all knowledge lies in its growth. The very mistakes of the past form the solid ground on which the truer knowledge of the present is founded. Would a mathematician be a mathematician who had not studied his Euclid? Would an astronomer be an astronomer who did not know the Ptolemaic system of astronomy, and had not worked his way through its errors to the truer views of Copernicus? Would a philosopher be a philosopher who had never grappled with Plato and Aristotle? Would a lawyer be a lawyer who had

never heard of Roman law? There is but one key to the present—that is the past. There is but one way to understand the continuous growth of the human mind and to gain a firm grasp of what it has achieved in any department of knowledge—that is to watch its historical development.

No doubt it will be said, there is no time for all this in the hurry and flurry of our modern life. There are so many things to learn that students must be satisfied with results, without troubling themselves how these results were obtained by the labours of those who came before us. This really would mean that our modern teaching must confine itself to the surface, and keep aloof from what lies beneath, that knowledge must be what is called cut and dry, if it is to prove serviceable in the open market.

My experience is the very opposite. The cut-and-dry knowledge which is acquired from the study of manuals or from so-called crammers is very apt to share the fate of cut flowers. It makes a brilliant show for one evening, but it fades and leaves nothing behind. The only knowledge worth having, and which lasts us for life, must not be cut and dry, but, on the contrary, must be living and growing knowledge, knowledge of which we know the beginning, the middle, and the end, knowledge of which we can produce the title-deeds whenever they are called for. That knowledge may be small in appearance, but, remember, the knowledge required for life is really very small.

We learn, no doubt, a great many things, but what we are able to digest, what is converted *in succum et sanguinem*, into our very life-blood, and gives us

strength and fitness for practical life, is by no means so much as we imagine in our youth. There are certain things which we must know, as if they were part of ourselves. But there are many other things which we simply put into our pockets, which we can find there whenever we want them, but which we do not know as we must know, for instance, the grammar of a language. It is well to remember this distinction between what we know intuitively, and what we know by a certain effort of memory only, for our success in life depends greatly on this distinction—on our knowing what we know, and knowing what we do not know, but what nevertheless we can find, if wanted.

It has often been said that we only know thoroughly what we can teach, and it is equally true that we can only teach what we know thoroughly. I therefore congratulate this Society for the Extension of University teaching, that they have tried to draw their teachers from the great Universities of England, and that they have endeavoured to engage the services of a large number of teachers, so that every single teacher may teach *one* subject only, his own subject, his special subject, his hobby, if you like—anyhow, a subject in which he feels perfectly at home, because he knows its history from beginning to end. The Universities can afford to foster that race of special students, but the country at large ought to be able to command their services. If this Society can bring this about, if it can help to distribute the accumulated but often stagnant knowledge of University professors and tutors over the thirsty land, it will benefit not the learners only, but the teachers also. It will impart new life

to the Universities, for nothing is so inspiring to a teacher as an eager class of students,—not students who wish to be drilled for an examination, but students who wish to be guided and encouraged in acquiring real knowledge. And nothing is so delightful for students as to listen to a teacher whose whole heart is in his subject. Learning ought to be joy and gladness, not worry and weariness. When I saw the eagerness and real rapture with which our visitors at Oxford last summer listened to the lectures provided for them, I said to myself, This is what a University ought to be. It is what, if we may trust old chronicles, Universities were in the beginning, and what they may be once more if this movement, so boldly inaugurated by the Universities of Cambridge, Oxford, and London, and so wisely guided by Mr. Goschen and his fellow-workers, becomes what we all hope it may become, a real and lasting success.

THE APPLICATION OF THE HISTORICAL
METHOD TO ECONOMIC SCIENCE

✓ BY HIS GRACE THE DUKE OF ARGYLL, K.G.

Campbell George Douglas, 5th Duke of Argyll
1890

THE subject on which I have to address you to-day is one so very large, so immensely wide, viz.—the connection between history and economic science—that I must say a few words in explanation of the very limited aspect in which alone it is possible to regard it in a single address, and for this purpose I wish to remind you of a few facts, not always, perhaps, borne in mind. It is now, my Lord Mayor, little more than a hundred years—I think exactly one hundred and fourteen years—since my illustrious countryman, Adam Smith, published the *Wealth of Nations*. During that hundred years, at least fifty years of it was an uphill contest, as you know, between the doctrines of economic science and the long-established practice of this and of all other countries. It was not, I think it may be said, until the year 1847 that the doctrines of free trade—or free exchange, as perhaps it ought properly to be called, which were taught and inculcated by Adam

Smith—secured a practical triumph at the time of the potato failure and the abolition of the Corn Laws by Sir Robert Peel. Since that period the doctrines of free trade have been promulgated and defended by a series of eminent writers. Those writers, my Lord Mayor, like all other writers of that class, have established for themselves a great authority, and have built up a great body of doctrine quite apart from the question of free trade. In dealing with that single question of free trade, they have incidentally treated much larger questions connected with economic science, and their authority derived from their advocacy of free trade has extended to all the other doctrines which, in the course of controversy, they came to promulgate or defend.

Now, it always happens under such circumstances that a body of men acquiring an authority of this kind are very apt to carry that authority into doctrines which are not as sound as those with which they were principally charged. The consequence is that, during the last few years, there have arisen a great number of writers—I should say within the last twenty years—who have found great fault with the conclusions of those older authors, and who have published most interesting works, inveighing, in some cases, in strong language against their doctrines. When I speak of the great economic writers of the last hundred years, you know very well the principal names and persons to whom I refer. Adam Smith stands almost alone. Hardly anybody attacks him, because he had a great practical object in view, and although in promoting that object he may have said a few things which were not correct, and promulgated a

few abstract opinions which will not stand investigation, yet the simplicity of his work—its great influence and great success—has earned for him a reputation in which he stands absolutely alone. But the writers that have followed him are such as these. First of all there was James Mill, then there was David Ricardo (a great authority, especially in London), then there was the better known son of James Mill—John Stuart Mill—who lived on, as you know, to our own time, and died not many years ago. In much later years there was—not so much as an original investigator as a systematiser and teacher—our late friend, Professor Fawcett. These great names constitute a sort of apostolic succession in the authority of economic science. They are often spoken of now as “the orthodox Economists.” The writers who have sprung up within the last ten or twenty years are, some of them, much less generally known. They cannot be said to form a school, for they differ widely from each other, but they are, many of them, very able men. It so happens that, about thirty or forty years ago, I read, I think, as much political economy as is good for any human being to read. I had become a confirmed free trader, and I swallowed much of the other doctrines of the school without much criticism and without much resistance. Occasionally, in reading them, I could not help seeing that there were some things said which did not appear to be well founded in observation or experience, and there were occasionally things which were ambiguous or obscure. But it is a laborious work to investigate these questions of abstract thought, and I accepted them upon authority. About three or four years ago

it happened to me to see a very elaborate theory, which I perceived clearly to be quite erroneous, propounded and defended by quotations from some of these writers. This induced me to look back into some of these old *obiter dicta* which had caught my passing attention in former years, and I soon found by the application of the ordinary processes of verbal analysis—which I recommend strongly to all young men and young women who desire to know the truth—I found by a little close attention and verbal analysis that some of the *obiter dicta* of these great writers were obvious fallacies,—at least, such they seemed to me. I only wish to refer to the general fact. This, again, induced me to look more closely into the younger school of political economy, and there I was surprised to find my views of the erroneousness of many of those doctrines strongly supported by a great number of younger men who have arisen since the death of John Stuart Mill.

I will mention some of the authors to whom I refer. It is quite natural, I must say, and we need not be surprised that in such a complicated and enormous subject as economic science, when new questions arise they should be viewed from a new point of view, and that errors should be discovered in the abstract doctrines of the older writers. The later writers to whom I particularly refer—I will name four or five to show how representative they are—are such as Professor Jevons (of the University of London), Professor Thorold Rogers (of the University of Oxford), Professor Nicholson (of the University of Edinburgh), and last but not least, the distinguished author of the article in the last edition of the *Encyclopædia Britannica* on

“Political Economy,” Mr. Ingram, of Dublin. So you thus have eminent men from London, Oxford, Edinburgh, and Dublin all engaged in assailing many of the dogmas and dicta which had fallen from the older writers. Time would fail me to quote more than a very few sentences, but I want to show you how very strong indeed the language of this younger school is in regard to the fallacies taught by the older school. Take Professor Jevons, connected eminently with the University of London. Professor Jevons not merely dissents, but he is vehement in his denunciations of many of the old writers. He says: “The only hope of attaining a true system of economics is to fling aside, once and for ever, the mazy and preposterous assumptions of the Ricardian school.” Again he says: “Our English economists have been living in a fools’ paradise.” Again, “That able but wrong-headed man, Dr. Ricardo, shunted the car of economic science on to the wrong line, a line along which it was further urged towards confusion by his equally able and wrong-headed admirer, John Stuart Mill.” Once more, he says, “It will be a work of labour to pick up the fragments of a shattered science and to start anew; but it is a work from which they must not shrink who wish to see any advance in economic science.” I think these quotations are quite sufficient to show you I am not speaking without book when I say that the older writers have been in recent years assailed by eminent men, and assailed in language which means the most emphatic denunciation of many of their fundamental doctrines. I do not mean to say that there is any very definite school of teaching represented by these men. Some of them attack one doctrine, some another. They are

not all of them united in what they would substitute for the abandoned doctrines, but they are all agreed that the older writers, on many subjects, fell into the most serious errors. Then they say, "Whence came all these errors?" The common explanation is that the "method" of the orthodox economists was a wrong one—that it was a method fallacious because it was "too abstract"; that Ricardo, James Mill, John Stuart Mill, and all the rest, were "too abstract" in their treatment of the science. Let me say at once that I do not agree that this is the source of error, if error there has been. Pray let us remember that abstract ideas are the meat and drink of our daily life. It is not merely that all science is founded on abstract ideas; it is that in all the transactions of common life we deal, every day and every moment of our lives, with purely abstract ideas. Justice and injustice, truth and untruth, error and unbelief—all these words, and a thousand more, are representative of purely abstract ideas, and we do not go materially wrong in using these abstract terms as expressive of our abstract ideas. I do not believe that this, by itself, was a source of error at all. In economic science we have to deal in like manner with abstract terms—with wealth, with value, with wages, with labour, with capital, with instruments of production, and with phrases such as these. Well, these are abstract terms, and it is quite true, in my opinion, that the older writers, in dealing with these fundamental conceptions of economic science, have been full of errors. But the cause lay not in the fact that their ideas were abstract, but that they were bad abstracts—that their analysis of facts has been bad and incomplete. As has been said by Adam

