
Royal Institution of Great Britain
Weekly Evening Meeting
Friday, November 20th, 1936

MOST OF THE LECTURES that are given in this place to this audience are delivered by men of very special knowledge. They come here to tell you something you did not know before. But tonight I doubt if I shall tell you anything that is not already quite familiar to you. I am here not to impart facts but to make certain suggestions. And there is no other audience in the world to which I would make these suggestions more willingly and more hopefully than I do to you.

My particular line of country has always been generalization and synthesis. I dislike isolated events and disconnected details. I really hate statements, views, prejudices and beliefs that jump at you suddenly out of mid-air. I like my world as coherent and consistent as possible. So far at any rate my **tempera-**

ment is that of a scientific man. And that is why I have spent a few score thousand hours of my particular allotment of vitality in making outlines of history, short histories of the world, general accounts of the science of life, attempts to bring economic, financial and social life into one conspectus and even, still more desperate, struggles to estimate the possible consequences of this or that set of operating causes upon the future' of mankind. All these attempts had profound and conspicuous faults and weaknesses; even my friends are apt to mention them with an apologetic smile; presumptuous and preposterous they were, I admit, but I look back upon them, completely unabashed. Somebody had to break the ice. Somebody had to try out such summaries on the general mind. My reply to the superior critic has always been-forgive me—"Damn you, **do it better.**"

The least satisfactory thing about these experiments of mine, so far as I am concerned, is that they did not at once provoke the learned and competent to produce superior substitutes. And in view of the number of able and distinguished people we have in the world professing and teaching economic, sociological, financial science, and the admittedly unsatisfactory nature of the world's financial, economic and political affairs, it is to me an immensely disconcerting fact that the **Work, Wealth and Happiness of**

Mankind which was first published in 1932 remains—practically uncriticized, unstudied and largely unread—the only attempt to bring human ecology into one correlated survey.

Well, I mention this experimental work now in order that you should not think I am throwing casually formed ideas before you tonight. I am bringing you my best. The thoughts I am setting out here have troubled my mind for years, and my ideas have been slowly gathering definition throughout these experiments and experiences. They have interwoven more and more intimately with other solitudes of a more general nature in which I feel fairly certain of meeting your understanding and sympathy.

I doubt if there is anybody here tonight who has not given a certain amount of anxious thought to the conspicuous ineffectiveness of modern knowledge and—how shall I call it ?—trained and studied thought in contemporary affairs. And I think that is mainly in the troubled years since 1914 that the world of cultivated, learned and scientific people of which you are so representative, has become conscious of this ineffectiveness. Before that time, or to be more precise before 1909 or 1910, the world, our world as we older ones recall it, was living in a state of confidence, of established values, of assured security, which is already becoming now almost incredible. We had no

suspicion then how much that apparent security had been undermined by science, invention and sceptical inquiry. Most of us carried on into the War, and even right through the War, under the inertia of the accepted beliefs to which we had been born. We felt that the sort of history that we were used to was still going on, and we hardly realized at all that the War was a new sort of thing, not like the old wars, that the old traditions of strategy were disastrously out of date, and that the old pattern of settling up after a war could only lead to such a thickening tangle of evil consequences as we contemplate today. We know better now. Wiser after the events as we all are, few of us now fail to appreciate the stupendous ignorance, the almost total lack of grasp of social and economic realities, the short views, the shallowness of mind, that characterized the treaty-making of 1919 and 1920. I suppose Mr. Maynard Keynes was one of the first to open our eyes to this world-wide intellectual insufficiency. What his book, *The Economic Consequences of the Peace*, practically said to the world was this: ***These people, these politicians, these statesmen, these directive people who are in authority over us, know scarcely anything about the business they have in hand. Nobody knows very much, but the important thing to realize is that they do not even know what is to be known. They arrange***

so and so, and so and so must ensue and they cannot or will not see that so and so must ensue. They are so unaccustomed to competent thought, so ignorant that there is knowledge and of what knowledge is, that they do not understand that it matters.

