

ELEMENTS OF SOCIAL
CREDIT

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*An introductory Course of Lectures
published with the authority of
The Social Credit Secretariat.*

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THE SOCIAL CREDIT SECRETARIAT (*Advisory Chairman—Major C. H. DOUGLAS*)

ELEMENTS OF SOCIAL CREDIT

An introductory Course of Lectures published with the authority of the Social Credit Secretariat, "a non-party, non-class organisation neither connected with nor supporting any political party, Social Credit or otherwise."

CONTENTS

	PAGE
The Lectures and Studies Section of the Secretariat:	
CONSTITUTION	
ORDINANCES	
SYLLABUS	
INTRODUCTION.....	
COURSE A	
COURSE B	
Lectures I to XX	
Note on Courses	
Postscript (1946)	

SOCIAL CREDIT SECRETARIAT

LECTURES AND STUDIES
SECTION

Constitution

(1) The Lectures and Studies Section is constituted a sub-department of the Department of Information of the Social Credit Secretariat.

(2) The responsible officer is a Director responsible to the Deputy Chairman.

(3) Services to the Section are voluntary.

(4) Organisation of the Section is based upon the geographical distribution of groups of individuals collectively affiliated to the Social Credit Secretariat, and upon the acceptance of individual responsibility to the Director for Lectures and Studies for the effective delivery and management of the courses.

Deputy Chairman: Tudor J. Jones, Sc.D., M.D., (Glasgow), F.R.S.E.*

Director for Lectures and Studies : Mrs. B. M. Palmer, B.A. (Lond.).

*The lectures were compiled, with the exception of Lecture XV, by the Deputy Chairman.

Ordinances

i. **Courses.** There shall be an elementary and an advanced course of study: Course A and Course B.

For Course A, classes will be held where suitable arrangements can be made, and where not fewer than twelve persons apply for instruction.

For Course B, classes will not be held. The required course of study covers a wide range, and is subject to special conditions. (See Ordinance ii below).

ii. **Admission to Courses.** Students seeking admission to Course A shall

(1) Signify their intention of making at least four-fifths of the possible attendances at lectures, and of completing such other work of the class as may be required by the lecturer, and

(2) Pay the prescribed fee.

(See further the announcement at the end of this volume: "Note on Courses.")

They may further be required to furnish evidence that they are likely to profit by the instruction given.

Students seeking to enter upon Course B shall be required to have passed the prescribed Examination terminating Course A, unless this formality is dispensed with by Regulation applying to their special case, and to fulfil such other Regulations as may be in force at the time of their entry for Examination.

(See further the announcement at the end of this volume: "Note on Courses.")

iii **Diplomas.** There shall be two degrees of qualification: an Associate's Diploma and a Fellow's Diploma.

iv **Examinations,** (a) Subject to the provisions contained in the Ordinances, diplomas will be granted to those who have satisfied the examiners appointed by the Social Credit Secretariat concerning their proficiency.

(b) Diplomas issued shall not be valid unless signed by Major C. H. Douglas, or by someone else nominated by him for the exercise of this power.

(c) For the protection of the public and to safeguard the prestige of diploma-holders, it shall be within the power of Major C. H. Douglas, or of someone else nominated by him to exercise it on his behalf, to withdraw any diploma at any time, and to announce his action publicly in such manner as he deems expedient.

(d) Candidates for examination in Grade A may be admitted on payment of the prescribed fee covering the expenses of their examination, *whether they have attended the prescribed course or not*. If successful, such candidates shall be admitted to the proper degree of qualification subject to the provisions of paragraphs a, b, and c of this Ordinance.

(e) Candidates for examination in Grade B may be admitted on payment of the prescribed fee and compliance with the Regulations in force at the time of entry.

v. **Lecturers.** Appointed lecturers shall have individual responsibility to the Director for securing satisfactory attendance upon the courses of lectures they deliver, and the concordance of the instruction given with the order, extent and accuracy of the instruction prescribed, to the extent that the due preparation of students for examination is dependent upon such concordance. They shall further be responsible for the organisation of the courses they deliver and for the supply of such information relating thereto as may be required by the Director.

vi. **Lecture Period.** The term lecture shall mean instruction for one hour by an approved lecturer, and tutorial work for a further period of one hour.

vii. **Order and Discipline.** Lecturers are empowered to secure the retirement of any student whose conduct is disturbing to the order of the class or to the satisfactory prosecution of the work of the class.

Fees

Class fee, Course A	£1 10 0*
Course B	None
Examination fee (Grade A and Grade B)	10 6

*See, however, Ordinances iv(d).

SYLLABUS

Introduction

Great care is necessary in introducing this course of lectures to the public and to students.

Social Credit has been the subject of study and propaganda for many years, but was not until January, 1937, the subject of organised exposition, instruction, and examination.

The propagandist aims to achieve the spread of ideas, whether right or wrong, tending to promote some action which he desires. The student tries to gain *correct* ideas. The word means different things to different people or different things to the same people at different times. It may mean correspondence with the idea entertained by someone in a position of authority, or an idea which what we call our minds cannot dispel, or an idea which is right in the sense that it leads in execution to the attainment of a desired result. That is what is meant here by a correct idea. The efficiency of the propagandist rests upon the formation of at least some correct ideas (in this sense): *i.e.*, it is dependent upon at least some study. But this study may best be study of the means of propagating ideas in general, or of a particular idea the spread of which the propagandist desires. He may already be in possession of that idea, and may not need to study to acquire it.

Undoubtedly a wide spread of certain ideas would facilitate the Social Credit propagandist's labours; but it is questionable whether the spread of these ideas in a sufficiently accurate form can be effected widely enough and quickly enough to assist him very materially.

On the other hand, it is probable that in the sense in which knowledge is power, the distribution of as much sound knowledge as possible would increase the individual's power. The emphasis is on the soundness, not upon the possible extent of distribution. The course is planned in accordance with this guiding principle.

It is not primarily designed to assist those who have already experienced difficulty in understanding what the words "Social Credit" mean, or the practical proposals of Major Douglas based upon this understanding. The course may be said to be designed primarily to give opportunity for instruction to those able and willing to profit by it.

The course, then, aims at as complete instruction as possible in a limited number of matters concerning Social Credit. All the matters which concern Social Credit have not yet been investigated. It is the youngest of studies, though possibly the most vitally important. It concerns *the efficiency of human beings in association (or in society) as measured in terms of human satisfaction*.

A brief note on the method of study is desirable.

The lectures were not constructed to take the place of an afternoon's reading, light or heavy. When first used in 1937 detailed instructions to lecturers were distributed, and in most cases obeyed, prohibiting the introduction of irrelevant material and the discussion of the subject matter of later lectures in advance of the designed place and time for its consideration. Each lecture was considered to be more than sufficient for one week. Lecturers were advised to read each sentence slowly, without oratorical emphasis, and, if necessary, to repeat it, more or less in the spirit, and for the reason, that one may read over a telegram, to make sure that each word receives its due attention. In practice, this proceeding lasted nearly an hour, and a second hour was spent in elucidation (not discussion) of points suggested by students. To enforce, if possible, as deliberate an approach to the study of the lectures, when they came later to be distributed by post, the rule was established that only one lecture a fortnight was to go to any student. This account of previous practice should convey to the reader the attitude of mind in which he should enter upon the study of the lectures, if he desires to gain from them an understanding of the principles they are designed to convey.

COURSE A

LECTURES

Lecture 1. Social Credit a fact, not a theory, by definition. Study aims at the extension of knowledge of the fact and of contributory facts. Method: direct observation, communication of verifiable direct observation by others, and orderly presentation of results gained. Society and association. Definitions. Conflicting tendencies reflected in current definitions. Elimination of definitions containing an ideal element.

Society as a complex of observable phenomena. Phenomena: observed results in nature. All phenomena appear to arise from some mode of association. Natural modes of association, leading to analysis of their characteristic results—phenomena.

Lecture 2. The increment of association in its various forms.

Lecture 3. Social instances of the increment. Chief facts associated with development and transmission of increment. Modern process. Industry.

Lecture 4. Wealth defined. Sources of wealth (natural; no other sources demonstrable, but inductive method ready to admit and describe new sources of wealth as they may appear). Capital.

Lecture 5. Wealth: negative aspects. Observable limitation upon human productivity. Sabotage. Restriction of production.

Lecture 6. The notion of cost. Relationship to assessment of efficiency. The “balance” sheet. Historical avoidance of precision in regard to the Social Credit.

Lecture 7. Objective comparison with implications of ideal elements in definitions of society. Policy.

Lecture 8. Fundamental notions of a precise nature other than those already dealt with. Precision in measurement (conformity to exact standards in a science) largely a matter of choice of relevant standards. Douglas’s use of the notion of “sufficiency.” Organisation.

Lecture 9. Organisation and control.

Lecture 10. Control in relation to efficiency. Natural and artificial (planned) control. Agency of control. Sources of power available to controlling agent. Some examples analysed.

Lecture 11. The “arts” of government.

Lecture 12. Exchange and barter. Simple consequences arising from introduction of additional terms. Chain barter. Nature of money.

Lecture 13. Forms of money. Elementary observations on the use of money in its various forms.

Lecture 14. Price.

Lecture 15. Bookkeeping conventions.

Lecture 16. Simple instances of the principle of mechanical similitude applied to human association: force and momentum in society. Brief outline of sphere of Social Dynamics.

Lecture 17. Current propaganda assessed from the point of view of its effect upon the Social Credit.

Lecture 18. Current symbolism in use among financiers. Objective assessment of the working of the financial system.

Lecture 19. General review of power available to individuals to affect the Social Credit.

Lecture 20. Conclusion. Suggestions for future study.

I

Every student should have read carefully the brief Introduction to this Course.

Our objective is stated there to be “as complete instruction as possible in a limited number of matters concerning Social Credit”, and Social Credit is defined as “the efficiency, measured in terms of human satisfaction, of human beings in association (or in Society)”.

The student should study that phrase word by word until he is satisfied that he is familiar with it. He will soon discover that so far from being a theory, Social Credit, if it is what the definition indicates, must be a fact.*

*Until the present revision (1946), this sentence read as follows: — “He will soon discover that so far from being *a belief, or a religion, or* a theory, Social Credit, if it is what the definition indicates, must be a fact.” The words here italicised have now been removed because, though still true and important, they tend to conceal the relationship which exists between Social Credit and not only religion but a particular religious system, namely that variously called the Christian or Catholic. This relationship; confirmatory (we would say) of the truth of both the Social Credit and the Trinitarian Philosophy, has been made evident and clear by experience of the recent development of Social Credit thought, and is the subject of some passages in a POSTSCRIPT at the end of the Lectures, which bears the same date as the emendation (such as there has been) of the text. The student is advised to master the argument of the Lectures before he ventures upon this more advanced territory.

Let us go over that. “Efficiency”, according to Chambers’s *Dictionary*, is “power to produce a result intended.” There is no other word that offers any difficulty, although the phrase “measured in terms of human satisfaction”, may have an unfamiliar ring. It means that the power is to be considered as being measured in a particular way. Let us suppose then, that we can remember the original definition well enough to repeat it and that in it we substitute the dictionary meaning of “efficiency” for the word. The expanded definition is:

“The power of human beings in association to produce the result intended, measured in terms of their satisfaction.”

You may decide now whether human beings have or have not any such power: whether two or more persons can help each other to produce a result they intend to produce. If they have no such power, Social Credit does not exist: if they have it does.

What do we decide? We cannot study something that does not exist, and if we decide that human beings inevitably help each other to produce a result which they do not intend and do not find satisfactory, we had better give up, for we have nothing to study.

Social Credit, then, is a fact, not a theory. We shall try in this course to get to know as much as possible about this power—about every means of increasing it and every means of diminishing it. The result will be more power in our hands to control it, whether we use that power or not.

How is this plan of extending our knowledge to be carried out?

There is not much doubt that wherever practicable direct observation is the readiest means of gaining knowledge. That is to say: our own direct observation. Verifiable direct observation by others may supplement our own observation. The method we shall follow, therefore, is direct observation, extended by verifiable observation by others in combination with the orderly recording of our results.

Essentially this is what is called the “scientific” method: the method adopted by Faraday in getting to know many useful things about electricity: he just watched events happening and wrote down an account of the precise circumstances in which they happened.

Most scientific studies require a specially constructed laboratory in which events may be made to happen and may be watched. Social Credit is no exception; but you need not be disappointed to find yourself beginning the study of Social Credit in a room, instead of a laboratory. There is scarcely anything that will be mentioned here that you cannot go and try out in a laboratory—the very specially constructed laboratory.

That laboratory is the civilized world as you know it, and most of the things you will be asked to watch you already have watched in one sense or another. It is true you may find that you have looked at them without seeing them distinctly. Or you may find yourselves so full of thoughts about them that the things—events—your thoughts are about have become covered up. There are reasons for that. They explain why the “power of human beings to produce the result intended” is so little as it is. They are part, therefore, of the study of Social Credit.

If we are quite clear in our minds that in studying Social Credit we are really engaged in making careful and accurate observations concerning matters of common experience, which we may test over and over again, we can move forward. We know what it is we are studying, and we know we are studying it in order to increase our control over it.

Some of you may not find it easy to proceed in the way suggested—*i.e.*, by making careful and accurate observations or even to follow steadily with your mental eye the observations made by someone else. The method entails a good deal of self-discipline. Really one can learn to practise the scientific method only by applying it. It is no use talking about it. Many large and almost unintelligible books have been written about it: but they contain scarcely more than half-a-dozen really useful statements about it. It is not very helpful here to say what they are, but it may be helpful to give a hint concerning the nature of this difficulty you may experience.

To use language which is undeniably metaphorical, once we get any single thread of the universe fairly into our hands to observe it, we are certain to find that it “pulls” upon some other thread, and the great guiding principle which we ought to adopt (because others have demonstrated its soundness), is that we must never let go *even when we have felt, as it were, that “pull”*. That, simply stated, is a profoundly important principle of scientific method (which is our method). In studying Social Credit, some of you are studying not only a science, but an exact science for the first time. There may be no name for the principle just referred to; but it is very important. It is impossible to find out where the threads of experience lead without taking a firm grasp of them. It is of no use to jump impatiently from one thread to another. Yet it is difficult to retain one’s grasp very often. There are many temptations to let go. One of the commonest is what is called an “idea”, and many a man who has fast hold of a really important thread can be persuaded to let go if an idea so much as winks at him. Take Care.

Now, with our definition still, as it were, in our hands for observation, notice the end of it: “in *association* (or, in *Society*)”.

The letters italicised are the essential letters of both words: but one word begins with a capital letter. Why? We are not really concerned, of course, in merely examining words—that would land us in a mere logical argument and we are concerned, as scientific people, with events rather than with symbols. We want to get past words, if we can, through them, beyond them: we want to reach *events*, experienced *as events* directly by ourselves. Is it possible, by direct observation, to gain useful notions about Society (or, if you like, about association)?

We, at the present moment, are associating. Is there anything exceptional or different in the nature of what is called “human Society” which distinguishes it from this little bit of human Society or association? Let us look for it. If we find it, we find the difference. If we don’t find it we can only say *we have found no difference*. We cannot say more than that. This is what is called the “inductive method” of proceeding. It brings to light facts that matter, instead of assuming that all that matters is already contained in some general statement. We are looking for facts that matter, and we had better behave in this way. We should, of course, test everything that is said for ourselves. Some matters may take a long time to test. For example, it will take a long time to test the statement that nothing is discoverable in human Society that establishes an essential difference between it and the society, let us say, of two families on an island, excepting the number of people concerned and the variety of their modes of association. No other difference has been discovered so far, and on that account we are justified in saying at present that the phrases “human society” and “human association” mean exactly the same thing, that one is as good as the other and that whenever we refer to one we might call it by the name of the other. If human society were stricken by some sudden strange disease and were reduced to a bare half dozen individuals, instead of the 2,000 millions who at present inhabit the

earth, Society would not necessarily be destroyed. It would still continue to be human Society, provided that the six individuals co-operated with one another, or unconsciously affected one another if only in a single instance. The variety of ways of co-operating would have been reduced in number; the associations of the six people would be changed: but they might, and if they were wise they would, still be six associating people, in other words, a human society.

We have mentioned association and *modes* of association without finding out what it means to associate or whether, whatever it may be, it is something that can be done in different ways. The word is Latin: *Socius*, a companion. It is not profitable, however, to begin the study of association in the highly complex instance provided by human companionship.

Inspection suggests we should find it compounded of several, perhaps a very large number of subordinate associations, or modes of association. Let us begin with something easier, for even an *apparently* simple instance of association, *e.g.*, the association, or “companionship” of two apples on one plate, may reveal unexpected features. Unprofitable study is to be avoided; yet no point which may prove to have value or significance must be allowed to pass unnoticed. Each apple seems to be imperatively restricted in definable ways by the presence in its neighbourhood of the other apple. If one apple occupies one position, the other cannot occupy the same position at the same time: if either apple is moved, its movements must have a continuous but changing relationship in regard to the other: if both are apparently at rest, they nevertheless influence each other in various describable ways. The simple instance does, then, reveal on inspection, matters of some difficulty. “Common Sense” is alleged to be capable of handling such matters. In a practical sense this is probably true to some extent, *e.g.* a child of two years often gives us the impression that it is striving to secure an *impossible* result. In doing so it discovers, practically, by trial, some, perhaps most, of the *possible* results. It cannot formulate symbolically or express what it has done or how it has done it. *It can just do it again and again with increasing precision.* It is learning the *practical limitations to effective action.* They may be natural or artificial. Time and the persistent use of the inductive method will show which.

Since our objective bears a resemblance to the child’s we might do the same in regard to the powers inherent in association (or in Society); but we desire greater mastery than the child possesses, and our world is much more complicated than a plate with two apples on it. Observations show us that the relationships which exist between the two apples would be materially altered by adding a third apple, and are still more materially altered by adding the child. By the addition of the third apple fresh physical relationships are established. By the addition of the child, a new kind of relationship is established. Much time might be spent in classifying associations and reclassifying them. Do it as much as you can in the time you have; but do not waste your time. That is a counsel of perfection. The test is the *result* in regard to the value of the useful knowledge gained, and so much has, in fact, been gained in the past that we may as well examine it, while at the same time keeping an eye open for fresh sources of help.

We shall proceed, then, presently, to an examination of the major results gained by those who have studied various instances of association. But, before we do so, it is necessary to linger for a few moments over the statement which has just been made that no one, turning his attention to Society, has ever yet found in it anything but a number of instances of association. It is only by straining his imagination that he has been able to combine these and to picture them as a whole, as a single instance of association. No one has ever seen Society, or heard it, or felt it. Each of us apprehends it only in fragments, and then what we are actually able to give our attention to is a separate instance of association and its result. For example, nobody has ever seen Society do any of the things which Society is commonly said to do. When anyone has been said to be a witness of the vengeance of Society, inflicted upon one or more of its members, what was actually seen was a hangman, a rope, a support for a rope, a moveable platform, a superintending officer, a stopwatch and a victim. Inquiring into the antecedents of these things one sees books, schools, churches, fields in which hemp is growing, factories, the instruments of carpentry and joinery, wigmakers, watchmakers, and homes and so on. No one has made it clearer than Douglas in the third Chapter of “Social Credit”, and elsewhere. In the work cited, he says:—

“One of the first facts to be observed as part of the social ideal . . . is the elevation of the group ideal and the minimising of individuality, *i.e.* the treatment of individuality as subordinate to, *e.g.* nationality. The

manifestations of this idea are almost endless. We have the national idea, the class or international idea, the identification of the individual with the race, the school, the regiment, the profession, and so forth. There is probably no more subtle and elusive subject than the consideration of the exact relation of the group in all these and countless other forms, to the individuals who compose the groups . . . The shifting of emphasis from the individual to the group, which is involved in collectivism, logically involves the shifting of responsibility for action. This can be made, it would appear, an interesting test of the validity of the theory.

For instance, the individual killing of one man by another we term murder. But collective and wholesale killing, we dignify by the name of war, and we specifically absolve the individual from the consequences of any acts which are committed under the orders of a superior officer. This appears to work admirably so long as the results of the action do not take place on a plane on which they can be observed; but immediately they do, the theory obviously breaks down. There may be, *ex hypothesi*, no moral guilt attributable to the individual who goes to war; but the effect of intercepting the line of flight of a high-speed bullet will be found to be exactly the same whether it is fired by a national or a private opponent. Nations are alleged to have waged the First World War, but the casualties both of life and property fell upon individuals. There is no such thing as an effective national responsibility—it is a pure abstraction, under cover of which, oppression and tyranny to individuals, which would not be tolerated if inflicted by a personal ruler, escape effective criticism. We do not know what is the automatic reaction consequent on the killing of one individual by another, as distinct from the non-automatic and artificial reaction involved in the trial and punishment of a murderer in a court of law. But we do know that over every plane of action with which we are acquainted, action and reaction are equal, opposite and wholly automatic. Consequently there is nothing to indicate that the automatic consequences of a given action will exhibit any difference if committed under the orders of a superior officer, or not.”

These passages take us further than our present topic, but they justify our present slow pace of progress. Take the sentence:

“There is probably no more subtle and elusive subject than the consideration of the exact relation of the group in all these and countless other forms, to the individuals who compose the groups.” It is subtle and elusive because something is constantly distracting the attention from actualities; and before any headway can be made we must practise uncomplicated attention to actualities just as a cricketer practises uncomplicated attention to the movements of a cricket ball in varying conditions. This is an entirely different matter from the rules of the game of cricket. It is doubtless possible for a cricketer to learn the rules of the game and how to bat concurrently; but he can learn nothing about batting from the rules and nothing about the rules from batting. Batting and the rules of cricket have no connection with each other. It is not the rules of cricket which cause the ball to rise for a catch; but the relative movements of bat and ball. This, which is so obvious in cricket, has ceased to be obvious in the discussion and the practice of association, or Society; and we can only reacquire our ability to see the plain and the obvious in this “subtle and elusive” sphere by, as it were, practice at the nets—not by study of the rule book. Finished as they are in the application of objective standards, the passages quoted from Douglas are the work of one who has practised at the nets. So we must practise at the nets unless we have already done so until we regain facility in distinguishing between rules and strokes and can think without confusion about rules and strokes. Since the matter is plainly one which may involve the life and death of individuals it is important.

Another matter:—

Douglas asserts that “for every action with which we are acquainted, action and reaction are equal, opposite and wholly automatic”. Those unacquainted with physical science may be reminded that these constitute a statement of no less important an observation than that contained in the Third Law of Motion of Sir Isaac Newton: “To every action there is an equal and opposite reaction”.

A very large part of the science of mechanics is an elaboration of this law, and the demonstrations which usually accompany it are as simple as those we have used to demonstrate a simple association—two apples on a plate. Unless we can submit ourselves to the discipline of considering such simple things, “the exact relation of the group to the individuals who compose it” will always be a subtle and elusive subject.

Douglas draws attention to the fact that “the consequence of intercepting the line of flight of a high-speed bullet will be found to be exactly the same whether it is fired by a national or a private opponent”. It is quite possible to express what Douglas is driving at in the statement that if there is any validity in the ideal plan of the nature of society, a bullet fired with “social” authority ought to effect some change which a bullet fired without “social” authority could not effect and that if experience fails to reveal such a difference, “Social” authority is as incapable of establishing it in any other field as it is in this. Things are either what they are or what they ought to be. Events either occur as they do occur, or as they ought to occur; we can take our choice whether we will deal with things as they are or whether we will deal with them as they are not, but ought to be. The impossibility of establishing agreement concerning what they ought to be as well as our powerlessness to impose this *ought*, whatever it is, upon nature as a whole, determines that if we are to make any progress at all, we must consider things as they are, and we cannot do this unless we do it completely. We cannot think if our minds are in a state of perpetual conflict. The “oughts” belong to a different world from the “is’s” and we shall never understand the effective nature of society unless we deal with these two worlds at least one at a time. Also talking about them, even one at a time, is not the same thing as learning to attend to them one at a time. We must practise that. Broadly speaking every mention of society which tends to endow it with a quality, apart from an observed result of association, will be found, on examination, to be contaminated by some notion which is purely ideal. Whenever a word is used to bring into the mind any notion of a difference in quality of life, as between a civilised quality and a barbaric quality, a cultivated quality and an uncultivated quality, a better quality and a worse quality, it will be found, on inspection, almost invariably to have been used to do some violence to the individual’s grasp of facts, to have deflected his mind from consideration of them—and this is practically disastrous. Our attention to the actual, to the thing seen, the action performed, the events secured, the living individual—must not be relaxed for an instant if we really mean to gain useful notions about the nature of society.

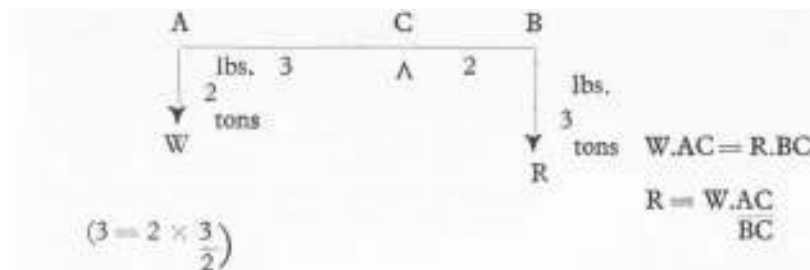
However far then we extend our observation of society, we shall never be able to observe anything, but such elements as entered into our description of a legal execution. They will not be all of this gruesome nature; but every element will be inevitably an instance of things in association. Under cloak of the phrase—“Social Phenomena”, these would be admissible to any text-book of sociology—but even this phrase nevertheless tends to hide the fact that a phenomenon is merely an observed result in nature. Pursuing the indicated method, we might spend some time looking for a phenomenon, an observed result in nature, which does not arise from some mode of association. None has been discovered yet. *Society*, for us as students of it, *is a complex of observable phenomena and phenomena are observed results in nature and all phenomena (all observed results in nature) appear to arise from some mode of association.*

Beginning with the simplest, let us try to make a list of natural modes of association (i.e., modes we are able to observe in nature) with which we are acquainted. There are the two apples on a plate. This association is of a kind which is usually called *physical*. A very large number of useful observations have been made concerning this kind of association and some of them have led us to the construction of what we call machines. The apples and the plate are merely common objects, each with certain more or less ascertainable antecedents, related to one another in space and time in ways which are more or less definable.

Suppose we exchange the plate for some simple support, and the apples for a rod raised on the support. We have what is perhaps the simplest machine, which is called the lever. Experience shows us that the rod is moveable on the support, which is relatively fixed in the sense that it can be moved less easily than the rod. The rod may be straight or curved or crooked and is so adjusted that it has to move round a fixed axis—this is called the *fulcrum*. A natural consequence of depressing one end of the rod is the elevation of the other end.

Let us suppose that the rod is of equal cross-sectional area and uniformly dense—that is to say, that if we cut it up into pieces of equal length every piece would weigh the same as any other piece—and let us suppose that we support it in the middle. Experience tells us that so placed it will “balance.” Experience also shows that we can weight the ends without disturbing this “balance” provided we apply equal weights to both ends at the same time, and that each addition to the weight on one side is the same distance from the fulcrum as its fellow on the other side. There is no limit to this proceeding, apart from the availability of weights and the strength of the rod and its support. This “balance” is at once disturbed if a weight is added or subtracted without corresponding addition or subtraction to the counter-balancing weight, or by moving

the weight on one side nearer to the fulcrum or farther away from it. This has the same effect as shifting the fulcrum and then we find that this “balance” may be restored by increasing the weight on the shorter arm without increase on the longer arm. If we made a careful record of what was done in this way, provided the weight of the rod is negligible in comparison with that of the “weights”, we should find that the length of the arm in the “balancing” position on one side, multiplied by the weight on that side, was always equal to the length of the other arm multiplied by *its* weight. In other words, a smaller weight at the end of the long arm will “balance” a larger weight at the end of the short arm.



(Since you will find it hard to obtain a rod which has practically no weight, your result might differ from this.)

If the rod weighs nothing, the larger weight is equal to the smaller multiplied by the ratio of the long to the short arm of the rod.

Everyone knows the uses of the lever and that it is *advantageous* to use it, *e.g.*, a man applying his own weight to the end of the long arm can lift a greater weight than his own. Something is gained in efficiency—*i.e.* in the power to produce an intended result—and this something is measured by the ratio of the long to the short arm. This is called the *mechanical advantage*.

For the same reason that a halfpenny has to revolve oftener than a penny if the two, rolling side by side, are to keep abreast, the end of the short arm moves more slowly than the end of the long arm; or, in the same time, the end of the long arm moves farther than the end of the short arm. Thus it is often said that “what is gained in efficiency is lost in time.”

The anxiety of physicists to emphasise the counter-balancing of a gain by a loss must not be misunderstood. It is not a denial of the advantage gained in the use of the lever. It is an attempt to discover the true source of this gain. The true source of this gain is *the natural properties of the association which permits us to vary the opposing weights to our advantage. What we cannot vary are these natural properties.*

Levers have been divided into three classes according to whether the Fulcrum, the Resistance or the Driving Force occupies the middle position. A crowbar or a spade are levers of the first kind: a pair of nut-crackers, or a wheel-barrow, and an oar, are levers of the second kind; a pair of sugar tongs is a lever of the third kind. The Balance and the Steel-yard are modifications of the lever; the other simple machines are the pulley, the inclined plane, and the screw, each with its characteristic mechanical advantage.

Every simple machine consists of more or less massive parts and its characteristic action is displayed only in the presence of something which produces, or tends to produce movement in these parts.

Inspection of one of these machines in action elicits curiosity in the observer concerning it, and this is quite enough to know that physical association is a very respectable subject for investigation and a fruitful source of observed results which are advantageous.

Results.

Phenomena = observed results in nature (of association).

Association = the apparent source of phenomena.

Society = complex associations into which human beings enter with each other.

Additional Notes.

The lecture is planned to serve as an introduction to the inductive method “go on looking until you find it is not so. If you cannot find it is not so, say ‘no case has been found’. Students unfamiliar with the methods of the natural sciences will be prone to revert to logical argument or to seek for ultimate causes, e.g., *why* is W.AC — R.BC? This is the constant *result* obtained by the actual measurement and it arises out of the association. Students should make this point of view familiar to themselves and should resist the temptation to enter into argument or philosophical discussion. Social Credit takes account of everything relevant to social life, *but* from the definite point of view of “the power to produce the result intended”. The *effects of beliefs* in modifying efficiency are thus matters for consideration. But each effect must be treated in its own place lecture by lecture.

II

We are trying to learn something about ASSOCIATIONS, because human society is AN ASSOCIATION ... the most complex association we know: a vast construct, or complex, of separate associations.

A simpler association than a ruler balanced on the edge of a knife it would be hard to find, yet results of great importance have been gained by paying attention to this very simple instance. By watching what happens when similar very simple associations are established, a vast amount of useful knowledge has been acquired by man — knowledge of HOW TO DO THINGS. A short name for man’s knowledge of how to do things is *Culture*.

The men who did most of this work were wise in that they made haste slowly. They found that they were most successful when the job was easy, so they stuck to simple easy matters. All the great practical achievements are due to their persistence in this course: modern technology, engineering, chemistry, agriculture. The most wonderful thing about these is THE RESULTS: each of the steps taken to reach these results was a childishly simple and easy step.

It is not because Social Credit is “mechanistic” (whatever that may mean), or because it is a branch of the science of Mechanics (it isn’t) that we are at present considering some of the better-known results of elementary mechanics. It is because they are very simple in themselves, and illustrate the properties of associations of all kinds as nothing else can do.

Every association has a RESULT. This is its INCREMENT OF ASSOCIATION.