Smith himself—this is one of the few quotations with which I will trouble you,—“Gross sophistry has scarce ever had any influence upon the opinions of mankind except in matters of speculation and philosophy, and in these it has frequently had the greatest; mere sophisms which had no other foundation but inaccuracy and ambiguity of common language.” That is a strong expression from Adam Smith, but it fully explains the errors found in the older school. Before I pass from this question whether the method has erred in being too abstract, let me repeat that it is not from being too abstract, but from making bad abstracts, that errors have arisen. If you make a bad abstract of complicated facts—if you make an incomplete analysis of any substance in chemistry, you have a wrong result. And so you will find that the error of these old writers is not that they have been too abstract, but that they have constantly forgotten certain all-important elements in their consideration of the questions they had in hand. In dealing with wealth and wages, and all these abstract terms, they have forgotten many elements in the consideration, and that has been due to the enormous complication of the elements with which we have to deal in all these subjects. The younger school say, “Let us have a new method. There has been something wrong with the old methods; these errors could not have arisen with a good method.” It is now a very common thing to say, “Let us go in for history.” Let us take the “historical method,” and so that is the subject about which I propose to address you to-night.

The suggestion is that all the difficulties of economic science will be solved, and all the errors refuted by reading history. I wish to say very shortly that I

entirely agree in the importance of history as helping us to the solution of the great problems of economic science. Yes! but history on one condition. You will never solve these problems if you do not apply to the facts of history the same powers of careful classification and analysis which are absolutely required in interpreting the phenomena of your own day. Do not suppose that by a careless reading of history you can solve any of these problems. You require just as much in the days gone by as in the days in which you are now living—not merely to collect facts, but to collate them and concentrate them in the light of thought; just as scientific men have made all their discoveries by looking at the facts of Nature, not in a haphazard way, but in the light of genius, and in the light, very often, of some pre-conception which may possibly have been in itself erroneous—just as they have made those discoveries by looking at external Nature through the faculties of reasoning, ay, and of imagination, too; so, if you are to profit by history, you must read history in the spirit of careful analysis, of weighing and comparing the facts as well as ascertaining them. You know where it is said, “The kingdom of Heaven is within you.” Yes, ladies and gentlemen, and the kingdom of Nature is within us, too. Professor Jevons says the ultimate laws of political economy are “known to us instinctively by intuition.” This is not, I think, literally true. It is much too broadly stated. But at all events, the elements of political economy are there. You have to deal with the phenomena of society, and society is made of individuals; and it is in the analysis of your own thoughts and of your own instincts that

you will best find the ultimate solution of the difficulties which assail you both in the history of the past and in the complicated transactions of your own life. If we cannot analyse the present we shall not be able to analyse the past. Therefore, let me give you warning, that when you come to history you must study it with all the care with which you study existing facts. But there is one great advantage in history, and that is this, that in regard to many of the facts of your existing life you get rid of what is temporary, accidental; you see human life in other conditions than those with which you are yourself familiar—sometimes so widely different, that the whole world seems to have been other than it is to you. That, no doubt, is an advantage, a great advantage, if you take due care of it; but observe, your business in correcting past errors of economic science will not be in being less abstract, but in making better abstracts, both for the present and for the future.

And now let me give also a few words of warning as to the difficulties of dealing with history, with a view to the solution of economic problems. In the first place you must remember this: that history, properly so called, carries you a very short way back in the account of human society. All history is lost, and lost very soon indeed, in the prehistoric. We know nothing of the first beginnings of anything, unless—of course, I am not speaking of that—unless we accept the Biblical narrative of Creation. But I am talking about it now as a matter of science, and I must remind you that from history, properly so called—that is to say, from contemporary historic records—we know nothing of the origin of human society. We

may dislike to look that fact in the face, and many of us so dislike it that we forget it altogether, and put it out of sight. But it is a fact that we know nothing in the light of history of the origin of human society. Man has kept no journal of his own early days. We must trust to other authorities for anything we can know of that. This is not an insignificant fact, for pray remember, ladies and gentlemen, that the most important problems of social science find their ultimate difficulty in determining what has been the origin of man. Has man arisen from a single pair? Is it so, or is it not? Having had some personal acquaintance with Charles Darwin, I wrote to him some years ago,—and no man ever applied to Charles Darwin without having a candid and truthful reply, so far as his knowledge carried him—I wrote to him and said: “My dear Mr. Darwin,—In your theory you assume that man originated at some one place, and in a single pair. Will you be kind enough to tell me on what you base that assumption, assuming that you do not accept the Biblical account as in itself conclusive?” He wrote back to say: “I have no other ground for assuming it” (he did assume it), “but the doctrine of chances, for it is inconceivable to me that so highly-organised a being as man could have arisen except in one spot and from one pair.” I do not now raise any question whether his reasoning is safe or not. I only wish to point out that in this matter the speculations of Darwin and the authority of Moses are at one. Man began with a single pair. That fact being admitted, let us look at the light it casts on one of the great problems of economic science. People talk about “instruments of produc-

tion," and some modern theorists say that the instruments of production ought to belong to society. What instruments of production were there when man consisted of one or two or three families? The whole of the instruments of production were once in the head and in the brain and in the heart and in the hands of one man and of his family. The whole of the instruments of production were their personal property. Does this cast no light upon the nature of human society? Is it not true now, as in the days of Adam, that the ultimate instruments of production in all human industry are the human head, the human heart, and the human hands; and does not the theory which asserts that all the instruments of production should be placed in the hands of what men call society come to this—the doctrine, the horrible doctrine of negro slavery in America some thirty years ago—that man was made to be the property of his neighbour? Does not this follow inevitably, if that fact be admitted, that all the original instruments of production belong to the individual man, the individual brain, the individual hand, and the human spirit? Well, then, let us remember another thing. Talk of solving the difficulties of human society by history. Do you remember what are the things that are prehistoric? The invention of language—if I may use the word invention—the origin of language, the origin of writing, the origin of artificial fire, the origin of domestic animals, the origin of the cereal grasses—all these things are hid in the night of the prehistoric. History casts no light whatever on the origin of language. Why, gentlemen, the philosophers of language can give us nothing but a series of childish and almost grotesque

suggestions. We know nothing ; it came down from heaven and from the instincts with which heaven invested our species ; and amongst the first and greatest was the faculty of conceiving abstract ideas, and giving to those ideas a habitation and a name.

Now, looking back to history properly so-called, leaving the prehistoric in the obscurity from which we cannot lift it, it seems to me there are three great facts which are of great interest in economic science. First of all, that there has been great progress in our command over the resources of Nature, our own nature being included in the term. The second is, that this progress has not been continuous, but has been very fitful ; and the third is, that it has been locally often retrogressive. Human society has sometimes gone backward as well as forward. The question naturally arises here : Is it true that there are any laws of birth, growth, and death in nations as there are in individuals ? That is a question not very often put, and I have never seen it grappled with or handled. I was, however, much surprised the other day to get a book on political economy from America, a country which has now developed a very powerful school of economic science, owing to the contest going on on our old subject of free trade—I was very much surprised to get a book from America which assumed, as an unquestionable fact, that among nations, as among individuals, there is a law of birth, of growth, of maturity, and of death. I was very much surprised to see that in an American book, because America is a young society. It is full of life, full of its own

conscious energy—and I might almost apply to it the famous lines of Wordsworth :—

—A simple child
That lightly draws its breath,
And feels its life in every limb ;
What should it know of death ?

And yet this writer in America, looking at the history of the world, sees distinctly that there is a law of birth, of growth, of maturity, and of decay in nations. Now there is no question whatever of this, that a great part of the world—some of the most interesting parts of the world—are covered with the ruins of ancient civilisations which have passed away. This is unquestionable. We may make of that fact what we like. We may say that the causes of their decay are no longer causes in operation ; but when we come nearer our own time we see that even in Europe the relative positions of the nations has greatly altered since comparatively recent times. It would be invidious if I were to mention names, but it will recur to all of you that there are nations now in Europe which no longer occupy the place they did occupy in the scale of nations even a century—and still more clearly a few centuries—ago ; and it is quite possible that such changes may be owing to those laws of decay which the American writer says prevail over the whole world. But what I would wish to point out to you is this : that as when we stand on the sea-shore we are often unable to say whether the ripples of the tide are advancing or receding, so it is very difficult for us to decide whether any given nation is waxing or waning. But if there is even a doubt on this point, it should make us pause

and think, because many writers of our time assume that all movement is not only progress, but progress in the right direction. Now I do not profess to have not made up my mind whether there is any law by which modern nations pass through the periods of birth, decay, and death ; but I am sufficiently doubtful to look with great circumspection on all movements, and to test them whether they are really movements of progress by other considerations than the mere fact that they are movements of some kind or another. And this, I think, is a most necessary caution.