The same terrifying sense of insufficient mental equipment was dawning upon some of us who watched the birth of the League of Nations. Reluctantly and with something like horror, we realized that these people who were, they imagined, turning over a new page and beginning a fresh chapter in human history, knew collectively hardly anything about the formative forces of history. Collectively, I say. Altogether they had a very considerable amount of knowledge, unto-ordinated bits of quite good knowledge, some about this period and some about that, but they had no common understanding whatever of the processes in which they were obliged to mingle and interfere. Possibly all the knowledge and all the directive ideas needed to establish a wise and stable settlement of the world's affairs in 1919 existed in bits and fragments, here and there, but practically nothing had been assembled, practically nothing had been thought out, practically nothing had been done to draw that knowledge and these ideas together into a comprehensive conception of the world. I put it to you that the Peace Conference

at Versailles did not use anything but a very small fraction of the political and economic wisdom that already existed in human brains at that time. And I put it to you as rational creatures that if usage had not chilled our apprehension to this state of affairs, we should regard this as fantastically absurd.

And if I might attempt a sweeping generalization about the general course of human history in the eighteen years that have followed the War, I believe I should have you with me if I described it as a series of flounderings, violent ill-directed mass-movements, slack drifting here and convulsive action there. **We** talk about the dignity of history. It is a bookish **phrase** for which I have the extremest disrespect. There is no dignity yet in human history. It would be **pure** comedy, if it were not so often tragic, **so frequently** dismal, generally dishonourable and **occasionally** quite horrible. And it is so largely tragic **because** the creature really is intelligent, can feel **finely** and acutely, expresses itself poignantly in art, music **and** literature, and-this is what I **am** driving at—impotently knows better.

Consider only the case of America during this recent **period**. America when all is said and done, is one of the most intelligently *aware* **communities** in the world. Quite a number of people over there seem almost to **know** what is happening to them. **Remem-**

ber **first** the phase of fatuous self-sufficiency, the **period** of unprecedented prosperity, the bloom, the crisis, the slump and the dismay. And then **appeared** the new President, Franklin Roosevelt, and from the point of view of the present discussion he is one of the most interesting figures in all history. Because he really did make an appeal for such knowledge and understanding as existed to come to his aid. America in an astounding state of meekness was ready to be **told** and shown. There were the universities, great schools, galaxies of authorities, learned men, experts, teachers, gowned, adorned and splendid. Out of this knowledge mass there have since come many very trenchant criticisms of the President's mistakes. But at the time this-what shall I call it-this higher brain, this cerebrum, this grey matter of America was so entirely unto-ordinated that it had nothing really comprehensive, searching, **thought-out and** trustworthy for him to go upon. The President had to experiment and attempt this and that, **he turned** from one promising adviser to another, **because there** was nothing ready for him. He did not pretend to be a divinity. He was a politician-of exceptional **good-will**. He was none of your dictator gods. He **showed** himself extremely open and receptive for the **organized** information and guidance . . . *that wasn't there.*

And it isn't there now.

Some years ago there was a considerable fuss in the world about preparedness and unpreparedness. Most of that **clamour** concerned the possibility of war. But this was a case of a most fantastic **unpreparedness** on the part of hundreds of eminent men, who were supposed to have studied them, for the normal developments of a community in times of **peace**. There had been no attempt to assemble that mechanism of knowledge of which America stood in need.

I repeat that if usage had not dulled us into a sort of acquiescence, we should think our species **collectively** insane to go about its business in this **haphazard**, planless, negligent fashion.

I think I have said enough to recall to any one here, who may have lapsed from the keen **apprehension** of his first realization, this wide **gap between** what I may call the at present unassembled and **unexploited** best thought and knowledge in the world, and the ideas and acts not simply of the masses of common **people**, but of those who direct public **affairs**, the dictators, the leaders, the politicians, the **newspaper directors** and the spiritual **guides** and teachers. We live in a world of unused and **misapplied knowledge** and skill. That is my case. **Knowledge** and **thought** are ineffective. The human **species**

regarded as a whole is extraordinarily like a man of the highest order of brain, who through some lesions or defects or insufficiencies of his lower centres, suffers from the wildest unto-ordinations ; St. Vitus's dance, **agraphia**, **aphonia**, and suffers dreadfully (**knowing** better all the time) from the silly and **disastrous gestures** he makes and the foolish things he says and does.