At the close of the present lecture, we shall have reached two important conclusions:

(1) Each of the ELEMENTS in an association is effective in its own way.

(2) Knowledge of the RESULT of an association is, and can be derived PRACTICALLY by observing the CIRCUMSTANCES IN WHICH IT OCCURS.

Both of these generalisations are of supreme importance to anyone who wishes, let us say, to control the Social Credit. They are well understood by those who wish to diminish it. Anyone who wishes to increase it had better be as well-informed, and it is impossible to be well-informed about matters of this kind without considering them carefully by easy stages.

The chief instance of association and its result considered last week was one which involved the tendency of matter to move in certain circumstances. We saw that some of these circumstances might be controlled, leading to the gain of an advantage called the mechanical advantage. There was one general circumstance that was rather overlooked. It affected everything in the experiment: the ruler, the support and the pennies . . . everything. The tendency of the ruler to move would have been displayed by everything else which was not supported so as to prevent movement, and if it had occurred this movement would naturally

have been downwards. All the objects we were considering seemed to lie in something which disposed them to move in the same direction. This was not the air. As a matter of fact the tendency would have been more marked if there had been no air. It is something called the “field”. . . in this case the “gravitational field”.

A “field” is something which can dispose material objects which lie in it to move.

The whole association we were considering therefore concerned materials parts which were free to move in a field which tended to produce motion in them. We were able to contrive an *arrangement* of these parts so as to secure a definite *result*, but *we were unable to do anything to the “field”*. It was just there all the time, tending to produce similar results in similar circumstances. It was “constant” but the arrangement of the moveable structures was variable *in it*.

MEN HAVE BEEN ABLE TO CONTRIVE USES FOR WHAT HAPPENS NATURALLY APART FROM THEMSELVES: *by varying the variable elements in a natural association.*

Both the constant and the variable elements in association must be observed in order to be *known*. They may be “expected”, but this is a very different thing from being known.

The so-called *laws* of motion, first stated by Sir Isaac Newton, are deductions from observations and experiment. Their truth cannot be demonstrated by mathematics. The usefulness of mathematics can be demonstrated by applying mathematics *to them*. It is what is *done* that is true; *not what is said about it*.

The relationship:—

30-ins.	20-ins.	
2 lbs.	3 lbs.	(2 : 3 :: 20 : 30)

is invariably found to be so. When the conditions are as stated the beam balances. If it did not, everything that occurs in regard to matter and motion would occur *differently*.

Pure machinery is the result of *the search for mechanical* advantage and how far along this single line it is possible to go may be inferred from Kropotkin’s remark as follows :—

“Just as there are in science some notions and methods which are preparatory to the study of all sciences, so there are also some fundamental notions and methods preparatory to the special study of any handicraft. Reuleaux has shown . . . that there is, so to say, a philosophy of all possible machinery. Each machine, however complicated, can be reduced to a few elements— plates, cylinders, discs, cones and so on—as well as to a few tools—chisels, saws, rollers, hammers, etc., and, however complicated its movements, they can be decomposed into a few modifications of motion, such as the transformation of circular motion into rectilinear, and the like, with a number of intermediate links. So, also, each handicraft can be decomposed into a number of elements. In each trade one must know how to make a plate with parallel surfaces, a cylinder, a disc, a square and a round hole; how to manage a limited number of tools, all tools being mere modifications of less than a dozen types ; and how to transform one kind of motion into another. This is the foundation of all mechanical handicrafts . . . ”

(Fields, Factories and Workshops, 1906).

“How To Do THIS, AND How To Do THAT!”

Your observation may have led you to the association of this little phrase with the totally unrelated idea of *work*. We have not so far mentioned work, and although some work may have been done in the little balancing experiment last week, none was intended to be done—at all events in the experiment itself.

The purpose of this part of our course is to illustrate the use of the inductive method in directions in which it has been amazingly fruitful of results, and at the same time to provide a real knowledge of some phenomena of great importance to the life of man in society which are often misrepresented.

We shall not deal with anything very difficult: but it is necessary to be precise about the things we do

observe. Let us go slowly.

- (1) Work is something that must be done in order to move anything.
- (2) Work is *not* done unless something is moved.
- (3) Work is “an observed result in nature”, *i.e.* it is the result of association.

We must not allow ourselves to be confused about this matter, because the most absurd notions are current about work. People talk about kinds of work . . . *e.g.* physical and mental work. The physical work done by so-called mental workers is very little in amount and largely involuntary, purposeless and wasteful . . . *e.g.* in restless movements of their bodies, and harmful contractions of their blood vessels as well as in useful ways which must occur in any case to keep the so-called brain-worker alive. Fatigue need not arise from doing work, and is *not* a measure of the work done. A man may tire himself out without doing any external work at all. On the other hand he may do an enormous amount of work and not tire himself at all.

- (3) Work is an observed result in nature, *i.e.* is the result of association.
- (4) What association?

This:

- (a) A tendency to impart motion to some material body.
- (b) Actual motion in that body.

Notice that the tendency may be small or great, and the actual motion may be little or much (as measured by the distance moved).

Thus, in the experts' language,

THE MEASURE OF WORK — THE TENDENCY TO MOVE A PARTICULAR BODY \times (multiplied by) the distance it is moved.

Arbitrarily this tendency is called a “force”, let us say the force of a lb.-weight.

Thus: The unit of work = 1 lb. \times 1 ft. = one foot-pound.

It is the amount of work done in lifting one pound one foot. If the piece of matter weighing one pound does not move, no work is done, if it moves one inch, 1/12th of a foot-pound, if 20 feet, 20 foot-pounds, and so on.

There are some very important names given to derived associations. They lead straight on from one to the other, and we had better write them down and remember them.

The CAPACITY for doing work may be small or great.

It (the capacity for doing work) = ENERGY.

A doer (an agent) can expend his (or its) energy in doing work = its POWER.

For the moment, although you should learn these definitions (energy = capacity for doing work; power = rate at which the capacity can be expended), the meaning of these things is less important than an appreciation of the fact that

AN IMMENSE AMOUNT OF WORK IS DONE *WITHOUT* THE INTERVENTION OF MAN.

Remember work is always done when anything is moved. Therefore instances of work done without

man's assistance are:—

- (1) All instances of growth.
- (2) The natural movements of wind and water.

Now note that the capacity for doing work may be stored up. That is to say, *there are natural stores of energy*. Such are Solar light and heat. This light and heat is being expended in work done all the time on the earth. Thus a constant circulation of water is effected, movements of the air, and the manufacture of food materials by plants, which food materials are thus made available for animal consumption. Some of these materials are not so used, or were not so used in the past, and they are slowly converted into highly combustible substances, coal, peat and oil, capable of liberating heat energy, a particular form of the capacity for doing work, whenever the appropriate circumstances are established ... or that is to say, the *appropriate associations*.

This brings us to the fundamentally important matter in relation to the Social Credit.

The establishment of the appropriate associations admittedly involves some work.

(1) HOWEVER GREAT OR SMALL THIS AMOUNT OF WORK MAY BE, THE CAPACITY FOR DOING IT IS NOT THE STORE OF ENERGY MADE AVAILABLE BY DOING IT.

(2) UNLESS THE ENERGY MADE AVAILABLE IS GREATER THAN THE ENERGY EXPENDED IN MAKING IT AVAILABLE THE UNDERTAKING IS UNECONOMICAL AND USELESS.

Some people profess to believe that the work done in the establishment of appropriate associations for the release of energy from stores “makes work” instead of making available an increased capacity for doing work. This is the same as saying that a man who had spent half his time in work to provide himself with the energy to get coal would find that by that time its energy would have been dissipated and that the coal would not burn. It is of course true that a train-load of coal can be consumed in keeping the train running in a circle so long as the fuel lasts. But so long as it is true that it is not the energy of the food-materials consumed in collecting and liberating stores of energy which is stored in the store collected, *one store is an addition to the other store, not a transference of it*. The availability of the capacity for work in any store of energy is independent of the capacity for work already stored or in process of being released elsewhere. To prove this it is not necessary to collect elaborate statistics relating to the engineering, mining, building, manufacturing and agricultural industries. Such statistics may be largely or wholly concerned with the maintenance of motion in trains consuming their own loads of coal. All that is necessary is to observe that men can and do support life and that at the same time they acquire stores of capacity for doing work. They do this in virtue of the operation of a large number of associations which all yield an advantage. This advantage, in the aggregate, complex as it is, is the *increment of association in its most familiar form—e.g. the fruitfulness of the earth*.

We may have noticed that each fresh instance of association that we have considered had some concealed element in it. Take the last for example. Evidently it is possible to expend energy so that no more is accomplished than a rather long train journey. Or instead of the train journey someone might be kept warm for a long time. We are apt to look at these divergent results from the point of view of their personal meaning to ourselves—their usefulness.

Both in the long series of associations (mechanical, industrial, etc.) leading to the running of a train, however purposelessly, and in the judgments passed by us are hidden increments of association. We call these mental. They are established apparently within ourselves by the association somehow, of a very large number of elements; inherited physical and related elements, past elements of the individual's experience, present elements of his experience, and what we may call expectations of future experience of a desired or undesired kind. Thus along many different lines, the past and as much as possible of the present are *brought into some relationship, or association, which economises our own expenditure of energy and facilitates the release of our own and extra-human energy in ways we call intelligent. This is, perhaps, the most amazing*

increment of association we know; but its effective range has scarcely begun to be explored.

An association of apparently the simplest nature which we might have considered first is *mass association* and the peculiar and rather elusive increment of association which arises from it. Special consideration will be paid in a later lecture to the importance of a thorough understanding of this increment in the study of Social Credit.

Let us suppose that we have available a rather more elaborate form of balance than a simple rod surmounted on a support considered in the first lecture. A domestic pair of scales will do. Assume that the scales are properly adjusted and in working order, and that an iron or brass weight is placed in one of the pans, while granulated sugar is poured very slowly into the other. *Some time will elapse before anything happens.* The whole system appears to be rigid until at last the weight of the sugar increases until it is equal to that of the “weight”, and then the beam moves suddenly and the two pans come to rest suspended in air on a level. If now some of the sugar (a small amount) is removed, the weight will fall again, to rise time after time as often as the sugar is replaced after its removal.

Observe how easy it is to create the illusion that it is the removal and addition of the small quantity of sugar that leads to the falling and rising of the opposite pan. This is, of course, demonstrably false, for in other circumstances these actions will produce no result at all. There is a difference between the same *action* and the accumulation of the same *mass* of sugar.

Whenever this accumulation is completed, enough *mass* is accumulated to equal the *mass* of the weight (iron or brass). One might say that nothing but enough sugar is enough; but this too would be wrong, for enough of anything heavy would do. It is the *mass* which has to be enough, and experts therefore define this as the QUANTITY OF MATTER. One quantity is said to be equal to another quantity, one mass the same as another mass, when they tend to be affected to the same extent in the same way in the same “field”. This *MASS IS INDEPENDENT OF OTHER PROPERTIES OF MATTER*: in other words the quantity of matter is independent of the colour, taste, boiling-point, melting-point, physical structure and chemical structure.

Do not imagine that this is something that is so obvious and simple that everybody knows it and has always known it. The famous “leaning tower” of Pisa is said to have been the scene of quite a bitter argument about it, settled, mistakenly, by trying whether feathers or lead fell the faster. But again we are not trying to make engineers or physicists of ourselves, and we must not be led away from the point that is of importance to us.

In considering instances of the increment of association which occur in human society, as we shall do later, it is of the greatest importance that we should be well acquainted with the point just illustrated and practised in discriminating the essential from the accidental in the elements associated. We must be able to IDENTIFY the EFFECTIVE elements in an association. If human society (as some people assert) is something “higher” than beeswax and string, it is unlikely that we shall manage it very successfully without a thorough understanding of matters which are by no means easy even in relation to beeswax and string.

It is often asserted that there are many ways of doing the same thing, and people who entertain this misconception point to the possibility of precisely the kind of thing that is involved in balancing a metal weight on a scale by sugar, *or* sand, *or* lead, *or* something else. These, they say, are different *ways*. They are, it is true, different *substances*; but, as we have seen, it is not the sugar or the lead or the sand or the anything else but the MASS. The equality of the MASSES in certain circumstances produces the result of a balanced beam.

Think about it.

Another point: you will find that by no means everyone knows what to expect in regard to the simple relationship:—

$$\frac{a}{W} = \frac{b}{R}$$

They cannot *predict* that $W_a = R_b$

To say this is so because the laws of motion are what they are is misleading, for these laws are *merely statements of the results* of observation. *Unaided by previous observation we cannot infer any result in nature.* Now we should know:—

- (1) That of all the elements of a single natural association EACH IS INDEPENDENTLY EFFECTIVE IN ITS OWN WAY ; and
- (2) That KNOWLEDGE OF THE RESULT OF AN ASSOCIATION IS PRACTICALLY DERIVED FROM OBSERVATION of the circumstances in which that result occurs.

Knowledge of associations enables us practically

- (1) To control the motion of bodies (machines).
- (2) To control the flow of energy (power).
- (3) To apply these controls for intelligent ends.

Since the motto of the Institution of Civil Engineers has a wider application than engineering, we may say the knowledge we are seeking would enable us more effectively *to apply the powers in nature to the use and convenience of Man* (the motto of that famous institution).

ADDITIONAL NOTES

Students of a metaphysical turn of mind should resist the temptation to stray from the simple demonstrations of the lecture. Their motto at this stage should be “Study what is said first until it is understood, memorise definitions; take full notes and go over them and over them until the subject matter is familiar”. The importance of the lecture lies in the multiplicity of instances of the greatest importance to man, of the principle that each element of association is effective in its own way.

Note in regard to this. It is not the *name* of the medicine that cures the patient. “Hell is paved with good intentions.”

A man may put his foot on the accelerator with complete sincerity, but the car will not accelerate unless the appropriate associations are established within its mechanism. All of these are external to the driver. Pressure from the foot of the least sincere of men will cause acceleration of the car if the appropriate associations are established. So-called “effective causes” are in no sense of the word *like* the results which ensue from them, nor are the results which ensue from them *like* them.

Associations and phenomena, although indissoluble (inseparable) belong to entirely different categories. The man who says “I knew that would happen”, or “That is what I expected”, speaks *after* the event. It is true that instances of apparently the same association that has been observed before are expected to give the same results, and experience suggests the belief that they do so if they are the same.

Students who have read something of the history of beliefs may remember the many instances of the belief that because A is like B it will do all that B does or that B is alleged to do, (*e.g.* the belief that because a particular shell appears to resemble the organs of reproduction a string of them hung round the waist will promote fertility).

The students should recognise this superstition in various insidious forms current in modern society, *e.g.* that because A wants B and is an ‘X’-ist, ‘X’-ism is B.

The nature of the relationship between associations and their results is not for us a matter of speculation but of observation. Social Crediters, like all other individuals, may depart from this standing ground in their spare time. The speculations concerning such matters have nothing to do with us as Social Crediters, unless

they can be shown to *affect the power of society to produce the result intended as measured in terms of human satisfaction*. It is the definition of Social Credit that limits our technique. We are engaged in an objective, not a subjective study.

Students should observe associations and their results (phenomena) which occur apparently as integral parts of social life during the week following the lecture and determine for themselves:

- (a) whether they have in fact anything at all to do with human society.
- (b) whether they could not occur independently of Human Society altogether, and
- (c) in what sense, *if any*, they might occur differently in a state of nature, from their mode of occurrence in the state of society.

III

(1) Broadly speaking, human beings, whether in or out of a State of Society, cannot do anything more in regard to natural associations than arrange for their occurrence and make provision *for reaping the natural increments*. “Un-natural” associations are associations of which we have no experience.

(2) No one living has seen human beings apart from the State of Society.

(3) Most of the associations which yield an increment for man are associations which occur naturally apart from Society.

The present lecture is to deal with social instances of the increment of association, the development and inheritance of increment, modern process and industry.

Any large mass of matter—a tree trunk, a rock needed for building may be too heavy for one man to lift, even with the aid of levers and pulleys (simple machines). With or without assistance from such devices, several men applying their force may move it. This can only be done if their force is applied at the same time as well as in the appropriate way.

This is unquestionably an instance of human association yielding its characteristic increment. It is a *mass* association. The force exerted by one man is multiplied by the number of men exerting an equal force *at the same time*.

In all cases where the capacity for work concerned is human muscular energy, this increment is important.

The first words of Adam Smith’s “Enquiry into the nature and causes of the Wealth of Nations” read:—

“The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes.”

This statement was false when the words first appeared in print in 1776 and has been false ever since, if what is meant by the annual labour of a nation is the work done in one year by its inhabitants. The necessaries and conveniences of life are naturally more plentiful every year in all countries and the work done by human beings, if they are economically (conservatively) employed, is less every year. It has been calculated that upward of 11,000,000,000 man-power is available (power = rate at which capacity for doing work can be expended) for the 2,000 millions of the earth’s population in addition to their own man-power, which, owing to the inclusion of infants in the population, is considerably less than 2,000,000,000.

Mass association for doing work is therefore of decreasing importance as a part of human society and is relatively of small account.

If the primary characteristic of mass association in society is that a number of men shall do the same thing at the same time, a reverse mode of association would be one in which a number of men did different things at the same time, each individual doing the same thing all the time. This embodies a well-known and useful principle: the principle of the *division of labour*.

As in the case of mass association, some aspects of the division of labour, particularly those which concern the doing of WORK, for obvious reasons, are less important than they were. If the DOER of the work be disregarded and yet the economical (conservative) spending of the capacity for work be insisted upon (whatever its source), the principles underlying the division of labour are of great importance. Essentially the division of labour is a TIME-SAVER.

When Adam Smith wrote, power-production was relatively so unimportant that he almost completely disregarded its effects. He was, perhaps for the same reason, able to give a description of the division of labour which is concise, clear and still valid:—

“To take an example, therefore, from a very trifling manufacture, but one in which the division of labour has been very often taken notice of, the trade of the pin maker; a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which in some manufactories are all performed by distinct hands, though in others the same men will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly not the two hundred and fortieth, perhaps not the four thousand eight hundredth part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations.”

Do not let your mind be preoccupied by the details cited in that passage. We are not considering at the present time anything that strictly has to do with the efficiency of association *as measured in terms of human satisfaction*, but with the efficiency of association; and we see here, owing to time saved and skill enhanced, an increased power to produce results from association; an increment from the division of the work to be done into small parcels and the distribution of these small parcels, one each, to those associating.

Observe also, that while the workers in the pin factory were doubtless working under some form of pressure, comparable instances of association can be seen where the division of the labour is undertaken voluntarily, and then it is found to yield a corresponding increment of association. In other words, it is not the inducement to adopt a particular method of working that yields the increment of association but the association, *and this is independent of all other elements*.

REMEMBER: EACH EFFECTIVE ELEMENT IN AN ASSOCIATION IS EFFECTIVE IN ITS OWN WAY.

To extend our observations on this point: Adam Smith said there were “about eighteen distinct

operations” undertaken by different operatives. Each “operation” consisted of the means to reach a certain definable objective: *e.g.*, making the heads for the pins, or sharpening the points. In other words, each operation involved a number of associations of which those resulting in mechanical movements were probably most numerous.

Not one of these associations is affected to the slightest degree in its *result* by its being an incident in the social manufacture of pins. In the association of men with one another, we have not yet discovered, then, anything more than agreement to use the increment of natural associations for a definite end, or objective. Adam Smith noticed, further, that “a great part of the machines made use of in those manufactures, in which labour is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it.” In other words, most, at all events, of these instances of invention were very highly individual matters and had no more to do with human society than that the individuals who did the inventing lived in a state of society and applied themselves to the study of natural associations which disclosed themselves in their work.

The use of the phrase “common workmen” suggests that there may be “uncommon workmen” whose associations were more definitely social. Adam Smith mentions them as those “whose trade it is not to do anything, but to observe everything; and who, upon that account are often capable of combining together the POWERS OF THE MOST DISTANT AND DISSIMILAR OBJECTS.”

Note “the powers of OBJECTS”: what are they but the powers of association to produce results? Here then, as before, it is a highly individual function that is performed: an association of “the powers of the most distant and dissimilar OBJECTS”.

Adam Smith goes on to comment upon the large NUMBER of people co-operating with one another in this way; but we must not lose sight of the fact that this *way* is:—

(1) By agreement, voluntary or otherwise, among men to

(2) Reap the largest possible result from natural associations. So far as we have discovered, up to the present point, the HUMAN association lies in the agreement. The wood is under heading (1) and the trees under heading (2).

The point may be emphasized that an agreement to reap or to forego the natural results of associations affects the extent to which such associations are established; but not their nature or characteristic increments.

We must look therefore for instances of purely human association first of all, to associations which either favour (by agreement) or disfavour the USE of available associations which, strictly speaking, are external to man and to society.

There is reason to believe that the total effect of such associations (the agreement associations) is UNfavourable to the full use and development of associations of the second (external) kind; but this is a matter for assessment later on, and what we have to do at present is to state categorically the headings under which these associations (human associations) fall.

The most important is what is called LAW.

Law in the social sense is an entirely different thing from law in the scientific sense. In the latter sense, law is merely the briefest possible statement of the results of observation, and since such statements are always discarded as soon as the inductive method reveals any instance of departure from them (breach) it may be said that if they are ever “kept” they certainly cannot be “broken”.

Law in the social sense is something—some rule of conduct—which can always be “broken”, but a penalty is exacted for breaking it. Such penalties are exacted by an association of persons within the total association concerned, and this inner association is often termed “the constituted authority”. In extreme cases it is easy to see, but in other cases less easy to see, that the penalties attached to every breach of law

can only be exacted by consent of those of whom, collectively, they are exacted, since the exaction depends ultimately upon the exercise of a force internal to the association, not external.

Law is variable. On passing from country to country one finds systems of law which differ widely; while periodical additions to the law in all countries show the hand of the lawmaker, who can be named with the place and date of the making of the law, and the place and the date of the beginning of its operation; *i.e.* the time and place when penalties other than natural penalties begin to be exacted from those whose behaviour varies from that prescribed.

The lack of duration and uniformity in the social law is thus in marked contrast to the “always and everywhere” of so-called scientific law. It is useful to regard social law as a body of prohibitions of courses of action which are physically possible. Disobedience may thus have two kinds of consequences: a natural consequence, which (being the result of an association) is inescapable, and a social arbitrary consequence which is a penalty escapable in some circumstances if not in all.

Douglas’s illustration is piquant:—The natural consequence of driving a motor car twice as fast is that it covers the distance in half the time. There is no connection between the speed of a car and a fine.

Law has various forms: the statute law, case law and regulations made by persons permitted by law to make them (called by Lord Chief Justice Hewart ‘Administrative Lawlessness’). A more insidious (and more effective) form of prohibition is that derived from the laws supporting financial practice. Convention and custom constitute additional associations which yield their characteristic increments, and it is to be noticed that all the associations we have been considering are capable of yielding a “negative” increment, from the point of view of the number and variety of the things done: that is to say a “DECREMENT.”

We must not, however, infer from this formal treatment of strictly human associations that their result is all loss; loss of what and to whom? We are not able yet to begin an account of man’s gains and losses. All that we have shown is that some human associations aim at restricting the full use and development of natural increments of association.

There is one function of human association which those we have named have not succeeded in prohibiting, and although efforts have often been made to penalise it they have failed to eradicate it. One might therefore be led to suspect that (assuming the objective of human association as practised to be chiefly restrictive) this function belongs rather to the natural order than to the order of ‘constituted authority’. At the same time it is indubitably an instance of human association: a true FUNCTION OF HUMAN SOCIETY. If it is an inevitable natural association as well, (for man is a part of nature) one might say, without impiety, ‘Thank God’, for it is a function of the greatest consequence. It concerns THE CONSERVATION OF INCREMENTS—or the conservation of knowledge of the USE of increments (*L. conservare*=to keep together).

The essential elements of this association are revealed in the following sentences from Elliot Smith’s “Evolution of Man”:—

The germs of civilisation were planted when Man’s attention first became fixed upon specific problems, which he was able to deal with in an experimental manner, and, in co-operation with other men, to solve in a way more or less satisfying to him and his contemporaries, and to hand on his solutions of them to those who came after them. Once this process began, a new era in the manifestation of the human spirit was inaugurated. Every serious research, in whatever department of enquiry, leads to unforeseen results; it opens up new lines of investigation and suggests new trains of thought. So that once this method of groping into the unknown secrets of Nature was inaugurated, the human mind entered a new and ever-expanding world of ideas; and with many vicissitudes and fluctuations of zeal and insight, it has pursued this new direction, and has ever striven to attain the goal of new desires.

We may sum up the meaning of this passage by saying that the conservation of discovered increments of association in human society—or among human beings—is secured by *inheritance*. There are, of course, no ‘generations’ of men. There are large numbers of people living of approximately the same age, and as

many 'generations' are living at once as the duration of life of the oldest inhabitant and the onset of reproductive powers in his descendants permit. The handing-on "from generation to generation" is a constant process: the handing-on is something done at once, as soon as there is something to hand-on. The inheritance is a *constantly increasing power to do things*. This constantly increasing power to do things is, together with a constantly increasing power to undo them, the *CULTURAL INHERITANCE*. The doing and the undoing parts seem to be of a different nature one from the other. The whole matter is one which had never been properly studied, but what we know about it suggests that we shall find that broadly speaking the doing part is concerned with natural associations and the undoing part with social prohibitions. Very definitely it seems, however, that the doing part is stronger than the undoing part: that the tendency of the inheritance to increase is for some reason not susceptible of complete control. This does not mean that the restrictive action of prohibitions is always ineffective. Many arts, countless observed associations have, together with their increments, been lost as well as gained. We might find a key to the tenacity of man's grasp of natural associations, however, in the fact that their advantage is self-evident, and it is possible to reap the advantage, for example, of using a lever without knowing what it is called or what the mathematical representation of its properties is. Also, very important associations and their increments rarely reveal, when they are first observed, the whole of their power *in association with other cultural elements* to yield what may be called compound increments, and the imagination of those who invent prohibitions does not therefore suffice very often to nip the flower in the bud. The complex process of the development and inheritance of a knowledge of how to do things is therefore stronger than the power of prohibition confronted with the accomplished fact of a result of obvious advantage to man.

The fact of a cultural inheritance is peculiarly associated with human life. This breeding of abilities by abilities is one of his unique blessings.

Many factors in the development of the cultural inheritance are unconscious in the sense that they are unexpected associations which, together with their characteristic increments, claim the attention of some human being to whom they are immediately accessible. (*cf.* Adam Smith's description of the origin of inventions among "common" workmen). These factors, together doubtless with many which are the outcome of long and difficult search for a means of reaching a definite goal, tend irresistibly to add themselves together into more and more efficient, although complicated, ways of doing things. Such "strings" of the cultural inheritance elaborated for the efficient accomplishment of given productive ends constitute the "processes" of modern industry. Every industrial process would, on inspection and enquiry, reveal an unexpectedly large number of such inherited cultural elements, the origin of many of which, would, without any doubt, long ago have been forgotten.

ADDITIONAL NOTES

The lecture is shorter than the preceding two. It contains matter which most students are relatively more familiar with than with the questions discussed before, and may appear easier. It is not really so, and familiarity should not be allowed to disguise the difficulty of some of the matters discussed. It is often said that SPEECH is the great distinguishing feature of man. It is not easy to see without a good deal of special information to lead the student, that speech is itself an instance of inherited culture. So is tennis. Observe the differences between old established games and games newly invented. On the whole the old games are simpler but more interesting. Possibly analysis might reveal that they showed greater economy (conservatism) in the use made of a few associations. The famous physician, Sir Henry Head, said there was essentially no difference between the processes involved in learning to speak and those involved in learning to play tennis but the use to which the aptitude was put. Tennis playing might easily be elaborated into a technique for communicating to others our understanding of external relationships; it might be used symbolically to express relationships which have been formulated in the same symbolic terms. The mention of the inherited cultural nature of speech, leads us to the other associations of speech, whether pictorial, written or spoken. This would lead us to an examination of the explanations commonly given to "explain" things, to beliefs, systems of ideas built up as time goes on. These constitute an accumulating RECORD of something quite different from the record of man's material successes represented, *e.g.*, by the pyramids of Egypt and the Forth Bridge or the Mersey Tunnel. Note that a record of these things also exists (although it is rarely examined) side by side with the constructions—as plans and formulae. It has been asserted that what we may call the "belief" records, as distinct from the "plan" records, are related to each other in this

sense, that man's unsuccessful plan and formulae records gain currency and accumulate as beliefs which, having little bearing upon the successful construction of anything, pass to a large extent untested by those who have (division of labour) little to do with the constructing of anything. Students are not asked to adopt this view but they should notice it, if only as a pointer to the complexity of the cultural inheritance, and its effectiveness in determining the efficiency of society as measured in terms of human satisfaction.

IV

John Ruskin, in the preface to "Unto this Last", wrote that "the real gist of these papers, their central meaning and aim, is to give, as I believe for the first time in plain English, ... a logical definition of WEALTH: such definition being absolutely needed for a basis of Economical Science." He went on to quote J. S. Mill, who, after saying that writers on political economy professed to teach or to investigate the nature of wealth, gave his opinion that "everyone has a notion, sufficiently correct for common purposes, of what is meant by wealth", and further protected himself by asserting that it was no part of the design of his treatise (Principles of Political Economy) to aim at "metaphysical nicety of definition".

Ruskin's comment is that "metaphysical nicety, we assuredly do not need; but physical nicety and logical accuracy, with respect to a physical subject, we as assuredly do."

Such a need for "physical nicety and logical accuracy" was met in Ruskin's opinion by the statement that "there is no Wealth but Life. Life, including all its powers of love, joy and admiration." This is doubtless an admirable definition to those who know the work in which the words appear, but open to some misunderstanding by others. Ruskin scarcely meant to assert that wealth and life were interchangeable terms, *e.g.*, in the statement that a man in danger of his wealth escaped from captivity among Cossacks, leaving all that remained of his life among them. Ruskin went on to say that "that country is richest which nourishes the greatest number of noble and happy human beings."

It does not matter much here whether the riches lie in the number, the nobility or the happiness. The people of a country can hardly be numerous, as well as noble and happy, without something to nourish their numbers, nobility and happiness upon. And so Ruskin understood it: and bringing the matter thus down to various kinds of nourishment it is at once brought down from the abstract to the concrete.

All the needs of man are in respect of the exercise of his powers, and in respect of the exercise of each power he has probably many needs. He is properly nourished in Ruskin's sense (and his own) when these needs are supplied at will.

Wealth is, strictly speaking, not the source from which the needs are supplied but the supplying of the needs. In other words, a nation's wealth is what its citizens consume. An individual's wealth is what he consumes. Apart from wealth a community or an individual may have assets, but these are not wealth. No nourishment results from the meat in the pantry; but only from the consumption of the meat in the pantry. Endless confusion results from the admission of wider definitions of wealth, which may all be avoided by observing the precise function performed by each item in its turn which our definition excludes.

Clearly between the meat in the pantry and the nourishment of life various stages intervene, *e.g.*, preparing, cooking, bringing it to the table, carving and serving. And so other stages preceded these; retail delivery, dressing, butchering, and killing. In the retail shop the meat was "consumable"; but on the farm, not consumable yet.

The phrase "production of wealth" properly covers all these stages which prepare for the receipt of wealth by the individual.

Indistinguishable in respect of technique—*i.e.*, in respect of the associations yielding the increment—is the production of goods which are themselves not consumable: the fittings of the butcher's shop, his instruments, and so on. These wear out and have to be replaced; but they never reach the consumer. On the other hand, the wealth he consumes would not be forthcoming were it not for them. It is also true that

collectively the community consumes them in the sense that they are used up in its service; but this consideration must not tempt us from our definition which has this merit, that it concentrates attention upon the production of *the result intended*, which is the nourishment, not the means of possible nourishment.