There is one other universal fact connected with past history, to which, for a few minutes, I wish to attract your attention, and it is this : that man, ever since we have any record of him, has been a fighting animal. Let not my fair friends, whom I have the honour to address, think I am bringing before them something which belongs to a coarse philosophy. Let us look facts in the face. In all science we have to deal with facts, and we ought not to put them aside for the sake of fancy or sentiment. It is unquestionably true that war and conquest have been universal facts in the history of the world. I believe I am correct in saying that there is not a single nation of any power now existing in the world that has not been founded in war and conquest. We are apt to forget this, because here in England, and over the whole of the British Isles, we are the descendants both of the conquerors and of the conquered ; but we ought to remember that the earliest conquering race we know of in Britain was that with which I have myself the honour to be connected, I believe, by a continuous

descent, and that is the Celts. The Celtic invaders of Britain unquestionably found there an aboriginal population. They did not come into an empty country. They seized Britain when it had been already occupied by some older race, of which we know nothing except from a few palæolithic implements found in the mounds and caves of the country; and they founded this nation on war and conquest, reducing that early race to the conditions of slavery. So it has been all over the world, and it is so at the present moment. We are even now perpetually seizing and occupying countries which have a native population, and whom we do not actually conquer only because they are too weak to fight. The world in this respect has not changed, ladies and gentlemen,—not one whit. I know nothing more curious in recent history than the fact that, in the great war between Germany and France, when France was defeated, Germany seized a little bit of her territory—Alsace, and she was severely blamed for doing so. I said to all my friends at that time, “Do you think the world has so completely changed: that great wars and great conquests are to go on, and that the conquering nation is never to take what all other nations have hitherto taken—portions of territory for their own possession?” There was no answer to that. But at the same time it does show a very curious change in public sentiment, if it be really expected that there may be great wars and conquests without annexation and possession. My own belief is that there is much of the same kind yet before us. At all events, in the general history of the world, the fact has been that all great countries have been founded by invasion, by conquest, and on

permanent military possession. I do not think it looks very much as if this universal fact of humanity is one that is going to cease. What is the state of Europe now? I believe there are four great military monarchies with certainly not less than between six and eight millions of men under arms, besides a very large number that might be called out of the reserves. I am speaking in the presence of my Right Honourable friend the Chancellor of the Exchequer, and he must know, as we all know, that he is obliged to put his hand into our pockets for a very large sum of money to support a comparatively small army. It is well to look this fact in the face, and I believe you will find it full of instruction in an economic point of view. There are many aspects in which we may regard war; there are three especially. There is the terror and the suffering of war; there is the triumph and the glory of war; and, lastly, there are the blessings and the benefits which have been secured by war. Now, we have very eloquent expressions in various authors upon all these aspects of war. I will mention three of them to you. You know those magnificent words—they are familiar to all of us: "Every battle of the warrior is with confused noise and garments rolled in blood." That is a picture, and a powerful picture, of the terror and the suffering of war. Well, then, on the triumph of war we have the lines—I think the too bitter lines—addressed by Lord Byron to Napoleon, after his fall, in which he said,—

The triumph and the vanity, the rapture and the strife,
The earthquake voice of victory! To thee the breath of life.

There is the feeling of triumph; and now let me read

to you a few lines, very striking, I think, as coming from a Quaker poet—for you know it is a doctrine of the Quakers that war is almost in all cases unlawful, yet Whittier, the great American poet, who is a member of the Society of Friends, has lived to see the blessings which only war could confer upon the world, and he says, speaking of “Nature,”—

She knows the seed lies safe below
The fires that blast and burn,
For all the tears of blood we sow,
She waits the rich return.

She sees with clearer eyes than ours
The good of suffering born,
The hearts that blossom like her flowers,
And ripen like her corn.

Well, what are the blessings of war? Is it not a universal feeling, the popularity of soldiers? Never shall I forget the scene which I saw in this city when Garibaldi came to it after he had secured the independence of Italy. There is only one other scene in my memory to compare to it—very different as it was in many of its conditions—and that was the scene close to us which surrounded the coffin of the Duke of Wellington as it sank under the pavement of St. Paul's. Now, why is this popular admiration, almost worship, given to soldiers—to great soldiers? Well, there are many reasons; but depend upon it, it is not this—it is not mere animal courage that you admire. Animal courage is the commonest of all virtues in the lowest men and in the lowest animals. It is not this that you admire in soldiers; it is the feeling that in a great soldier—in a really great soldier—you have a

representative, an embodiment of the very highest human gifts. No man has been a great soldier without having the very highest human gifts in the furniture of his mind. The magnetic influence of man over man—that is what we see and what we admire. War brings forth kingly men, and we see in them the emblems of the foundation of all human society, and of all human possessions.

But there is another essential which belongs to war, not one of mere sentiment, and one which is immediately connected with our science; and that is, that to war, as I have already said, all countries owe the possession of all that they enjoy. Now, here we come upon a very curious feature of economic science. I took the trouble some two or three years ago to look out all the definitions of wealth which could be found in the older economists, and strange to say, I found one element entirely and absolutely wanting. I do not mean to say that if you had asked those writers, "Don't you mean to include 'possession' in wealth," they would not say, "Yes, of course"; but it is exactly those elements of which men say, "Of course," that they forget, and they do not put into their definitions. There are plenty of definitions of the things you must possess to have wealth, but the idea of possession as in itself a necessary element in the very idea of wealth is rarely thought of. I know only one perfect definition of wealth, and that is in the New Testament. In a few words, it is perfect: "A man's life consisteth not in the abundance of the things which he possesseth." The whole sentence falls upon the word "possesseth." Possession is the foundation, the necessary condition, of all wealth; and that is why

you admire the soldier! That is the inner source of the human instinct which has been planted in you by the great Creator. You are translating into your own inmost thoughts the facts of nature and the fundamental conditions of all human society when you admire the successful soldier as the emblem of that on which, originally, all your civilisation has been founded. But here again, ladies and gentlemen, I wish to point out to you that we are met with great difficulties. War, undoubtedly, has been the source of all our wealth. There is no doubt about it. It is a question of historical fact which no man can dispute; but there are many conditions under which war has been a great curse to mankind, and the definition I should give of all war which is useless and injurious is this—war that is not for possession, but for some other object—mere lust of conquest, pride, devotion to barbarous and savage deities, and all other causes which lead men to make war into a pursuit by itself without reference to its objects. Now, we have a very curious illustration of this, which has often struck me very much in the history of mediæval Europe. As we know the Roman Empire was a great military empire. In the height of its glory, property was secured, civilisation and industry—such industry as existed in those days—were secured, because there was a great empire to defend it, and to enforce the recognised obligations and duties of mankind. But when the Roman Empire broke up, and semi-barbarous tribes took possession of Europe, then there arose war of another kind, and under new conditions. There was no great empire—nothing but inter-tribal wars, and inter-tribal wars do not give security—permanent

security—for the growth of wealth. There was a very curious result of this. We have very tolerable accounts of the state of agriculture in this country at the close of the Roman Empire and in the first centuries of the Christian era. It is a curious fact, but I will venture to assert it on evidence I have carefully examined, that I believe there was no progress in agriculture, and, of course, no progress in wealth, for nearly eleven hundred years from the close of the Roman Empire till the dawn of improvement in our own grandfathers' time. The agriculture of Scotland, for example, was, during those long centuries, in a retrograde condition. Why was this? Because there was perpetual war—war between tribes, not between great nations, but between tribes fighting each other across glen, or mountain, or river; and in the perpetual feuds of families, which lasted for centuries—they invaded each other's territory, murdering each other's people, carrying off each other's cattle, or burning each other's houses. War did not give what it ought to give, secure possession. Look at the effect of that on political economy. I daresay many of you have not realised the fact that the whole of Europe was, up to very recent times, and a great part of Europe even now is, inhabited by men living in villages called village communities. There is a great deal of modern sentiment got up in favour of village communities, and against individual property. Why did they live in these villages? Because they were obliged to defend each other. They could not live in single houses or scattered farms, and preserve their crops or cattle; they must live in communities, and under the protection of military chiefs. Now it is a very curious fact that these village communities are at

last being rapidly dissolved even in Russia, and in the eastern parts of Europe where they still exist, through the natural economic forces of our own age,—the railroad and the steamboat doing a great deal more than armies or parliaments could do. The young women of these villages, seeing railways and the possibility of getting fine dresses in the great centres of civilisation, go into the towns and get higher wages. The young men are under similar inducements. So gradually those villages are being given up. They were the result of bad and insecure conditions which kept back the civilisation of Europe more than a thousand years, and now they are gradually giving way.

There was another effect of these village communities with regard to improvements, and that was the influence of custom. You have no idea how impossible it is to get people living in a village system like that to adopt or believe in anything new. They walk, as it were, in the ruts of custom, and their system is such that any individual member of their community introducing a new system commits an injury on his neighbours. Unless they have divisions, they cannot have good crops nor improved breeds of stock. But dividing and enclosing is one of the greatest crimes and sins against the community. The result is that the whole community is kept down to the very lowest level of the stupidest customs of ancient times. The other day a very interesting speech was made by the Archbishop of Odessa to the Russians in that city. He sees numbers of poor Germans going in and buying lands to a great extent in the southern parts of Russia, and they were all thriving on the individual system, each having his own crop

and owning his own farm. The old Russian system is giving way, and the Archbishop says to the Russians, "Go and look at the German villages; see how nice and clean and tidy and prosperous they are, and compare them with your own dirty houses and slovenly agriculture." Yes; but the Archbishop forgot that these poor men could not improve. Until the village system is broken up, the individual mind of man is never brought into contact with the fertility of the soil and the resources of modern civilisation. Another very important feature in illustration of what the instincts of man point to, with regard to individual property in land, is to be seen in our colonies. You know our colonies have enormous quantities of land to dispose of. Not at all from theory of any kind or sort, but simply from the instincts of these communities, the first thing they do is to advertise to the whole world that their land is to be sold in individual plots. I saw this very morning in the papers a statement, that our various colonies had within a limited number of recent years sold to individuals some ninety million acres. There is a colony in Western Australia, numbering little more than forty thousand people, who have demanded from our Government here—and I believe it has been conceded—that they shall have the exclusive right of disposing of territory larger than the whole of Europe. What do these colonies invariably do? When they get the lands, they immediately advertise their readiness to sell them or let them to individual men, each purchaser resting, of course, upon the security that has been obtained through their connection with our great military Empire. Our colonists know instinctively that the individual mind

must be brought into contact with the soil and with modern means of improvement. Let me illustrate this by a very curious case, which attracted my attention a very short time ago. You know, probably, that there is a Society in this country for the exploration of the Holy Land; it is called the Palestine Exploration Society. I earnestly recommend the publications of that Society to the consideration and attention of all young men and women who wish to know the bearings of history on some of the many aspects of economic science. The result of the operations of that Society is this, that the whole country between the Mediterranean and the Euphrates is being completely and scientifically examined by men of the highest education as historians and engineers. Well, I hope you will remember what that country is: it is a narrow strip of the world; it seems a mere fragment of the terrestrial surface; but it is by far the most interesting historical area on the surface of our planet. A narrow margin of territory of some five or six hundred miles between the Mediterranean and the Euphrates is the seat of the greatest and most ancient civilisations of the world. They are all now in absolute desolation. Great mounds cover the site of Babylon and the site of Nineveh; and nearer to our own Holy Land, in Bashan and the east of the Jordan, a country rich in natural resources, and so late as the Roman Empire full of populous cities, is all now nearly absolutely desolate! Why? We cannot help asking ourselves, Why have these countries become desolate? Is it in virtue of a law of death operating among all nations, or can we trace special causes? Yes; we can trace the causes. I have spoken of the blessings of war;