I don't think this has ever been so evident as it is now. I doubt if in the past the gap was so wide as it is now between the occasions that confront **us**, and the knowledge we have assembled to meet them. But because of a certain run of luck in the late nineteenth century, the existence of that widening gap and the menace of that widening gap, was not thrust upon our attention as it has been since the War.

At first that realization of the ineffectiveness of our best thought and knowledge struck only a few people, like Mr. Maynard Keynes for example, who were in what I may call salient positions, but **gradually** I have noted the realization spreading and **growing**. It takes various forms. Prominent men of science speak more and more frequently of the responsibility of science for the disorder of the world. And if you are familiar with that most admirable of all **newspapers**, *Nature*, and if you care to turn over the files of that very representative weekly for the past **quarter**

ter of a century or so and sample the articles, you will observe a very remarkable change of note and scope in what it has to say to its readers. Time was when **Nature** was almost pedantically special and scientific. Its detachment from politics and general affairs was complete. But latterly the concussions of the social earthquake and the vibration of the guns have become increasingly perceptible in the laboratories. **Nature** from being specialist has become world-conscious, so that now it is almost haunted week by week by the question: "What are we to do before it is too late, to make what we know and our way of thinking effective in world affairs ?"

In that I think it is expressing a change which is happening in the minds of—if I may presume to class myself with **you**—nearly all people of the sort which fills this theatre tonight.

And consider again the topics that have been dealt with at the latest gathering of the British Association. The very title of the Presidential Address: "The Impact of Science upon Society"? Sir Josiah Stamp, as you will remember, stressed the need of extending endowment and multiplying workers in the social sciences. Professor Philip dealt with "The Training of the Chemist for the Service Of the Community." Professor Cramp talked of "The Engineer and the Nation", and there was an important **discus-**

sion of "The Cultural and Social Values of Science" in which Sir Richard Gregory, Professor **Hogben** and Sir Daniel Hall said some memorable things. There can be no doubt of the reality of this awakening of the scientific worker to the necessity of his becoming a definitely **organized** factor in the social scheme of the years before us.

Well, so far I have been merely opening up my subject and stating the problem for consideration. We want the intellectual worker to become a more definitely organized factor in the human scheme. How is that factor to be organized? Is there any way of implementing knowledge for ready and universal effect? I ask you to examine the question whether this great and growing gap of which we are becoming so acutely aware, between special knowledge and thought and the common ideas and motives of mankind can be bridged, and if so how it can be bridged. **Can** scientific knowledge and specialized thought be brought into more effective relation to general affairs ?

Let us consider first what is actually going on. I **find** among my uneasy scientific and specialist friends a certain **disposition**—and I think it is a mistaken disposition—for direct political action and special **political** representation. The scientific and literary workers Of the days when I was a young man were either

indifferent or conservative in politics, nowadays quite a large proportion of them are inclined to active participation in extremist movements; many are leftish and revolutionary, some accept the strange pseudo-scientific dogmas of the Communist party, though that does no credit to their critical training, and even those who are not out on the left are restless for some way of intervening, definitely as a class, in the general happenings of the community. Their ideas of possible action vary from important-looking signed pronouncements and protests to a sort of strike against war, the withholding of services and the refusal to assist in technical developments that may be misapplied. Some favour the idea of a gradual supersession of the political forms and methods of mass democracy by government through some sort of *élite*, in which the man of science and the technician will play a dominating part. There are very large vague patches upon this idea, but the general projection is in the form of a sort of modern priesthood, an oligarchy of professors and exceptionally competent people. Like Plato they would make the philosopher king. This project involves certain assumptions about the general quality and superiority of the intellectual worker that I am afraid will not stand scrutiny.