At various stages short of the actual fruition of the production system in wealth (as defined) there are *goods* (and, it may be added, services, which differ from goods only in respect of the function of the individual which they increase or maintain, *e.g.*, the organised communication to the individual of some part or other of his cultural inheritance is effected by supplying him with goods which result from this inheritance—at least in part—but also by instruction, which is a service). Commonly such goods are designated.

- (1) Capital goods.
- (2) Intermediate products.

In common language, then, the descent or ancestry of wealth may be summed up in the sequence:—

Men to make things,

Things to make things with,

Things half-made,

Things made,

Things consumed (wealth).

The place of men themselves in this sequence is noteworthy. They may be enumerated under this heading of things to make things with, *i.e.*, as instruments of their own for wealth production, *i.e.*, as capital. Further, not only as items of capital but as things self-consumed for the exercise of some power (action) they may be regarded as being, at different stages of their individual lives, half-made, or made; and all the time as being in process of consuming themselves. In other words they appear at every stage of wealth production and are themselves wealth. It is curious that economic orthodoxy, which tends to restrict the meaning of wealth to cover everything *but* the wealth actually appreciated by man, nevertheless accords man a place among the things to make things with and sets a “value” upon him as though he were “worth” something to make things for nothing.

The relative importance to individuals of various forms of wealth differs from individual to individual within wide limits, without affecting the necessity of some forms of wealth to all people, *e.g.*, a sufficiency of food, air, water, sunlight, clothing, is necessary to all individuals at all ages, while such things as tennis racquets and the printed scores of orchestral music may occupy relatively very different positions, if any, in different individuals’ lists of wealth items arranged in order of their importance. Indeed, such a list, if it could ever be compiled for even a single individual would never be strictly applicable to his life at any given moment and would tend to change from hour to hour. This fact, which very little examination of the subject is needed to verify, is itself a demonstration of the soundness of our rule that wealth only discloses itself in consumption, for consumable goods capable of being converted by consumption into wealth at one moment of the life of an individual are quite incapable of realising any wealth at another. In other words, all questions of *value* are incapable of settlement because there is no possibility of fixing a standard of value and all that we can say of anything is that at a particular moment it was presumably valued by an individual consumer because he consumed it.

Notions of utility, likewise, arise from confusion concerning the nature of wealth. The usefulness of wealth lies in the fact of its being wealth and how useful it is can no more be assessed than how valuable it is. On the other hand the usefulness of a tool (simple or complicated) or of an intermediate product can be measured by ascertaining its effect in making consumable goods available.

The abstractions, value and utility, have been a source of great hindrance to the advancement of

knowledge of the efficiency of society but it should be noticed that appropriate standards of measurement are not rendered less appropriate because we detect the inappropriateness of a standard which has failed to serve us. Because value is indefinable it does not follow that people have no power to produce a result in association which is satisfactory to them. Probably that power will be increased if they eliminate from their discussion of it a useless, ideal conception.

Many people in the community seem to associate matter more prominently with that particular form of it which we call mud than with any other, and the same people show sometimes a strong inclination to disregard the fact that wealth which they are willing to interpret in the broadest terms has usually a lowly origin. Thus the greatest poetry is usually printed on ordinary paper with ordinary ink and cannot become wealth but through the medium of the printed book. Similarly the greatest music cannot become wealth but through the medium of a large variety of material instruments made of steel, brass, silver, copper, wood, gut, horsehair, ivory, etc. Stone, linen, oils, paints and varnishes are items in the medium for conveying wealth through the visual sense, and spiritual wealth is characteristically associated with special and elaborate buildings, mural and other decorations, and other things of a material kind. It will be observed that the wealth made available through such media is relatively intangible, and that the vehicles are either relatively permanent, like some of the instruments of production, or are transient, like the sound of music, if the sound be regarded as a source of wealth.

Such considerations, however, only drive us back to the consideration that the availability of wealth is dependent upon the establishment of all the kinds of association we have considered in previous lectures. Examined minutely every instance of wealth (which observe is essentially individual in its nature) is traceable to a number of antecedent associations; the cultural heritage, industry and process, mental association, mass association, the agreement associations, material associations, all yielding their characteristic increments (some of which may be decrements). Throughout, each effective element in association has been effective in its own way.

The peculiar associations between the seed and the soil, the growing plant and sunlight have resulted in a *redistribution* of energy (the total energy of the universe is not believed to be susceptible of increase or decrease). Man makes arrangements for this natural event to occur at times and places advantageously to himself. The capacity for work is increased by providing the conditions in which energy may be released from stores, and, by the use of mechanical associations inherent in the properties of motion, this capacity is directed into useful channels. The knowledge of how things can be done embodies a *conservative* force which results in their continuing to be done as it is known they can be done and the result is constantly accelerating power to do things. There is no other ingredient in wealth-production. We have not mentioned money, which superstition places among the items of wealth. It is neither wealth (it is never consumed) nor is it capable of producing wealth. Apply the experimental method to it and see. All the associations which lead to the production of wealth can be established independently of money. We could, of course, agree not to provide for the occurrence of any natural associations unless, let us say, all the pavements were painted pink, and so, by agreement, we might allow any other arbitrary rule to intervene between us and the reaping of the natural increments of association which are advantageous to us. If we did we should not call the process one of *wealth-production*.

In a modern community the tools assume great prominence, *i.e.*, capital is prominent. Thus Ruskin said:

“Capital signifies ‘head, or source, or root material’—it is material by which some derivative or secondary good is produced. It is only capital proper (*caput vivum*, not *caput mortuum*) when it is thus producing something different from itself. It is a root, which does not enter into vital function till it produces something else than a root: namely fruit. That fruit will in time again produce roots: and so all living capital issues in reproduction of capital; but capital which produces nothing but capital is only root producing root; bulb issuing in bulb, never in tulip; seed issuing in seed, never in bread; The Political Economy of Europe has hitherto devoted itself wholly to the multiplication, or (less even) the aggregation of bulbs. It never saw nor conceived such a thing as a tulip.”

Clearly, a society that knows no difference between an apple in a barrel and an apple in its mouth, between the soil from which the apple-tree grew and the human being enriched by eating an apple, can

hardly distinguish the bulb and the flower.

But to say that we must distinguish between capital and wealth is not to say that capital is unimportant. Capital is, however, relatively easy of definition if we stick to the doing part of life in society and avoid the purely recording part. All the associations which enter into wealth production—man’s inherited knowledge of how to do things, the increase he is able to effect in this knowledge, the natural and mechanical associations he establishes, the stores of energy available to him, plant and equipment, transportation systems—all these are capital. Many items involve work and the use of materials. Plant wears out, becomes obsolete, and must be renewed. Note two points: that a disproportionate amount of energy may be expended on capital which, after it is produced, may remain largely unused, and that the obsolescence of capital is not something that directly affects its power to produce wealth.

V

The Associations we have considered are:

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(1)	<i>Kind</i>	<i>Increment developed</i>	<i>Conditions</i>
	Material.	Mechanical Advantage.	Freedom of material parts to move on application of force.
(2)	Mass.	Absolute (all or nothing).	Sufficiency of elements.
(3)	Energetic.	Work and Power.	Multiple and derived, <i>e.g.</i> , (1) and (2) plus availability of free energy.
(4)	Agreement.	Effective application of natural instances of association and gain by Man of characteristic increments.	Psychological : (appreciation of the use of associations and the will to use them).
	(a) General.		
	(b) Division of Labour.	Productive advantage.	Derived from (2) (time-saving) and psychological sources (enhanced skill).
(5)	Cultural Heritage.	Increased power to do things in human association.	All the conditions enumerated above plus persistence of results in society (in the community) (CONSERVATION OF MEANS).

Of the above (1), (2), (3), and to a great extent (5) are (a) constant and (b) instantaneous in the development of their characteristic increments. That is to say, the same result ensues from association whenever it is established, and it ensues at once. If the association can be established, the increment is always available. There is nothing erratic about the action of forces. Coal does not burn sometimes, and not at other times, in the same circumstances. The distance of the Sun from the earth varies seasonally; there is alternation of night and day, the angle of incidence of sunlight varies periodically; but green leaves transform the same amount of solar energy in the same way in the same circumstances, and if these circumstances are present the transformation is immediate.

There is no reason to believe that the same constancy does not attend every other kind of association; but, since the nature of mental action seems to involve DELAYED response (suspense of action—or of reaction) IN ITS END RESULT, it may be said that while the agreement increments are probably constant, they do not all display themselves instantaneously. Such considerations suggest that apparent variability in the results of agreement associations arises from our ignorance concerning the elements in effective association rather than from any other cause, *e.g.*, human “idiosyncrasy”, the “psychological factor”, *etc.*

The ease and success with which “government” of very large numbers of people by very few people has been practised during historical times suggests that accurate knowledge of a few relatively simple principles is of more effective consequence than ignorance of others more complicated in their nature. Without interruption throughout history, and with surprisingly few periods of a doubtful nature ‘strong’ governments have been the rule—that is to say ‘weak’ peoples have been the rule. The essence of government is

governing: a Norman word for a Saxon word, or rather a Norman termination for a Saxon termination.

It does, doubtless, require considerable imagination to picture what would at any time in the past or in the present have been the RESULT (as measured in terms of human satisfaction) of the free use of all the increments of association available to Man, if as many as possible were used advantageously. It is to be observed that every increment CAN be used *disadvantageously*. Thus it is possible to convert the mechanical advantage of a crowbar into a “disadvantage” by placing the fulcrum nearer to the hand of the user than to the mass to be moved. It is possible for nineteen men to tire themselves considerably by persisting in refusing the assistance of one man in a task for which the mass association of twenty men would suffice. Ammunition dumps can be exploded without reaping a useful harvest of work, and it is not necessary to dump the ammunition to secure the same useless end. Coal dumps can be made to evolve great heat; but it is not necessary for the energy thus made available to be converted into industrial power. Since wealth only displays itself IN CONSUMPTION the *productive* advantage arising from the division of labour need not result in any increase of wealth, for production can be dissociated from consumption. In considering the agreement associations it is important to realise that the fact that they *must* be effective (the increment of association: “every effective element in association is effective in its own way”) does not mean that they *must* be effective in securing any particular END. And, finally, in regard to the cultural heritage, it is of major importance to realise that at every past time since civilization began it has been affected by the operation of all these sources of DECREMENT; that what it would have been in the absence of this pruning is beyond imagination and that only advanced mathematical treatment could suggest even what KIND of diminution it has suffered in this process. For example, it has been asserted that the industrial revolution of the nineteenth century COULD have occurred in Europe in, at latest, the fourteenth IF certain agreement associations had not intervened to sabotage the mathematical and physical knowledge then accumulated by the Moors (Hogben).

Leave that for the moment. We have in this lecture to give some account of what the Syllabus calls “negative” aspects of wealth, and it is important in the first place to gain some idea of WHAT wealth is prevented, and HOW it is prevented, before the question WHY it is prevented can have much meaning for us. This is by no means an easy matter. In a jig-saw puzzle it is easy to see, when the available pieces are put together, that one piece is missing. One sees the empty space. It is difficult, unless you know how many pieces there should be, and count how many there are, to see that a piece is missing without putting those there are together. And it is impossible to guess all that may be painted on the missing piece. So it is difficult for most people to form any idea of the difference between what is and what there might be in regard to wealth (which, again, only displays itself in consumption).

The best we can do, probably, is to try to identify some of the ways in which wealth is prevented from expressing itself.

Although it discloses the answer to the question “why?”, which we ought not to consider until we are better prepared to understand it, you should read, in the first place, the sixth chapter of “Economic Democracy” (Douglas), and then the first twenty-six pages of Thorsten Veblen’s “The Engineers and the Price System”, and, after that, “The Great God Waste”, by J. L. Hodgson. But read to get some idea of the facts, and the intricacy of the facts, and the meaning of the facts from the point of view of the efficiency of human society as measured in terms of satisfaction to individuals (for all of those who support human society, or participate in human association, are individuals).

Do this first, from the objective point of view we have taken up in these lectures, before you begin to theorise about money. We have scarcely mentioned money up to the present, and it is as important to understand that the sources of wealth are NOT money as to understand what use is real wealth, actual or potential.

Douglas’s chapter, then, is as follows:

It will be readily understood that the difficulties which are seen to be inherent in the policy of super-production are only an accentuation of those with which we were only too familiar prior to the outbreak of war,* (1914-1918—Editor) and it may be contended and, in fact, it frequently is stated, that even with

the unemployment statistics at their minimum point and the nation at its maximum activity in Industry, there is still not enough product to go round. Recently, for instance, Professor Bowley has estimated that the total surplus income of the United Kingdom in excess of £160 per annum is only £250,000,000, which would mean, if distributed to 10,000,000 heads of families, £25 per annum per family, assuming that this distribution did not reduce the production of wealth.

The figures themselves have been criticised; but, in any case, the whole argument is completely fallacious, because it takes no account whatever of loan credit, which is by far the most important factor in the distribution of production, as we have already seen. What it *does* show is that the purchasing power of effort is quite insignificant in comparison with its productive power. But it may be advisable to glance at some of the proximate causes operating to reduce the return for effort; and to realise the origin of most of the specific instances, it must be borne in mind that the *existing economic system distributes goods and services through the same agency which induces goods and services, i.e., payment for work in progress*. In other words, if production stops, distribution stops, and, as a consequence, a clear incentive exists to produce useless or superfluous articles in order that useful commodities already existing may be distributed.

This perfectly simple reason is the explanation of the increasing necessity of what has come to be called economic sabotage; the colossal waste of effort which goes on in every walk of life quite unobserved by the majority of people because they are so familiar with it; a waste which yet so over-taxed the ingenuity of society to extend it that the climax of war only occurred in the moment when a culminating exhibition of organised sabotage was necessary to preserve the system from spontaneous combustion.

The simplest form of this process is that of ‘making work’; the elaboration of every action in life so as to involve the maximum quantity and the minimum efficiency in human effort. The much-maligned household plumber who evolves an elaborate organisation and etiquette probably requiring two assistants and half a day in order to “wipe” a damaged water pipe, which could, by methods with which he is perfectly familiar, be satisfactorily repaired by a boy in one third of the time; the machinist insisting on a lengthy apprenticeship to an unskilled process of industry, such as the operation of an automatic machine tool, are simple instances of this. A little higher up the scale of complexity comes the manufacturer who produces a new model of his particular speciality, with the object, express or subconscious, of rendering the old model obsolete before it is worn out. We then begin to touch the immense region of artificial demand created by advertisement; a demand, in many cases, as purely hypnotic in origin as the request of the mesmerised subject for a draught of kerosene.

All these are instances which could be multiplied and elaborated to any extent necessary to prove the point.

In another class comes the stupendous waste of effort involved in the intricacies of finance and book-keeping; much of which, although necessary to the competitive system, is quite useless in increasing the amenities of life; there is the burden of armaments and the waste of materials and equipment involved in them even in peacetime; the ever-growing bureaucracy largely concerned in elaborating safeguards for a radically defective social system; and finally, but by no means least, the cumulative export of the product of labour, largely and increasingly paid for by the raw material which forms the vehicle for the export of further labour.

All these and many other forms of avoidable waste take their rise in the obsession of wealth defined in terms of money; an obsession which even the steady fall in the purchasing power of the unit of currency seems powerless to dispel; an obsession which obscures the whole object and meaning of scientific progress and places the worker and the honest man in a permanently disadvantageous position in comparison with the financier and the rogue. It is probable that the device of money is a necessary device in our present civilisation; but the establishment of a stable ratio between the use value of effort and its money value is a problem which demands a very early solution, and must clearly result in the abolition of any incentive to the capitalisation of any form of waste.

The tawdry ‘ornament’, the jerry-built house, the slow and uncomfortable train service, the

unwholesome sweetmeat, are the direct and logical consummation of an economic system which rewards variety, quite irrespective of quality, and proclaims in the clearest possible manner that it is much better to 'do' your neighbour than to do sound and lasting work.

The capitalistic wage system based on the current methods of finance, so far from offering maximum distribution, is decreasingly capable of meeting any requirement of society fully. Its very existence depends on a constant increase in the variety of product, the stimulation of desire, and in keeping the articles desired in short supply.

Veblen remarks that in America stress has been laid upon the "less amiable" manifestations of sabotage (syndicalist sabotage: violent obstruction to the productive system) in order to discredit its use by workmen. He points out that this is unfortunate, for "it lessens the usefulness of the word by making it a means of denunciation rather than of understanding." But the pressure of events has widened the meaning since "manoeuvres of restriction, delay and hindrance have a large share in the ordinary conduct of business." "It describes a certain system of industrial strategy or management ... a resort to peaceable or surreptitious restriction, delay, withdrawal (of efficiency), or obstruction."

Observe, however, that all this is quite a different thing from natural limitations upon wealth, life and production. In the past these have been alleged to be the unwillingness, except under compulsion, of men to work. The displacement of this view has resulted from the growing unemployment problem and most people now realise that a shortage of available energy (capacity for work) is not the cause of poverty (a shortage of wealth).

Similarly, natural disasters, floods, droughts, disease affecting crops, variations of climate and weather, are of diminishing importance as scientific controls become more effective, available energy more abundant and transport facilities more rapid and certain. But no direct measure is possible of the total effect of sabotage and the restriction of production. We should expect that the latter is greater than the former, if Douglas and Veblen are right, and they are essential parts of our system, for destruction is evident and, with the possible exception of war, objection is raised to it by most who do not benefit artificially from it.

Nevertheless, an approximation (obviously a rough one, which falls far short of a correct representation of the full effect of restriction) can be gained from the fact that the reorientation of productive industry can be so quickly established on the outbreak of a modern war, that as many of the earth's inhabitants remain fed, clothed and housed as are fed, clothed and housed in "peace"; but an enormous volume of production is destroyed. That is to say, an approximation to the power of the community to produce wealth is made under war conditions, and at the same time there is a fall in the proportion of total production converted into consumable wealth of a desired kind (true wealth). The form of consumable goods is largely a matter of human determination. The chief differences between a torpedo and an aeroplane are differences of design. We might say, then, that *design* determines whether the population of the earth is rich or poor.

VI

In our modern community, the possession of goods (implying the possessor's ability to convert them at will into wealth by consumption) is related to three things:—

- (1) Availability of the goods.
- (2) The individual's desire to possess them.
- (3) His ability to pay for them.

We need not concern ourselves with the phrase "to pay for them" at the moment, beyond saying that it is usually interpreted in the sense of paying money for them. If the individual stole them, he may be said to pay for them in terms of personal insecurity.

In any case, this condition boils down to one involving what is called "cost". It is of great importance that we should examine this notion carefully, and attach, if possible, a precise meaning to it.

Note that it appears that the “cost” or “costliness” of goods and services is something that may operate to prevent individuals from converting them into wealth. It seems to be a potential limitation upon association effectively to satisfy individual requirements. It is therefore a Social Credit factor. We must decide whether it is a natural or an arbitrary factor. In a state of nature do things ever “cost” anything? Or is it only in human association that they are endowed artificially with this property? We must remember that current usage gives “cost” another meaning than a purely monetary meaning. Things are said to be done “at the cost of great effort”. But this is only to say that effort is sometimes required to effect a result. It would serve our turn to say that the thing done was hard to do.

The notion of “cost” is obscure. One can go back to Imperial Roman times—probably much further—without finding anything but double-meaning in the words used for cost, and rather significantly, the same double-meanings persist today. Thus *sumptus* meant cost and also expense; *impensa* (from *impendo*, I lay out) expense, outlay, cost; *praemium*, that which is taken *first*; advantage (which, in the natural world, is not taken first but *at the time* an association is effected). The word also meant gain, profit (the increment of association), an honourable reward, recompense, a promise and (ironically) *punishment*. *Merces* meant wages, hire, pay, fee, salary, reward, interest, rent income. It also meant *punishment*. *Caritas* meant costliness, dearness, high *price*, scarcity of money, and also affection and the dearness of *e.g.*, one’s children; while *carus* signified high-priced and also dear and beloved.

There is no natural connection between the high price of (say) tomatoes and natural affection. The rest of the meanings indicate either the plain effects of monetary customs (agreement associations) *e.g.*, the reward for services in negotiable money tokens instead of in kind, or they are ironical.

Legend attaches to the discovery of fire-making the punishment (said to have been for theft) inflicted upon Prometheus, whose liver was eaten in the daytime by birds, regenerating at night. This suffering might be regarded as the “cost” of the fire. Quite another “cost” of fire is the fuel to stoke it. This, however, only transfers the “cost” to the fuel. If the “cost” of the fire is its fuel, what is the “cost” of the fuel? Did the invention of money render costly what was costless before?

The cost of fire to Prometheus was a penalty arbitrarily fixed by divine decree. If we go back to our treatment of the distinction between the two kinds of law, the laws with variable sanctions attached to them and those (scientific) which are *altered* by breach, we may gain some useful notions of “cost.”

Let us suppose that the gain of wealth is invariably accompanied by penalties exacted from the consumer. A few minute’s work in our “laboratory” will show that this is untrue, for instances of wealth will disclose themselves to which no obvious penalties are attached, *e.g.*, the wealth generated by the consumption of fresh air and sunlight. Also, natural associations yield their characteristic increments unbidden, whether the appropriate associations are established by accident or design, and independently of the agency establishing them.

Wealth itself is the increment of such an association, and ensues from association between consumer and the thing consumed. Wealth, therefore, is costless: a notable conclusion.

If we look around, however, we shall soon discover that the same distinction as we established between consumable goods and wealth holds in regard to cost, and penalties *are* exacted for the accumulation of consumable goods—natural penalties.

We must guard against assumptions. To discover whether or not a penalty of any description is *naturally* attached to goods and services is not to discover the nature of the penalties or the names and addresses of the natural payees. Natural penalties are not, in fact, payments made *to* anybody. They are the natural conditions in which a desired result may be secured.

Let us take, then, any desired result and see as far as we can what are the natural conditions in which it may be secured. Broadly, they are the establishment of the appropriate associations.

Take the case of a loaf of bread. Loaves of bread are consumable goods, resulting, under modern industrial conditions, from a long and complicated train of associations, *e.g.*, the cultural heritage

(knowledge of effective methods of irrigation, breeding of desirable strains of wheat, the discovery of the aerating properties of yeast, natural mechanical principles embodied in the construction of machinery for mixing and transportation, fire-making, the modes of rendering heat energy available, the art of brick making, traditional knowledge of the behaviour of artificially implanted grain, and so on.) No natural observable penalty is exacted in regard to any of these associations or their increments, unless it is the penalty of having to do work to establish the associations anew in order to profit by them. Energy is the capacity for this work.

We may say, then, that the penalty exacted for using the cultural heritage (which, we see, is a large item in the production of a loaf of bread) is the work done by men in establishing the appropriate associations. Let us say, for it is the traditional symbol, that bread itself is the source of the energy providing the capacity to do this work. In other words, the cost, or penalty, exacted naturally, here is consumption by living men engaged in establishing the appropriate associations made available by inheritance. A part of this cost may have been “paid” in respect of some men who have died, let us say, since they established the appropriate associations for producing bricks or some other part of the capital equipment of the bakery.

If we take the land on which the wheat is sown, there is no discoverable penalty attached to its use. If there were, we should have to say that man had to pay a natural penalty for living. If we consider anything done to the soil, either to drain, clear, or irrigate it, or to increase its fertility, we find that the natural penalties here are the same as before; consumption by the men involved of energy-producing substances.

So in regard to transport of grain *etc.*, so in regard to the actual making of dough and the handling of it in cooking; so in regard to the wood or coal for heating ovens: the natural penalties exacted are the sum of consumable goods consumed throughout the process. These consumable goods are not all bread; nor strictly, are they all energy-producing: they may be goodwill-producing, increasing efficiency in the application of energy available or determining the direction of its employment. The consumption is of produced goods. Thus we may say that in regard to physical realities:

THE TRUE COST OF A GIVEN PROGRAMME OF PRODUCTION IS THE CONSUMPTION OF ALL PRODUCTION OVER AN EQUIVALENT PERIOD OF TIME.

As everybody knows, a standard method is in use of evaluating cost in terms of money. Before we try to discover the correctness or otherwise of the use which is made of this method, let us try to see what is involved.

It is always better to take very simple cases whenever the objective is to discover fundamental principles. The modern industrial system is complicated, and it is fatally easy to lose track of the events occurring within it and of their real meanings.

Suppose we go to that paradise of economists, an island. Let it be an island where coconut palms grow, and where a small population subsists entirely upon fruit. The pulp, let us say, provided the people with food, the shells with houses, the fibre with clothes. If the island did not produce enough for a large population, the excess of population would die, so we need not concern ourselves with the sufficiency of production. If the population of the island cared to concern themselves with this matter, they might increase production and increase their own numbers, though doubtless not indefinitely.

In this case, the cost of production of all the coconuts of the island would be all the coconuts of the island, or the cost of a coconut would be a coconut. But suppose the islanders to be capable and willing to produce more coconuts than sufficed for their needs, let us say twice as many, then the production would be twice the consumption, and the penalty exacted for making two coconuts available would be one coconut. It is never possible for the mean consumption rate to be greater than the mean production rate in any period without there being a source of goods not revealed in the production figures—that is to say without extending the period considered to cover an excess of production of goods which could be stored.

Now this is a very remarkable result, which must surprise some of us, who have so prominently in our minds notions of equity that we recoil from the plain fact that it is possible for the true cost of a volume of

goods to be a fraction of the goods. We are in the habit of thinking that since one coconut is as good as another, more or less, no exchange is equitable that is not on the basis of coconut for coconut. Yet it is evident that in certain circumstances, namely a higher mean rate of production than of consumption, the true cost of production is a fraction of itself.

Now, we do not need to know much about money to see that if the islanders are “rewarded” (quite unnecessarily in this case) for their production of, let us say, a hundred coconuts with a hundred little pieces of paper, upon each of which is written a letter “M”, the “cost” in “M’s” of one hundred coconuts is one hundred “M’s”. To quote from C. H. Douglas:

“The true cost of a programme of production is in general not the money cost, but considerably less than the money cost, and a given programme of production can only be distributed to the buying public if sold at its true cost.”

Why? In the case of the nuts an “M” represents the *monetary* cost of one coconut; but one coconut represents the *real* cost of two.

Now, it goes without saying that no estimation of the “power to produce the result intended”—*i.e.*, the efficiency of a system can be correct that is based upon a wrong standard.

The productive system is producing the results intended by those who participate in its working, when it supplies the goods and services they require with a minimum of trouble to themselves. If the requirements are to be satisfied, consumption must be continually expanding and if consumption is continually expanding, true cost is continually expanding, and so must production be, for consumption cannot occur without production. Efficiency cannot be measured, therefore, by the degree to which increased production can be secured without increasing consumption—“keeping down costs.”

It is the “minimum of inconvenience” clause that reveals where an index to efficiency must be sought. To measure the money costs does not establish “efficiency”. A falling money cost indicates the degree to which the consumers attached to industry can be reduced in number without reducing the volume of production.

What kind of a statement would interest the community in regard to these matters?

Clearly one which showed the real, actual and potential income of the community as measured in consumable goods and services, and the real expenditure as measured in consumption. A material item on the first account would be the degree to which the power of the community to produce had been extended—not by the addition of additional workers, but by the increase of their powers *per man*. Covering a long list of items, this may be called capital appreciation. Owing to the nature of the cultural heritage, it is naturally much greater than its opposite, capital depreciation, which is chiefly the wearing out of tools. There is a depreciation of the heritage through the inability of the community to transmit accurate and sufficient records of the means whereby various increments were discovered. It transmits chiefly the results. But this decrement is certainly not preventable at present, and may never be so.

No balance sheet of the kind indicated has ever been constructed, at all events in regard to the total availability of wealth in a developed community. This essential information concerning the true state of efficiency of social organisation has been unsought and un-tabulated.

Clearly it is a matter which affects very closely the power of men and women in association to make the most of association—*i.e.*, of society, and it is a scientific rather than a cynical inference to draw that the reason must be that the origin and purpose of human association have somehow been obscured in the sense that the only possible motive which man could reasonably entertain for associating—to gain the full increment of association—has not been allowed to operate. This matter will be pursued in the next lecture.

ADDITIONAL NOTES

What is the meaning of the excess of production of coconuts on the palm island?

(1) Leisure for a period covering their consumption.

(2) Applied to a more highly organised productive system, the consumed nuts and the unconsumed nuts may be taken to represent consumable and unconsumable goods. Then total product = the sum of consumable *plus* non-consumable goods. Total consumption = sum of consumable goods only. Non-consumable goods cannot enter into consumption.

True cost of non-consumable goods, therefore = a PART OF CONSUMABLE GOODS.

True cost of consumable goods = *the OTHER part* of consumable goods.

Many people have in their minds the picture presented by the over-elaboration of the means to produce (production of capital goods, through some misdirection of effort) and consequent diversion of effort from production of consumable goods. Not only industrial mal-adjustment but financial and political factors may determine such an event. BUT NOTE THAT, IF CONSUMPTION IS REDUCED, THE TRUE COST OF TOTAL PRODUCTION IS REDUCED, and willy-nilly the community has provided itself with assets the true cost of which is already covered.

(3) Note that neither individuals nor the sum of individuals in the community can go into “debt” for cost. If cost is consumption, it is “discharged” on consumption. If consumption goods are available they can be consumed, not otherwise. Tomorrow's dinner may be small or nothing, but it cannot be eaten today: it becomes today's.

(4) People (other than expert producers trying to gauge future demand) worry about what “ought” (ideal conception) to be the relationship between capital and consumption goods. The answer is the “correct relationship” as indicated by the availability of goods for consumption. It does not matter what the degree of elaboration of means to produce is, provided they are correctly related to the “power in association to produce the result intended” (that is to say, intended by those associating). Their intention may cover economy of effort and of resources. Only they know.

VII

Unless you have thought a good deal about the subject matter of the preceding lectures it may not be apparent that while the vast complex of associations involved in what is broadly termed Human Society (with capital letters) has been stripped bare of ideal elements, nothing actual has been touched or altered or belittled in any fashion.

Even if some of them have received only a bare reference, all the means whereby the individual may receive wealth or contribute to its production for himself or for others have been submitted to observation. Not one of them has been dislodged. No disrespect has been paid to any of them. The bloom is still on the grape, without so much as a finger-mark to mar it. The actual data of human experience are intact and undisturbed. No mental association has been condemned because its resultant in human satisfaction might be negative, with one exception, and that not because of its effects but because our examination of other instances of association shows it to be unnecessary and gratuitous. We must not invent unnecessary terms in associations just to please ourselves. Nothing ensues from them as increments, although something may ensue from our invention as an increment. The right name for such an increment is error, as surely as if a figure were invented to read into a column of figures in an addition sum.

Each effective element in an association is effective in its own way. Whenever we are able to trace observable results in nature, phenomena, to the associations of which they are the increments, we find, not the total of associations, but simple effective associations. It is not an abstraction, association in general, that yields increments, but individual concrete instances of association, each yielding its own increment. Human Society is an abstraction of this kind, and it is only the idea of it as an individual instance of association that is capable of yielding any increment. That is to say, Human Society acts, when it acts at all, as an idea capable of associating with other ideas to yield an ideal increment. This increment, being ideal, must be generated in individuals, since the only things we know capable of entertaining ideas are human individuals

(whether or not some other animals can is immaterial, since among them the same kinds of phenomena would ensue, and we should only extend our study of society to cover animal association if we took notice of this matter). The biological function of ideas is to assist their possessor in living—or, as someone has said, “the biological end of life is action, not thought”. Possibly, the entertainment of an idea may give satisfaction of some kind to the individual who entertains it; but from the point of view of the Social Credit this is irrelevant unless, directly or indirectly, action (behaviour) is affected. Thus, for us, ideas may facilitate, postpone, inhibit, direct, prompt or otherwise provide the means for either more effective and purposeful action or for inaction, and, so far as we are concerned, action can only be taken by individuals. In a mass association it is individuals who act together at the same time, and in every instance of the division of labour, whether in the factory or in the various “bodies” which function in the community, individuals are concerned in all the doing of things, even if the doing is only the contacting of a switch or the signing of some threat of penalties against an associate member of the group.