I have spoken of the triumphs of war; I have spoken of the poetry of war; but go to these countries and see the curse of war. There can be no doubt whatever that these countries have been desolated by a cruel and a wicked passion for war, wholly independent of the purposes of possession, which are legitimate objects and purposes of war. We have recovered, in our time, written on enduring monuments of stone, the inscriptions of the great monarchs of Babylon and of Assyria setting forth the methods by which they conducted war. We find in them a perfect confirmation of all that is told us by the Jewish writers of the cruelties and desolation which they inflicted. Allow me to read to you two inscriptions which I have copied for the purpose, to show you what was the nature of war as conducted by those great monarchies. We have inscriptions extending over many hundred years, and there are two especially of two monarchs who are mentioned in the book of Kings, and other books of the Old Testament. Tigleth Pileasar I. (B.C. 1130 *circa*.) says: "The country of Kasizara I passed through. With their 20,000 men and their five kings I engaged. I defeated them. Their carcasses covered the valleys. I cut off their heads; of the battlements of their cities I made heaps like mounds of earth; their movables, their wealth, and their valuables I plundered to a countless amount. Six thousand of their warriors, who fled before my servants and accepted my yoke, I took and gave over to the men of my own territory as slaves." Nearly four hundred years later we have Tigleth Pileasar II. repeating even more savagely the same savage boasts: "The City of Amilatu I captured, the people and children I carried off. Bitschalli,

through its extent like a whirlwind I overspread. I laid waste its districts. The groves of palms I cut down, I did not leave one. Its forests I threw down. Its enclosures I threw down." There we have, together with later devastations down to the Saracenic, the whole secret of the desolation of those countries. War with these monarchies was a passion, a lust of blood, no doubt under the impulse of superstitious ideas with regard to that which pleased their bloody gods. Now turn to the language and read it with a new eye, and listen to it with a new ear—turn to the magnificent denunciations of the prophets of Israel against the wickedness of those days. Here is an instance—I think, perhaps, the most awful denunciation in the whole compass of the Old Testament. The infernal regions are represented as in haste to swallow up those cruel and wicked monarchies. "Hell from beneath is moved for thee to meet thee at thy coming, . . . Thy pomp is brought down to the grave, and the noise of thy viols: the worm is spread under thee, and the worms cover thee. . . . They that see thee shall narrowly look upon thee, and consider thee, saying, Is this the man that made the earth to tremble, that did shake kingdoms; that made the world as a wilderness, and destroyed the cities thereof?" This is the history of the desolation of that country. One monarch after another given up to the worship of false gods, caring for nothing but war and desolation for the mere lust of the eyes and the pride of life. Will these countries ever revive again? The explorations of the Palestine Fund give us hope that they will. And how will they revive? A German gentleman, an engineer, named Schumacher, went the other day

across the Jordan to find a city mentioned in the Old Testament—Abila—as coming in the way of one of these expeditions of Tigleth Pileasar, and in later ages as one of the cities of the Decapolis. He wanted to see if he could find the site indicated in the Old Testament book of Kings, and which it was well known was situated somewhere about fifteen or twenty miles to the east of the Sea of Tiberias. Mr. Schumacher went to the place and found an old Arab sheikh presiding over a village there. He told him that he had come to see ruins and antiquities. The Arabs always think you are going to seek for treasure. They never believe in historic interest, and are very shy about showing anything. However, at last, after a long conversation, the sheikh took Mr. Schumacher to a place which he found covered with the broken stones of magnificent ruins—the site of a great city. The old sheikh took him to a height where he saw a great extent of fine arable land, fairly well cultivated, and apparently prosperous. The sheikh turned to him and said, “My son, look at all those fields, they are all mine; but I have sowers (or tenants) and cultivators under me, and they pay to me one-fifth of the produce.” There we have a picture of society beginning, and all the theories of Ricardo about the nature and origin of rent may be sent to the winds, not as too abstract, but as entirely fallacious when you read the simple narrative of that man’s story. For how did these fields become his? Why was it that his “sowers” owed and paid rent to him? I will tell you. He was a poor Arab, not richer, apparently, than his neighbours, but he had in him—in his head—that power of commanding influence over other men which,

as I have told you, constitutes the soldier. The nomad Arabs always hate the settled Arabs, and there is no possibility of cultivating land there because of the incursions of the nomadic tribes. This man said to a number of neighbours, "Why don't we all come together? I will lead you, and set up the standard. You follow me. Beat off these vagrant Arabs and we will have a bit of country for ourselves." They agreed; they saw he was in his own little way a king of men, and they followed him, and after desperate encounters for several years they established their power, and now the vagrant Arabs dare not touch them. There you see society beginning—there is possession, the source of all wealth, once more established—beginning with the soldier, with war for the legitimate purpose of securing possession and founding, I hope, a civilisation which, when the Turkish Empire is no more, will fill again those lands with population and with culture.

Before I sit down I have only one other consideration with which to trouble you. Pray remember, when talking of history, that we are enacting history in our own time. Everything is history except the fleeting moment of the present. It is history since you entered this room. It is history since you did your business on the Exchange to-day. Everything really belongs to the past that we can fully grasp or understand, and I ask you to think of the history which attaches to every day's transactions in this vast centre of civilisation. Pray remember that London contains a population of, I suppose, now four millions of human souls—a population greater than that of many powerful states which have made great figures in history. I ask you now to remember one thing about it, and that is the

commissariat of London. You know that the Duke of Wellington used to say he knew very few officers who could take twenty thousand men into Hyde Park and bring them out again in good order. You know also that the commissariat of great armies is one of the most difficult things great commanders have to encounter, even when they have at command all the resources of the country in which they may be fighting. The commissariat of a great army is a matter of extreme difficulty, requiring the highest powers of thought and organisation. But what is that to the commissariat of four millions of people, and how is this commissariat provided? Let any of you go out in the early morning—some of us have done it from the Houses of Parliament—when a summer morning is just breaking, and the streets of London seem almost deserted, the very houses seem asleep. Let us think of London as it was seen by Wordsworth, standing on Westminster Bridge, when he said—

And all this mighty heart is lying still.

Yes, yes; but think of who are providing for you; think of the millions of hands on all sides of the globe, from those who are hunting for furs in the Siberian wilds to those who are cultivating sugar in the torrid zone, and tea in China and India; think of all the hands working for you, of all the ships ploughing the ocean for you, to bring your daily food to this vast city, and I would ask you one question—How is this done? Who does it? Is it your municipality? No! my Lord Mayor; not you, with all your councillors, could do it for an hour. What is the tie—what is the connecting link—between this vast demand and

this world-wide supply? Individual interest; each man working for himself and for his own family. Individual interest is the tie, and the only tie, which provides the enterprise, the capital, the skill, the knowledge, and everything else that feeds this mighty population. Is not that a great lesson in economic science? Is it wonderful that the older economists thought of nothing but this: "Don't you interfere with these mighty automatic forces; hands off! Let them alone! They will do it better than you by your interference;" and hence the doctrine of *laissez faire*. Now there is a reaction against *laissez faire*. Well, gentlemen, there are limits to *laissez faire* as well as to other things. We must never run away with an abstract idea without looking to its limitations. There are limitations to the beneficent operation of individual interest. There are certain things which can only be done by the community: the maintenance of confidence and order by your police; the protection of property by your armed forces;—all these things can only be done by the community. In the city of Glasgow the municipality has brought water from the mountains at a great distance to supply the city. Such things as these very often can only be done by the community, and the great question of our day is this—whether there may not be other branches of economic operation which the community may beneficially undertake—whether there may not be evils creeping up from time to time which can only be dealt with by the higher will and higher conscience of a Christian community. That is one of the great questions of our time. I recommend it to the young men and the young women of this generation as

one of the most difficult, as it may be one of the most fruitful of all the investigations in which they can engage. We must always remember this, that we have to deal with tendencies and dispositions in human nature which are corrupt. You cannot legislate for humanity on the supposition that it is virtuous, that its instincts are unperverted. No one asserts more strongly than John Stuart Mill the fact that human nature is corrupt. We are too apt to think that this is a mere dogma for the pulpit, and to leave it to the clergyman. Alas! it is an economic truth with the most tremendous economic consequences. John Stuart Mill said, "Most criminal actions are, to a being like man, not more unnatural than most virtues." If this be true, we have hard work to do in guiding human society through the constant dangers which beset it. In conclusion, let me entreat you not to think that economic science is what my old friend Carlyle called "the dismal science." It has been made dismal by bad methods. Economic science includes all the questions which affect our nature. Let us return to the old definition of wealth. Do you see what it is? Look at the word and examine it, and you will see what wonderful power these two letters "th" have at the end of a word in the English language: strong, strength; long, length; weal, wealth. By means of these two letters you pass from the concrete to the abstract. Look what the economists have done for you. They have degraded the word "wealth" into the possession of lumps of matter. They say that wealth must be something material. Well, the meaning of the word "weal" was once the same as in the word "commonweal." It is our business and duty not to

look merely at material things, but it is part of our economic science, I maintain, to look at all that constitutes the weal of human society. You may expatiate, as you like, in all the fields of human thought that bear upon the welfare of the human family, and do not let the economist tell you you are going out of your field and out of your science in so doing. It is all part of your science. Given that idea of it and you will find it wide enough to exercise the richest imagination and the acutest intellect. And remember this—you young men and young women who are studying these subjects—remember that you have to deal with facts, and with eternal laws, and that the best motto, alike for your method and for your hope, is in the noble line of Wordsworth—

Painstaking thought, and truth its dear reward.