I submit that sort of thing-political activities,

party intervention and dreams of an authoritative *élite*—is not the way in which specialists, artists and specialized thinkers and workers who constitute the vital feeling and understanding of the body politic can be brought into a conscious, effective, guiding and directive relationship to the control of human affairs. **Because**—I hope you will acquit me of any disrespect for science and philosophy when I say this—we have to face the fact that from the point of view of general living, men of science, artists, philosophers, specialized intelligences of any sort, do not constitute an *élite* that can be mobilized for collective action. They are an extraordinarily miscellaneous assembly, and their most remarkable common quality is the quality of concentration in comparative retirement—each along his own line. They have none of the solidarity, the customary *savoir faire*, the habits arising out of practices, activities and interests in common that lawyers, doctors or any of the really socially organized professions for instance display. A professor-ridden world might prove as unsatisfactory under the stress of modern life and fluctuating conditions as a theologian-ridden world.

A distinguished specialist is precious because of his cultivated gift. It does not follow at all that by the standards of all-round necessity he is a superior person. Indeed by the very fact of his specialization he

may be less **practised** and competent than the average man. He probably does not read his newspaper so earnestly, he finds much of the common round a bother and a distraction and he puts it out of his mind. I think we should get the very gist of this problem if we could compare twelve miscellaneous men of science and special skill, with twelve unspecialized men taken-let us say-from the head clerk's morning train to the city. We should probably find that for commonplace team-work and the ordinary demands and sudden urgencies of life, the second dozen was individually quite as good as, if not better than, the first dozen. In a burning hotel or cast away on a desert island they would probably do quite as well. And yet collectively they would be ill-informed and limited men; the whole dozen of them would have nothing much more to tell you than any one of them. On the other hand our dozen specialists would each have something distinctive to tell you. The former group would be almost as uniform in their knowledge and ability as tiles on a roof, the latter would be like pieces from a complicated jig-saw puzzle. The more you got them together the more they would signify. Twelve clerks or a hundred clerks; it wouldn't matter; you would get nothing but dull repetitions and a flat acquiescent suggestible outlook upon life. But every specialized man we added would be adding

something to the directive pattern of life. I think that consideration takes us a step further in defining our problem tonight.

It is science and not men **of science** that we want to enlighten and animate our politics and rule the world.

And **now** I will take rather a stride forward in my argument. I will introduce a phrase New **Encyclopaedism** which I shall spend most of the rest of my time defining. I want to suggest that something-a new social organ, a new institution-which for a time I shall call **World Encyclopaedia**, is the means whereby we can solve the problem of that jig-saw puzzle and bring all the scattered and ineffective mental wealth of our world into something like a common understanding, and into effective reaction upon our vulgar everyday political, social and economic life. I warn you that I am flinging moderation to the winds in the suggestions I am about to put before you. They are immense suggestions. I am sketching what is really a scheme for the reorganization and reorientation of education and information throughout the world. No less. We are so accustomed to the existing schools, colleges, universities, research organizations of the world; they have so moulded and made us and trained us from our earliest years to respect and believe in them; that it is with a real

feeling of temerity, of alma-matricidal impiety, so to speak, that I have allowed my mind to explore their merits and question whether they are not now altogether an extraordinarily loose, weak and out-of-date miscellany. Yet I do not see how we can admit, and **I** am disposed to think you have admitted with me, the existence of this terrifying gap between available knowledge and current social and political events, and not go on to something like an indictment of this whole great world of academic erudition, training and instruction from China to Peru—an indictment for, at least, inadequacy and into-ordination if not for actual negligence. It may be only a temporary inadequacy, a pause in development before renaissance, but inadequate altogether they are. **Universities** have multiplied greatly, yes, but they have failed to participate in the general advance in power, scope and efficiency that has occurred in the past century.

In transport we have progressed from coaches and horses by way of trains to electric traction, motor-cars and aeroplanes. In mental organization we have simply multiplied our coaches and horses and livery stables.

Let me now try to picture for you this missing element in the modern human social mechanism, this needed connection between the percipient and **infor-**

mative parts and the power organization for which **I** am using this phrase, World Encyclopaedia. And **I** will take it first from the point of view of the ordinary educated citizen—for in a completely modernized state every ordinary citizen will be an educated citizen. I will ask you to imagine how this World Encyclopaedia organization would enter into his life and how it would effect him. From his point of view the World Encyclopaedia would be a row of volumes in his own home or in some neighbouring house or in a convenient public library or in any school or college, and in this row of volumes he would, without any great toil or difficulty, find in clear understandable language, and kept up to date, the ruling concepts of our social order, the outlines and main particulars in all fields of knowledge, an exact and reasonably detailed picture of our universe, a general history of the world, and if by any chance he wanted to pursue a question into its ultimate detail, a trustworthy and complete system of reference to primary sources of knowledge. In fields where wide varieties of method and opinion existed, he would find, not casual summaries of opinions, but very carefully chosen and correlated statements and arguments. **I** do not imagine the major subjects as being dealt with in special articles rather hastily written, in what has been the tradition of **Encyclopaedias** since the