It was in regard to the cultural heritage of man that we found the most definite association of an increment with the whole range of human life and with its continuity in Time. We may, therefore, examine the phenomenon of the cultural heritage again from this point of view (the abstraction called Society). If we do so, we must seek for instances of the cultural heritage (*i.e.*, not the abstraction, inheritance in general). So, quite apart from the fact that the case breaks down at the start, our attention is again directed to constituent associations, yielding their characteristic increments. Let us take the case of water transport. The present generation has inherited knowledge of the means of passing across the Atlantic in less than five days, without discomfort, except such as is inseparable in some individual instances from particular kinds of enforced movement, and in relatively large communities at a time, without great uncertainty in regard to the keeping of appointments. It would be hard to suppress the essential parts of the knowledge of how to do things from which this convenience arises, although the date fixed for the launch of the next large ship may, by agreement, be a very moveable feast. By far the greater number of individuals now living know next to nothing of any of the details entailed in the construction of such a ship, and if the total accomplishment is analysed it will be found to embrace an amazingly large number of items, which no one living understands in their totality. It seems then to have been a very tiny stream which bore the knowledge of how to do all the things done in and for the *Queen Mary*, and to say that Human Society was this tiny stream is to exaggerate the part into the whole.

Yet it is said that there are still identifiable in the *Queen Mary* elements peculiar to the construction of the first ships that ever sailed, thousands of years ago, and it is only within living memory that other significant features of naval architecture have at last fallen into disuse. What, for example, had “Human Society” to do with, on the one hand, the designer who at last reduced the figurehead to a neat, meaningless gilt scroll on the bows of the last ship to carry it, or, on the other hand, is there to be found recorded the decision of “Society” to discard it altogether? These were individual actions taken, possibly in consequence of discussion prompted by the same or some other individuals who voluntarily raised the question. If in addition there operated some factor inextricably associated with the phenomena of the descent of culture from time to time, it, in its turn, was an increment of association which we might fruitfully study. It was not an abstraction. It was not “Society”.

We said that the increment of association of cultural inheritance was increased knowledge of how to do things, and that its essential feature was the conservation of means. This intense conservatism operating to retain as a visible element in human culture items which originated in the distant past is represented in Africa by a cross bar of wood affixed to the bowsprit of canoes. From the natives who build their boats in this way, no elucidation of the meaning of this transverse bar can be gained, and their profound ignorance of its meaning is only surpassed by the intensity of the superstitious reverence accorded to it. But this fear of losing what may once have possessed practical significance is not “Society”. (It is suggested that the bar described is a representation of the horns of horned cattle. When it was discovered that a cow’s milk was not poisonous to Man, a special significance was attached to this animal, who, having demonstrated her virtues as a foster-mother, was deemed to be capable of affording protection to the daring navigators of the first ships. Hence the figurehead. The elusive sea-maiden still remembered on the bows of wooden ships was her cultural descendant). Before 1693, while money still represented at least the goods consumed in making it, the symbol for the Pound was a small letter “l” with a line above it, indicating that the “l” stood for a word. An old merchant’s journal of 1693 in the possession of the Bank of England contains the first known use of

a *capital* L, with a line or lines drawn *through* it. The graceful lines of the modern symbol are well-known.

Even in human society, natural laws cannot be suspended. Men and women can apply their knowledge of natural associations, or they can neglect to apply it. They can increase it, or they can diminish it by forgetfulness or failure to transmit it to others. They cannot alter the natural increments of associations which they establish or which are established without their aid. You remember: "For every action with which we are acquainted, action and reaction are equal, opposite and wholly automatic."

So, to the action indicated by the persistence of cultural elements, there is a reaction which is equal and opposite. It is abundantly shown that these "forces" maintain a dynamic, not a static equilibrium; the heritage increases: the system moves.

What maintains its motion is direct perception of advantage and the opposite is absence of direct perception of advantage. The perception once gained is not, evidently, the only effective element in the association which conserves the flight of culture down the ages. The bowsprit and the figurehead have almost the same "momentum" as the ribs, the keel and details of the rigging. Once there it is *actual*; it may almost be said to induce perception of advantage even when there is none.

This is evidently a matter affecting the mental attributes of Man. What is material is that something has to be done to induce action in the absence of perception of advantage (direct perception) and that equally something has to be done to inhibit action which is customary, even in the presence of direct 'perception' of disadvantage. But this is strictly impossible, since it implies perception of a negative. What individuals can perceive is discomfort, not disadvantage, and to be prevented this result must be traced to some definite association. Ineffective associations get, as it were, an acquittal. But all associations are, and must be, effective, and what actually occurs is that an association once "acquitted" of generating some disagreeable increment is acquitted of responsibility for generating any increment at all.

We should inspect then with particular care the 'discharged' among the accused, and among the discharged, remember, is "Human Society", the redundant abstraction which we have found it to be: a whole greater than the sum of its parts. One thing that may be more disastrous to Man than the discovery and application of new associations is the false ascription of increments to old ones. Relieved of the necessity of delivering the goods supposed to ensue from them, they have a free hand to go into business on their own. (This is metaphorical; but it is not flippant).

"The evil that men do lives after them;
The good is oft interred with their bones."

Unfortunately, we have not far to seek the increment ensuing from this freedom in the case of the ideal "Human Society". It is true we have not yet proved the evil nature of its increment, and indeed such matters are properly left to individual judgment. What we have to do, in relation to the matter, is to describe the increment.

It was stated earlier (Lecture 2) that men had been able to contrive uses for what happened naturally apart from themselves by varying the variable elements in natural associations. To contrive USES. The increments of association are useful to Man. His interest in them, when it is aroused, is because of their use to him. They, apparently, are incapable of showing interest in him. They develop independently of him, and he cannot be said to be of use to them.

Yet, by the device of inventing a superfluous master association, writers, not only in Germany and Italy but all over the world, have constructed an abstract entity, "Human Society", which, under many aliases, men are alleged to exist in order to serve. Thus the conservation of Society, the State, the Nation, the Empire, the Profession, the School, which are all more or less comprehensive instances of association from which normal increments should accrue, are all converted into objects for the service and attention of Man who is indeed said to find the true justification for his existence in the support and service of these abstractions. We are still not concerned with what should be, but with what is, and it scarcely needs demonstration that here, making all allowance for the importance of the preparation and conservation of

means, what has occurred is the substitution of means for ends. Measured by some standard unknown to him, which therefore he is incapable of estimating in regard to its correctness or authority, it may be that Man “ought” to find satisfaction in results with which he is dissatisfied. The matter is incapable of settlement. The fact is that once such a standard is arbitrarily defined, it is a matter of power whether or not it is successfully imposed as the objective of men’s efforts. That is to say POLICY is a matter of power and determination. The word is often misused, or used misleadingly. We mean by it the end, or result, to attain which associations of all kinds are established. An element and a necessary element, therefore, in estimating the efficiency of society is acceptance of some standard in this sense.

Efficiency, remember, is the power to produce the result intended. A community whose accepted policy is tyranny is functioning efficiently when tyranny is most complete and all-embracing. It is generally believed that all associations are established in the first instance for the benefit of those establishing them. If this is true, it is apparent that many associations are preserved in action when their original intention has been reversed.

Since the power to produce an intended result cannot be estimated until the intention is known, any estimation that is made of the Social Credit at any time must be made in regard to a clearly expressed policy.

Society has no objective, since it is an abstraction. Only men and women are capable of entertaining an objective (and, of a more limited kind, some animals, no doubt). This objective is, even when it concerns other persons, in the last analysis, a personal objective, or multiplicity of objectives. The sum of these can be correctly represented in the sum of individual *actions* in an environment affording the individuals concerned free choice of all available courses of action.

VIII

In 1841 there was published “The True Law of Population, Shewn to be Connected with the FOOD OF THE PEOPLE”, by Thomas Doubleday, described as the author of “Financial History of England”; “Mundane Moral Government”, *etc., etc.*

The title page of the third edition of 1853 bears these quotations:—

“But the more they afflicted them the more they multiplied and grew (*Exodus*).

“Old families last not THREE OAKS.” (Sir THOMAS BROWNE).

“*Steriliora cuncta pingua et in maribus et infeminis.*” (PLINY) (Which may perhaps be very freely translated “The fatter the fewer”.)

Without entering into the features of Doubleday’s “law”, his book ends with the claim that he has reached his conclusions by “the sure though slow method of induction”, and the statement that “Through life he has found that the heart is often to be believed before the head; that there are implanted in the human bosom still-voiced monitors, dim, perhaps, and obscure, but never to be despised; and that the profoundest philosopher ought long to hesitate before he says ‘no’ where nature whispers ‘yes’”.

Surely! We must guard, however, against confusing the human linguistic statement of “law”, even in so-called “natural” law, with the natural whisper. Nature never spoke Latin, Greek, or any of the languages known to us as such, and though her “whispers” are often heard, her important utterances are often unaccompanied with sound of any kind. What nature says, even when she speaks with the human voice, is of much less importance to man than what she DOES. Doing (events) may be said to be her native language. Although the chalk may fall from the hand while it is being written, nothing else falls because the formula expressing the law of gravitation is written on the blackboard. The motion of a falling body is Nature’s whisper, not the formula. Formulae of all kinds are mere instruments which Man has devised, and is continually devising, to increase his effectiveness in arranging new combinations of conditions in which natural action may occur—*i.e.*, to increase his power to produce the result intended as measured in terms of his satisfaction. When they do this, their function is discharged; when they don’t they are useless if not obstructive. Formulae of all kinds economise in the time men have to spend in “guessing the right question”,

to put, as it were, to Nature, in order to obtain a serviceable answer. Nature's language is action, and she only listens to questions put to her in her own language. These she never fails to answer; but if the questions are ill-advised, idle, irrelevant questions, the answers may be correspondingly uninteresting or useless.

There are many kinds of formulae; sentences in Latin, Greek, German or English, logical formula, mathematical formulae (a special kind of logical formulae), chemical formulae, plans and blue prints, *etc.* Their correct use lies in their capacity for saving time, making short cuts in action. Very often this action would never occur but for the short cuts that have been made to it, for example a modern wireless set would not have been likely to occur accidentally from haphazard movements of matter; it has a long ancestry of contributory achievements, each of which has been reached largely because of the extensive use of the "short cut" method of formularising or formulating, before a question is put to Nature in her own language.

This instrumentality of formulae is itself a precise notion profoundly affecting the Social Credit. A great deal that we may witness in human association appears to arise from the conviction on the part of somebody that Nature has been very foolish in not listening more attentively to Man, for example, the view frequently expressed (though not always with complete intelligibility) that it is chiefly the arguments of the more profound idealistic philosophers that have prevented Nature from making mistakes gravely affecting human happiness and even placing the continuity of the Human Species in great danger. This view is capable of statement in another way, namely, that in producing Man, Nature has produced a creature only a minority of whose individuals are viable independently of the rest. The point here is not the defensibility of the doctrine that in our complex society (or any other) some men need care, but the rarity of the occasions upon which the matter is put to the test of natural experience.

We may instance one more "law", extensively known under the title "The Law of Diminishing Returns". This was originally derived from agriculture, but has been given an extended application. Briefly it is a statement of the fact that in certain circumstances the application of greater effort does not affect a proportionately greater result. All that can be usefully said at the moment about this matter is a repetition of our statement that every effective element in an association is effective in its own way. Since it is a matter of observation that the result attained varies, the truly scientific thing to do about this variation is to trace it to the variable element in the association concerned. The construction of a list of such variables would be of more importance than the questionable generalisation that returns sooner or later diminish in proportion to the effort made to secure them.

The ideal effect of Doubleday's statement of his law of population was to fortify the conviction that the establishment of a strong middle class secure of income and limited and constant in number, was in accordance with "natural" law. The ideal effect of the statement of the law of diminishing returns is to fortify the authority of those who assert of any fall in the rate of profit-earning (fall in the expected increment of association) that it is "natural" and arises from the "operation" of the law . . . NOT, be it noted, from a variation in the terms, or elements, in association.

Since all *statements* of law are strictly ideal in their nature, we should expect them all to have ideal increments as shown in the last lecture. In regard to correct formulations of natural laws, the real increments will be evident. Incorrect formulations will yield no real increments, but they will yield ideal increments, and these will be disproportionately effective.

To use Doubleday's remark; these ideal increments are the basis for the philosopher's lack of hesitation in saying "no" where Nature whispers "yes!"

We have seen something of nature's "yes" and its emphasis in regard to the physical availability of wealth. Since the opposing "no" is a matter of importance in estimating the Social Credit, it is of interest to trace the history of what we may call "no-production". The motive for seeking instances of natural law in the working of society is advantage. Any precise knowledge of the application of law in society will yield advantage to those who possess it, and possibly to others.

It is therefore a curious fact that the search for the origin of the increments of all kinds of association has led to the identification of very few which could be termed either Social or Economic. The attempt to

discover “laws” for Society (or association) or for wealth-production and distribution has been beset by pitfalls of which possibly the deepest is the ideal doctrine that because Man is Man, mysterious and incalculable, subject to wide variations in regard to his aptitudes, tastes, wishes and desires even within the single individual, there cannot be much precision in any account of his movements. In comparatively recent years the growth of the doctrine that Man as an organism was susceptible to scientific study had the effect partly of displacing but also of strengthening the view that even if one could estimate his physical temperature within narrow limits, it was quite impossible to estimate his political temperature, or his economic temperature, *e.g.*, the intensity and direction of his demand.

Closely associated with this line of argument was a strongly marked tendency to try to do just what was said to be impossible of performance, and “laws” of economics began to gain currency often with little more to recommend them than that they were themselves arguments for the material “lawfulness” of Man. Even when these “laws” were loosely stated and of doubtful application they were often lumped together, the adjective “inexorable” was affixed to them in bulk, and they were used to dissuade men from doing what could physically be done—a practice which is not the most convincing testimonial to their “inexorability”. More apparent still is it that the phrase “economic law” was widely used in the absence of any definition of “economic”.

The claim has been made for our study that it is a scientific study and that it is exact. If, then, it is admitted that one cannot measure immeasurable quantities or qualities, this claim must appear absurd unless it can be shown that it is not necessary to try to do the impossible in order to reduce to intelligibility matters affecting the power of individuals in association to produce the results they intend to produce.

An enormous development and expansion in the use of statistics in recent years is associated with the public presentation of data of a politico-economical kind, and it is to be noticed that the method largely followed in this alleged scientific search for means of public betterment is of a kind which departs in essential particulars from the methods which led to the development of more materially productive studies such as chemistry and electricity. Neither of these great bodies of knowledge began with a mere counting of, as it were, chemical or electrical “heads”. Taking not quite, perhaps, its first beginnings, each of these studies was initiated by an enumeration of the NECESSARY entities (*entia*) which forced themselves upon the recognition of investigators. It was very strictly held before the minds of these men that it was something akin to sin to admit any such entity to recognition except under pressure of necessity. The origin of the clearly formulated injunction to the contrary in the fourteenth century is one of the greatest cultural inheritances of later times: *Entia non sunt multiplicanda praeter necessitatem* (things are not to be multiplied beyond what is necessary). The author was an Englishman, William of Occam.

In strict accordance with this profoundly important principle, re-stated inaccurately and ineffectively by Newton to the grave embarrassment of scientists ever since, the behaviour of matter chemically and electrically forced investigators to take cognisance, not of the named features visible to previous ignorance, but of a few *unnamed* terms, the elements of association to which each characteristic increment was constantly traced. So every science elaborates a necessary nomenclature peculiar to itself. The names are arbitrary like the names given to the chemical elements, carbon, hydrogen, oxygen and so on; atoms, molecules, volts, ohms, electrons. When necessity operates no longer in the minds of investigators, such entities are discarded, and knowledge is advanced, being always the greater, the fewer its parts.

So each science finds the bases for its own standards of measurement. Once established there is precision, before there is none. Before this process is fairly advanced all fields of experience present the same appearance of lawlessness. There is no reason why every possible field of experience should not in its turn discover its own relevant standards: what is fairly surely indicated is that they will not be the cast-off clothing of some already developed science. (The present unsatisfactory position of the science of biology is probably due to neglect of attention to this consideration).

It is Douglas’s great contribution to Life and Science that he has discovered the NECESSARY notions pertaining to the wealth of individuals in Society (all forms of wealth) and has elaborated relevant instruments for dealing with them. One, which we must particularly consider here, is the notion of sufficiency. You will remember that in dealing with MASS and mass associations, we drew attention to the

constant feature that these became instantaneously effective when there was a SUFFICIENCY of the elements acting in association. There is nothing in nature more precise than this. It is merely indicative of a state of mental confusion to say that because some totally dissociated and irrelevant fact or facts have not been given numerical representation this quality of being “enough” is somehow indefinite. It matters to no one *what* other measurable quantities are lying about, unless estimation of them is desired upon some other ground, the testing of mass associations by their result is a method of precision and as such it is known to everyone. How much is enough production? How much is enough consumption? How much is enough money? What is the rate at which this should occur? What is the rate at which that should occur? The precise answer is “When it is enough”. The natural question arising is again the right question: “enough for what?” Enough to secure the intended result and this depends upon individual action revealing it in an environment in which all possible action is permitted to occur.

When these factors operate, social organisation is complete and natural. Inherent forces will determine the whole life and later history of Man. Notice that there may be an alternative answer to the question “Enough for what?” When that alternative answer is the answer given organisation is incomplete and arbitrary.

ADDITIONAL NOTES

The uses made commonly of sufficiency as a method of precise measurement are numerous and it is possibly on account of their very familiarity that their applicability to problems of production, markets, *etc.*, was not readily seen, even after Douglas had drawn attention to this principle.

- (1) The ball-valve control of cisterns; there is enough water when there is enough water: (the rise in the level of the incoming water shuts off the incoming water by lifting a float.)
- (2) In domestic cookery ingredients are added until “there is enough” to secure some identifiable result, *e.g.* colour, consistency, *etc.*
- (3) In medicine drugs (*e.g.*, digitalis) are “pushed” until a definite physiological result is secured, *e.g.*, fall in the rate of beating of the heart.

IX

At the close of the last lecture it was emphasised that only individual action in circumstances affording free choice of action within natural limits could reveal the true policy of a community.

Sufficiency, as a method of precise measurement, is related on one hand to policy, to the objective the attainment of which is intended, and on the other hand to mechanism. If we examine again, the instances given last week of the adoption of the sufficiency method in our present society, we shall see that this is so in each case, and following the inductive method we may test it over and over again in other cases. The instances were:

- (1) The ball—or float-valve control of cisterns.

Enough water to raise the float to a level at which its own movement shuts off the supply = enough water in the cistern for the purpose intended. By bending the arm carrying the float, the height of water necessary to secure closure of the valve can be varied. Note, however, that the mechanism, however adjusted, is a COMPLETE mechanism. The associations involved in its invention and use are agreement associations. The associations involved in its mechanism—in its actual working—are natural mechanical associations. In all its aspects it shows the influence of the cultural heritage, *e.g.*, in the mechanical associations conserved in it, in its labour-saving motive, in the frequency of its occurrence as a working mechanism in use, revealing inherited customs related to the uses of water for cleanliness and sanitation, in its conservation of many details concerning the art of metal working.

- (2) In the case of ingredients added in domestic cookery until “there is enough” to secure some identifiable result, there is the same completeness of the mechanism, however simple—mechanical

stirring with a spoon—and the same definiteness in the result (which may be only a partial or contributory result to the objective entertained—*e.g.*, properly modelled and palatable decoration on a cake).

(3) The medical use of some drugs shows the same features.

Notice that in case (1) the fact that how much water flows into the tank may be unknown, the fact that how much water flows out when it empties completely may be unknown, the fact that how much water is necessary to lift the float to the effective level to shut off the supply may be unknown—not one of these facts interferes in the least with the effectiveness of the mechanism, with the frequency of its use in practice, or with its adjustment to secure some slightly different INTENDED RESULT. Just as surely, the fact that the inflow has not BEEN measured, and the outflow is not GOING TO BE measured and no one IS MEASURING the volume of water in the cistern—all this does not prevent anyone from measuring it if he wishes to do so, and knows how to do so;

BUT IN EACH CASE THE MEASUREMENT WILL BE EITHER THE MEASUREMENT OF A GIVEN INSTANCE AFTER THE MECHANISM HAS WORKED, or IT WILL BE A MERE EXPECTATION OF HOW IT WILL WORK AGAIN.

Take a simple instance affecting human consumption of consumable goods: suppose it is desired to ascertain how many buns are enough to supply the requirements of ten children at a party. We must rule out all opinions concerning what OUGHT to be the requirements of the children, *e.g.*, the baker's opinion, based, possibly, upon his need to gain a livelihood, that ten children OUGHT to want sixty buns; the entertainer's opinion, based upon financial cost, that they ought to want thirty; the collective opinion of the children's parents that they ought NOT to want enough to make them ill; and a dietist's opinion, based upon a supply of data and calculations involving the children's need for energy-forming substances that the RIGHT number is seventeen and a half. We must also rule out the polite expressions of the children themselves, who have been taught to say "No, thank you". It seems, now, that we have ruled out everybody concerned and, in so far as opinions are concerned, so we have (though there may be a train of other individuals behind the baker and parents, *etc.*, who also think that bakers OUGHT, and that parents OUGHT, *etc.* We must ignore these).

The fact is we can only ascertain the answer by letting the children, free from all restraint or, on the other hand, inducement other than their own wishes, eat buns as much as they like. This implies NO restrictions, and since exhaustion of the supply would be a restriction, there would have to be some buns left at the end of the experiment. At present, it is probable that only certain sweet manufacturers who apply this method to their work-girls, know, as an average, the real demand for sweets, and they only know it AFTER the sweets have been consumed and in circumstances where, no doubt, the desire to cope with the wage-earning amount of work is to some extent in conflict with the pleasures of idleness. (It is said the girls in these circumstances soon lose their taste for sweets, at all events in unhealthy quantities, and may perhaps lose it altogether). Now, let us suppose that the children of our experiment ate nineteen buns, thus falsifying the predictions made on their account or in their interest (as estimated by others), this would be the RESULT REVEALED BY INDIVIDUAL ACTION IN AN ENVIRONMENT IN WHICH ALL POSSIBLE ACTION WAS PERMITTED TO OCCUR. Organisation would be complete, as in the case of the cistern. Enough buns would have been shown to be nineteen in number, and if the experiment were repeated this number might never recur again. The effective objective of the experiment was the satisfaction of the children's demand for buns.

Strictly, the real objective of men and women in association can only be revealed in a similar way. If it is assumed that the objective of men and women in society is government (or tyranny), or if, on the other hand, it is assumed that it is the gain of the maximum of wealth possible with the least inconvenience, the FACT can only be ascertained by an initial acquirement of a SUFFICIENCY OF FREEDOM. A sufficiency of freedom, in this sense, has never yet been acquired by men—that is to say, by anyone at all, so far as we know. The point must not be obscured by reference to a lonely man acting in circumstances of great natural or artificial restriction in regard to permitted action. We are not considering the lone survivor of a shipwreck, but the multitudinous survivors of some thousands of years of civilisation. The circumstances of

the one are admitted to be disadvantageous. The circumstances of the peoples of the world are alleged to be advantageous. And we must not lose sight of the fact that the actions (if we truly knew what they were) of the lone man on a raft would probably disclose faithfully what his objective was, even if it were not attained.

We may say then that organisation is the increment of the association between available (naturally or otherwise) means and policy, whether policy in its turn is real (as revealed in action freely undertaken by individuals) or imposed (the opinion of some or all individuals of what OUGHT to be).

In every direction, sufficiency is reached when the intended result is attained.

The intended result HAS BEEN ATTAINED WHEN THE SUM OF INDIVIDUAL ACTIONS SHOWS IT TO HAVE BEEN ATTAINED, a sufficiency of freedom being postulated. It is not arguable that there is in present society sufficiency of freedom in this sense, and we have already drawn attention to the great limitations of means practised in regard to the increments of all kinds of associations: that is to say, to a cumulative negative heritage, or disinheritance, side by side with the cultural heritage.

Nevertheless, organisation merits our attention all the more because it occurs apart from, and possibly contrary to, real policy. Subject to this limitation, organisation does imply the use to the full of available *means*.

Affecting the Social Credit, organisations occur in a wide variety of cases, of which the most important are Industrial and Political organisations. The organisation of Finance is a part of Political organisation, rather than of Industrial organisation, if only because it has nothing to do with the production of consumable goods or with the production of any of the goods used in the production of consumable goods (capital goods). True cost is a useful index to apply to production. All production has a true cost, whatever it is, in consumption, and in the case of credit instruments (the “production” of financial organisation) the true cost (as we shall see later) is negligible, like the true cost of the Royal Assent to an Act of Parliament. From this point of view, then, Financial organisation is a department of Political organisation.

Since existing organisation implies full use of available means, subject only to imposed policy, the aspects of organisation which primarily concern us are those associated with policy.

The student here may consult his own experience. He may make a list in his leisure for, let us say, one week, of all the objectives or partial objectives he detects behind the actions of himself and others, if he is attached to industry, in the industrial sphere; if he is a politician, in political action; or in any case through his favourite newspaper, which gives an account of various actions, public and private. Let him write down, whenever he observes some significant act, the objective, the policy behind it, and he will soon, if he is attentive and reasonably precise, come to some understanding of the matter. On the other hand, if he has time, he may read, from the political point of view, “Democracy and the Organisation of the Political Parties”, by M. Ostrogorski (London: Macmillan, 1902) or, from the industrial point of view, F. W. Taylor's “Shop Management” (New York, 1911. McGraw- Hill Book Co.)

Ostrogorski's book, which has not been widely advertised, in spite of an impressive introduction by the late Lord Bryce, is in two volumes, with a total of 1,400 pages. Very briefly it may be said to be a documented statement of the devices of caucus government in Britain and America to determine the expressed objectives of the people composing those so-called democracies (that is to say, self-governing communities). He defines caucus as “a word adopted in American political terminology from the eighteenth century onwards, to denote a small committee of men who settle electoral affairs beforehand.” That is enough to assess the bearing of political organisation upon the Social Credit.

Students may also read the chapter on the influence of governments on society in Buckle's *History of Civilisation* with profit. The chapter, to express the matter in the language we are learning, was written to show that legislators lower the Social Credit, and that no positive increment in it can be traced to them.

The chief objectives revealed in Taylor's book are three in number: (1) Production, (2) Economy in the use of money in production, and of all things costing money, (3) Avoidance of all actions tending to increase the necessity for the use of money, *e.g.*, waste of time, energy and materials, friction and disputes.

The student should at this point consider whether there is, strictly, anything from the point of view of “the power of human beings in association to produce the result intended”—that is to say, from the point of view of the Efficiency of Society (or Association) which must be economised except all forms of effort made without choice.

In what circumstances, let us ask, is there any real meaning in the statement that society gains in efficiency through economising in (a) energy, (b) time, (c) materials, (d) capital?

ADDITIONAL NOTES

The questions at the end of the Lecture take us back to first principles stated in earlier lectures, and should focus attention upon the *result*, as the only thing that matters to individuals.

There are, broadly speaking, two kinds of results of human association:

The wealth made available.

The trouble (to individuals) of making it available.

Thus individuals must strike a balance between consumable goods as a source of wealth to themselves and leisure as a source of wealth to themselves. If natural inducement were allowed to determine the use to which all available associations were put, there would be a constantly increasing enrichment until an optimum was reached (but possibly indefinitely). Unless sources of energy ran short there would be no point in economising them as such: the meaning is in the effort necessary to establish associations for their conversion. Taking longer to do anything than is necessary usually means working longer or harder. It is only of consequence from the individual’s point of view as a worker. If a machine is run at less than its full speed there may be a shortage of production. Materials and capital goods matter in regard to quantities used, as these affect the production of consumable goods, or leisure of human beings, not otherwise.

X

Summarizing nearly 400 pages describing the growth, machinery and action of the political Caucus in England, Ostrogorski makes the remark that “. . . the strength of . . . forces invading a community lies not so much in the fighting power of their own contingents as in the weakness of those which they tend to supplant.”

Ostrogorski does not seem to be aware of the principle embodied in Newton’s third law, that whatever pushes or pulls is pushed or pulled to the same extent. This law of stress holds of mutually acting bodies in motion as well as at rest. Nevertheless, the statement serves to introduce us to the idea of the RE-acting forces in Society—or rather in wealth production in the broadest sense.

We have shown that as time has passed in the history of human association the number of natural associations which men have learned how to establish has vastly increased, and that correspondingly the *power* to do things in human association has increased. More and more increments of association have become available to men and women, and also more and more “decrements”—merely increments which are disadvantageous in some way or other—have become apparent.

The balance struck at any particular time in history would be the Social Credit actually realised at that particular time. At every time this has been a fraction of the true Social Credit of that time, and for a long time past men and women have had available to them vastly more POWER TO PRODUCE *satisfactory results* than they have realised. In other words:

Consumption of goods and services = an increasingly small fraction.
Potential goods and services

Produced goods and services = Another fraction, which is also diminishing, though not so obviously
Producible goods and services

The fact that Consumed goods and services is a fraction less than one is common knowledge:
Produced goods and services

there is sabotage of goods and services. It is not evident to many people how much of this is hidden under pretexts which would scarcely survive inspection, let alone critical examination by a mind uncontrolled by false axioms. The operation of the principle of obsolescence in industry is an example. The 1945 model is more often scrapped to make work than because it is an advance on the 1944 model, and, in any case, a five *per cent* improvement does not reduce the article improved upon to no value as wealth.

The most important of the above fractions, however, is the first. Let us suppose that it is $\frac{1}{4}$ at a given time (the fraction happens to be the smallest on the typewriter used for typing these notes. It is unquestionably very much less than $\frac{1}{4}$).

What prevents it from rising to $\frac{1}{2}$ or $\frac{3}{4}$ or $4/4 = 1$? Why is it not $1/400$, or $1/40,000$?

It is very important to realise exactly what these questions mean. Regarding the matter objectively, what we have to do here is to state, if possible, the conditions in which this result occurs; the result, that is, that the realised Social Credit is one quantity rather than another.

We must be very careful here that we preserve our scientific balance. In the first place the question is a particular case covered by the more general question: "What determines the course of observed events in human communities?" But, going back to Lecture VIII, these questions are only forms of words: they are not questions in the natural language of action, capable of receiving a natural answer, such as is alone acceptable to scientific people. Translating into this natural language of action, we must come down again to the individual and his policy. (Policy—the result intended, *i.e.*, the objective of action). When two billiard balls collide, the whole of each ball does not touch the other directly: they collide at a point, the point of impact. Their behaviour after impact bears, so far as observation goes, a constant relation to the conditions in which impact occurs, the mass and elasticity of the balls, their movements (direction and velocity: rotation) immediately before impact, the polish of their surfaces, their shape and the features of the surface on which they are moving. So the individual intention meets all the resistance there is to its complete expression in attainment at a point of impact. This is not a permanent point, resembling the point at which the sharp ends of two needles might be made to touch and remain touching for a minute, or a month, or a year.