IDEALS

BY THE BISHOP OF DURHAM (DR. WESTCOTT)

1891

MANY of us remember the splendid myth in which Plato connects the position of men in their earthly life with their experience in an earlier existence. There are, he says, festivals in heaven, when Zeus, followed by the divine hosts, goes forth to the outer boundary of the universe, and, during its revolution, gazes on the supramundane realms of absolute being. The spectacle is the food of the heavenly nature, and gods and heroes fill themselves with it to the full in serene and untroubled tranquillity. Other unembodied souls follow in the celestial train, struggling to share the life-giving vision. Some with grievous effort catch more or less transitory glimpses of righteousness and beauty and moral order, and so retain for another period their lofty state. Others, baffled and beaten down, fail to gain the glorious sight, and, falling to earth, are forthwith confined in mortal frames. But since they still remember something of the truth which they have formerly seen, they cannot on their first embodiment sink below the state of man, and their

place among men is determined by the measure of their remembrance. He who has seen and remembered most is born a philosopher. He who has seen and remembers least is born a despot.

Now, without discussing in detail the remarkable hierarchy of classes which Plato sketches between these extremes, or entering on any philosophical speculation, we can notice two central thoughts, two central truths, I will venture to call them, vividly expressed in this great picture. That which makes us men is the capacity for regarding the eternal. That which fixes our position in the scale of humanity is the energy of the eternal within and upon us, by which we are freed more or less from the dominion of material and selfish aims. Or, to express the teaching in popular language, man is a being who fashions ideals, and the worth of man in relation to his fellows depends upon the ideals which he cherishes.

Man partly is and wholly hopes to be.

I wish, then, to say a few words now, necessarily most fragmentary and imperfect, upon ideals regarded in this aspect. I wish to show, if there is need to show it, that ideals are the very soul of life; that the characteristic spirit of University teaching, which this Society desires to bring within the reach of all, tends to quicken, to sustain, to perfect the loftiest ideals; that the circumstances of the time give peculiar importance to this aspect of the work of University Extension.

Ideals are, I say, the soul of life. The simplest human act is directed to an end, and life, a series of

unnumbered acts, must answer to some end, some ideal, mean or generous, seen by the eye of the heart, and pursued consciously or often unconsciously, which gives a unity and a clue to the bewildering mazes of human conduct. The word progress is unmeaning without reference to an ideal. And I would say of ideals that which was said here of abstract thoughts by a distinguished scholar and statesman, that they "are the meat and drink of life." They support us, and, still more, they rule us.

It is, then, momentous that we should pause from time to time to regard our ideals. They exercise their influence upon us insensibly. We grow like the object of our desire perhaps before we have distinctly realised its true nature; and so we may find ourselves like some of the souls at the close of Plato's Republic, involved in unexpected calamities through a heedless choice. At the same time, the effort to give distinctness to our ideals brings with it a purifying power. For, after all, there is but one ideal in which we can find rest—that which answers to the truth of things. To this alone the name ideal properly belongs. It remains when all illusions pass away. By us "who are but parts" it is seen in parts, but it is one. It exists already. And we were born to seek it, to find it, to recognise it, to show it. "It is not," as has been nobly said, "the creation, but the gradual discovery of the human intellect." Yes; the best will be done; is on the divine side done now. There is an order in which all fragments will find their due place—

On the earth the broken arcs: in the heaven a perfect round.

This conviction that there is an order in things

which we do not make, but can discern and interpret, is the inspiration of the man of science and of the artist, no less than of the man of affairs. The man of science dimly perceives that after which he is feeling. Phenomena speak to him with a voice which others cannot hear, because he has known in some degree their vital coherence, and he trusts to the perfection of the harmony of which he has found the first promise. To the artist outward things are signs rather than copies. He uses them to suggest to others what he discerns behind them. His work is not an end in itself, but a revelation of that which is beyond. And for the statesman ideals are the adequate support of resolute and unwearied patience.

It was said, I think, of Michael Angelo that he often hewed the marble before him without a model, as one who was setting free a figure imprisoned in the block, clear to his artist eye. The image is a just representation of the work of life. Our work in life is to set free from manifold encumbrances that which is present about us, good and true and lovely. But we must first see the ideal which we desire to bring to view, and the vigour of action depends upon the clearness of our sight, and such clearness comes through discipline. Every prospect on which we look is for us as we are. The phenomena are the material which are offered to us to use and interpret, and as the quickened soul realises their meaning and their relations, seeing becomes beholding, and the partial apprehension of the ideal by which and towards which we have been guided.

So to keep the ideal before us in the midst of our common occupations, to guard the conviction that there

is an ideal, is to preserve the first freshness of our early impressions of the mysterious beauty of the world. Poets tell us that in the pilgrimage of life we shall watch the glory fade away from the things of earth. But if it be so, the fault lies with us. It will be because with the growth of things we have not grown to match. The halo still encircles the bush in the wilderness when we have learnt to study the material elements by themselves, only it is found to come by the gift of Heaven. The sunshine which floods the whole landscape at mid-day is the same as that which was seen as a star of dawn when it lighted the solitary mountain peak, only it is infinitely vaster, and therefore harder to comprehend in its fulness.

But while this is so, the conditions of living tempt or constrain us more and more to regard phenomena in relation to our own needs, and we come to forget their larger meaning. I have somewhere seen that an American writer has recorded how, when he was engaged as a pilot on the Mississippi, he was at first filled with adoring wonder at the magnificence of the sunsets, and then in the course of his work came to regard them as useful weather signs. But while we welcome the utilitarian interpretation we need not acquiesce in it. This itself points to something greater by emphasising one of the harmonies of creation. Here, as elsewhere, the part enables us to rise to a fuller conception of the whole, if only the thought of the whole is present with us. So, moving from fragment to fragment, we learn to give distinctness to our ideal, and to feel the unity and grandeur of the sum of being through our own experience. If the past shows no attainment, it shows many advances and

points to the hoped-for end. Tracing by intelligible marks how things have come to be, as far as they fall within the range of our powers, we look forward with a prophetic trust. We make the power of poetry our own, which a poet has defined to be "the feeling of a former world and of a future one." We come into contact with what has been truly called "the collective thought," and are kindled by the spirit of humanity, that humanity which is "a man that lives and learns for ever." Exceptional occurrences, oppositions in thought, material phenomena, transcending all conception in their necessary conditions, take their place in our view as indications of a larger order. Man, society, nature, are seen to be instinct with one life, and regarded, even as we can now regard them, inspire the spectator with patience at once and hope.

Such a temper, which answers to the highest ideal of man and of his dwelling-place, is intensely practical. It is not for intellectual indulgence: it is a spur to action. It enforces a thought—a fragment of the ideal—till the thought is recognised as a principle, and in due course the principle is embodied as a fact. Thoreau has said well, "If you have built castles in the air your labour need not be lost; that is where they should be. Now put the foundations under them."

The temper is practical and it is attainable. I am inclined to say it is necessary for every human life. The average man, the man of business, the artisan, the miner require the vision of the ideal, and they are capable of it. The vision of the ideal guards monotony of work from becoming monotony of life. The simplest home finds a place for it. And no problem is pressed

upon us now with more continuous urgency than how that place shall be rightly filled. The University Extension Movement is one important help towards the solution of the problem.

University teaching tends, I believe, with ever accumulating force and directness to quicken and to sustain ideals. It is characteristically structural, catholic, equalising, chastening, historical, personal, spiritual. Let me, in the fewest possible words, endeavour to explain and justify this formidable list of epithets. To every University man each word will, I think, recall a debt which must grow with the growth of life.

University teaching is, I say, structural. It aims, I mean, at giving a sense of the whole and preserving the proportion of the parts. It insists on a general training and a special training. It brings intelligent sympathy with all studies, and guides to the mastery of some one. It provides that the physical student shall understand the aims, the resources, the achievements of literature; and that the scholar shall understand the methods and the limitations of physical science.

It is catholic. A University is strong enough to prevent the overpowering dominance of a popular pursuit. It is hospitable alike to the enthusiasm which proclaims new thoughts and to the reverence which lingers over the thoughts of a past age. It is tolerant of all things except one-sided arrogance. No specialist can move among bands of fellow-students preoccupied with other interests without feeling the amplitude of knowledge and of life, and the manifold relations in which his own subject stands to others on

which he cannot enter. The common search for truth and right brings mutual respect; and the teacher who has felt the subtle influence of the University must himself in turn diffuse its spirit.

It is equalising. Nowhere is fellowship more complete among representatives of every class than at a University. There poverty is no reproach, and wealth is no title to superiority. The foremost students are bound, perhaps unconsciously, in a brotherhood of heart through which comes the power of penetrating to the noblest in each man. The teacher who has learnt his lessons under such social conditions will be eager to bring the best to the humblest as a fellow-heir with him of the wealth of humanity; and he will not accept as permanent conditions of life which exclude any class or any man from access to his birthright.

It is chastening. The University teacher cannot forget that his office is not to supersede labour, but to stimulate it. He will not entertain the vulgar notion that we can bestow on others our thoughts as we can bestow on them our money, so that they can employ them rightly before they have made them their own. He will bear in mind the pregnant saying of an old divine, "We have ourselves as we use ourselves." He will make it clear that great books can only be read in the spirit in which they were written, as serious work and not as indolent amusement. He will, therefore, claim from his hearers the difficult service of thinking, as one who knows that the true teacher, like Nature, gives nothing but materials and opportunities and impulse.

It is historical. A University is not a bureau.

It is a living body, a complex result of life, and not an official provision for carrying into effect a formal scheme. The teaching which answers to it is, as a necessary consequence, vital and not intellectual only. It bears the impress of many associations, old and new. It is flexible, in the largest sense human, of the past at once and of the present. A Cambridge man might find it hard to analyse or to estimate the effect which has been produced upon him by the great libraries, by the old buildings wedded to new, by the chapels of Trinity or King's, yet he will know that they have in many undefined ways given him breadth and sympathy and tenderness which will colour his own work.

It is personal. The method of learning is, I believe, of scarcely less moment than the matter. The student who has mastered a subject by the help of a text-book occupies a very different position intellectually and morally from one who has gained his knowledge in continuous contact with a teacher. The frank questioning, the interchange of thought, the influence of personal enthusiasm, the inspiring power of living words, which come in the free intercourse of the classroom, give a force and meaning to facts and theories which the book cannot convey.