World Brain

days of Diderot's heroic effort. Our present circumstances are altogether different from his. Nowadays there is an immense literature of statement and explanation scattered through tens of thousands of books, pamphlets and papers, and it is not necessary, it is undesirable, to trust to such hurried summaries as the old tradition was obliged to make for its use. The day when an energetic journalist could gather together a few star contributors and a miscellany of compilers of very uneven quality to scribble him special articles, often tainted with propaganda and advertisement, and call it an Encyclopaedia, is past. The modern World Encyclopaedia should consist of selections, extracts, quotations, very carefully assembled with the approval of outstanding authorities in each subject, carefully collated and edited and critically presented. It would not be a miscellany, but a concentration, a clarification and a synthesis.

This World Encyclopaedia would be the mental background of every intelligent man in the world. It would be alive and growing and changing continually under revision, extension and replacement from the original thinkers in the world everywhere. Every university and research institution should be feeding it. Every fresh mind should be brought into contact with its standing editorial organization. And on the other hand its contents would be the standard source of

World Encyclopaedia

material for the instructional side of school and college work, for the verification of facts and the testing of statements—everywhere in the world. Even journalists would deign to use it; even newspaper proprietors might be made to respect it.

Such an Encyclopaedia would play the rôle of an undogmatic Bible to a world culture. It would do just what our scattered and disoriented intellectual organizations of today fall short of doing. It would hold the world together mentally.

It may be objected that this is a Utopian dream. This is something too great to achieve, too good to be true. I won't deal with that for a few minutes. Flying was a Utopian dream a third of a century ago. What I am putting before you is a perfectly sane, sound and practicable proposal.

But first I will notice briefly two objections—obstructions rather than objections—that one will certainly encounter at this point.

One of these is not likely to appear in any great force in this gathering. You have all heard and you have all probably been irritated or bored by the assertion that no two people think alike, "*quot homines, tot sen tentiae*", that science is always contradicting itself, that theologians and economists can never agree. It is largely mental laziness on the defensive that makes people say this kind of thing. They don't

want their intimate convictions turned **over** and examined and it is unfortunate that the emphasis put upon minor differences by men of science and belief in their strenuous search for the completest truth and the exactest expression sometimes gives **colour** to this sort of misunderstanding. But I am inclined to think that most people overrate the apparent differences in the world of opinion today. Even in theology a psychological analysis reduces many flat contradictions to differences in terminology. My impression is that human brains are very much of a pattern, that under the same conditions they react in the same way, and that were it not for tradition, upbringing, accidents of circumstance and particularly of accidental individual obsessions, we should find ourselves—since we all face the same universe—much more in agreement than is superficially apparent. We speak different languages and dialects of thought and can even at times catch ourselves flatly contradicting each other in words while we are doing our utmost to express the same idea. And self-love and personal vanity are not excluded from the intellectual life. How often do we see men misrepresenting each other in order to exaggerate a difference and secure the gratification of an argumentative victory! A World Encyclopaedia as I conceive it would bring together into close juxtaposition and under critical scrutiny

many apparently conflicting systems of statement. It might act not merely as an assembly of fact and statement, but as an organ of adjustment and adjudication, a clearing house of misunderstandings; it would be deliberately a synthesis, and so act as a flux and a filter for **a** very great quantity of human misapprehension. It would **compel** men to come to terms with one another. I think it would relegate "*quot homines, tot sententiae*" back to the Latin comedy from which it emerged.