It is something like the point of impact of the billiard balls—instantaneous. Living may be represented as a constant stream of such impacts (taking the words "individual intention") in their broadest sense to mean everything the individual does that has an effective goal to it), and the life of the community as a whole is the sum of these streams. Notice that the "equal and opposite" resistance is as fragmented as the individual intentions which are resisted. It forms, as it were, an incessant moving face of points of resistance.

It hardly needs statement that the forms assumed by the multiple individual resistances are legion, just as the individual practical intentions which are resisted are legion. One can get farther away from what determines the course of events in history than these collisions; but one certainly cannot get any nearer to it. If individual intention and the resistance are regarded as opposing forces, they reveal themselves at the point, or points of application. We may say, then, that the first of the conditions we are seeking is (1) *equilibrium between action and reaction*.

It is probably well-known to you that many people have followed quite the opposite approach to this matter, and, trying to get as near to what they call (it is only a word) the "Truth", they have gone as far as they can get from the actual collision of the forces they profess to be attending to. Inevitably, they reach abstractions, which may or may not have some degree of correspondence to the reality they are seeking to define. Certainly when not understood, or interpreted in the wrong relationship, such abstractions have the effect of removing the individual from his personal objective. Thus *alibis* are constituted for the human agent, which, even when deserving of recognition, or even reverence, when not so perverted, are the 'untouchable' scapegoats for human error. It is not without significance that the highest concepts as well as

the lowest of man's thought are pressed into this mischievous service. The following list is not exhaustive:—God, Divine Will, Prophecy, Allah, Ideas, (either in general or in particular), Pain, Pleasure, *Der Zeitgeist* (Spirit of the Age), *Die Gestalt* (Form), The Mode of Production and Distribution, Sin, Inexorable Economic Law, Evolution, Historical Determinism, Predestination, Climate, Sun Spots, The Profit Motive, Past Historical Events, “The War”, “ They”, The System, The Economic System, Banks, Industrial Organisation(s), Fate, Education, Bad Education, Custom, Nationality, *etc.*, *etc.*

To us as observers the great number and variety of these answers are informative:—

(1) The individual who believes that Allah, or Fate, or the Spirit of the Age, or inexorable economic law, or some very strong individual or a tendency or “trend” is what is resisting the attainment of his individual intentions is likely to be influenced to the extent of diminishing his determination to secure his objective, or his intention may be abandoned. In this case an idea has at all events contributed to the course of events. Only individuals can either act or react. Ideas may be instrumental to action or reaction.

(2) People are generally more prone to seek for explanations for what causes them discomfort than to trace their blessings to their source, apart from the “point of impact” already mentioned: they are realists in their pleasures, but not in their pains. We may infer, then, that men in general are not completely satisfied with their realisation of the Social Credit, since they seem to have sought diligently for the source of personal frustration.

(3) If it were possible for anyone to influence the realisation of the Social Credit adversely by his own action, and this action involved effort, he would approve of the ascription of responsibility to a wide variety of relatively irresistible forces of the abstract nature indicated in the list. The responsible individual is seeking an *alibi*.

(4) In the same case as (3) any spread of knowledge leading to more effective individual action to increase the Social Credit would be resisted. It is foolish to resist what is ordained. Any objective evidence for such resistance as is indicated here, therefore, would be evidence of disbelief in external control, and any evidence of successful resistance would establish such belief as right in action.

One of the ideas which may be observed to operate as in paragraph (1) above is the idea that in the absence of humanly applied force (police, army, deprivation of livelihood, the establishment and maintenance of “inspiring” conditions—*i.e.*, hard conditions (Smuts) and the provision of DISTANT desirable objectives (Smuts) the “Race” would degenerate, die out, soften and decay. Thus Graham Kerr (Prof. J. Graham Kerr, M.P., F.R.S., “Evolution”) has pictured Civilization as a self-extinguishing mechanism: anti-biological in its nature. Hence SOME men intervene to keep Nature straight in dealing with ALL men. We may stigmatise the view as lacking in naturalism or in piety; but what we have to do is at all events to notice it as evidence of the belief of some individuals that they have power.

Beginning at the “point of impact”, then, what we find is that we have not to fly the expansive distances which the philosophers travel before we come to data which at least have a bearing on the size of the fraction:

Consumption of goods and services

Potential goods and services

Behind the billiard ball there is the cue, and behind the cue the player. The result of a game of billiards is a statement of the successive movements of the balls. It is a score, and says nothing about the players, the cues or the tables. So the fraction we are studying is a score: an account of the stream of human impacts. It says nothing about the system, and nothing about the players. If we studied the history and manufacture of billiard cues, of green cloth, or if we studied the factors concerned in the inheritance of a high degree of mechanical aptitude, we might still have to begin at the beginning in order to learn to play billiards.

In regard to the requisite materials for continuous growth, trees might grow much higher than they actually do grow. Many trees reach a height at which the surface they offer to the pressure of the wind is

greater than the cross section of their trunks will stand. They fall. Mechanical factors control the height of trees.

A billiard score and the height of the highest trees are practical matters, and so is the realisation of the Social Credit a practical matter.

What have those who have used our method with the greatest effect to say about all these?

That things (causes) are not to be multiplied beyond what is necessary.

Proceeding from the actual impact between intention and resistance, step by step, one may find an alterable element here or there. *The first* alterable element is the one to seize upon. If the intention of an infant (disclosed by its actions) is to obtain food, the proper thing to do is to feed it. An infant who dies of starvation does not die of *Zeitgeist*, or because of ideas, or from Predestination. It dies from lack of food. A mother unable to buy food offered for sale fails because she has not the money. A husband unable to renew or increase his bank overdraft fails because the bank manager decides unfavourably to him. A government unable to carry out its expressed policy fails because its members defer to experts. If we are seeking extended knowledge of all these matters, we must, of course, examine the actions of individuals at every remove from the availability of wealth to the individual, and each instrument used. But our survey will probably reveal controllable factors long before we reach Allah, and will, in any case, not violate the principle that impact is always at a point. Alternatively, when we are obliged to trace the causes of action beyond the range of human responsibility we are in the sphere of that aspect of Reality with which man has to co-operate or die.

Action alone will establish the case and the interpretation of the case as established will always be a matter of human judgment and perception. Nevertheless it lies within our province to observe the frequency with which effective causes for which natural authority is claimed require the assistance of human agents before they operate. The beam of the physical balance does not wait until an economist or a politician applies the laws of motion to it before it reacts to its conditions. Whenever economic law is invoked to explain social phenomena, what we actually observe is someone posting letters to convene a committee to decide whether the “law” shall be applied, when it shall begin to operate, what name it shall receive, who shall apply it and where.

Take two examples:

(1) “The War (1914-1918) gave great opportunity for the development of Medical Science, particularly in the application of scientific principles not hitherto applied, chiefly chemical and physical”. The statement suggests a “complex” of forces in society, *e.g.*, the liberating effects of a great upheaval (break-up of “old ideas”, fertilisation of the social terrain, *etc.*). As revealed by the Scientific Correspondent of the *Manchester Guardian*, a superfluity of trained chemists was demobilised, and because they were intelligent and purposeful individuals, something had to be done about their future. A political and press campaign was inaugurated chiefly concerned with the wonders of science. Chemical Physiology (undertaken by subordinate members of university staffs) became Bio-chemistry in the hands of new chiefs of departments, the results were advertised, the scheme flourished (as all scientific work must flourish if it is allowed to do so) and “Medical Science was revolutionised”. The War did not do this; nor did the war prevent the doing of something else not yet done.

(2) The personal consequences of rearmament; these are not the result of “inflation” or “deflation”; they are the consequences of Acts of Parliament passed by M.Ps.

Whence do the controlling forces derive their power? (By “their” power is meant the power actually displayed in the actions constituting control). The answer is: from all available sources, in proportion as those individuals who actually exercise control can establish an effective demand for these sources, or it may be effectively established on their behalf. In our society, effective demand is largely represented by money.

Since these Lectures were first instituted, the history of the Alberta Experiment has been written by

Major Douglas. Students will gain more information concerning the resources of the controlling power from that book than from any other examples which might be cited.

XI

The existence of an “Art” or “Arts” of Government is in itself a recognition of the claim that some or all individuals may exert a measure of control over the use and development of human associations.

The Arts of Government are known to and practised by some *individuals*: that is to say, they are not known to and practised by “Allah” or “Fate” or “*Die Gestalt*”. The Art of Government includes the Arts of Government, and may be defined as the means whereby all the members of a community (in the result) are constrained to accept an objective entertained by less than the whole number.

Doubtless briefer though less detached definitions might be and are formulated.

The word “objective” calls for examination. It illustrates a dilemma which has frequently shown itself in the development of the natural sciences. It is all very well to say “10 lbs”; but what is a pound? Remember that we are chiefly interested in the power of human beings to produce intended results, and in the first lecture we dismissed the closing phrase of the definition “in terms of their satisfaction” with a brief indication that this was merely the standard of measurement to be adopted. We thus asserted, by implication, the measurability of objectives, and stated the term of measurement. Satisfaction, as we have shown in Lecture IX, can only be truly revealed if there is a sufficiency of freedom (Douglas: “freedom to choose one thing at a time”). If there is this degree of freedom, satisfaction can be measured and expressed as a fraction, the numerator of which is the number of people who reveal by their actions (cessation of demand) that their needs are satisfied, and the denominator the total number of people concerned. We need not, therefore, be concerned with any difference between what people think they are about to get and what they actually do get. These are two totally different meanings of “objective”. The true or real objective is satisfaction.

The Art of Government, therefore, is an art exerted to falsify the Social Credit—to substitute a false standard of satisfaction for a real standard; to represent the objective as being attained when it is not, in fact, attained: to deflect the aim of individuals in their attempts to reach their objective: to alienate policy from individuals: to tyrannise—all these paraphrases are useful, and doubtless many others. The aim of government is control of policy, and the Art of Government is chiefly concerned with the development of skill (exerted by individuals) in the control of policy. In a true democracy this skill would be developed and devoted solely to the end of securing that the real objective of association was correctly expressed (not necessarily in words or formulae: better still in *fact*: *factum* = the thing done).

It is important to observe that skill of the kind described, like all knowledge of how to do things, contains a large element of cultural heritage.

Thus we find that those individuals in the community who may be given opportunity of displaying skill in the Arts of Government are so trained that they may develop skill and use it to the greatest advantage with the minimum of trouble to themselves. It is even more widely recognised that a requirement of successful government is the evocation of a minimum of conscious resistance in the governed.

It has already been stated (Lecture X) that the resources in regard to power available to those who control the progress made towards the attainment of any given policy are all those resources available to effective demand. The ability to develop inventions to assist in the special technique of government is only one of them.

Observe that the evocation of a minimum of conscious resistance implies that the Art of Government should be, as far as possible, an art which conceals art: if it were concealed from the governor as well as the governed, both would be influenced by the conviction that they were largely the passive instrument of action and reaction. On one hand Art plus action would be opposed to Reaction without art. Since the Art of Government has exercised the ingenuity of rulers throughout history, we should expect a detailed

understanding of it to be hard to acquire. Modern society reveals the volume of effective knowledge in THE RESULT: namely, an association in which the associators (individuals) do not effectively determine policy: at least the acquisition of a sufficiency of freedom is a prerequisite to their doing so. What cannot be shown to be done cannot rightly be said to be done.

While the field is one of the greatest importance to students of Social Credit, it must be emphasised that it is a dangerous field to potter in. If the objective method of induction is applied to its problems, it must be applied rigorously. Our remark concerning the evocation of a minimum of conscious resistance is alone sufficient to suggest that the associations we may light upon are capable of generating emotion. Responsibility undertaken unsuccessfully for the attainment of an objective is likely to be confused with culpability. It is within the province of students of Social Credit to assess the objective effect of moral qualities in increasing or diminishing the Social Credit: but such an estimation implies, again, a sufficiency of freedom.

The following expressions used in praise of a deceased British Statesman by another will show that statesmen are not condemnatory of each other concerning the exercise of a high degree of skill in the Art of Government. He was:—

Completely disinterested,

Perfectly loyal,

Sincere above everything,

Sympathetic,

Attentive,

Courteous,

Understanding,

Respected,

Self-sacrificing,

Generous to a fault,

Fair,

Determined,

Influential,

In his company nothing unworthy in public life could live. He was courageous and upright. To be asked to speak about him was a treasured privilege.

Admitting that some of these terms are arbitrary, and that all of them are by no means exhaustive of the qualities which may find effective expression in any individual's actions, it is clearly useless to look for the source of social conflicts to the *qualities of esteemed individuals*. But the objective method is not easy of application, without, as has been suggested, engaging the emotions of at least some individuals. Every effort should be made by the student to connect results with apparent associations at every stage. It is necessary to avoid cynicism, and the appearance of cynicism, more than the thing itself (which is rare in all true students) if it is the object of the individual to increase rather than to diminish Social Credit. Niccolò Machiavelli's "The Prince" is relatively unpopular in governmental circles, not because its indications have been surpassed by modern technique, but because of its satirical effect, which is repugnant to those who are themselves conscious of trickery in their dealings with others. We must bear in mind, too, that an *objective* grasp of any considerable field of events may be within the capacity of relatively few people. The division of labour applies; and as each individual becomes more and more proficient in performing a part of the total process, the other parts, and even the finished product, may be increasingly strange to him. Politicians themselves sometimes foster the tendency to cynicism, perhaps purposely (*e.g.*, Sir Josiah [later Lord] Stamp's assertion to the effect that the resources of modern psychology suffice to induce people to LIKE higher taxation); but, broadly, any inducement to depart from the objective method operates to deflect the aim of a serious study such as our own.

Let us study an example:—

Let us assume that the objective (to be ascertained in an environment affording a sufficiency of freedom for its ascertainment) of the practice of medicine is the maximum provision of health to the individual. Certain insurance companies popularise this idea, omitting the last three words. (Enlightened public policy). The process costs money (generosity). A statistical investigation is made of the incidence of disease. (Scientific). Clinics are established and endowed (Good business). Research is promoted into the causation and treatment of seven (7) ailments. (Public spirited). The clinics are financed out of premiums. (Equitable distribution of cost and increased popularity of insurance). (Note: This is also “nationalisation” on a small scale). Nationalisation on a large scale advocated by Insurance Companies and adopted, the doctors being divided, but on the whole favourable to the scheme, since their incomes are falling and salaried security is better than high-fee-ed insecurity. (Political question). *Results:* (1) increased control. (2) Diminished personal freedom. (3) Economy in the use of money. (4) Higher actuarial certainty concerning insurance. (5) Reduced mortality in certain disease groups and increase in the average length of life. (6) Doctors complain *publicly* about loss of professional freedom (freedom of individual doctors to treat and to investigate disease) and privately about loss of income. (7) Someone counters with a public demonstration of loss of professional income and gain to the public through reduced mortality. NOTE THAT THE INDIVIDUAL MUST NOW BE CAREFUL TO SUFFER FROM THE “RIGHT DISEASE” IF HE WISHES TO BENEFIT FROM MEDICAL ADVANCES and a *substitution of objectives has brought this about*. There has been

ADVANCE TOWARDS A MAXIMUM OF “HEALTH”, but not

ADVANCE TOWARDS A MAXIMUM OF “HEALTH” TO THE *INDIVIDUAL*.

Presumably this is not the policy of the individual member of the community, who nevertheless has to contribute his quota of cost (Financial). Nevertheless, let us suppose there is an electoral majority for the policy, indeed the popularity of the “Health Service” plank in the platform of the party returned secures at the same time endorsement of other policies of an even more far-reaching character. The steps enumerated above might be assisted by all the political parties. In so far as they have been taken they are not yet complete.*

*The editor cannot forbear to remind the student that the passage, which epitomises the present (1946) manoeuvres all over the world for a “State Medical Service” and *control of certification of patients*, was written in 1936.

Certainly we may write down “Substitution of policy” as an important *art of government*, however this substitution may be effected. (“Carrier” policies—*i.e.*, “popular” but unimportant policy “a” with unnoticed policy “A” on its back—are a *method* of substitution.)

The illustration reveals a substitution of another kind namely, substitution of MEANS for ENDS—in the demand arising directly or indirectly from the public for (in order in time) the return to power of a party, and the introduction of a “measure” (incompletely available for study and incompletely studied) which is not itself the objective to be gained.

The second art here shown, then, is the art of

SUBSTITUTING MEANS FOR ENDS

Still another substitution in the example is the substitution of a *morally defensible objective* for one *morally suspect*, namely, resistance to the inroads of “rapacious anti-social medical men” for the associating individuals’ advantage.

We are not strictly concerned with the question *why* these substitutions are effected, although it is of importance to know *where* they are effected. In regard to the first question, each substitution which is successfully carried out increases the efficiency of government, and it may broadly be said to be related to the belief current in the community that government is a necessity, each particular instance of government being accepted for lack of a better. The belief itself is derived from ideal philosophy. The Greeks were wont

to refer to the simple, happy life of people at the dawn of civilisation, “when men were not worn by toil, and war and disease were unknown” as the “Golden Age”. Recent enquiry does not entirely support the view that the existence of such an age was mythical, and in any case the proper handling of combative traits, if they are inherent in the human community, is at once a problem affecting the Social Credit and one for solution in an environment affording a sufficiency of freedom for its *right* solution.

Many subordinate arts, involving the use of psychological knowledge, particularly knowledge concerning the tendencies towards particular kinds of behaviour on the part of people either as individuals or in groups, are practised in support of the major governmental arts. All of them are *favoured by possession of effective demand for means of practising them*. The last great Art of Government to be mentioned here, therefore, is the Art of conserving effective demand for means. This, as the individual may test for himself, consists in the possession of MONEY.

XII

“ without the disposition to truck, barter, and exchange, every man must have procured to himself every necessary and convenience of life which he wanted. All must have had the same duties to perform, and the same work to do, and there could have been no such difference of employment as could alone give occasion to any great difference of talents

ADAM SMITH (Wealth of Nations).

There is no need to comment upon this passage, although the last clause conceals the assumption that specialisation of individual aptitude can ONLY—“alone give occasion”—be made possible through division of labour and the resulting exchange of commodities. Adam Smith did not envisage the possibility of increased leisure as a consequence of the introduction of power-driven machinery. Aptitude is made fruitful in facility and skill by practice, regardless of the economic conditions in which the facility and skill are exercised. An artist (or a surgeon) is not more skilful BECAUSE he is not permitted to consume goods without an initial demonstration of his skill. The permission can be dissociated from the condition. Then skill would be developed (by practice) in some other condition. The only NECESSARY condition is *practice associated with aptitude and opportunity*. An artist with a sufficient income not derived from the practice of his art *could* develop skill in painting without trading his pictures for boots and ham sandwiches. It may be that Adam Smith thought that only the inducement of economic necessity sufficed to make the acquisition of skill desirable to the individual who acquired it. The universal interest in play contradicts this. The luxurious people who invented the hammock were not above decorating it or themselves. (A very idle West Indian people whose sole known contribution to the arts is this invention).

Compare—C.H.D.

“There is absolutely no concrete difference between work and play unless it be in favour of the former. No one would contend that it is inherently more interesting or pleasurable to endeavour to place a small ball in an inadequate hole with inappropriate instruments, than to assist in the construction of a Quebec Bridge, or the harnessing of Niagara.”

Adam Smith recognised barter as a consequence of functional specialisation in production, and asserted that *variety* of talents could only arise from the division of labour and the consequent exchange of goods. Several creatures besides Man have established conditions in which leisure is possible without division of labour (apart from sexual division of labour). They lack Man’s cultural heritage and his power to make use of it. The physical requirements of variety of aptitude and skill are:—

- (1) Mental and muscular variability.
- (2) Variability of motive (which the cultural heritage provides lavishly).
- (3) TIME.

PHYSICALLY, a man COULD (whether he would or not) provide for his own needs and his family’s and still have TIME to discover in himself some special aptitude and to develop skill in the use of it. The

identification of some natural means of labour-saving and the application of it would increase this time as well as providing new opportunities for its use. If such an individual were free from arbitrary control he might choose one interest before another, or choose not to exert himself unnecessarily. Those who at present are planning “work for all” envisage a mode of association in which the use to which these physical possibilities are put (with great resources of non-human power available) is subject to regulation (*i.e.* control by someone in accordance with some ideal standard).

For us, as students of Social Credit, the natural effects of exchange are what we have to examine in the first place. Aptitude and skill are not direct consequences of trade. By favouring the life and reproduction of particularly “economical” men, trading customs may tend to standardise men, may inhibit the appearance of new aptitudes among them, may inhibit the development of aptitudes which exist or may appear, or they may promote natural circumstances in which new aptitudes appear or are developed. (Follow this illustration to its conclusion:—Biologically regarded, every individual is the product of the union of two germ cells—that is to say, two particular individual germ cells, which can arise ONLY in particular individuals and in them probably, only once. This is only to say, besides giving a technical explanation of the fact that every individual is *individualised* and is in some respect or respects different from all other individuals. Even “identical” twins differ from each other. It follows that all the descendants of a particular union (of germ cells, not only of individuals) are different from all the descendants of another union. Any circumstances, therefore, which, tending to act uniformly, alter the movements and frustrate the actions of individuals—*e.g.*, the movements of men about the country in search of work—will tend to substitute a population composed of one set of individuals for a population composed of another set. If the Income Tax had been five shillings in the pound in 1831, it is unlikely that any Englishman now living in England would be living at all: the population of 1937 would consist of other individuals, perhaps with the same or similar general features as the present population, perhaps not. While there is some evidence for the persistence of particular racial qualities, even in environments which tend to render them ineffective, and even when masked under exceptional external features (*e.g.*, domestic breeds of dogs), the cumulative effect of apparently small matters increasing or diminishing the hardship of men’s lives, absorbing their energies and affecting their interests, is by no means negligible. Evidence does not suffice, however, to assess its value.

We must confine our attention then, for the present, to the direct consequences of a particular custom,—barter—*i.e.*, the inescapable, natural consequences, remembering that the *effect* upon individuals of such consequences is not necessarily incapable of correction or adjustment, if the appropriate associations are established to secure this end.

(1) Since exchange of goods is superfluous unless the bartering individual has excess of the commodity bartered, the first necessity of barter is the existence of more than one individual in possession collectively of more than one commodity, and these commodities must be in excess of the need of their possessors to consume them or to use them.

e.g.—A prehistoric hunter has an assortment of flint arrowheads which he has made, but no food. Another has broken his last weapon in killing an animal for food. Arrowheads are bartered for meat.

The example is worthy of analysis, and provides information along several lines:—

(a) The division of labour (production of capital goods and production and consumption of goods) develops its characteristic increment of association in increased production and enhanced skill in both killing and flint-chipping. It is also time-saving.

(b) Cave bears and flints are not found together, nor is the environment of flint-chipping the best suited to successful hunting: flint-chipping was a localised industry. Distance factors enter; food must be carried to the flint-chipper and flints to the hunter. Physically, carrying (transport) entails work (consumption of energy-liberating substances) and lapse of time.

(c) The real cost of food plus arrowheads *plus* transport is a part or the whole of the food, the arrowheads being capital goods. The transport is service and possibly capital goods as well, if these goods are only a bag for the arrowheads. This statement holds, even if, let us say, the flint-chipper and

the hunter shared the labour of transportation.

What natural circumstances govern the RATE OF EXCHANGE? *i.e.*, the exchange of flints for food? Broadly we may say POLICY *not equity*, for notions of equity could only be supported by arguments drawn from policy. Assuming that the individuals associate voluntarily and that their policy (objective) is that consumable goods should be forthcoming with the minimum of trouble to themselves, the OPTIMUM rate of exchange, food for flints, is that rate (which may well vary from time to time) which is related to the highest yield from their association.

Note that strictly speaking every exchange of goods that is effected is unique, and that while in a complex society many exchanges can sometimes be repeated at the same rate, this uniformity arises from their acceptability in the circumstances in which they are offered.

Suppose now that instead of effecting the exchange of food for flints directly an acknowledgment of indebtedness is handed to the hunter for flints and to the flint-chipper for food, a set of instruments would have been created entitling someone to food and flints to the amount stated, and it is not until the explicit nature of the demand on the face of each certificate is merged in a single “unit” that any confusion arises. This “unit” is in itself fictitious. It is MONEY, which has been defined by Professor Walker in his *Money, Trade and Industry* as “any medium which has reached such a degree of acceptability that no matter what it is made of, and no matter why people want it, no one will refuse it in exchange for his product

Consider, in the place of the food and flints of pre-history, a more extended list of exchangeable commodities to the number, say, of ten; it is reasonable to suppose that these may be exchanged on the basis that the individual accepting one of them, at an agreed rate, may have done so in the expectation that he will more readily be able to provide himself with a commodity which he desires to consume by exchanging it than he could have done by exchanging his original possession. And the like may be true of other traders, so that some time elapses before all the commodities have reached the individual who desires to consume them. Note that here each commodity is accepted in consideration of the expectation of the recipient concerning what he may get by exchanging it and as the process of exchanging proceeds, so individual estimations act to restore the first commodity to be offered for exchange to its original owner for less than he received for it in the first place. This result is not peculiar, then, to the use of money. Note, however, that such “gains” do not alter the quantity of commodities in existence. Only production of fresh goods or consumption of existing goods can do this.

Barter is concerned with the distribution of goods, and any increment of association arising from it must be distinguished from the increments arising from other associations which are associated with its practice. An increase in the *variety* of products accessible to the individual arises from the practice of exchanging products.

We have already stated that the rate of exchange is related to policy. Exchange effects distribution, and if money is used to expedite these exchanges, its use is related to policy in the same way as the exchanges. Its function is to distribute goods. A large part of Douglas’s published work is taken up by demonstrations of this point. The student should read “Social Credit”, pp. 130-1 and pp. 61, 62 and 63 : “Warning Democracy”, pp. 15, 128-9, 133: “The Control and Distribution of Production”, pp. 9-10: “These Present Discontents and the Labour Party”, pp. 8-9 : “Economic Democracy”, p. 28, and “The Monopoly of Credit”, p. 23. Passages from the pages cited are as follows:—

SOCIAL CREDIT, pp. 130-1

“There is extant in the world a common if somewhat nebulous idea that whoever, for instance, grows a ton of potatoes grows thereby in some mysterious way the purchasing power equivalent to a ton of potatoes . . . If I grow a ton of potatoes and exchange those potatoes for five currency notes of one pound each, held at the moment by my neighbour next door, all that has happened is that I have five pounds which he had before. My ton of potatoes has not increased the number of pounds, although it *may* have, but probably has not, increased the purchasing power of each pound. If we imagine this five pounds to be the only five pounds in existence, and money to be the only effective demand for goods, no one will be able to exchange

any goods until I part with, at any rate, a portion of my five pounds.”

pp. 61-63

“Reams of paper and many valuable years have been expended endeavouring to define and standardise this thing called “Value”, and with it the methods of relating goods and services to the standard when obtained. The line of thought which is usually followed is something after this fashion: “Money is a standard or measure of value. The first requisite of a standard or measure is that it shall be invariable. The money system is not giving satisfaction, money is not invariable, therefore the problem is to standardise the unit of money.” As a consequence of this line of argument, a dazed world is confronted with proposals for compensated dollars varying from time to time in the amount of gold they contain in accordance with the price index, or even with card money out of which holes are punched to represent its adjustment to the physical realities of economics. Nor is the misdirection of thought confined to professional economists. Almost the first idea which seems to present itself to physical scientists whose attention is directed to this problem is in the nature of a search for some adaptation to finance of the centimetre-gramme-second system of units. Yet perhaps the most important fundamental idea which can be conveyed at this time, in regard to the money problem—an idea on the validity of which certainly stands or falls anything I have to say on the subject—is *that it is not a problem of value-measurement*. The proper function of a money system is to *furnish the information necessary to direct the production and distribution of goods and services*. It is, or should be, an “order” system, not a “reward” system. It is essentially a mechanism of administration, subservient to policy, and it is because it is superior to all other mechanisms of administration that the money control of the world is so immensely important ... It is every whit as sensible to argue that because there may only happen to be one hundred tickets from London to Edinburgh in existence, therefore no more than one hundred passengers may travel, as it is to argue that because the units of money happen at the moment to be insufficient (whether they are “invariable” or not), therefore desirable things cannot be done, irrespective of the presence of the men and the materials necessary to do them. The argument only assumes validity if a deficiency of tickets is a reflection of a real deficiency in transport and not *vice versa*.”

SOCIAL CREDIT, p. 60

“There are few people who would claim that the money systems of the world are perfect, and the number of such persons is decreasing daily. But when asked to define the various defects in the money system, it is remarkable to notice with what monotonous regularity these ideas of “justice” and “value” are paraded. It is claimed that money is defective because it is not an accurate measure of value, or that it results in an unjust “reward” for labour, but when such critics are asked to suggest a method by which the relative value of a sunset, and say, the Venus di Milo might be assessed, on the one hand, or, on the other hand, what is the “just” return for a given amount or variety of labour, their answers are not usually helpful from a practical point of view.”

SOCIAL CREDIT, p. 131

“The distinguishing feature of the modern co-operative production system, depending for its efficiency on the principle of the division of labour, is that the production of the individual is in itself of decreasing value to him, as the subdivision of labour and process is extended. A man who works on a small farm can live (at a very low standard of comfort and civilisation) by consuming the actual products of his own industry. But the highly trained mechanic, producing some one portion of an intricate mechanism, can only live by casting his product into the common stock, and drawing from that common stock a portion of the combined product through the agency of money.”

CONTROL AND DISTRIBUTION OF PRODUCTION, p. 1

“Money is only a mechanism by means of which we deal with things—it has no properties except those we choose to give to it.”

THESE PRESENT DISCONTENTS AND THE LABOUR PARTY, pp. 8-9

“In order to meet the primal necessities, men work for money, having always at the back of their mind

that so much money represents so much satisfaction of primal needs. It should be particularly observed that it is this faith, this credit, which gives money its value, and it is therefore true to say that all money is, or is fundamentally dependent upon, credit.”

WARNING DEMOCRACY, p. 129

“The simplest and most satisfactory conception of money is that it is simply a ticket which enables the holder to obtain goods and services upon demand.”

WARNING DEMOCRACY, p. 128

“You do not make money by making goods.”

MONOPOLY OF CREDIT, p. 23

“Purchasing power is not, as might be gathered from the current discussions on the subject, an emanation from the production of real commodities or services, much like the scent from a rose.”

While it is not practicable to treat money comprehensively in a single lecture, the study of money from an objective point of view reveals facts of such importance at the outset as to suggest that the vast literature of Money largely ignored matters which are most material.

The inductive method reveals features which are unexpected, at all events by most people, in respect of all its aspects, *e.g.*, in respect of the true cost of its production, the factors governing the quantity of its production, the materials of which it is made, its origin and use in Society, the history of its development—*i.e.*, the changes in practice concerning it—its inherent properties, the necessary consequences of its use, the arbitrary consequences of chosen methods of using it, and so on.

On all these points what is commonly asserted and widely believed is so demonstrably wrong as to make it a matter of difficulty to decide in what order to state the results of even a superficial survey in practical life of the common facts of experience concerning money and the uses of money.

Since the current definitions of money tend, in many cases, to endow it with properties which objective study shows to be erroneous or gratuitous, it is plainly a use of the deductive method tending to error to refer any matter to such definitions. It is to be noted that even concerning Professor Walker’s definition, Douglas remarks that “so long as this definition *holds good*—” *etc.*, suggesting that there is no necessity for its holding good; and Douglas’s own definitions are, in general, broad statements having the effect of deprecating fixed views of the nature of money in favour of clear and objective definitions of events associated with its use or which may be associated with its use. Since money “is only a mechanism by means of which we deal with things”, in regard to the efficiency of society to “deal with things” as those in association desire, it is of supreme importance if it is invariable; but of no importance at all if it is variable at will.