It is spiritual. The end of the teacher whose work we strive to follow is not fixed by the communication of his special lesson. He will seek, indeed, to do this as perfectly as possible, but he will at the same time suggest the vast fields which lie unexplored even in his own department; he will make clear the limitations and assumptions under which his results are obtained; he will add, if I may so express the

truth, the symbol of infinity to the provisional statements which represent the actual attainments of man ; he will use the most effective technical education as the vehicle of wider culture. Literature, art, science will be for him partial revelations of a boundless life ; and it will be his object to make the life felt through the least part with which he deals.

If, then, this is the general character of University teaching, however imperfectly it may be realised by the individual teacher, we may rightly maintain that it does, as I have said, tend to quicken and sustain ideals, to bring into view the loftiest aspects of man and nature, to assure to thought and action that liberal freedom which corresponds with the sense of absolute law, to keep open a free course for aspirations and endeavours which rise beyond the conventional standard of custom.

Hitherto the Universities have fulfilled their teaching office for a few. Now they are endeavouring to extend it to every town and village, and to make it effective even for those who are busily engaged in various industries. The movement corresponds in many respects with that out of which the old Universities themselves arose. It is still experimental, but the results already obtained have far more than satisfied the hopes of those who watched the beginning of the movement not without anxiety. They have won a distinct academic recognition at Cambridge, and they have contributed, I believe, in no small degree to create the desire for a teaching University in London. For, however important the test of an examination may be for fixing the value of acquirements, the discipline of learning is yet more important for character ;

and this discipline the Extension system offers in a form equally attractive and stimulating.

Such a system, fitted to bring many-sided liberal culture to every condition of life, to enlarge common interests, to deepen fellowship, to create simplicity through refinement, and to check the passion for excitement by the force of purer interests, would be welcome at any time.

But it is of singular importance now, when we are in danger of losing the true conceptions of nature, humanity, and life, and the calm vigour of action is failing us. The inspiration of great ideals seems to be alone able to meet the intellectual distraction, the materialism, the critical indifferentism, and the consequent enfeebling of will which appear to be the dominant perils of our age.

On the one side our attention is concentrated on isolated subjects. We are absorbed in the study of fragments. We are fascinated by minute details. We unconsciously treat our little domain as the whole. On the other side, in the eager hurry of life, every one is expected to possess a ready acquaintance with all that can be known. In this way genuine labour and superficial borrowing of opinions become equally destructive of broad and balanced judgment. But the contemplation of a great ideal of nature will bring proportion to special inquiries and justly discredit the affectation of an impossible omniscience. The worth of our own little service will be seen to be fixed by the grandeur of the cause to which it is rendered, and the worth of our knowledge by the help which it brings to others.

Again, as long as our aims, our methods, our

sanctions are material, there can be no equal fellowship, no enthusiasm of service, no stable peace. Wealth to be held irresponsibly as a private possession is tacitly accepted as the standard of success. The skill which we labour to gain is regarded as a weapon to overcome a rival. The final appeal is to strong battalions. But the contemplation of a great ideal of humanity will constrain us to recognise as axioms that classes, nations, races rejoice and suffer together; that every possession, every power of a society or a people, is an instrument for wider service; that the accordant voices of history and conscience give a verdict which no force can arrest from final execution.

Yet, again, we are reminded at every turn that men who should be prophets and pioneers of a noble future are content to sink into expositors of the past or present. They devote themselves to making a survey, an analysis, a description. Life becomes a study without a moral, treated as equally interesting and equally transitory in all its forms, a drama provided for the amusement of those who are in a position to forget that the actors are men of like passions and like destiny with themselves. But as one of the most noble of modern political leaders said with his latest voice: "Our world is not a spectacle; it is a field of battle upon which all who in their hearts love justice, beauty, and holiness are bound—whether as leaders or soldiers, conquerors or martyrs—to play their part." And the contemplation of a great ideal of life will sustain the combatant in the struggle, and through every failure enable him to strive as knowing that, for states, as for men, the test of abiding greatness is the power of sacrifice.

Such an ideal will give back also, strengthened and purified, the true conviction of personal responsibility. At present we first shrink from forming a decision, and then we improvise one. We are first irresolute and then precipitate. It must be so till we fix our eyes upon an unchangeable goal and have faith to move towards it. As we do so we may err in this step or that, but we shall never go wrong as to the line of our advance. Thus only can we do our work. An ideal is, we have seen, a condition of sustained action ; and action is the mark of a man. He is born not to think, as regarding one element only of his constitution ; not to be, as gathering into himself all the treasures which he can command ; but to act, to consecrate to one supreme cause the fulness of his powers, as knowing that life is not a search for personal happiness or aggrandisement, not an effort after self-centred culture, but the accomplishment of a divine service.

Such ideals of nature, humanity, life, are, I repeat, intensely practical, even if they are unattainable. They are as sunlight upon our common ways. And the teachings which this Society is seeking to gain and to spread brings them into the very heart of our common business. And it is on this that I wish to lay the utmost stress. We cannot all be scholars or philosophers or physicists, but we can all enter on the blessings of the larger heritage which it is the office of such explorers to gather. We can do our humblest tasks thoroughly and liberally, not as drudges, but as fellow-workers with saints and heroes ; we can feel that we, too, in the lowest places, are servants of an illustrious commonwealth ; we can find the opportunity for a generous career each in our narrow

circle ; we can pursue our peculiar work in the spirit which is common to us all as men, and enjoy the invigorating energy of a larger being ; we can, if I may so use your motto, learn to convert that which is a means of livelihood into a means of life.

And it is, I believe, by the help of these noblest ideals—ideals which belong to men as men, the ideals of our Christian faith—that purity and peace and freedom and dignity will be given to the masses of our countrymen. This conviction has brought me here to-day that I might plead once more for a work which I have watched with gratitude from its beginning. Only let those of us who have caught some distant glimpse of the beauty of creation as the thought of God, and of the obligation of labour as the lot of man, tell courageously what we have seen and known. All who share our nature are capable of our highest visions, and awakened reverence will do her perfect work. The ruined denes of Durham will then smile once more, and smoke-wrapped rows of huts will give place to homes of men. Ideals grow wider, and brighter, and nearer with our own years and with the years of the world. I see now that far more is within a measurable distance for nations and for men than seemed possible when I was first stirred by great hopes in my school days. Thoughts whispered then with bated breath have become commonplaces. We know our dangers ; in part, we know our aims and resources. We stand on the edge of a new age. It is for the young to shape it. To them we commit without fear our ideals and our faith.

that could have been formed. These results have afforded fresh evidence of a fact which has long been known to experienced workers in the field of popular teaching, viz., that large and constantly increasing numbers of men and women, of all classes and callings, are beginning to comprehend the twofold claim which entitles Greek to a permanent place in a liberal education: first, the claim arising from its intrinsic power to satisfy mental and moral wants which become more widely felt the more widely liberal studies are diffused; and, secondly, the historical claim, arising from the relation of Greece to the literature and the life of subsequent ages. It seemed to me, then, that the moment was a favourable one for inviting you to consider, though it be only in rapid outline, the general nature of the influence which Greece has exerted, and must always exert, over the modern world.¹

The very name of this noble hall, in which your Lordship's courtesy permits us to meet to-day, recalls a part of that prehistoric background against which the Greek genius first shone forth. The immemorial civilisation on the banks of the Nile had gradually passed under the bondage of stereotyped formulas, as despotism of another kind overshadowed the lands of the Tigris and the Euphrates, when the Greek spirit, in the first glow of a youth which has proved immortal, was beginning to clear the path of mankind to political liberty, to the recognition of natural beauty, and to the fearless pursuit of knowledge. If,

¹ Some passages in this address are taken, with modifications, from the first and last of a course of lectures which I gave at Baltimore in 1892, and which have since been published under the title of *The Growth and Influence of Classical Greek Poetry*.—R. C. J.

again, we look back from a modern standing-point on the various parts played in human progress by various members of the Indo-European family, how singular do the faculties of the Greek race appear, alike in compass and in harmony! This might be illustrated from the history of modern art, when some felicity of invention or achievement is explained by the fact that several strains of lineage, several branches of the Indo-European stock, have contributed to a result which no one of them could have produced alone. Thus, the most signal achievement of the French genius in art has been the creation of Gothic architecture; and, as the President of the Royal Academy reminded its students some years ago, the cradle of that architecture was the Royal Domain of central France, a region in which the Celtic blood of the Cymri was mingled with the Latin element derived from the Romans, and with the Teutonic element furnished by the Franks, giving birth to that Gothic style which blends freedom with self-restraint, audacity with prudence, and science with emotion. No similar analysis can be applied to the masterpieces of the Greek architect and the Greek sculptor. Imperfect though our knowledge is, does it not warrant the belief that no people has yet appeared upon the earth whose faculty for art, in the largest sense of the term, was at once so fine and so comprehensive?

But it is through the classical literature of Greece that the mind of the race is most fully known to us. There is a passage in one of Macaulay's earliest writings—a review of Mitford in *Knight's Quarterly Magazine*—from which I will quote a few sentences, because they put the claim of Greek literature in the

boldest form,—one which many readers, probably, would deem extravagant, or even paradoxical. “If we consider,” he says, “the subtlety of disquisition, the force of imagination, the perfect energy and elegance of expression, which characterise the great works of Athenian genius, we must pronounce them intrinsically most valuable; but what shall we say when we reflect that from hence have sprung, directly or indirectly, all the noblest creations of the human intellect; that from hence were the vast accomplishments and the brilliant fancy of Cicero, the withering fire of Juvenal, the plastic imagination of Dante, the humour of Cervantes, the comprehension of Bacon, the wit of Butler, the supreme and universal excellence of Shakespeare?” The claim which Macaulay here makes for Greek literature would be extravagant indeed if it meant that Cicero was brilliant because he had profited by Demosthenes, that Juvenal’s satire was inspired by Aristophanes, that Dante was vivid and sublime because Virgil had given him glimpses of Homer, that the humour of Cervantes and the wit of Butler flowed from an Attic source, that Bacon’s grasp was due to study of Aristotle, or that Shakespeare, who had small Latin and less Greek, was the prince of dramatists by grace of the Dionysiac Theatre. In what sense, then, if in any, is the claim a just one? In this—that the Greeks were the people with whom the very conception of artistic literature began; that, in all the principal branches of poetry and of prose, the Greek mind achieved work so abounding with intellectual life, and so excellent in form, as to remain for after-ages an inspiration and a standard.