The second type of obstruction that this idea of a World Encyclopaedia will encounter is even less likely to find many representatives in the present gathering and I will give it only the briefest of attention. (You know that kind of neuralgic expression, the high protesting voice, the fluttering gesture of the hands.) "But you want to **stereotype** people. What a dreadful, dreadful world it will be when everybody thinks alike"—and so they go on. Most of these elegant people who want the world picturesquely at sixes and sevens are hopeless cases, but for the milder instances it may be worth while remarking that it really does not enhance the natural variety and beauty of life to have all the clocks in a town keeping individual times of their own, no charts of the sea, no time-tables, but trains starting secretly to unspecified destinations, infectious diseases without **notifi-**

cation and postmen calling occasionally when they can get by the picturesque footpads at the corner. I like order in the place of vermin, I prefer a garden to a swamp and the whole various world to a hole-and-corner life in some obscure community, and tonight I like to imagine I am making my appeal to hearers of a kindred disposition to my own.

And next let us take this World Encyclopaedia from the point of view of the specialist and the **super-intellectual**. To him even more than to the common intelligent man World Encyclopaedia is going to be of value because it is going to afford him an intelligible statement of what is being done by workers parallel with himself. And further it will be giving him the general statement of his own subject that is being made to the world at large. He can watch that closely. On the assumption that the World Encyclopaedia is based on a world-wide organization he will be-if he is a worker of any standing-a corresponding associate of the Encyclopaedia organization. He will be able to criticize the presentation of his subject, to suggest amendments and re-statements. For a World Encyclopaedia that was kept alive and up to date by the frequent re-issue of its volumes, could be made the basis of much fundamental discussion and controversy. It might breed swarms of pamphlets, and very wholesome swarms. It would give the **spe-**

cialist just that contact with the world at large which at present is merely caricatured by more or less elementary class-teaching, amateurish examination work and college administrations. In my dream of a World Encyclopaedia I have a feeling that part of the scheme would be the replacement of the latter group of professional activities, the college business, tutoring, normal lecturing work and so on, by a new set of activities, the **encyclopaedic** work, the watching brief to prevent the corruption of the popular mind. In enlightening the general mind the specialist will broaden himself. He will be redeemed from oddity, from shy preciousness and practical futility.

Well, you begin to see the shape of this project. And you will realize that it is far away from **anything** like the valiant enterprise of **Denis** Diderot and his associates a century and a half ago, except in so far as the nature of its reaction upon the world's affairs is concerned. That extraordinary adventure in intellectual synthesis makes this dream credible. That is our chief connection with it.

And here I have to make an incidental disavowal. I want to make it clear how little I have to do with what I am now discussing. In order to get some talk going upon this idea of an Encyclopaedia, I have been circulating a short memorandum upon the subject among a number of friends. I did not think to mark

it **Private**, and unhappily one copy seems to have fallen into the hands of one of those minor pests of our time, a personal journalist, who at once rushed into print with the announcement that I was proposing to *write* a brand new Encyclopaedia, all with my own little hand out of my own little head. At the age of seventy! Once a thing of this sort is started there is no stopping **it**—and I admit that announcement put me in my place in a pleasantly ridiculous light. But I think after what I have put before you now that you will acquit me of any such colossal ambition. I implore you not to let that touch of personal absurdity belittle the greatness and urgency of the cause I am pleading. This Encyclopaedia I am thinking of is something in which manifestly I have neither the equipment nor the quality to play any but an infinitesimal part. I am asking for it in the **rôle** of a common intelligent man who needs it and understands the need for it, both for himself and his world. After that you can leave me out of it. It is just because in the past I have had some experience in the assembling of outlines of knowledge for popular use that I realize, perhaps better than most people, the ineffectiveness of this sort of effort on the part of individuals or small groups. It is something that must be taken **up**—and taken up very seriously—by the universities, the learned societies, the responsible edu-

cational organizations if it is to be brought into effective being. It is a super university I am thinking of, a world brain; no less. It is nothing in the nature of a supplementary enterprise. It is a completion necessary to modernize the university idea.

And that brings me to the last part of this speculation. Can such an Encyclopaedia as I have been suggesting to you be a possible thing? How can it be set going? How can it be organized and paid for?

I agree I have now to show it is a possible thing. For I am going to make the large assumption that you think that **if it is a possible thing** it is a desirable thing. How are we to set about it?