A man sells a cow for what are called ten pounds, and buys a watch with what he calls “the money”. This is a transaction with which we might meet fairly often if we set out to watch the trading habits of people. Three people; a man with a cow, a man with what they call “ten pounds” and the man with a watch. Call the men A, B, and C. If we timed the events we are observing, we might find them to be correctly recorded as follows (note there are five times, even if these are not evenly separated one from another):

			Cow	Ten pounds	Watch	Nothing
July 4	11.2	a.m.	A	B	C	
„	11.2 $\frac{1}{2}$	a.m.	B	B	C	A
„	11.2 $\frac{3}{4}$	a.m.	B	A	C	
„	3.5	p.m.	B	A	A	C
„	3.5 $\frac{1}{4}$	p.m.	B	C	A	

In this simple case the interval of time during which the original owner of the cow and the original owner of the watch have nothing is fifteen seconds. In practice it is often a negligible fraction of a second in

such simple cases; but it is by no means negligible in some business transactions, and during this time, short or long, the owner of a commodity is said to be in debt for “the money” and the man who has nothing, in credit for “the money”. If the cow and the watch were the only commodities in the world, and if at the end of July 4, neither B nor A were willing to sell, C would have what he called ten pounds which would only acquire some meaning for him if something “Came on the market” to be bought. The “money” passes through three hands (giving rise to the phrase “the circulation of money”) and the cow passes from A to B, and the watch from C to A. In the illustration, therefore, the ten pounds represents a hypothetical buyer of a hypothetical product which might be accepted either for a cow or a watch in so far as its acceptability goes. It represents a third term in barter— that is to say a commodity and has no meaning apart from this. If, then, money has no power to buy goods, it has no meaning. This is to state more correctly than usual the fact that the meaning which money has for its possessor lapses during a period of time during which there are no goods for it to buy. This is important because one of its alleged uses is to “save up for a rainy day”. If by a rainy day is meant a day of scarcity, it cannot be spent on such a day, but only on a day when there are goods to buy. Money, clearly, enters into that complex of varying estimations of exchangeability leading to the possibility, *e.g.*, that in a particular transaction £10 may become the equivalent of £9. This in itself suffices to contradict the view that the monetary unit measures anything besides its chosen monetary equivalent, *e.g.*, 20/- = £1, 1/- = 12d. These evaluations are wholly arbitrary and are alterable by common agreement (adoption of standards). All they do is to facilitate closer approximation to the maintenance of the same rate of payment in money for varying amounts of a commodity sold at the same time *e.g.*, 20 cigarettes for 1s.0d. or 10 for 6d. 30 for 1s. 6d.* This is merely disguised arithmetic. Money is not a measure of “value”—whatever that may be. Money is effective demand for goods, if goods are available in the hands of someone wishing to barter in the belief that there are still other goods available which he desires to obtain.

*It is salutary to remember the pre-war price which was even then built up of distributed and undistributed costs with a heavy addition of “tax.”

MONEY CAN BE MADE THE ONLY EFFECTIVE DEMAND FOR GOODS by *taxing* every vendor (*i.e.*, holder of goods to exchange) *in money* on every sale. Here tax does not mean only a fine for selling the goods paid to some “authority”, *e.g.*, any retail tax, but all payments in money imposed upon a vendor in virtue of his power to offer the goods for sale. These form not merely an element but indeed *the whole* of “price” which we shall discuss next week.

To the extent that money is the only effective demand for goods, B in the illustration must initially be in possession of money. If we extended the list of transactions, which we might do indefinitely, this necessity is unaffected, and to say the ten pounds has done “more work” (it has done no work) is merely to say that more concealed bartering has been done, while someone began with ten pounds and someone else ends up with ten pounds. The money neither increases nor decreases in total amount and originates outside of the illustration.

Suppose, however, that the individuals in the illustration who held nothing for a short time were issued with a certificate expressing their condition—*e.g.*, that they were in credit for ten pounds—such a certificate may have the acceptability of money. Such a credit instrument is a Bill of Exchange, which, with limits assigned to it by law and custom, increases money by performing its functions without the actual transmission of money. A Bill of Exchange is in the form of an order by the *Drawer* to pay to the *payee* (who may have no existence) money by the *drawee*. If he, or anyone else, agrees to pay, the bill is “accepted” and is negotiable, unless transference is prohibited. Note that there are now (for a time at any rate) £30 in existence so far as the use of credit instruments is concerned in the illustration, instead of £10. A cheque is a bill of exchange drawn on a banker payable on demand. Actually a more obvious form of money than a bill of exchange, cheques are not intended for circulation, whereas bills are. Obviously the extended use of cheques obviates the actual use of currency, which is the name given to the forms of money in which legal payment of debts may be demanded—*e.g.*, coins and forms of promissory notes legalised for this purpose, *e.g.*, Treasury Notes or Bank Notes. There are other instruments which have the effect of money while actually being orders to pay money, and while the most common form of British money is a promise to pay an indefinable “pound” (see Midland Bank *Monthly Review*, February—March, 1934), the exact meaning of monetization must be blurred.

Observe that money has no meaning in the absence of goods and that the absence of money in the presence of a rule that all or most goods must pay a tax in money is restrictive.

The student should notice that money (whatever it is) is really something intangible, and the moment that something tangible is widely distributed in a community with the statement attached to it “This is money” the intangible nature of money is disguised by practices associated with its distribution. This has operated almost completely to disguise from those most concerned with the employment of money the true nature of money, and it may be a long time before the student is able to detect all of these disguises and to see, as it were, the true image of money underneath. He should not be satisfied that his quest for a true understanding of money has come to an end, until he perfectly understands what Douglas means by the simple statement that money is a ratio. Money is a rate—not in the sense of a rate which is “levied” by, *e.g.*, a municipality, but in the pure sense; the rate at which something is done. The student has to discover what this something is, and why “money” is the correct name for it. This will take a little time.

Students should revise this lecture repeatedly and add to it notes from reliable sources.

In the meantime they should study the following passages which Douglas has written:—

WARNING DEMOCRACY, p. 128

“Having it firmly fixed in your minds that while to the ordinary man there is no wealth without money, and yet that there exists either actually, or still more potentially, enormous quantities of wealth, for which there is no equivalent amount of money, I should like to bring to your attention another simple, apparently obvious, but very frequently overlooked fact, that is that you do not make money by making goods. In other words, the industrial system, which makes goods, is not to blame for poverty—it is the financial system.”

MONOPOLY OF CREDIT, p. 23

“Purchasing power is not, as might be gathered from the current discussions on the subject, an emanation from the production of real commodities or services much like the scent from a rose, but on the contrary, is produced by an entirely distinct process, that is to say, the banking system.”

SOCIAL CREDIT, pp. 130/131

“There is extant in the world a common, if somewhat nebulous idea, that whoever for instance grows a ton of potatoes grows thereby, in some mysterious way, the purchasing power equivalent to a ton of potatoes ... If I grow a ton of potatoes and exchange those potatoes for five currency notes of one pound each, held at the moment by my neighbour next door, all that has happened is that I have five pounds which he had before. My ton of potatoes has not increased the number of pounds, although it *may* have, but probably has not, increased the purchasing power of each pound. If we imagine this five pounds to be the only five pounds in existence and money to be the only effective demand for goods, no one will be able to exchange any goods until I part with, at any rate, a portion of my five pounds.”

p. 63

“The measurement of productive capacity takes place, or should take place, in regions other than those occupied by the ticket office, or its financial equivalent, the bank; and the proper business of the ticket department and the bank is to facilitate the distribution of the product in accordance with the desires of the public and to transmit the indication of those desires to those operating the industrial organisation, to whom is committed the task of meeting them. They have no valid right to any voice in deciding either the qualifications of travellers, or the conditions under which they travel.

CONTROL AND DISTRIBUTION OF PRODUCTION, p. 1

“Money is only a mechanism by means of which we deal with things—it has no properties except those we choose to give to it. A phrase such as “There is no money in the country with which to do such and so” means simply nothing, unless we are also saying “The goods and services required to do this thing do not

exist and cannot be produced, therefore it is useless to create money equivalent of them". For instance, it is simply childish to say that a country has no money for social betterment, or for any other purpose, when it has the skill, the men and the material and plant to create that betterment. The banks or the Treasury can create the money in five minutes, and are doing it every day, and have been doing it for centuries."

p. 2

"*Real credit* is a correct estimate of the rate, or dynamic capacity, at which a community can deliver goods and services as demanded. *Financial credit* is ostensibly a device by which this capacity can be drawn upon. It is, however, actually a measure of the rate at which an organisation or individual can deliver money. The money may or may not represent goods and services."

ECONOMIC DEMOCRACY, p. 121

"*Now it cannot be too clearly emphasised that real credit is a measure of the reserve of energy belonging to a community and in consequence drafts on this reserve SHOULD BE ACCOUNTED FOR BY A FINANCIAL SYSTEM WHICH REFLECTS THAT FACT.*"

CREDIT POWER AND DEMOCRACY, pp. 106-107

"... *the only possible basis of real credit is a belief amounting to knowledge in the correctness of the credit estimate of a society, with all its resources, to deliver goods and services at a certain rate . . . The business of a modern and effective financial system is to issue credit to the consumer, up to the limit of the productive capacity of the producer, so that either the consumer's real demand is satiated, or the producer's capacity is exhausted, whichever happens first.*"

WARNING DEMOCRACY, p. 31

"The simplest method of obtaining a physical conception of the situation is to regard the money system and the price system as a double-entry system of book-keeping. Every article which is produced has a price attached to it, and somewhere on the opposite side of the account there should be a sum of money capable of moving each and every article out of the production system into the consuming system. Since money is the mechanism by which the consumer gives orders; no money, no order; no order, no delivery; and ultimately, no delivery, no production. Having this conception firmly fixed in your minds, you will see at once that if the total amount of money available on one side of the account is less than the total amount of prices on the other side of the account there must be something remaining unsold always."

XIV

The phrase "Cost-price" shows how closely the ideas of cost and price are related in the popular mind.

Cost, when there is any, is something actual. Price, on the other hand, is an arbitrary statement in financial terms concerning the amount of money which must change hands to effect a sale. Cost and price have, therefore, *not necessarily* anything to do with one another. They may be brought into relationship by evaluating cost financially, while, at the same time enforcing obedience to a system of rules, which would be correctly described as "The rules to be obeyed in accounting for costs and prices"—or, briefly, "The rules of Accountancy". Alternative rules could, of course, be devised. In their broad outline the rules which have been adopted and which are now being obeyed (more or less) have become sufficiently invariable to make it *appear* to those who obey them (that is, all of us) that they are not arbitrary but natural. The illusion is thus created that there is a natural relationship between cost and prices. This is an illusion.

In an earlier lecture we saw that the practice of measuring costs in terms of a monetary unit disguised the fact that in certain circumstances the true cost (or real cost) of producing anything was only a fraction of itself. Since cost and price are in practice related through the use of this monetary unit the disguise affecting cost will affect price as well. We must gain some precise notion of price.

The idea of price is often confused with that of cost, with which it has not necessarily anything to do. True cost is a natural penalty which must be paid to secure production involving human agency. The cost of production is consumption. Price, on the other hand, although the word is often used to express what we may call the buyer's view of cost *plus* profit, cost being the vendor's view of price *minus* profit, is merely an evaluation in monetary units. The only way to express prices is "in plain figures," and such figures express the number of monetary units in the particular price. We have handed back to us, in our enquiry, therefore, our old friend the monetary unit from a new angle, and it is imperative that we should understand again that this unit does not measure anything but itself, and that the numbers (pure numbers, figures) used measure only the size of a monetary quantity in terms of this monetary unit. The "price", to the user of the inductive method, is what a particular individual has to pay in money (so many units of money) in order to possess himself of some things he wants (*e.g.*, freedom from confinement, discomfort and underfeeding about to be imposed upon him by authority, or goods or services). Such an individual may haggle about the price, may be induced to pay too high a price, may induce the offer of sale at a lower price, or may call the deal "off", but if the deal takes place the figure denoting the number of monetary units paid, or to be paid, or to be owed, is the price. There is nothing vague about the notion of price. In regard to the notion itself, there is no need to depart from the plain experience of the man in the street that the price of a bottle of ink is a penny or sixpence or a shilling and the price of a house £1,450 reduced to £1,200 ("inclusive"), "at which PRICE the deal was closed". In all these cases, the price, either asked or accepted, is a sum of money.

This conclusion, though elementary, is of great importance, because, in emphasising the purely monetary character of price it throws some light upon the meaning of the statement that a monetary unit does not measure anything but itself. This point is difficult to grasp, but important. Money does not measure value. The unit of money is, in Britain, a pound, divisible into shillings and pence at an agreed rate, while the unit of value would be, let us say, the amount of enjoyment, or of wealth, received by a boy of seven years, of chosen weight, height, colour and other physical characters, of defined mental characters as well, who after eight hours of perfect rest, eats an apple of standard colour and sweetness immediately on waking. Such a unit, after all the trouble we have taken to define it, would be impossible to fix. It is purely subjective. One could only know it of one's self for one's self. No one could say what it was of anyone else for anyone else; and no-one could apply the unit strictly to the measurement of a second or subsequent experience like the first. Value is immeasurable. In these days of over-emphasis on the Relative, on "Relativity", it may not be pointless to suggest that value is, although immeasurable, an Absolute.

The question arises, does price measure anything? It is a measure of what the buyer has to pay in money. Different buyers at the same time and the same buyer at different times have to pay different prices for the same or similar goods and we are within our province in asking therefore what factors operate to determine price. In seeking information on this point, we may leave out of consideration such contributory circumstances as the folly or cupidity of individuals, since it cannot be sustained that either operates unduly or to a controlling degree. We may also leave out scarcity, because nothing that is naturally very scarce is necessary, and, in proportion as it is unnecessary it does not enter largely into the associations into which individuals enter. (Scarcity can, of course, be experienced over a shorter or longer period). Let us take two standard commodities neither of which is in short supply in the sense that increased production of them is inherently difficult or impossible, while both are widely desired and their prices are widely different—a loaf of bread and a motor car. A very wide range of other commodities resemble these in practically everything but the wealth they yield to particular individuals, and we may check our results by considering some of these if we wish. Suppose now, we go to the nearest person who is likely to be in a position to give us correct information, the baker, in the case of bread, or the dealer in the case of the car. The baker's price is 9d. and the dealer's £240. Let us ask, "Why is your price 9d. instead of 8½d. or 9½d. ? Why is your car £240, and not £230 or £250?" In each case we shall receive a definite answer, and many of us are near enough to being bakers or car dealers to know that broadly it is a true and right answer, "Because of the way in which the price is built up."

How is it built up? "By the addition of the financial costs of production and the super-addition of the financial cost of my livelihood." Proceeding further in our enquiries, we shall find that the dealer and the baker are themselves responsible for only a small part of the price, compounded of the financial cost of conducting their own businesses and a proportion of their own livelihood. They are price-fixers upon whom price-fixing in this sense is an enforced function, their prices being in their turn compounded of their

financial costs and the allocation to themselves of as much as they can without rendering their produce unsaleable, for their own maintenance. So the enquiry goes through the shop to the factory, and through the factory to the “field”, which is the source ultimately of all materials. At the same time we shall find that our enquiries begin to concern events which happened a long time ago. The selling price, then, of the loaf and the car is a sum compounded of smaller items, and just as in production there is a gradual bringing together of a large number of elements in association in or regarding the finished product, so there is a corresponding accumulating price which must be paid unless someone is to suffer a bad debt in money. Standing at the shop door, there is a flow of commodities towards the would-be consumer, and, standing at the counter or sales desk, there is a corresponding flow of prices towards him which he has to discharge. The name given to this point at which we suppose ourselves to be is THE CONSUMPTION MARKET. It is to be observed that at no point before this in time or antecedent to it in production is there any possibility of wealth accruing to the consumer. All prices in the long train of partial prices are prices paid not for consumption but to be handed on towards the consumer, until ultimately they reach him. He has then to discharge them all as they were fixed and agreed to by various individuals each constrained to at least recover his own financial costs. The fairness or otherwise of each partial cost stated in financial terms need not necessarily confuse us, therefore, for it is self-evident that there is an irreducible charge (whether increased unduly in presenting it to the public or not) which must be made to consumers. The addition of some monetary quantity to this is not a question of equity, because the individuals concerned at each stage of production could not continue their existence unless they added to the price of their partial product an amount at least equal to their cost of living at subsistence level. Practically speaking, everyone in the modern community has to buy some priced articles, priced in accordance with the principles just outlined, and the entire commodity income of most families, with trivial exceptions, is priced in this way, and if consumption is to take place the price must be paid by the consumer in money at the stipulated rate. It is at least clear that a *PRICED* stream of commodities is all the time flowing to the feet of the consumers in the community (*i.e.*, everybody) and that to consume these commodities payments in money must be made.

It is common knowledge that consumers as a class have not in their possession a vast store of money from which to discharge the financial obligation imposed upon them if they are to live successfully, and it is a material question to consider how they obtain the means of payment individually and collectively and what connection exists, if any, between their coming into possession of the means of payment, and the other monetary transactions which, so far as we have seen, consist merely in the making of monetary payments.

This relationship is very close. We may not like to think that we are all borrowing money all the time, and living entirely on borrowed money. Yet we are, for the simple reason that there is no other money but borrowed money. While, then, the consumer does not call it borrowing when he receives his wages envelope or his quarterly cheque, this is what he is doing. As Douglas puts it: “Just as the manufacturer only receives a loan from the bank, which has to be repaid, so also the workman, who is paid by this manufacturer, only receives a loan in the form of wages, which loan is repaid by him in the form of prices” (*Breakdown of the Employment System*).

Wages, salaries and dividends, then, provide the means of payment, and all wages, salaries and dividends are bank loans redistributed so long as the original borrowers (collectively) are permitted to retain them. Money is never lent by bankers to facilitate consumption. If now we enquire concerning the destination of the money paid out in the course of production we shall find that it is divisible into the following parts chiefly:—

Payment to individuals, who may thus use them for the purchase of goods in the consumption market, or save them (hoard them), or “invest them”—*i.e.*, purchase the means of production with them, or pay tax charges with them or take them straight back to the bank in repayment of debt individually acknowledged to the bank (overdraft).

Payments to other organisations. The obligation to pay some of these is to be noticed, sometimes old-standing and we might wonder how these organisations have carried on without paying their own workers, and suppliers, *etc.*, if we did not know that they borrowed the money (which was not for consumption purposes) and are now waiting to pay off the debt.

These points cover the answer to the question, “How do consumers get, money”? They do not answer the question whether the money they receive in these ways week by week and month by month, suffices to cover either the total prices accumulating against them in the same time or even the lowest possible price to cover the costs in industry. Our present knowledge does not suffice to answer these questions; but it should suffice to make clear the following passages from *Credit Power and Democracy* and *Control and Distribution of Production*.

CONTROL AND DISTRIBUTION OF PRODUCTION, p. 38

“ credit-issue and price-making are the positive and negative aspects of the same thing, and we can only control the economic situation by controlling both of them—not one at a time, but both together, and in order to do this it is necessary to transfer the basis of the credit system entirely away from *currency*, on which it now rests, to *useful productive capacity*. The issue of credit instruments will then not result in an expansion of money for the same or a diminishing amount of goods, which is inflation, but an expansion of goods for the same or a diminishing amount of money, which is deflation.”

CREDIT POWER AND DEMOCRACY, pp. 131-3

“It will, of course, be understood that no *absolute* unit of measure of value is either possible or needful; it is, however, the popular delusion that a gold or other standard is an absolute measure of value which has obscured the economic problem for so long. The only possible standard which can be applied with accuracy to the measurement of economic value is that of ratio, a standard which does not require that we postulate anything at all about the unit used to establish the ratio except that it is the same unit. To readers who are familiar with the mathematical hypotheses known as the Theory of Relativity, the basis of which may be quite simply expressed in the statement that it is impossible by means of physical measurements to determine the absolute velocity of a body through space, certain analogies will no doubt present themselves. For the average person, not particularly interested in such matters, no difficulty arises in grasping what is meant by ‘ten miles an hour’, even though he cannot conceive of ‘a mile’ as distinct from ‘a mile long’.

When, therefore, we say that:-

$$\text{True price (in £)} = \text{Cost in £} \times \frac{\text{Cost of ultimate products consumed (£)} + \text{depreciation of real capital in £}}{\text{Credit created (in £)} + \text{cost of total production (£)}}$$

we do not require to know anything about the properties of the pound sterling; we do not, for instance, require to know what is the absolute quantity of labour for which it is a “just” remuneration, and still less is it a matter of the slightest interest how much gold it represents.

“We are simply saying in effect: ‘Credit, convertible into money, is a correct estimate of the capacity of society with its plant, culture, organisation, and moral, to deliver goods and services desired by individuals. Whatever unit we adopt for it, the number of these units held by the individuals who collectively compose society must be such that by surrendering these units they will receive in exchange all the goods and services which society can possibly deliver. As society’s *capacity* to deliver goods and services is increased by the use of plant and still more by scientific progress, and decreased by the production, maintenance or depreciation of it, we can issue credit, in *costs*, at a greater rate than the rate at which we take it back through *prices* of ultimate products, if *capacity* to supply individuals exceeds desire. This it can always be made to do, by ensuring that the production of capital goods is secondary to a sufficient production of ultimate products, and their delivery to individuals.”

BOOK-KEEPING CONVENTIONS.

Specimen.

A. B. & COMPANY LTD.

Half Year to December 31, 1936

PROFIT AND LOSS ACCOUNT

(The letters indicate grouping of items referred to in the Lecture).

		£	£
(a)	By Sales		58,000
(a)	To Cost of Goods Sold—		
	Stock as at 1st July, 1936	9,000	
	Add Purchases	32,500	
		41,500	
	Less Stock as at 31st December, 1936	8,500	
		33,000	
(b)	„ Wages	5,000	
(c)	„ Fuel	1,000	
		39,000	
	Balance—Gross Profit	19,000	
		£58,000	£58,000
		£	£
	By Balance—Gross Profit		19,000
	„ Interest received		500
(c)	To Rent, Rates, Insurances, Heat, Light, etc. ..	700	
(b)	„ Staff Salaries	1,600	
(c)	„ Repairs and Renewals	1,600	
(c)	„ Bad Debts	300	
(c)	„ Delivery Charges	2,400	
(c)	„ Other Expenses	1,700	
(b)	„ Director's Salaries	1,700	
(c)	„ Income Tax	1,500	
(d)	„ Depreciation	2,000	
(e)	„ General Reserve	2,000	
(f)	„ Dividends	3,500	
	Profit carried to Balance Sheet	500	
		£19,500	£19,500

A. B. & COMPANY LTD.

As at 31st December, 1936

BALANCE SHEET.
CAPITAL AND LIABILITIES.

I.	CAPITAL		£		£
	80,000 Shares of £1 each				80,000
II.	GENERAL RESEVE				
	As at 1st July, 1936		1,500		
	Added during year		2,000		
			3,500		3,500
III.	ACCOUNTS PAYABLE				12,700
IV.	UNDISTRIBUTED PROFIT				
	Balance forward		1,800		
	Balance of Profit and Loss A/c.		500		
			2,300		2,300
					£98,500
- ASSETS.					
I.	GOODWILL				10,000
II.	BUILDINGS AND LAND				23,300
III.	PLANT AND MACHINERY				
	As at 1st January, 1936		23,800		
	Less Depreciation		2,000		
			21,800		21,800
IV.	DELIVERY VANS				1,050
V.	STOCKS ON HAND				8,500
VI.	SUNDRY DEBTORS				25,200
VII.	INVESTMENTS, BANK BALANCES, CASH, &c.				8,650
					£98,500

“The basis of accountancy depends upon the Balance Sheet principle of the modern double entry system. There are two parties, real or imagined, to every transaction—the receiver and the payer—or, in common parlance, the debtor and the creditor. Whenever money changes hands, only one sum may be concerned, but two parties. The effects on these two parties are, of course, equal and opposite, and the book-keeping entries made to record them share the same characteristic.”

The above is a quotation which, although not by a recognised authority, will serve the purpose of introduction.

The ledger accounts in which such debit or credit entries are made are divided into two main groups—personal accounts and impersonal accounts.

Example: — The business A. B. & Company (Builders), buys timber from a Mr. X. (Timber Merchant). In A. B. & Co's books Purchases Account is debited and X's account credited with the purchase price. When, at a later date, a cheque is passed in payment, then in A. B. & Co's books X's account is debited and Bank Account is credited.

This illustration is given to show distinction between personal and impersonal accounts. Broadly speaking, impersonal accounts relate to sub-divisions of A. B. & Co's own business, such as purchases, sales, different kinds of expenses, etc. Personal accounts relate to other firms outside of the business. In the above example, the double entry convention holds that, in the first case, Purchases Account was the debtor and X. the creditor and on payment that X. was the debtor and Bank Account the creditor.

At the same time, these two elementary transactions are being recorded in X's books as follows:—

A. B. & Co's account, Dr., Sales Account, Cr., and on receipt of payment at a later date, Bank Account, Dr., A. B. & Co's Account, Cr.

All accounts, as we have seen, fall into two groups—personal accounts and impersonal accounts. The impersonal accounts of any business are further divided into two main groups which we might call the Balance Sheet group and the Profit and Loss group. It will be seen that the convention of debtor and creditor

causes a credit entry to be made for every transaction as well as a debit entry. When, for example, a firm sells goods, Sales Account is credited and the Purchaser is debited. If, the moment after this transaction had taken place, the firm's books were brought to a balance, there would be a debit balance on the Purchaser's account corresponding to a proportionate part of the credit balance on Sales Account. The one, obviously, does not wipe out the other.

At the moment before the transaction took place, the firm or company had a certain stock of goods. After the transaction has taken place, the firm's stock of goods is reduced by the amount of goods sold, and the man who has bought the goods is now due to pay the firm money in settlement. Therefore, in arriving at the balance of the firm after the transaction, the Sales Account falls into the Profit and Loss group and the reflection of it, in the form of the Debt due by the person to whom it was sold, falls into the Balance Sheet group. By this method, book-keeping convention succeeds in reflecting the position correctly from an individualistic point of view.

The Trading or Profit and Loss group gathers together all accounts dealing with the buying and selling of material and the annual expenses involved in running the business. In the Balance Sheet group are gathered together all accounts relating to the cash position—money borrowed or lent, money received from shareholders, ground, buildings, plant, etc., on which at some time money has been spent, but which items, convention says, are not used up in one year but persist as fixed or working capital.

When a firm makes up its annual Accounts, the impersonal accounts relating to the Profit and Loss group are all brought in to form the Profit and Loss Account, and the impersonal accounts relating to the Balance Sheet group are, together with the personal accounts, dealt with separately to form the Balance Sheet. The Profit and Loss Account can be pictured as containing the following main groups of items:—

- (a) Purchases and Sales with valuations of stocks at the beginning and the end of the period.
- (b) Wages, Salaries, etc.
- (c) Overhead Expenses.
- (d) Allocations for Depreciation, Sinking Funds etc.
- (e) Amounts added to reserves.
- (f) Charge for profits to be distributed.

Items under (d) and (e) groups are created by means of what is called a journal entry which debits the Profit and Loss Account with a sum and credits a similar amount in the Balance Sheet group. A credit to the Balance Sheet group may take the form of a separate entry in the Balance Sheet on the Liabilities side, or it may take the form of a deduction from an Asset on the Asset side. For instance, Depreciation might be shown on the Liability side as a Depreciation Reserve Fund, or it might be deducted from the value of the Building or Machinery on the Asset side. Similarly, a reserve might be shown openly on the Liability side, or concealed by deduction from an item on the Asset side.

The Balance Sheet is a statement of what are called Assets and Liabilities; debit balances are put on the Asset side and credit balances on the Liabilities side. The main groupings on the Liabilities side will be as follows:—

- (a) Capital Account (in the case of Limited Companies a fixed amount).
- (b) Borrowed Money (Debentures, Mortgages, Bank Overdrafts, etc.).
- (c) Trading Liabilities, (ordinary business Accounts due).
- (d) Reserve Funds.

(e) Balance of Profit and Loss Account (undistributed or unallocated profits).

The main groupings on the Assets side will be as follows:—

(a) Intangible Assets (Goodwill, etc.).

(b) Tangible Assets fixed (Land, Buildings, Plant, Machinery).

(c) Fluctuating Assets (Stock, Loose Tools, etc.).

(d) Liquid Assets (Accounts due by customers, Cash on hand or in Bank, Investments, Loans, etc.).

The difficulty in dealing with these groupings is that there is nothing definite about the names or about the groups that the various Assets or Liabilities should be included in, and if the above are conventions, then possibly they are more often established by the breach than by the observance.

Let us now consider the Assets and Liabilities of the ordinary Balance Sheet from a different point of view. Taking the Assets first, they all have, of course, relation to sums of money put out either directly or indirectly in times past, but they can be looked at according to their ability to produce cash in the future and according to the number of stages, as it were, which they are away from actual cash. There is, of course, no doubt about the cash value of cash in the safe, and convention says that cash in the Bank is just as good as cash in the safe. In other words, it is an assumption of all businesses that no Bank in this country ever fails. Nevertheless, cash in Bank is a stage further away than cash on hand. The next stage will be such Assets as investments, loans, trading accounts due to the business, etc. If all goes well, these will, in time, be met, cheques will be received in settlement, and the Company's Bank Account will be enriched by the proceeds of these Assets. The dangers which have to be met before these Assets become cash are, for example, a drop in the market quotation of the investment, failure to pay the loan, or bad debts. A still further stage away from cash is represented by trading stocks, etc. These have to be worked and sold when they become accounts due, and so reach a stage nearer cash. Still another stage back are Assets such as Plant and Machinery which are not normally for sale but are used in production and their use charged into the price of things made and so into stock and from stock into accounts due. The same applies to a lesser extent to Assets still further back in the stage such as Buildings, Land, etc. The furthest back Assets such as Goodwill are in a somewhat similar position, and the minimum charge that must be included in price must be at least sufficient to cover interest on such an Asset at the rate at which it is hoped to pay dividends. Thus we see how price is arrived at.

Referring back to the groupings in the Profit and Loss Account, what is needed is to price the sales so that the total shall cover the various charges indicated. It is at least necessary to cover *a*, *b*, and *c* groups if business is to be continued for any time, but over and above that in the long run it is necessary to include in price a charge to cover *d*, *e*, and *f*.

Turning now to the Liabilities side of the Balance Sheet, the various liabilities can be looked upon with regard to the time when they are payable. Accounts due to other firms for goods supplied are almost immediately payable. A stage further back than that might be Bank Loans or other loans payable in a short time. Further back still might be notes or debentures bearing fixed interest and with a fixed date of redemption. Further back still are Reserve Funds which are merely nominal Liabilities and not actually payable to anybody outside of the business. Further back still might be Share Capital which is nonrepayable.

One often sees reference to working capital and permanent capital— for instance it is said it is not the duty of Banks to provide permanent capital for business. Consideration of the foregoing notes on Assets and Liabilities will show that if the Liabilities immediately payable exceed the Assets immediately realisable in cash, then the firm is said to be deficient in working capital, and the cure for the situation is an increase of permanent capital.

Similarly, a prosperous firm might accumulate a surplus of working capital which might be used either to pay large dividends or in certain circumstances to reduce the permanent capital, but in practice is usually got rid of by extensions or an increase in semi-permanent investments.

We will now consider the question of the inclusion of Cash and Bank balances on the same side of the Balance Sheet as fixed Assets.