The vital power of the Greek spirit was indeed not fully disclosed until, after suffering a partial eclipse in the Macedonian age, it emerged in a new quality, as a source of illumination to the Italian masters of the world. Under the plastic touch of conquered Greece, the Latin language was gradually moulded into an apter instrument of literature, while the Roman intellect itself acquired, in some measure, a flexibility not native to it. Through Rome the Greek influence was transmitted to medieval Europe in a form which obscured much of its charm, yet also served to extend its empire. In the earlier period of the Renaissance, the scholars of Italy, where the revival had its chief seat, were engrossed with Latin literature; they regarded it as their Italian heritage, restored to them after long deprivation. Greek studies, though ardently pursued by a few, remained, on the whole, in the background. And it may be said that the general spirit of the classical revival continued to be Latin rather than Greek down to the latter part of the last century. Even where the Greek language was most cultivated, there was comparatively little sense of what is characteristic and distinctive in the best Greek literature. This sense was developed, in the second half of the eighteenth century, chiefly through two agencies. One was the study of Greek art, as advanced by such men as Winckelmann and Lessing,—bringing with it the perception that those qualities which characterise the best Greek art are also present in the best Greek literature. The other agency was a reaction against that conventional classicism, wearing a Latin garb, which had so long been dominant. Minds insurgent against that tyranny turned with joyous relief to the

elastic freedom of the Greek intellect, to the living charm of Greek poetry and art. Goethe and Schiller are representatives of the new impulse. The great gain of the movement which thus began was that, for the first time since the Revival of Letters, the Greek originals stood out distinct from the Latin copies. Men acquired a truer sense of the Hellenic genius, and the current of Hellenic influence upon modern life began to flow in a clear channel of its own, no longer confused with the somewhat turbid stream of Renaissance classicism.

Meanwhile, however, modern literature and art had experienced the influence of other forces, acting in very different ways; and with these forces the Hellenic influence had to reckon. One of these was the product of medieval Catholicism, which had given art a new genius. A new world of beauty had arisen, even more different from the pagan world than the Empire of the twelfth century was different from that of the first. Greek art had sprung from a free, cheerful life, open to all the bright impressions of external nature, a life warmed by frank human sympathies, and lit up with fancy controlled by reason. The lawgivers of medieval art were men withdrawn from communion with the outward world by the rapture of a devotion at once half mystic and intensely real; instead of flexible intelligence they had religious passion; instead of the Greek's clear outlook upon the facts of humanity, they had a faith which transfigured the actual world. The Greek artist, even in portraying passion, was mindful of balance, and placed certain limits upon the expression of individual character. The medieval artist strove before all things to express the intensity

of the individual soul. In poetry Dante is the great exponent of this spirit. And medieval Catholicism deeply coloured the sentiment of all the literature known by the general name of romantic. In Goethe's younger days the conflict between the classical and the romantic schools raged fiercely. The interlude of *Helena*, which forms the third act in the second part of *Faust*, was the work of his old age. Faust's nature is to be elevated and purified by developing in him the sense of beauty; Helena represents the classical, but especially the Greek element in art and literature; and when Faust at last wins her, their union typifies the reconciliation of the romantic with the classical. Goethe himself dated a new life, a mental regeneration, from the time when he first seized the true spirit of the ancient masters. These are his own words, speaking of Greek art and literature: "Clearness of vision, cheerfulness of acceptance, easy grace of expression, are the qualities which delight us; and now, when we affirm that we find all these in the genuine Grecian works, achieved in the noblest material, the best proportioned form, with certainty and completeness of execution, we shall be understood if we always refer to them as a basis and a standard. Let each one be a Grecian in his own way, but let him be one." In that allegorical strain which pervades the *Helena*, Goethe has not failed to mark that, while the Hellenic idea of beauty is supreme, the romantic element has also enriched modern life. The gifts are not all from one side. The symmetry, the clear outlines, the cheerful repose of classical art, are wedded to the sentiment, passion, and variety of the romantic. The great German poet felt, and has expressed with wonderful

subtlety, the truth that no modern can absolutely dissociate the Hellenic influence from the others which have contributed to shape our modern life; no one can now be a pure Hellene, nor, if he could, would it be desirable; but every one should recognise the special elements with which the Hellenic ideal can ennoble and chasten the modern spirit, and these he should by all means cultivate. To do so successfully, is to educate one's sense of beauty; and to do that aright, is so far to improve one's whole nature. This lesson, taught half mystically in the second part of *Faust*, has sometimes been obscured by what Mr. Matthew Arnold called the Hebraising tendency. We remember his definition, in *Culture and Anarchy*, of Hebraism as contrasted with Hellenism. The governing idea of Hellenism is spontaneity of consciousness; that of Hebraism is strictness of conscience: both seek, in the Hebrew apostle's words, to make us partakers of the divine nature; but Hellenism seeks to do this through the reason, by making us see things as they are; Hebraism insists rather upon conduct and obedience. In our own country the intellectual influence of the Renaissance was crossed, and for a time checked, by the Hebraising tendency. But, though there is a profound difference, there is no necessary antagonism between the ideal broadly described as Hebraic, and the permanent, the essential parts of Hellenism. The Greek influence has acted upon modern life and literature even more widely as a pervading and quickening spirit than as an exemplar of form; and it has shown itself capable of co-operating, in this subtle manner, with various alien forces, so as neither to lose its own distinction, nor to infringe

upon theirs. Milton illustrates this. By temperament no less than creed he is a Puritan of the higher type. Steeped though he was in classical literature, the pervading spirit of his work is at any rate not Greek; it is more akin to the Hebraic, or, when not that, to the Roman. The *Lycidas*, for instance, is a pastoral elegy on an Alexandrian Greek model; but how strangely the temper of the Hellenic original is changed when the English poet's wrath blazes forth against the corruptions of the time. He shows his own consciousness of this in reverting to his theme:—

Return, Alpheus, the dread voice is past
That shrunk thy streams; return, Sicilian Muse!

The *Samson Agonistes* has the form of a Greek drama, but its inspiration, like its subject, is far more Hebraic than Hellenic. Yet no one acquainted with the best Greek poetry can read Milton without feeling what its influence has contributed to his genius; it has helped to give him his lofty self-restraint and his serenity.

But the deepest and largest influence of Greece is not to be sought in the modern literature which treats Greek subjects or imitates Greek form; that influence works more characteristically when, having been received into the modern mind, it acts by suggestion and inspiration, breathing a grace and a power of its own into material and form of a different origin. This influence has been all-pervading in the modern world. Yet those who most appreciate the true value of Hellenism will never claim for it that, by itself, it can suffice for the needs of humanity. In the intellectual province its value is not only permanent but unique. It has furnished models of excellence which

can never be superseded; by its spirit it supplies a medicine for diseases of the modern mind, a corrective for aberrations of modern taste, a discipline no less than a delight for the modern imagination; since that obedience to reason which it exacts is also a return to the most gracious activities of life and nature. Of such a power we may truly say:—

it will never
 Pass into nothingness, but still will keep
 A bower of quiet for us, and a sleep
 Full of sweet dreams, and health, and quiet breathing.

But in the province of religion and morals Hellenism alone is not sufficient. Greek polytheism, even as ennobled by the great poets, was incapable of generating religious conceptions which could satisfy the mind and heart, or of furnishing an adequate rule for the conduct of life. These must be sought from another source. Yet there is no inherent conflict between true Hellenism and spiritualised Hebraism such as is contained in Christianity. The distinctive quality of the best Greek literature and art, that by which it has lived and will live, is the faculty of rising from the earth into a clearer air. "The divine," says Plato in the *Phaedrus*, "is beauty, wisdom, goodness, and the like; by these the wing of the soul is nourished, and grows apace; but when fed upon evil, it wastes and falls away." The Greek spirit, in its noblest form, is indeed, to borrow Plato's beautiful phrase, "the power of the wing" for the human soul. The visions to which it can soar are such as that described in the *Phaedrus*, where beauty is beheld dwelling with modesty in a holy place. The best Greek work in every kind is essentially pure; to

conceive it as necessarily entangled with the baser elements of paganism is to confound the accidents with the essence; the accidents have passed away; the essence is imperishable.

A further claim which may be made for the best Greek work is that it is capable of acting as an intellectual tonic, and of bracing us for the battle of life. "To pass from the study of Homer to the business of the world," says Mr. Gladstone, "is to step out of a palace of enchantment into the cold gray light of a polar day. But the spells in which this enchanter deals have no affinity with that drug from Egypt which drowns the spirit in effeminate indifference; rather they are like the *φάρμακον ἑσθλόν*, the remedial specific, which, freshening the understanding by contact with the truth and strength of nature, should both improve its vigilance against deceit and danger, and increase its vigour and resolution for the discharge of duty." The tribute here rendered to Homer might be paid, with not less justice, to the classical Greek poetry as a whole. True to Aristotle's principle for art, this poetry deals with the universal,—with those elements of human character and life which are not transient or abnormal, but of interest for every age and every land.

On the high places, the *templa serena*, of Greek literature and art, those who are worn with the troubles or disturbed by the mental maladies of modern civilisation can breathe an atmosphere which, like that of Greece itself, has the freshness of the mountains and the sea. But the loneliness of Oeta or Cithaeron is not there; we have around us on those summits also the cheerful sympathies of human life, the pleasant greetings of the kindly human voice. The great

thinkers and artists of ancient Hellas recall the words in which Aeschylus described those kinsmen of Niobe who worshipped their ancestral deity on the mountain-heights of Mysia :—

the seed of gods,
Men near to Zeus ; for whom on Ida burns,
High in the clear air, the altar of their sire,
Nor hath their race yet lost the blood divine.

Humanity cannot afford to lose out of its inheritance any part of the best work which has been done for it in the past. All that is most beautiful and most instructive in Greek achievement is our permanent possession ; one which can be enjoyed without detriment to those other studies which modern life demands ; one which no lapse of time can make obsolete, and which no multiplication of interests can make superfluous. Each successive generation must learn from ancient Greece that which can be taught by her alone.