I think something in this way: To begin with we want a Promotion Organization. We want, shall I call it, an Encyclopaedia Society to ask for an **Encyclopaedia** and get as many people as possible asking for an Encyclopaedia. Directly that Society asks for an Encyclopaedia it will probably have to resort to precautionary measures against any enterprising publisher who may see in that demand a chance for selling some sort of vamped-up miscellany as the thing required, and who may even trust to the **unworldliness** of learned men for **some** sort of countenance for his raid.

And next this society of promoters will have to survey the available material. For most of the **ma-**

terial for a modern Encyclopaedia exists already—though in a state of impotent diffusion. In all the various departments with which an Encyclopaedia should deal, groups of authoritative men might be induced to prepare a comprehensive list of primary and leading books, articles, statements which taken together would give the best, clearest and most quint-essential renderings of what is known and thought within their departments. This would make a sort of key bibliography to the thoughts and knowledge of the world. My friend Sir Richard Gregory has suggested that such a key bibliography for a World Encyclopaedia would in itself be a worthwhile thing to evoke. I agree with him. I haven't an idea what we should get. I imagine something on the scale of ten or twenty thousand items. I don't know.

Possibly our Encyclopaedia Society would find that such a key bibliography was in itself a not unprofitable publication, but that is a comment by the way.

The next step from this key bibliography would be the organization of a general editorial board and of departmental boards. These would be permanent bodies—for a World Encyclopaedia must have a perennial life. We should have to secure premises, engage a literary staff and, with the constant co-operation of the departmental groups, set about the task of making our great synthesis and abstract. I

must repeat that for the purposes of a World Encyclopaedia probably we would not want much original writing. If a thing has been stated clearly and compactly once for all, why paraphrase it or ask some inferior hand to restate it? Our job may be rather to secure the use of **copyrights**, and induce **leading** exponents of this or that field of science or criticism to co-operate in the selection, condensation, expansion or simplification of what they have already said *so well*.

And now I will ask you to take another step forward and imagine our World Encyclopaedia has been assembled and digested and that the first edition is through the press. So far we shall have been spending money on this great enterprise and receiving nothing; we shall have been spending capital, for which I have at present not accounted. I will merely say that I see no reason why the capital needed for these promotion activities should not be forthcoming. This is no gainful enterprise, but you have to remember that the values we should create would be far more stable than the ephemeral **encyclopaedias** representing sums round about a million pounds **or** so which have hitherto been the high-water of **Encyclopaedic** enterprise. These were essentially **book-selling** enterprises made to exploit a demand. But this World Encyclopaedia as I conceive it, if only

because it will have roped in the larger part of the original sources of exposition, discussion and information, will be in effect a world monopoly, and it will be able to levy and distribute direct and indirect revenue, on a scale quite beyond the resources of any private publishing enterprise. I do not see that the financial aspects of this huge enterprise, big though the sums involved may be, present any insurmountable difficulties in the way of its realization. The major difficulty will be to persuade the extremely various preoccupied, impatient and individualistic scholars, thinkers, scientific workers and merely distinguished but unavoidable men on whose participation its success depends, of its practicability, convenience and desirability.

And so far as the promotion of it goes I am reasonably hopeful. Quite a few convinced, energetic and resourceful people could set this ball rolling towards realization. To begin with it is not necessary to convert the whole world of learning, research and teaching. I see no reason why at any stage it should encounter such positive opposition. Negative opposition—the refusal to have anything to do with it and so forth—can be worn down by persistence and the gathering promise of success. It has not to fight adversaries or win majorities before it gets going. And once this ball is fairly set rolling it will be very

hard to stop. A greater danger, as I have already suggested, will come from attempts at the private mercenary exploitation of this world-wide **need**—the raids of popular publishers and heavily financed salesmen, and in particular attempts to create copy-right difficulties and so to corner the services and prestige of this or that unwary eminent person by anticipatory agreements. *Vis-à-vis* with salesmanship the man of science, the man of the intellectual *élite*, is apt to show himself a very Simple Simon indeed. And of course from the very start, various opinionated cults and propagandists will be doing their best to capture or buy the movement. Well, we mustn't be captured or bought, and in particular our silence must not be bought or captured. That danger may in the end prove to be a stimulus. It may be possible in some cases to digest and assimilate special cults to their own and the general advantage.