To the individual business, cash held in the form of coin or notes and cash at call in the firm's Bank Account is undoubtedly an Asset just as Buildings, Plant, *etc.*, is an asset. The firm could use its cash to exchange for further Buildings or Plant and the firm could sell its Buildings and Plant to increase its cash. This latter statement, of course, does not mean that the firm would receive in cash for its Buildings and Plant the figures shown against these Assets in the Balance Sheet. Looking at the Assets of a firm from the particular firm's point of view is, however, quite a different thing from looking at them from a point of view outside of the firm. From that outside point of view, the Assets of the firm are the Liabilities of all parties outside of the firm. If the firm is to continue in business, it has to get from some source outside of itself money in exchange for its Assets at a rate dependent on the type of the Assets concerned. From this point of view, therefore, the Assets of one business constitute a demand for money against all other businesses and the nation generally.

Similarly, the Liabilities of one firm are the Assets of other firms. For instance, a firm's ordinary Trade Liabilities appear in other firm's books as debts due, or a firm's Bank Overdraft appears in the Bank's books as an advance. Reserve Funds and Capital Accounts of firms are, as has been explained, not liable to be paid and they are represented by Share Certificates, which the holders look on as their Personal Assets, or in private firms (as opposed to public companies), the Capital Account is a business liability to the proprietor and from the proprietor's point of view is a Personal Asset.

The convention of book-keeping then works in that way, constantly piling up and up debits and credits which have their reflection in opposite credits and debits somewhere else, a kind of double double entry. If it was carried to its conclusion consumers would also keep a set of books, in which they would credit their salary and debit their living expenses and so on. The matter, however, is not carried to that length.

Looking at the whole system from what might be called a realistic point of view, book-keeping figures have been piled up and up and they come to mean very little except relatively to each other.

If one proceeded to reverse the process and cancel one debit against another credit account, the whole book-keeping structure would be liquidated. Money values on Assets would disappear and all cash would disappear, leaving only metal coins. We would then have a position where the whole nation's inventory could be made up showing material Assets described in material terms, and there would be then no Liabilities at all unless foreign indebtedness, which might be expressed as necessity to export. As against that, we might have foreign Assets which might be expressed as a power to import.

This is coming near the picture drawn by Major Douglas in the "*Monopoly of Credit*". A.H.M.

XVI

Scientific procedure does not discountenance the use of ANY instrument, however fantastic or even unintelligible, to assist the individual to state his questions in a FORM CAPABLE OF RECEIVING A NATURAL ANSWER. At its best, scientific procedure is to accept correction from natural events before correction from intellect, or intelligence, or logic, which are only means to ends. It is important to recognise this *instrumental* character of ways in which we behave (*e.g.*, reasonably, intelligently, logically). They are so important that, intuitively we are apt to look upon them more in the light of masters than of servants. They are, in a sense, just 'habits' and while they may attain the rank of 'good' habits there is nothing in them which entitles them to more respect than the events which ought always to be a check upon them. It is particularly important to understand the place which logic has—or would have—for all scientific people; it is merely, for them, a TRICK of representing natural events in a more or less USEFUL fashion. Nothing can be made to happen just by representing it in a way which we are pleased to call a "correct" way: nothing happens to a barrel containing 209 apples just because one writes "209" on a sheet of paper, or remembers the number 209 for a week, or multiplies 209 correctly to make 418. In simple cases this seems quite obvious; but there is nevertheless a strong temptation in most people to think that things are going wrong if they happen "illogically".

Scientific procedure does not discard or condemn the use of any instrument. Argument from “analogy” is not discountenanced; but when this method (or instrument) is used it is borne in mind that in any case “Nature is going to have the last word”—not the arguer. (The notes for Lecture 10 should be reread before considering what is about to be said.)

In the physical world of experience, a very large number of different measurable quantities are found, when they are measured, to be proportional to the square roots of the same number of other different measurable quantities. This similarity has nothing to do with analogy, which, in logic, is the drawing of the inference, not necessarily true, that because one thing is like another in one respect it is like it in another respect also.

(Definition): TWO SYSTEMS ARE SAID TO BE DYNAMICALLY (OR MECHANICALLY) SIMILAR WHEN THE NUMERICAL DATA WHICH DEFINE ONE SYSTEM CAN, BY TRANSFORMATION OF FUNDAMENTAL UNITS, BE TRANSFORMED INTO CORRESPONDING DATA DEFINING THE OTHER SYSTEM.

The distance from London to Edinburgh is twenty times a twentieth of the distance from London to Edinburgh; and the distance from London to Birmingham is twenty times a twentieth of the distance from London to Birmingham. If we call these twentieths, in the first case “Edinburgh Distance Units” and in the second case “Birmingham Distance Units”, we can use the SAME figures to describe the duration of both journeys and the speed of both trains, provided we alter our time units so that “Edinburgh” time units have the same *ratio* to “Birmingham” time units as the London-Edinburgh distance has to the Birmingham-London distance. A train would then (assuming the London-Edinburgh distance to be the longer) take the same time to reach Edinburgh as it would to reach Birmingham and travel at the same rate to do so. Travelling is travelling; and travelling to Edinburgh is “like” travelling to Birmingham. We may suppose that Birmingham, twenty Birmingham units of distance from London, is reached in two time units, at a speed of ten distance units a time unit; while Edinburgh, twenty Edinburgh distance units from London, is also reached in two time units at a speed of ten distance units a time unit. The *results* are *different results*. The two sets of units are different; yet the SPEED may be the same. In much the same way, all dynamically similar systems may give rise to great differences in their results.

We are touching upon an aspect of knowledge which is of the greatest practical interest in physics, and of great importance in the study of human associations. It is also a matter of great difficulty and complexity. Put very broadly, without reference to mathematics, which we may find distasteful, the problem is concerned with the *circumstances*, physical or otherwise, *in which some things* (results) *may remain the same, even when, apparently, everything concerned is altered*; and, on the other hand, something may alter (in the result) even when, apparently, all the circumstances remain the same, or similar. In engineering, it is a frequent experience that a model apparatus will work perfectly; but the utilisable industrial product, constructed accurately to scale, will not work at all. This is often due to carelessness in applying the Principle of Dynamical (or Mechanical) Similitude. In nature a growing tree adds to its strength to withstand wind pressure up to a point. If it reaches that point, we may predict that, strong as it is, it will be blown down. The thin envelope of water enclosing a drop of water contracts and makes the drop spherical, presses on the water contained within the drop, and affords a surface upon which water vapour can condense; but, if the radius of the spherical drop is reduced below a certain dimension, measured in length units, the internal pressure becomes inconsistent with the continued existence of the drop as a drop.* A drop has thus a *minimum size*. The internal pressure in a drop is proportional to the CURVATURE of the surface, and the curvature is INCREASED (not diminished) by *diminishing* the radius of the drop. The problem involves the changes which alteration of one element in an association necessarily imposes upon other elements. We undertook the duty, in regard to the study of the efficiency of society (as measured in terms of human satisfaction) of identifying as many elements which enter into associations as we could. The engineer who showed a Commission of enquiry into mining accidents a model device for arresting the fall of a cage, after the winding rope had broken, had not identified one of the elements in association. The model worked; but the device in question would have wrecked the guides of a real shaft.

*This remark gives a clue to the nature of the problem.

Although the relationship is not obvious, the old puzzle propounded by Zeno is of interest to us in this

connection. Zeno admitted that Achilles ran faster than a tortoise; but he said that, if the tortoise started first Achilles could never overtake it, because, assuming the tortoise to be capable of covering one tenth the distance Achilles could cover in the same time, by the time Achilles had covered the distance which separated him from the tortoise, the tortoise would have covered one tenth that distance, and would thus be still ahead. When Achilles had again covered the distance which now separated the two, the tortoise would have covered again one tenth of it, and although the distance between them would be less, the tortoise would still be ahead. And again, when Achilles had moved up to the new starting point of the tortoise, the tortoise would again have covered one tenth the distance and would thus still be ahead; and so, travelling one tenth the distance which always separated the two in the time Achilles covered the whole of it, however small this one tenth might become, it would always separate the two runners. The Greeks knew that Achilles could outstrip a tortoise, but they had no means of handling a problem of this kind properly, *i.e.*, by finding the *limit* which nature set to their arithmetic. (It is said that one must be a follower of Zeno if one wishes to be elected to a Chair of Economics).

The most important application of what we have been saying is, at the moment, related to the study of events in the community, preventable in themselves, which most of its members do not desire to happen, yet, cannot prevent. Douglas has used the phrases “Social Momentum” and “Applied Force” in connection with such matters. Momentum in the case of material bodies is the product of the quantity of matter in the moving body and the velocity at which it is moving: the Momentum of a mass M , moving with velocity, v , (expressed in distance units *per* time unit) is $M \times v$, or Mv . Such a moving system can *do work*. Its capacity for doing work is its “Kinetic energy” and is $\frac{1}{2}M \times v \times v$ or $\frac{1}{2} Mv^2$

Let us quote Douglas (THE FIG TREE, September, 1936):—

“The traditional success of British Governments in dealing with various situations that may confront them (which from one point of view has provoked the criticism so universal on the Continent, that we have no policy other than expediency) is due, I think, to our concentration upon problems of momentum, rather than upon problems of original forces. When such momentum is comparatively small, as is the case where communications are slow, agriculture and small industry are primitive, the dissemination of news and propaganda is comparatively restricted, and in general the conditions are those which existed up to the beginning of the present century—the brake is a more effective and simpler mechanism than are the engine controls. When it is necessary to affect the judgment of only a small number of comparatively well-educated people, constantly in touch with each other and familiar with the practice and technique of governmental action, a change of policy is easy and can be comparatively rapid. But such is not the case today. Political propaganda has reached dimensions previously unknown, by means of syndicated newspapers, broadcasting, motion pictures, and so forth, whilst the submission of large populations to a uniform economic system based upon finance, and producing parallel problems everywhere, has generated mass emotion on a scale which is reflected in the wars and revolutions contemporaneous with it.

“If the situation is looked at in this light, it must evoke even some sympathy for the unfortunate statesmen who are supposedly responsible. If we regard them as free agents with the best intentions, which are in most cases, much to assume, they are faced with the necessity for action along two distinct lines, both of them full of difficulty. In the first place there is the reduction of the momentum towards disaster which has assumed such formidable proportions; and the difficulties which surround effective action of this nature—even the dangers of a directly opposite result to that which is desired—are exemplified by the breakdown of efforts at disarmament. But with the magnitude of modern social forces it is not much use applying the brake if the vehicle is still hell-bent to destruction on full throttle. The forces which make for destruction in the world today, which have produced the situation which is now so menacing, are more powerful than they were twenty-five years ago, and there seems to be little more prospect that their direction will be diverted.

“Without pressing material analogies too far, it may be observed that the stored energy of matter in motion is proportional to Mv^2 . If we have a flywheel one ton in weight turning 100 revolutions per minute, it takes a great deal more to stop it if it is all in one piece than if it is split up into 20 flywheels weighing one cwt., and of correspondingly less diameter. The analogy is crude, but it is suggestive of what I am convinced is the truth, that dictatorships representing the power of many millions of people must be disastrous if the dictators are in control of *policy*.”

(All the items in this passage which present the case as it is today are deserving of extended treatment from the point of view of this lecture, and students should attempt this for themselves as an exercise).

A question of the greatest significance is stated in the quotation. It is suggested that the EFFECTIVE policy (the objective which will more or less inevitably be reached) is at variance with the real policy of the majority of persons associating to produce it. *Social Dynamics is the study of all relevant factors determining the adjustment of such a paradox.*

XVII

In the course of these lectures, it has been asserted that:—

- (1) The true policy of a community can only be known in action in conditions which afford a sufficiency of freedom for individual action.
- (2) That, nevertheless, it lies within our province to observe the frequency with which effective causes for which natural authority is claimed require the assistance of human agency before they operate.
- (3) A distinction must be drawn between culpability and responsibility, and it is within our province as students to assess effects, not to apportion blame. Frustration of the will of individuals generates emotion, and a grasp tending to completeness of the associations producing undesired increments is inhibited in an emotional atmosphere. (Notice how will and intelligence— action and thought—tend to be dissociated).

At the close of the last lecture it was stated that EFFECTIVE POLICY was the objective which will more or less inevitably be reached (in consequence of present action) and it was suggested that this constantly-being-reached goal was at variance with the real policy of the majority of persons associating to produce it. The effort, sometimes very great, put forward by people, reinforced by the active individual will, often leads to a result contrary to the intended result. While this fact of experience is often disguised in proportion as the individual believes that failure is determined by the natural difficulties of his course, failure as JUDGED BY THE RESULT is nevertheless a fact of common experience, and it is a melancholy business to take a sheet of paper and to write down in cold blood a statement of the objectives of large numbers of the people of any country, actively associating for their attainment over a relatively brief period of historical time, and to write by the side of each hoped-for end the ACTUAL ATTAINMENT—that is to say, not what the people who worked and strove themselves gained, but the actual state of the community in regard to the OBJECTIVE of their striving. The long list of recorded “victories”, measured in terms of human satisfaction, has a disappointing “sum”.

Propaganda is the dissemination of opinions, and while in its most familiar and obvious forms it is dependent upon the more or less clear formulation of the opinions disseminated in the minds of a minority of “propagandists” who disseminate them by various means, a more satisfactory way of treating it is to regard it as independent of means, methods and conscious intention. We might, thus, ascribe all opinions to propaganda, being very careful, nevertheless, to distinguish between knowledge and opinions. This is often a fine point, and entails great difficulty. Without attempting too precise a definition, we may regard opinion as something short of actual knowledge upon which individuals are often required to act, knowledge being, in the nature of the case, impossible although preferable, (*e.g.*, a general’s opinion concerning the intentions of the enemy whose movements he has responsibility for resisting or against whom he has to move. The general would prefer to *KNOW*; but he has to put up with the best opinion he can formulate, often with undesirable results to himself or his troops).

The illustration must not hide from our minds the fact that while doubtless one objective of “enemy propaganda” will naturally be directed to leading our general into entertaining an erroneous opinion, this is not the only instance of propaganda with which the general is concerned. His opinion will be determined to a corresponding degree by what we may call “home propagand” —*e.g.*, his training in the traditional moral qualities of good generals, the data he assumes concerning the psychology of the enemy’s general, and even matters far more subtly unobtrusive may enter into the formation of his opinion, and these will be matters of

the propaganda to which he has been subjected throughout his life; although, at home, he is likely to be judged by results, even if propaganda leads to the wide dissemination of an erroneous opinion as to what these were.

We saw, in an earlier lecture, that perhaps the chief “art” of government relied for its effectiveness upon substitution—broadly, the substitution of a false for a true objective. Propaganda is a technique of the Art of Government (the art of getting people to do what they do not want to do: the art of getting them to entertain an objective they do not truly entertain). And, as with the art of government, so with propaganda, an important item in technique will be found, on inspection, to be substitution of opinion for knowledge. Everything which induces the acceptance of opinion in place of knowledge is likely to be seen, on inspection, to be a part of propaganda. The opinion, widely current, that money measures something besides itself (which we have unmasked) enters into this complex, for all propaganda ORIGINATED IN THE PRESENT Or MAINTAINED BY ACTIVE MEANS IN THE PRESENT has to be paid for in money. See Douglas: *“Monopoly of Credit”*, pp. 2-3:

“Finance, *i.e.*, money, is the starting-point of every action which requires either the co-operation of the community or the use of its assets. If it be realised that control of its mechanism gives, to a major extent, control of both personal and organised activity, it is easy to see that education, publicity and organised Intelligence (in the sense in which the word “Intelligence” is used in military circles) can be controlled, first to minimise the likelihood of criticism arising, and should it arise, depriving it of all the normal facilities for effective action. Finance can, and does, control policy, and as has been well said by an American writer, Charles Ferguson, control of credit and control of the news are concentric.”

We have no need to go further, if our sole object is to define the limits of effect of Propaganda upon the Social Credit. Its effect is concentric with that of finance. Assessment of the effect of the financial system objectively is reserved as the topic of the next lecture, and we must not anticipate our methodical analysis to go further than saying what has been said, namely, that whatever the influence of finance upon the Social Credit, the effect of propaganda—all active propaganda generated in the present—must TEND the same way. The word ALL here is inclusive; if some part of current propaganda has a different objective from that of finance, it will TEND to be submerged, deprived “of all the normal facilities for effective action”. This concentricity of propaganda and finance is an important result, although as students we should analyse, as thoroughly as we can, as many examples as we can, in order to gain familiarity with the varying techniques employed. “The end of life (which includes the life of studies) is action, not thought”. Great help can be derived from a slow, careful reading of Douglas, and the student, whenever possible, should consult at the same time contemporary documents. (In the middle of the discussion concerning the contemplated abdication of King Edward VIII, *The Times* printed in its chief correspondence column a letter reporting a conversation overheard in a public vehicle between a young man and a young woman: “What’s a constitutional crisis?”—“That’s just what I was going to ask you!” *The Times* did not then admit to knowing whether there was or was not a constitutional crisis).

“I can imagine”, says Douglas (*Warning Democracy*, p. 54), “someone saying ‘This is another Hidden Hand theory’. Every theory of events which has any soundness must at the present time be a ‘Hidden Hand’ theory, because events are not controlled by Voting or Parliamentary Debate, but by Finance. A theory is neither more nor less likely to be true because it appears to be romantic, nor does it necessarily involve conscious turpitude on the part of, *e.g.*, statesmen. If you train a man from youth, you can make him honestly believe anything, and I can assure you that there are very few ‘accidents’ in the rise to power of public men. If you consider the influence of such men as the late Sir Ernest Cassel on the London School of Economics, and the care taken to see that high permanent officials have an orthodox training, you will see how subtle this influence may be”.

Consider always—before the moral obliquity of individuals—the “ineffectiveness of the unseen”. Great as is the discouragement of experienced press writers to submit unsuitable matter, the waste paper basket of every newspaper office would provide a different newspaper to the one actually submitted to the public gaze. Now that a biologist has been appointed to the direction of the London School of Economics (1937), the genetics associated with the inheritance of servility are not necessarily likely to replace the rapidly developing routinist studies of this “science”. The rise into prominence of new scientific studies is not

fortuitous. Money and propaganda (financed with money) combine to launch them. “Educational and Scientific purposes” figure in national budgets. “Policy” influences committees of the Privy Council entrusted with the spending of money, which, they claim, is too little for the purposes intended. New and better sciences could be constructed out of the “waste paper basket”. Apply realism to every event! *e.g.*, “The busmen have won!”—What have they won? If the Social Credit may be measured by the fraction p/P —actual production / potential production (which is so small a fraction as not to differ materially from the more “socially creditable” C/P —Consumption / potential production), the social “discredit” may be measured by the *ratio*, the unseen/the seen. This ratio is determined largely by propaganda.

Douglas writes:

“The results of this state of affairs can be seen somewhat sharply defined in the case of professional economists, necessarily in the direct or indirect employ of banks or insurance companies. It would, of course, be improper and probably unfair to attribute anything but intellectual honesty to these gentlemen. Moreover, such an assumption would deny due appreciation to the ability of their patrons. Their failure to make any noticeable contribution to the solution of the problems within their special field can, I think, be explained by the incompatibility of any effective solution with the credit monopoly which is at once their employer and critic”. (*Monopoly of Credit*, p. 3)

We should be a long time exhausting the present tendencies to the formation of opinion which COST MONEY. They constitute a “major” control. “Money is the starting-point of every action which requires the co-operation of the community or the use of its assets.” Does propaganda (the formation of public opinion) operate outside of this field? Unquestionably there is that part of the cultural heritage which never receives the sanction of productive trial, the vast inheritance of error and superstition. In some cases little “co-operation” or “use of the community’s assets” SEEMS to be entailed in the maintenance of the vitality of this stream of influence. But in many cases (and those not the least effective) this is not found upon examination to be so.

XVIII

In Lecture 16 it was shown that in accordance with accepted book-keeping conventions, every asset is a liability and every liability an asset, and that if the book-keeping system were carried to its logical conclusion even consumers would keep books, and the representation in figures of the whole process of production, distribution and consumption in society would be complete. Assets and liabilities would balance, and might be cancelled, item for item, one against another. “The whole book-keeping structure would be liquidated.” Of the monetary superstructure—financial evaluations of all assets and liabilities—only metal coins would be left.

“It is fair to say that almost any explanation which is not a full and accurate explanation of the working of the financial system has the curious result of playing directly into the hands of the upholders of that system”. (*Social Credit*, pp. 90-91). Let us, therefore, postpone explanations until we are quite certain of the objective facts. Among the chief are:

- (1) That the process of cancellation of assets against liabilities suggested in the first paragraph can, in practice, only be carried out by agreed transactions involving the use of money in one or other of its forms—*i.e.*, “debts” are in practice cancelled when they are “paid”. Such payments involve not the virtual but the actual possession of money in most cases.
- (2) If by “virtual” possession of money is meant possession by somebody (it does not matter by whom) of two assets (which are also liabilities) represented by the same monetary symbols, actual possession is merely possession of power to provide the necessary symbols.
- (3) This power is physically trivial—*i.e.*, the exercise of it is as easy of performance as, *e.g.*, punching a cowhide disc to represent a claim to a cow, or writing a certificate of cost to represent a claim to a pair

of boots. (On this point, and its bearing on modern financial practice, the student should read the Ashridge Address of Major Douglas, paying particular attention to the points (a) that the origin of money was bound up with the recognition of the right of the vendor to issue his own money (not to “borrow it”—equivalent to “*borrowing*” a right), and, (b) the relationship of the *custodian* to both owner and producer in regard to the claim to the right to issue monetary certificates.

(4) In a social complex imposing payment in money as a condition for any course of action, ability to pay is a condition of individual freedom.

(5) Material “borrowing” (except by one individual, or group of individuals within the community of another individual or group of individuals) is a physical impossibility: e.g., the farmer must wait for the next wheat crop, and the building industry for next month’s window frames. The phrase “oxygen-debt” which has been introduced into the science of physiology, is actual *storage* of chemicals awaiting oxidation, and this misleading introduction of a conception alien to physical science is “propaganda”. Hence, a nation’s inventory CAN “be made up showing material assets described in material terms” against which the sole liability “might be expressed as a necessity to export”, i.e., *social production is “self-liquidating”*.

(6) Financial borrowing is the sole means (the nominal right of the Crown to mint coin does not invalidate this statement) of monetary creation, and the financial system is *not* self-liquidating—i.e., finance does not correctly reflect the material facts of the production-consumption system. The proof of this assertion is not complex or difficult, although a grasp of the matters involved can be made difficult in the same way as a recital of Zeno’s paradox may be used to confuse and confound the grasp of the matters involved in a man’s overtaking a tortoise. The proof is objective: the world would gladly pay its financial debts if it were provided with the means of payment. (Hawtreys: “Banks create the means of payment”-*Encyclopaedia Britannica*). It does not do so because the means of payment are not created. Debt increases faster than real assets accumulate with financial evaluations attached to them. 1943 is the year about which the whole real and personal property of the United States, monetised on terms of equity, will become insufficient to pay the tax and interest charges against the American community. (See *Social Credit*, p. 148).

Before proceeding to an explanation of the mode of working of the financial system and its effect on the Social Credit, mention must be made again of the fact that the community’s money is (a) borrowed, and therefore a debt against it; (b) created by lending; (c) inconstant in amount; (d) determinative of financial values—e.g., if the community’s total money (bank deposits if desired) were £1,000, the total real wealth of the community could not “fetch” more than £1,000; (e) regarded as the property of its creators.

The proof that money is created lies in the fact, which no one denies, that it is variable in amount. If at any given time there is in existence more money than at some earlier time, the additional money must have had an origin: *ex nihilo, nihil fit*. Similarly a fall in the community’s money implies destruction of money. The statement that credit is only issued in accordance with certain rules is an admission of credit-creation; not a denial. Bankers make the rules. As an essay in the inductive method, students may test the consequences of making their own rules, or of attempting to induce the banker to depart from or otherwise modify his rules. A recent authoritative statement is that of the Midland Bank (*Midland Bank Monthly Review*, February—March, 1934):

“If now, we examine a bank balance sheet, we shall see that bank deposits are like notes in that they are supported by debts due to the banks. True, the banks hold some currency, that is, authorised pieces of paper and coin, to meet immediate demands; but we have already seen that currency is nothing more than debt . . . Finally, the debts of the banks are supported by entries in their books representing debts owed to them in respect of direct borrowings by their customers. Many of these are “secured”, that is to say, the borrower has pledged or mortgaged to the bank some assets he possesses and on the ownership and estimated value of which he borrows. The assets may be houses or land, or other physical things, but the proportion of bank accommodation secured in this way is small, so that it is true to describe the debts of the banks as supported almost entirely by debts owing to the banks by public authorities, business undertakings and individual customers.

“So long as the debts owed to the banks, together with the cash they hold, are at least equal to the debts they owe, the banks are “solvent” and so long as the debts owing to the banks can be converted into repayment of their liabilities to their customers, the position of the banks is “liquid” the fact remains that debts from the banks are balanced by debts to the banks. Thus all the money is bank indebtedness, and it is this cardinal fact that gives to the banking system the power to expand or contract the quantity of money by increasing or diminishing the quantity of bank debts”.

There follows an account of what banks do and do not do. These are matters of *practice not of principle*. The article later quotes, with approval, the statement of Peel, “there is no contract, public or private—no engagement, national or individual, which is unaffected by the operation of the monetary system.”

Money is constantly being created and as constantly destroyed. As Mr. Reginald McKenna put it: “Every bank loan and every purchase of securities by a bank creates a deposit, and the withdrawal of every bank loan, and the sale of securities by a bank destroys a deposit” (*i.e.*, a bank acquires securities for nothing). It will not pass notice that these transactions into which banks enter with individuals, singly or collectively, in the community are conducted in circumstances in which (as may be inferred from Peel’s remark) the banks are the terms-makers as well as the credit-makers. Also of importance is it to recognise that this money business sets up quite a different (and a far more important) money stream than the “circulation” stream, which represents only the internal transactions of the community, and not the community’s transactions with its financial masters. There is a FLOW of money from the banks; and a FLOW of money back to the banks for cancellation. (This is not merely the depositing of money in banks). This may be pictured in similar terms to any other dynamic event of a like kind (a flow): a tank with an inflow and an outflow. At any level of the water within the tank, if the two streams are equal, the water level is constant; if the inflow is greater than the outflow, the level will rise, per unit of time, by an *amount* equal to the difference between the two flows, or by a “height” proportionate to this difference: if the outflow is faster than the inflow, the level will fall by an amount equal to the difference between the two flows. How is a flow capable of being measured?—This is very important: by the *movement* of an *amount* in a *time*. In the case of water this involves measurements of length (how much water)—a cubic foot, or the weight of a cubic foot, and time. In the case of money, POUNDS PER SECOND or (since we are fundamentally concerned with something else that takes place AT THE SAME TIME):

£ (per PRICE UNIT IN £) IN THE SAME TIME.

By price *units in £* is meant the prices generated in production which the community has to meet before it is permitted to consume the priced goods.

The student should here satisfy himself before going further that it is a mathematical requirement of *saleability* of goods produced that goods and prices on the one hand and monetary tokens on the other hand should flow AT THE SAME RATE.

It may help him if he considers:

(1) That we must keep the terms we use unaltered in considering the problem from its two aspects: *viz.*, the goods are for consumption. Only consumers consume, and all consumers are individuals. By the community is therefore meant individuals, not books.

(2) That all money is debt to the banks and that it is a material matter to consider whether, having been once used to purchase goods, money can do the same again (in the sense of discharging THE INDEBTEDNESS TO THE FINANCIAL SYSTEM on account of these goods). The money is not left lying about when it has once been used for the purpose for which it was intended (*i.e.*, to buy goods).

The following passages should be studied:

WARNING DEMOCRACY, p. 31

“The simplest method of obtaining a physical conception of the situation is to regard the money system and the price system as a double-entry system of book-keeping. Every article which is produced has a price

attached to it, and somewhere on the opposite side of the account there should be a sum of money capable of moving each and every article out of the production system into the consuming system. Since money is the mechanism by which the consumer gives orders; no money, no order; no order, no delivery; and ultimately, no delivery, no production. Having this conception firmly fixed in your minds, you will see at once that if the total amount of money available on one side of the account is less than the total amount of prices on the other side of the account, there must be something remaining unsold always.”

MONOPOLY OF CREDIT, pp. 125-6

“On the assumption that the delivery of goods and services is the objective of the industrial system, it is obvious that the rate of flow of purchasing power should be equal to the rate of generation of prices. The existing financial arrangements make a crude effort to approximate this condition by issuing purchasing power to manufacturing organisations in the form of loans, which in turn the manufacturing organisations distribute in wages and salaries against future production. In other words, the existing financial system increasingly mortgages the future in order to sell the goods existing at present, the most recent and most obvious form of this practice being the instalment system of purchase.”

SOCIAL CREDIT, pp. 83-85

“. . . orthodox theory, then, assumes that the money, equivalent to the price of every article which is produced, is in the pocket or the bank pigeon-hole of somebody in the world. *In other words, it assumes that the collective sum of the wages, salaries and dividends distributed in respect of the articles for sale at any given moment, which represent collective price, are available as purchasing-power at one and the same moment.* Certain persons have more money in their pockets or bank pigeon-holes than they wish to spend on consumable goods. They do not spend it, they save it, as the phrase goes. By this abstinence from spending, they form a fund which enables capital goods, *i.e.*, tools, plant, factories, to be paid for, and therefore produced, and because of the process by which these are paid for the capital goods thus produced become the property of those persons who have thus saved.

“Now the first point to be grasped in regard to this argument as a whole is that, even supposing at any given moment it were true, one week afterwards it could no longer be true. If on a given day, there was extant in the world sufficient money to buy all the goods in the world at the prices it had cost to produce those goods, and any portion of that money were applied to form the payment for the production of new goods, then that money so applied forms the costs of the new goods, and immediately there is a disparity between the total *costs*, which are the minimum total *prices* of goods, and the amount of money in the world which would, *ex hypothesi*, be exactly the same as before. This would be true even if no one “saved” any *further* quantity of money. The persons who had saved the money would not have saved the goods which the original money represented, they would merely have transferred their claims from the original goods in existence to new goods, and could only “get their money back” by the sale of those goods; nor would there be any mechanism in existence by which the old goods could be bought. That surely must be self-evident.

“But the process does not stop there. From the investor’s or “saver’s” point of view, his only object in putting his money into capital goods is to get an increased amount of money back, and....he can only get this money back from the public in the form of prices. The condition then is, that there are more goods in the world at each successive interval of time, because of the financial saving, and its application to fresh production, while the interest, depreciation and obsolescence, on this financial saving, has to be carried forward into the prices of production during a succeeding period.”

SOCIAL CREDIT, p.99

“To put the matter in a form of words which will be useful in our further consideration of the subject, the consumer cannot possibly obtain the advantage of improved process in the form of correspondingly lower prices, nor can he expect stable prices under stationary processes of production, nor can he obtain any control over the programme of production, unless he is provided with a supply of purchasing-power which is not included in the price of the goods produced. If the producer or distributor sells at a loss this loss forms such a supply of purchasing-power to the consumer, but if the producer and distributor are not to

sell at a loss this supply of purchasing-power must be derived from some other source. There is only one source from which it can be derived and that is the same source which enables a bank to lend more money than it originally received. That is to say, the general credit."

The following, from *Credit Power and Democracy*, pp. 21-23, should be studied chiefly (at the present stage) in order that the point may be emphasised *where the money must get to* in order that its function of transferring *goods* may be properly discharged:

"A factory or other productive organisation has, besides its economic function as a producer of goods, a financial aspect—it may be regarded, on the one hand, as a device for the distribution of purchasing-power to individuals through the media of wages, salaries, and dividends, and on the other hand as a manufactory of prices—financial values. From this standpoint its payments may be divided into two groups:—

GROUP A—All payments made to individuals (wages, salaries and dividends).