Through what channels, in what modes, has her teaching been most largely operative upon the world ? History shows how, from the Roman age to our own, Greece has everywhere helped to educate gifted minds, from which her light has radiated in ever widening circles. It has been her privilege to elicit a sense of kinship in the finer spirits of every race, and to enter as a vitalising essence into the most varied forms of modern thought, bringing to every such alliance some distinction which no other element could have conferred. But the peculiar characteristic of this influence among us in recent years is the vast increase in the number of those who receive it, not indirectly merely, but directly, through their own study of Greek literature and art. As regards the literature, this has been

largely due to the appearance of really good translations. Through these a reader may learn to appreciate some qualities, at least, of the best Greek writers. In regard to art, again, any one whose eye has been trained to recognise the distinction of the best Greek work has learned much.

But the qualities of the Greek language are such, that the difference made by a knowledge of it to one's appreciation of the literature is greater than in the case, for instance, of Latin, or German, or even of French. In these languages, of course, as in all others, very much is lost by translation; yet not so much as in Greek. The comprehension of Greek art, again, is distinctly aided by a knowledge of the Greek language, as the best archaeologists would, I think, agree; and these facts follow from that general character of Greek which I must now attempt, however briefly, to describe. Compare classical Greek with its elder sister, the literary language of ancient India, and the difference is striking. Sanskrit has been the more faithful guardian of old Indo-European sounds and forms; the transparency of its structure gives it an unequalled value for students in relation to that whole family of languages. Greek attracts by a different charm. The thought which it suggests is rather—how wonderfully this language has achieved the purposes inherent in its own particular genius! It is an instrument which responds with happy elasticity to every demand of the Greek intellect. The forms which it has retained are light, graceful, flexible. It can express the most delicate shades of meaning with an elegant simplicity. This power is due, not only to its organic structure, but also to the tact with which words ex-

pressing the same general idea have been discriminated in its rich vocabulary. The Greek language is the earliest work of art created by the spontaneous working of the Greek mind, and it is the greatest work of Greek art which has survived. If those fragments of Greek architecture and sculpture which we so prize had come down to us without any credentials of their origin, simply as relics of an otherwise unknown race, it would not have been fantastic to conjecture that, of all the peoples recorded in history, the only one presumably capable of producing such monuments in marble was the same people whose thoughts had moulded, and whose spirit had chastened, the most perfect among the forms of human speech. The characteristic qualities of the Greek language are nowhere seen to greater advantage than in the Homeric poems, although the Homeric language has not yet fully developed certain traits which the Attic dialect shows in perfection. We perceive in Homer how vividly this language bears the stamp of the imagination which has shaped it. The Greek saw the object of his thought directly and clearly. His first aim in speaking was to make the expression fit the thought. When an imagination of this kind, unclouded by any haze of literary reminiscence, and free from conscious striving after effect, soars into the region of the marvellous or the ideal, it still commands the obedience of the language which it has disciplined in the field of natural observation. Consider, for instance, the preternatural elements in the *Odyssey*. The Oriental art, which embodied an abstract conception or a mystic dogma in some hybrid or monstrous animal shape, was merely making an effort of symbolism. The spectator

may comprehend the meaning or accept the doctrine, but he does not believe in the monster. The reader of the *Odyssey*, on the other hand, who feels the persons to be real, is not robbed of his illusion when Circe changes the hero's companions into swine; or when the flesh of the Sun-god's oxen bellows on the spits; or when Poseidon petrifies the Phaeacian ship. The human verisimilitude of the whole disguises the impossibility of the details; we scarcely feel at the moment that they are impossible. But how has this effect been attained? By an imagination which, through habitual contact with what is living and real, has learned to animate fiction also with the breath of life; and which is served here also by a language so faithfully and finely moulded upon nature that, when it clothes a narrative of the miraculous, the very outlines of the garment disarm suspicion as to the form which they invest. Such is the general character of the Greek language—a perfect organ of expression, showing essentially the same qualities which appear in the best Greek art.

We ought all to rejoice, then, in the remarkable success of a new experiment in teaching that language, which has arisen out of the work of this Society. Classes have lately been formed for the study of Greek, and students who had enjoyed no previous advantages of instruction in the language, but whose interest in it had been quickened by lectures on the literature, have shown a zeal and made a progress of which their teachers have reason to be proud. I would venture to commend this new enterprise to the sympathies of all who are interested in classical studies, or indeed in literary studies of any kind. To my

thinking, it is a movement of great importance, which is very likely to mark the beginning of a time when a first-hand knowledge of Greek shall be more widely diffused. It would be a notable and fruitful result if, as these new classes seem to promise, the interest felt in the Greek language should grow into anything that could fairly be described as a popular interest, —so that considerable numbers of students, outside of our great schools and Universities, should set themselves to acquire the power of reading the Greek literature in the original. I do not think that such a hope is chimerical, in view of what has already been accomplished by the enthusiasm of teachers and students. Perhaps one can scarcely expect that the time should soon come when the members of such classes, in any large numbers at least, will be able to read the more difficult parts of Greek literature; though I have no doubt that some students, when once started, will advance rapidly. But we may expect, I think, that such a knowledge of Greek as enables one to read Xenophon's *Anabasis*, for instance, will be found such a pleasant and profitable acquisition that, even if the student should not see his way to going much further, he will think that his time has been well spent, and that his labour has been well rewarded. I rest this belief on the peculiar charm of the Greek language, and on the peculiar way in which this charm affects learners, almost from the beginning—as I know from my own experience. A simple illustration may help to make this plainer. There are many children to whom no toy is more delightful than a printing-press, and its fascination consists chiefly in the leaden types. The letter A, for instance, so clear cut, so faultless, as it stands forth

from its neat stem—what a contrast it is to the same letter as scrawled by pen or pencil; it is a little work of art in itself, which appeals to the fancy of an intelligent child. And such as types are to him, such are the words of the Greek language to a sympathetic learner. The Greek words are, in themselves, so clear-cut, so beautifully moulded, that they begin to please one's artistic sense even before one has made much progress with the language. This pleasure becomes keen so soon as one proceeds to put Greek words together—even three or four at a time—in the simplest sentences; it is like the child's pleasure in type-setting, only more varied. Therefore, for the beginner in Greek, we may always prescribe a little easy composition, it does not matter how little or how easy, if only it calls this feeling into play. For this feeling is not an illusion which will fade in the presence of better knowledge. It is the germ of that delight in Greek which ripens with study, when the pleasure given at first by shapely words is enhanced by a perception of that symmetry and harmony, that unflinching adequacy to the lucid utterance of thought which distinguishes the language as wielded by all its great masters, alike in verse and in prose.

I have firm faith, then, in the power of Greek to retain the interest which it has once awakened, not only for the sake of the treasures which it unlocks, but for its own sake also. And I believe that anything which tends to make the study of this language popular will be valuable in a further way. High specialisation has long ago become inevitable in every branch of knowledge. Classical philology is no exception to the rule. If a student is to know the best that has been done in

even a small part of the field, he must concentrate himself thereon. But in the case of classical studies such completeness at a particular point may be purchased too dearly. These studies used to be called the "Humanities." This name expressed what is, after all, the greatest and best gift which they have to bestow. Their highest office is to influence the character, to chasten the judgment, to illuminate the understanding, and, in a word, to render their disciples more truly humane. But, in order that they should produce these effects, it is necessary that they should be approached in a spirit more comprehensive than that of the specialist who confines himself to one small part of them, and comparatively ignores the rest. It is better—for most minds at any rate—to renounce the hope of an exhaustive acquaintance with any one corner of the field, than to miss the largest benefit which the entire discipline can confer. This is what, under the conditions of modern scholarship, we are perhaps too apt to forget. But, if the study of the Greek language were to be spread over a wider area, and if a more popular interest in the classics were to spring from it, the academic tendency towards excessive specialising would be gradually tempered by more popular instincts; the classics would be, so far, recalled to their paramount function as "Humanities"; in this sense, and to this extent, the intellectual pleasures tasted by the scholars of the Renaissance would be enjoyed anew by large numbers among us, to whom the charm of Greek literature, inseparable as it is from that of the Greek language, would come with all the joy of a discovery.

But even this is not the largest issue involved.

That eager acceptance of stimulating lectures on the classics which has been manifested at several great centres of population is only one symptom, though a most remarkable one, of a growing desire to know the best literature at first hand. There is an eagerness abroad in the land to participate in those highest benefits of civilisation which are within the common rights of all mankind,—those gifts of education which may enable every one to live a worthier life, a life of higher activities and higher enjoyments, a life in which the duties of loyal citizenship can be discharged with greater efficiency and intelligence. The strength of the University Extension movement resides in the fact that it has responded to this desire—indeed, has done much to evoke it where it was latent, and to define it where it was vague. The Universities, as representing the higher education of the country, have gone out to the people, clearly seeing that the popular desire is not for the second best, but for the best,—only presented in forms which can be understood. All thinking persons will perceive the immense importance of such a movement to the public welfare, not merely in an educational sense, but in regard to social stability and national security. Nothing could contribute more powerfully to preserve the best things which we have inherited from our ancestors, or to warrant a confidence that the new generation will be qualified to deal in a wise and enlightened manner with the conditions and problems of their time. University Extension has created a new profession, which demands special gifts and a special training. The distinguished men in its ranks have much hard work to do, sometimes much drudgery; and they have often to encounter

difficulties which only perseverance can surmount. But they will be encouraged by the thought that they are rendering their country a great service—that they are helping to maintain the continuity of its best traditions, and to ensure that a people whose self-respect has its root in centuries of ordered freedom shall be knitted together by ties even stronger and nobler than those which united their fathers.

In conclusion, allow me to thank you for the kind patience with which you have listened to these remarks. I earnestly hope, and fully believe, that this great Society, which has already accomplished so much, will go on prospering more and more. In the field at which we have been looking to-day, it is doing a great work by enlarging the basis of those studies which are of primary importance for all literature and history. This is really to work in the Athenian spirit; and it will bring fresh honour to London—in words which a living poet applies to Athens—

While this city's name on earth shall be for earth her mightiest name.

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