And there will be a constant danger that some of the early promoters may feel and attempt to realize a sort of proprietorship in the organization, to make a group or a gang of it. But to recognize that danger is half-way to averting it.

I have said nothing so far about the language in which the Encyclopaedia should appear. It is a question I have not worked out. But I think that the main text should be in one single language, from which

translations in whole or part could be made. Catholic Christianity during the years of its greatest influence was held together by Latin, and I do not think I am giving way to any patriotic bias when I suggest that unless we contemplate a polyglot publication-and never yet have I heard of a successful polyglot publication- *English* because it has a wider range than German, a greater abundance and greater subtlety of expression than French and more precision than Russian, is the language in which the original text of a World Encyclopaedia ought to stand. And moreover it is in the English-speaking communities that such an enterprise as this is likely to find the broadest basis for operations, the frankest criticism and the greatest freedom from official interference and government propaganda. But that must not hinder us from drawing help and contributions from, and contemplating a use in every community in the world.

And so far I have laid no stress upon the immense advantage this enterprise would have in its detachment from immediate politics. Ultimately if our dream is realized it must exert a very great influence upon everyone who controls administrations, makes wars, directs mass behaviour, feeds, moves, starves and kills populations. But it does not immediately challenge these active people. It is not the sort of

thing to which they would be directly antagonistic. It is not ostensibly anti-them. It would have a terrible and ultimately destructive aloofness. They would not easily realize its significance for all that they do and are. The prowling beast will fight savagely if it is pursued and challenged upon the jungle path in the darkness, but it goes home automatically as the day breaks.

You see how such an *Encyclopaedic* organization could spread like a nervous network, a system of mental control about the globe, knitting all the intellectual workers of the world through a common interest and a common medium of expression into a more and more conscious co-operating unity and a growing sense of their own dignity, informing without pressure or propaganda, directing without tyranny. It could be developed wherever conditions were favourable ; it could make inessential concessions and bide its time in regions of exceptional violence, grow vigorously again with every return to liberalism and reason.

So I sketch my suggestion for a rehabilitation of thought and learning that ultimately may release a new form of power in the world, recalling indeed the power and influence of the churches and religions of the past but with a progressive, adaptable and recuperative quality that none of these possessed.

World Brain

I believe that in some such way as I have sketched tonight the mental forces now largely and regretably scattered and immobilized in the universities, the learned societies, research institutions and technical workers of the world could be drawn together in a real directive world intelligence, and by that mere linking and implementing of what is known, human life as a whole could be made much surer, stronger, bolder and happier than it has ever been up to the present time. And until something of this sort is done, I do not see how the common life can ever be raised except occasionally, locally and by a conspiracy of happy chances, above its present level of impulsiveness, insincerity, insecurity, general under-vitality, under-nourishment and aimlessness. For that reason I think the promotion of an organization for a World Encyclopaedia may prove in the long run to be a better investment for the time and energy of intelligent men and women than any definite revolutionary movement, Socialism, Communism, Fascism, Imperialism, Pacifism or any other of the current *isms* into which we pour ourselves and our resources so freely. None of these movements have anything like the intellectual comprehensiveness needed to construct the world anew.

Let me be very clear upon one point.

I am not saying that a World Encyclopaedia will

World Encyclopaedia

in itself solve any single one of the vast problems that must be solved if man is to escape from his present dangers and distresses and enter upon a more hopeful phase of history; what I am saying-and saying with the utmost conviction-is this, that without a World Encyclopaedia to hold men's minds together in something like a common interpretation of reality, there is no hope whatever of anything but an accidental and transitory alleviation of any of our world troubles. As mankind is, so it will remain, until it pulls its mind together. And if it does not pull its mind together then I do not see how it can help but decline. Never was a living species more perilously poised than ours at the present time. If it does not take thought to end its present mental indecisiveness catastrophe lies ahead. Our species may yet end its strange eventful history as just the last, the cleverest of the great apes. The great ape that was clever-but not clever enough. It could escape from most things but not from its own mental confusion.