GROUP B—All payments made to other organisations (raw materials, bank charges, and other external costs).

Now the rate of flow of purchasing-power to individuals is represented by A, but since all payments go into prices, the rate of flow of prices cannot be less than A plus B. The product of any factory may be considered as something which the public ought to be able to buy, although in many cases it is an intermediate product of no use to individuals but only to a subsequent manufacturer, but since A will not purchase A plus B, a proportion of the product at least equivalent to B must be distributed by a form of purchasing power which is not comprised in the descriptions grouped under A. It will be necessary at a later stage to show that this additional purchasing-power is provided by loan credit (bank over-drafts) or export credit."

As an exercise the student should attempt to write a commentary on Major Douglas's statement (*Social Credit*, p. 105.) that "no proposal to redistribute the National Debt has ever received the slightest encouragement from Socialist leaders."

XIX

The subject matter of the present lecture is a general review of the power available to individuals to affect the Social Credit. During the development of the complex agreement associations, which, with the cultural heritage, give what we call "Society" its special effects upon the life of individuals, there has been a great enhancement of power at the community's disposal. At the time of the building of the Egyptian Pyramids (which, by the bye, have weathered the disruptive forces, social and natural, of historical times) the power available (*i.e.*, mechanical power—rate at which work may be done) was chiefly muscular human power, equal to about 1/10 of a horse power per man, and measured in horsepower was, in Egypt and contributory territories, not very many thousands. It was a fraction of the number of the Egyptian people and those in contact with them. Now it is considerably more than the equivalent of the power of several *times* the earth's population *in addition to the power of the earth's population*. The results of this power, this rate of doing work, are, it is generally agreed (although its precise ascertainment awaits the advent of an environment which affords freedom of choice), not satisfactory; that is to say, they are not such as would be reached if all or most individuals had had, for some time past, and still had, freedom of choice, in other words, a just share in the determination of social policy.

We are students, and as such approach the matter in hand in an orderly fashion. In the first place, then, the power of individuals to affect the social credit is itself a PART of the SOCIAL CREDIT. This is a conclusion of great importance from the point of view of EVERY technical proposal which could be effective for increasing the social credit realisable at any particular moment. Put on a purely material basis, increased accessibility of material goods tends to increase at the same time the accessibility of freedom of choice, and enhances the ability of individuals to refuse what does not give satisfaction up to a point.

Ultimately, that point is the margin of natural possibility. One cannot refuse natural death; but one can refuse starvation if there is free access to foodstuffs. From this point of view, consumption is in itself a form of capital, and just as a highly organised community might facilitate capital production on the ground that it is a facilitation of production for consumption, so it may facilitate consumption on the ground that it is a facilitation of satisfaction (or wealth, in the broadest sense). Payment for production is usually regarded merely as an inducement to produce: whereas we have seen that it has an altogether different function to perform, and is an indirect (and insufficient) inducement to consume. The real inducement to consume is one for which there is no need to invent inducements. The natural inducement suffices. It is satisfaction. We may go one step further than even Adam Smith and say that the end of production is not only consumption but is satisfaction. In regard to inducement, the inducements of modern social organisation are not truly inducements to produce. Many of them are inducements not to produce. They are inducements to concur in some other policy than individual satisfaction.

We are back again, then, at this question of means and ends, and we see, or should see, that individuals may affect the social credit in two distinct ways: the way of METHOD and the way of ends: in a political way (as concerning the end or policy) and in a technical way (as concerning any or every association which yields an increment, positive or negative). The two fields are complementary in the sense that means and ends are complementary and also in the sense that what is done has repercussions upon how it is done. We cannot analyse these mutual dependencies: but the student will see, as he becomes more and more conversant with Douglas's practical proposals, that it is POSSIBLE to foster a natural *resolution* of such interacting forces through the operation of an *end point*, similar to the various end-points which we discussed when we were speaking about the use made by Douglas of the notion of sufficiency.

There are, then, two ways in which the individual can affect the social credit: the TECHNICAL and the POLITICAL. The following heads are useful:—

(1) By discovering new increments of association (a) natural—*e.g.*, by discovery and invention leading to increased power in the hands of the community. This power is, according to the late G. F. Powell, enjoyed by all people, often unconsciously, and is exercised by them usually quite unconsciously. Even in machine production an operative USES his machine uniquely, with more or less than the usual effect, and observation of such involuntary departures from established practice are the basis of important improvements in practice. By doing a job “his way”, the operative often reveals a “better way”, frequently difficult to analyse. Often “his way” is not a “better way” and it is discouraged, while the “better ways” are carefully explained to everyone concerned, learnt and adopted. This tendency has the momentum of the cultural heritage; but also, it is subject to all the agencies of government (*i.e.*, control, financial and otherwise). Nevertheless, it has led to such an accumulation of power as we know, and is important. The student, however, must observe that, *practically*, the effect even of material increments on the power to produce goods and services as when and where they are required does not necessarily entail increased efficiency as measured in terms of human satisfaction. What such increments do entail, particularly over a considerable period of time, is a wider consciousness of socially distributed power, and the elaboration of more and more obvious devices to reverse or modify its effects. It leads to crises.

(2) By discovering new increments of association arising from the agreement associations, (b) in political, or (c) in industrial or (d) in financial organisation. To take these in order, (b) the student should give close attention to such of the documents as are available for public consumption published from time to time by the Social Credit Secretariat, (c) a standard work on Industrial Psychology is worth reading; but the subject matter is largely derived from suspect sources in regard to its principles at least, and a study of the internal organisation of industry at this stage is not the most important which a student can undertake unless, in these stirring times, he has more leisure than can be absorbed by increasing the social credit. (d) What has been made clear in this field is chiefly the work of Douglas, and while the whole of this course has been taken up with explaining its general nature, its special application lies in Douglas's detection of a series of relationships and their bearing upon one another. In Douglas's own words (*Control and Distribution of Production*, p. 49) . . . “Credit-issue and price-making are the positive and negative aspects of the same thing, and we can only control the economic situation by controlling both of them—not one at a time, but both together, and in order to do this it is necessary to transfer the basis of the credit-system entirely away from CURRENCY, on which it now

rests, to USEFUL PRODUCTIVE CAPACITY. The issue of credit instruments will not then result in an expansion of money for the same or a diminishing amount of goods, which is inflation, but in an expansion of goods for the same or a diminishing amount of money, which is deflation". And p. 72: "Now the CORE OF THIS PROBLEM IS THE FACT THAT MONEY WHICH IS DISTRIBUTED IN RESPECT OF ARTICLES WHICH DO NOT COME INTO BUYING RANGE OF THE PERSONS TO WHOM THE MONEY IS DISTRIBUTED IS NOT REAL MONEY—it is simply inflation of currency so far as those persons are concerned. The public does not buy machinery, industrial buildings, *etc.*, for personal consumption at all. So that, as we have to distribute wages in respect of all these things, and we want to make these wages real money, we have to establish a relation between total production, represented by total wages, salaries, *etc.*, and total ultimate consumption, so that whatever money a man receives it is real purchasing power. This relation is the *ratio* which total production of all descriptions bears to TOTAL consumption and depreciation."

The student may further study the following passages:

CREDIT POWER AND DEMOCRACY, p. 132-3

"We are simply saying in effect: 'Credit, convertible into money, is the correct estimate of the capacity of society with its plant, culture, organisation and moral to deliver goods and services desired by individuals. Whatever unit we adopt for it, the number of these units held by the individuals who collectively compose society must be such that by surrendering these units they will receive in exchange all the goods and services which society can possibly deliver. As society's *capacity* to deliver goods and services is increased by the use of plant and still more by scientific progress, and decreased by the production, maintenance or depreciation of it, we can issue credit, in *costs*, at a greater rate than the rate at which we take it back through *prices* of ultimate products, if *capacity* to supply individuals exceeds desire. This it can always be made to do, by ensuring that the production of capital goods is secondary to a sufficient production of ultimate products, and their delivery to individuals."

CREDIT POWER AND DEMOCRACY, pp. 133-4

"We have every type of information required to fix the ratio we require at our disposal at any moment. The loan credit accounts of the banks, plus the ways and means and note and bond issues of the Treasury, plus the increase in capitalization of productive organisations, roughly represent credit creation, cost of production is obtainable from the 'factory' cost accounts, including now agricultural production accounts; the quantity and consequently the collective cost of articles bought by (*i.e.*, delivered to) the public is available through such departments as the Ministry of Food, the Board of Inland Revenue, the Board of Trade, *etc.*

"In order to transform the measure of financial credit which these figures would give us into a measure of real credit, only two things are required: first, that control of credit-issue shall be in the hands of the consumer, so that production is moulded to his needs, and secondly that the number of credit units in the hands of the public shall be that necessary at any moment to buy the whole possible output of society, both of which premises are eventually met by the arrangements previously described. That they are not met by the existing economic system is self-evident on a consideration of, say, the relative amount of expenditure during the last ten years on factories, as compared with that on houses; and on the other hand, the utter insolvency of the British banking system during the few days immediately subsequent to the outbreak of war with Germany."

SOCIAL CREDIT, p. 193

"It should be emphasised that the practical operation of a price factor of this character involves no difficulty and is, in fact, in various forms a commonplace of business operations at the present time. As compared with the complex system of discounts which are a feature of every business, and vary not merely from business to business, but from one department of the same business to another, the application of a uniform price factor for the purpose of reducing the general price level is a matter of elementary simplicity."

“Suppose that the large departmental stores, such as Messrs. Harrods, Messrs. Barkers, *etc.*, were to agree, as they probably would, to restrict their net profit on turnover (not, be it noted, on capital) to ten *per cent*. Imagine them to issue with each sale to an individual consumer, an ordinary statement of sale, commonly called a bill, and imagine arrangements to be made with the banks that these bills, when turned over by the individual consumer to the bank, should be credited at twenty five *per cent*, of the face value to the individual consumer’s account to which they refer. Such an arrangement would amount in effect to a reduction of price to the consumer of twenty five *per cent.*, without any reduction in profit to either the producer or the retailer, and as the results of such an arrangement would be to increase effective demand, the turnover of both the retailer and the manufacturer would increase accordingly, and consequently their profit would increase. So that you will see that neither the retailer, the manufacturer nor the consumer would under such an arrangement have any complaint to make. You will, of course, enquire where the bank will receive the necessary funds with which to credit the individual consumer with twenty five *per cent*, of his purchases. The answer to this is that at stated intervals, of say one or three months, the banks would present an account of such credits to the Treasury, which would in turn pay to the banks a Treasury Draft equalling the amount, so that the banks would then be covered in the transaction.

“The justification for the issue of the Treasury Draft is found in the increased real credit of the community, which accrues from the increased trade which is assured by the lowering of prices. I have, of course, used the figure of twenty five *per cent*, for purposes of illustration.”

XX

Since the money units per price unit distributed in unit time are not all available for the discharge of prices (*i.e.*, for the purchase of goods) some other form of money must be distributed to make good the deficiency if goods are to be sold (*i.e.*, distributed). To a limited extent, this money is distributed in the form of export credits and advances for capital production in one form or another *i.e.*, mortgages against future appearance on the market of saleable goods for consumption. Without being strictly a measure of it, the rate of increase of public and private indebtedness to the bank is an indication of this deficiency. All money is bank indebtedness. The community is therefore in debt for all its money, and all its money will not buy current production, let alone its existing property. The *just price* is the price at which the community as a whole can buy the community’s production as a whole: and the price at which the community as a whole can buy its production is *the just price*. This is a fraction of financial cost, and bears the *ratio* to financial cost which consumption bears to production; total national consumption including capital depreciation and exports, while total national production includes capital appreciation and imports. That is, the Just Price per ton = Cost per ton (Financial cost) X (Cost value of total consumption) / (Money value of total production).

Providing this price-adjusting factor IS applied to every sale of goods, it does not matter HOW it is applied. This statement is of sufficient importance to justify a moment’s examination. If a vendor of goods receives a rebate equivalent to the factor, his goods are not saleable unless he passes it on to the consumer. Unless he does so, THE FACTOR IS NOT APPLIED. It is not a *price-adjustment* unless it *adjusts* the price to the pocket of the consumer—that is to say the consumer in the large: potential consumers of potentially consumable goods. The requirement of saleability is that there shall be effective demand, and demand becomes effective by being backed by the money units of the price figures. The number of WAYS is probably very large in which a steady flow of purchasing power could be maintained of such volume as to make the flow of money through industry or otherwise to individuals the same as the flow of money prices. ALL money NOT lent but GIVEN to the community and NOT REPRESENTED as an increase of the community’s debt to the banking system would *tend* to the equalisation of the price flow and the purchasing power flow. However spread out, a price inflation, however secured, might cancel the purchasing power of such a “gift”. Then it would not be a “gift” but merely a monetary illusion. Things cannot be done without doing them. And what we are speaking of here is the true *adjustment of prices*. Categorically, the necessary condition is the creation of NEW MONEY NOT REPRESENTED AS DEBT to the banking system or to any other system. The cases in which such a creation would be in fact a mere pretence are legion. Money is

only money when it is functioning as money. Anything, no matter what it is made of, that discharges prices is functioning as money. Here again, as so often, Douglas's effect is to concentrate the attention of the community upon events instead of upon appearances and representations and names. If, then, the fact is appreciated that there must be a multiplicity of WAYS of adjusting the power to purchase (which, again, is not the power NOT to purchase) to prices, it will be clear that one *particular* method can only be defended on some other ground than the necessities of price adjustment.

The particular method referred to is the proposal to distribute a part of the total money periodically required to adjust prices in the form of a *financial profit warrant*, or *dividend*. Regarded as real money, *i.e.*, money that buys goods—the only economic limitation to such a distribution is expediency and it is not expedient to distribute money against absent goods—such “money” would not be real money. We have already shown that improvements of process lead constantly to a greater and greater volume of production with less and less application of human labour. The natural consequence is what is called the “unemployment problem”. The “problem”, of course, is not to discover why individuals are “unemployed”, but why their enforced work is as much as it is, and why the community as a whole, including the “unemployed”, do not enjoy the advantage which has been gained by work-saving in the form of increased leisure and wealth. If human association is for individual advantage, it is not fulfilling its purpose until all its members are satisfied to the extent at least that they would voluntarily continue to associate rather than to break their association if they could. Is there any ground for apportioning the new money necessary to equate consumption with potential production? Clearly there is from the fact that the individual is himself a source of wealth, if only to himself; and if his attachment to his productive system is not advantageous to it (*i.e.*, to himself and his fellows) his withdrawing of consumable goods from it cannot be a disadvantage to it (*i.e.*, to himself or his fellows) either. Otherwise we should find it hard to explain why his productive efforts would not benefit it (*i.e.*, himself and his fellows). As Douglas remarks, there is no need to attempt to prove that the cultural heritage belongs to everybody, since recognition of the fact rests on equity.

The total result of human association, which for convenience may be taken as the human association of any present political unit of mankind, receives contributions from two sources, the *effort* of living individuals applied to *instruments* which are largely the creation of past generations. We have an association between the present and the past yielding an increment which is *present*; and relatively to one another, the past is enormously the more effective element in this association. Only the freely operating decision of individuals would rightly determine whether this *ratio* should be represented by the *ratio* between the “unearned” part and the rest of the purchasing power required to equate consumption with production. What should be emphasised here is that it is NOT within the province of a community which cannot choose one thing at a time. “Since the institution of a modified financial system of a suitable nature would rapidly increase the (what is called) material wealth of everyone, without detracting from the wealth of anyone, it would be imagined that when once agreement has been obtained as to the feasibility of such a readjustment opposition would cease. But this is far from being the case. The more important the individual with whom one is dealing in these matters, and the more able such a person may be to assist in the end desired, the more likely one is to find a very definite dissent, not as to the competency of the mechanism, but as to the desirability of the end. It is a curious feature of the average human being that he deems himself singular in the ability to make a right and proper use of wealth.” (*Warning Democracy*, pp. 5-6.)

The doctrine that if a man will not work, “neither shall he eat . . . completely denies all recognition to the social nature of the heritage of civilisation, and by its refusal of purchasing power, except on terms, arrogates to a few persons selected by the system, and not by humanity, the right to disinherit the indubitable heirs, the individuals who compose society.” (*Control and Distribution of Production*, p. 7.)

We may leave this point to consider a point which is not one of equity, nor of the propriety of forcibly reducing the population to dimensions imagined to be (though they would not be) more in consonance with the financial system.

Is there a means of *assessing* the *relative* value of the inherited part of the current power to produce goods and services? It may be doubtful whether this point will ever have more than academic interest; yet there is room for making it, if only to indicate the “dimensions” in which a solution would be stated. The “dividend”, assessed on the basis that it is even an approximate representation of heritage as distinct from

present effort (work), would be surprisingly large, and a practical consequence of its strict application would be an immediate, probably a steep depression of all forms of “earned” income, offset by a considerable dividend distributed to all individuals tending rapidly to appreciate, without any great increase in employment. This forecast is not susceptible of proof, and if we take refuge in ascertained facts, widely varying estimations may be made of the heritage. On a purely mechanical (*i.e.*, energetic) basis, (energy-calculation basis) it is no more than indicated by taking the *ratio* of the power available per unit population expressed in manpower (1 manpower = 1/10 h.p.) to one man power. But this is an obvious underestimate, since so much of the power to increase power is of “heritage” origin. An Englishman in 1495 could support himself and his family in comfort by working 15 weeks in the year (Thorold Rogers). This figure affords comparison with the present rates of potential dis-employment, allowance being made for forms of waste (*e.g.*, war production, advertising of goods for which there is no purchasing power, book-keeping, and so on). English industrialists (Lord Leverhulme) have said that they need not ask more than two weeks’ work from each of their employees a year from which we might infer that whereas the individual capacity for work has not noticeably advanced, something else has advanced in the ratio of 7½ to 1. If this figure were valid and were adopted, total incomes would be distributed in the proportions *fifteen millions* in dividends for every *two millions* in wages. The dimensions are not of merely academic interest; the precise determination is.

The man-hours per unit of production, including transportation and distribution have probably decreased in the ratio of about 100 to 15 between 1913 and 1945. If prices were based on true cost, therefore, the 1946 pound would be worth about £6 12s. 0d. instead of 8s. 4d. “The difference represents conscious and calculated inflation by the Treasury and the Bank of England and is merely a concealed form of taxation additional to the taxes imposed by the various Finance Bills. Had the creation of monetary units which are necessary to represent improved process been applied, as they should have been, to a reduction of prices, the pound sterling would have stood at an immense premium to the dollar, and everyone in the country would be better off, while no one would be poorer.” (*The Social Crediter*, February 23, 1946).

This is the concluding lecture of this short course. Social Credit has been too large a subject for merely twenty study periods; but you may still be asked for a complete account of “Social Credit in a nutshell”. Many students probably realise that the ordered approach to the greatest matter of present human interest—the life of man in association with other men—has received great assistance from Douglas; and some are doubtless willing to believe that there is no aspect of human life and conduct, political, industrial, scientific, religious, artistic, moral, that may not be affected, in the future, by his genius. Simple as they are, Douglas’s ideas have as far-reaching consequences as those of any of the great leaders of the past. What is there still for us to study? All of them over again, from this angle and from that, gradually making them our own until they are “familiar as our garter”. This is the most profitable thing we can do—for what we call Society and ourselves: namely, absorb the IDEAS, all of them, in all their bearings. Some students may be particularly interested in book-keeping. Let them by all means revive their interest and make it valid and real by the light of the help they receive from Douglas. Let them learn to see the life through the figures: to see how much and how little figures mean. Particularly they may take up the study of each of the causes enumerated by Douglas of deficiency in purchasing power.

“Categorically, there are at least the following five causes of a deficiency of purchasing power as compared with collective prices of goods for sale :—

- (1) Money profits collected from the public (interest is profit on an intangible).
- (2) Savings, *i.e.*, mere abstention from buying.
- (3) Investment of savings in new works, which create anew cost without fresh purchasing power.
- (4) Difference of circuit velocity between cost liquidation and price creation which results in charges being carried over into prices from a previous cost-accountancy cycle. Practically all plant charges are of this nature, and all payments for material brought in from a previous wage cycle are of the same nature.

(5) Deflation, *i.e.*, sale of securities by banks and recall of loans.

There are other causes of, at the moment, less importance. (*The New and the Old Economics*).

Above all, let it be remembered that the failure of human association to achieve its purpose is ultimately the failure of all individuals collectively to achieve *their* purposes. Knowledge of Social Credit which does not increase the Social Credit is neither socially nor individually creditable. The Philosophy of Douglas is a philosophy of *action*.

NOTE ON COURSES

Course A—(Associate).

Though primarily intended for students of the Study Course, the examination is open to all subscribers to *The Social Crediter* or to members of Associated Groups who agree to subscribe to *The Social Crediter* regularly in the proportion of at least one copy for every five members. The questions set will cover the general field of Social Credit, and will correspond in severity to the 'matriculation' examination in the degree system of universities, where that is still held as an initial test before entry upon a more advanced course of study. At the 1946 Examination, one question bore directly upon *The Brief for the Prosecution* by C. H. Douglas.

The following is a specimen Examination Paper (that set for the Associate Examination for Overseas Candidates—Canada—in June, 1945):

The Candidate must attempt to answer all the questions.

Question One.

Provide brief definitions of the following:

(a) Evolution, (b) Culture, (c) Policy, (d) Politics.

What adjustment, if any, has it been necessary for you to make in your conceptions concerning these ideas (as defined), in consequence of your reading of Social Credit—*i.e.*, the body of doctrine so described?

Question Two.

Distinguish between (a) the strategical and (b) the ideological differences between Monetary Reform and Social Credit.

Question Three.

Compare and contrast the role of the Jews and the role of the Japanese in Canadian politics.

Question Four.

Write short notes on the following:

- (a) Trade
- (b) Tradition
- (c) Majority Rule, and
- (d) 'The compensated price.'

Examiners :—Dr. Tudor Jones, Mr. Hewlett Edwards and Mr. H. R. Purchase.

Course B—(Fellowship).

No examination for the Fellowship of the Social Credit Secretariat was held until June, 1943, although there had been several examinations on the Associate standard at that time, conducted in England and overseas.

The initial Fellowship Examination was conducted on novel lines, a selected list of candidates being asked if they would submit themselves to examination on an exacting standard, set a question each, which they would not be permitted to answer, and assess in marks the value of the answers they received to their own question, anonymity being preserved by attaching to each candidate an Examination Number. There were two papers, one in Economics and one in Politics, Major C. H. Douglas setting one question in each paper. (Major Douglas was not, of course, a candidate). Seventeen candidates accepted the invitation extended to them, of whom five passed the test, Messrs. L. D. Byrne, Hewlett Edwards, and R. B. Gaudin, and Drs. Tudor Jones and Bryan W. Monahan.

The experimental stage having been passed, the following regulations were adopted for the conduct of future examinations and published in *The Social Crediter*:

- (1) Candidates who hold the Diploma of Associate may enter for the Fellowship examination following their receipt of the official notification of their having passed the required examination, or at any time later.
- (2) The Director of Lectures and Studies shall have discretion to admit, or to refuse to admit other candidates.
- (3) Examiners will be appointed by the Director, whose choice is not limited to Fellows of the Social Credit Secretariat.
- (4) The Examination for the Fellowship shall consist of two parts :

viz:

PART I The presentation before an appointed date of a Thesis on a topic chosen by the candidate from a list announced annually not less than nine months before the date of Examination, or proposed by the candidate and accepted by the Director not less than nine months before the date of Examination. A note appended defines the requirements in regard to acceptable Theses.

PART II An examination, conducted *viva voce*, at a time and place convenient to the Director and the candidate, on the subject matter of the Thesis presented and, at the discretion of the examiners, on relevant matters of economic and political theory and practice.

This examination will be held after reception of the candidate's Thesis and within six weeks of its reception.

- (5) A fee of 10/6 will be payable by each candidate to cover the cost of his Examination.

The acceptable standard of Theses will be one approximating to that required by British Universities before 1945 from candidates for higher degrees.

Original and thorough research will be expected, and the standard of marking will be high. Citations from documents must quote originals, not compilations, *etc.*, and the objective should be the preparation of a publishable work of importance. Length is not prescribed and should be adequate for the due presentation of the candidate's work.

N.B.—In all cases, copyright will be vested in the Social Credit Secretariat, and each candidate will be asked to sign an agreement to this effect. If publication is undertaken by the Social Credit Secretariat a royalty will be paid at an agreed rate. If publication elsewhere is consented to, the candidate may make his own terms with the publisher of his choice. *This rule is solely for the purpose of safeguarding the interest of the Social Secretariat in impeding the attachment to itself of work which is unsound or otherwise objectionable.*

The following is the Note referred to above:

Note.

EXAMINATION DATE: 1945, February 28.

LAST DATE FOR ENTRY TO THE EXAMINATION: April 30, 1944.

THESIS SUBJECTS: The following will be Acceptable Theses* in accordance with the above Regulations. The list is not exclusive:—

*Information concerning the acceptability of Theses for future dates may be obtained from the Director.

The Financial Systems of Russia and Germany since 1928.

Cartels, with particular reference to bye-products of coal mining.

The breakdown of the Financial System, with particular reference to the maintenance of other controls and to its effect on the strategy of monetary reformers.

Monopoly. (*Candidates choosing this subject must define clearly the proposed scope of their investigation before their entry can be accepted.*)

An analysis of the strategy of the newspaper press from 1917 onwards, and of the B.B.C., with special reference to the production of situations whereby the policy of the political parties in England were determined in a manner favourable to the objectives of the German High Command.

The history of an institution supported by the proceeds of taxation, *e.g.*, The London School of Economics, or The Royal Institute for International Affairs, with reference to personal responsibility for political effects.

POSTSCRIPT

(July, 1946)

Since January, 1937, when the Lectures contained in this volume began to be distributed, they have twice been subjected to minor revision. No revision was made during the war years, and, now that this trying period is replaced by at least a restoration of active control of human affairs to the hands of non-military agents, it might be assumed that the world's experiences would enforce some adjustment of the presentation of the Social Credit case, as it has adjusted the presentation of most arguments of a political character. This has not been found to be necessary, and scarcely more than a hundred words have been added to the Lectures, while fewer than fifty have been taken away.

Nevertheless, it was during this time of universal stress that Social Crediters generally became aware of the dimensions of the philosophy they had embraced. Whether gaining or losing influence, playing a larger or a smaller part in "The Tragedy of Human Effort"—the unforgettable title of one of the most memorable of Major Douglas's Public Addresses before the outbreak of Phase II of the World War—Social Crediters the world over have become conscious of their place in the perspective of history, and this process, which will continue, has enriched their thought. Some notion of the nature of this enrichment has to be added to the substance of the Lectures, and a postscript seems, in the circumstances the proper place for an attempt to do this. (The credit for effecting this expansion of understanding is due to Major Douglas himself, through the medium of *The Social Crediter* and otherwise. It is not the boundaries of the territory covered by Social Credit which have been enlarged. The root ideas of Social Credit are inherent in Douglas's earlier work—*i.e.*, from 1918 to 1934.

Frequent use is made in the Lectures of the term 'scientific' to define the point of view of the writer. The time may come—if the present drive towards the establishment of a 'closed' authoritarian system of control of effective policy by an oligarchy, open or concealed, continues, the time *will* come—when, if such a document as the present is permitted to gain any currency at all, the use of this term, in our context, may be deemed inexpedient. Such a correction will not, however, arise from any change in our opinions; and it

will not be made until the term may have become so corrupted for all but the most scholarly and sequestered of readers as to be a vehicle of superstition rather than of true meaning, and that superstition perhaps the most monstrous that has ever gained ascendancy over the human mind. The drive towards this objective is already terrible in its strength and blind impetus. Modern science is fast becoming a cult. There is little that is Baconian about it, and few 'scientists' would not be shocked to read Bacon's own frank acknowledgment of their role, (*Novum Organum*, Book I, cxxii), "my way of discovering sciences goes far to level men's wits, and leaves but little to individual excellence; because it performs everything by the surest rules and demonstrations. And therefore attribute my part in all this, as I have often said, rather to good luck than to ability, and account it a birth of time rather than of wit." The 'Age of Science' is in large measure the Age of the ascendancy of such 'witless' agents, with whom it seems to be the objective of those who dangle the world's 'Ministries' of 'Education' like marionettes to populate the earth—a race of certificated proletarians each able and willing to effect nothing of any consequence in life but his allotted task, and his allotted part of his allotted task, which he understands only in the execution and not in the intention, and can adjust to his purposes, or modify, only if it is prescribed that he shall acquire this intention as the agent of a plan too vast for him to grasp, and too evil to be believed, if he should, rarely and ineffectually, gain some insight into its nature.

It is clear that Bacon perfectly understood the role of the Reason in human affairs, and that it is the role of an instrument—let us say, to use an industrial simile, that of a transformer rather than that of a generator, although even electrical 'generators' are themselves merely transformers, energy *converters*, and what they 'generate' is but change in the form of energy and not energy itself. Whitehead, though less radically than Douglas, has stressed this point, *viz.*, ". . . the manipulation of the algebraical symbols does your reasoning for you, provided that you keep to the algebraical rules."* The vast and expensive propaganda in favour of 'science' during the past century tends to obscure this basic truth and to endow "science" with 'rights' wholly inappropriate to its instrumental status, an instance of the determination of those who order the effective policies of the world to elevate an abstraction to the rank of a conscious entity—doubtless with the greater assurance that their own anonymity will be preserved, their responsibility masked and their purposes served as though by a Law of Nature itself. Thus they evade responsibility.

*A. N. Whitehead, *Symbolism*, Cambridge, 1928.

It will not have escaped the notice of any critical reader that there has been, progressively, with the exploitation of mob judgment masquerading as the voice of the supreme wisdom in the community, a corresponding encouragement to all classes to recommend the pursuit of any chosen policy, however disastrous and detestable, with the assertion that it is 'scientific'. The term has a purely functional connotation; and to say that any course of action is 'right' *because it is pursued scientifically* is like saying that war is an inestimable blessing because it is conducted 'explosively'. Whitehead's warning is too limited in its incidence. We prefer Douglas: "The Reason, like a slide rule, is incapable of furnishing anything more than the logical sum of the data provided. It is pure instrument, and can prove nothing."

To cite *The Social Creditor*, "It is clear that the Scientific Method on which the nineteenth century placed a reliance which is now seen to be a little pathetic, is itself subject to the Law of Diminishing Returns. The great discoveries which lend themselves to the operational test of validity, the steam engine, the galvanic battery, the dynamo, the Siemens-Martin and Bessemer steel processes, were the work of a mere handful of investigators. For each of these, working with crude apparatus and little or no financial backing, there are millions turned out by the Universities and technical schools of every country having at their disposal every device that ingenuity can suggest or money buy. The outcome, apart from logical development and refinement of the main basic discoveries, is a mass of abstract theories most of which are discarded a few years after they are announced as epoch-making. Probably, of all the mass of 'applied science' products with which the world has been deluged in the last thirty years, stainless steel cutlery, vacuum cleaners, and very doubtfully, wireless broadcasting, alone have much more than gadget value.

"Of course, this does not mean that the Scientific Method is not a beautiful instrument in the right hands. Far from it. It merely means that bad workmen do bad work with any tools, and, in addition, spoil good tools."

Another matter: Social Crediters account for the apparent failure to profit from life in society to an abuse, at all stages, of the principles which must underlie all successful association. If the student has used correctly the material presented, he will have seen that the tendency to break down as well as to build up associations, which is a feature of the present unsatisfactory state of society, would be as prominent a feature in a state of society functioning to better advantage. When divergence of policy shows itself, Social Crediters envisage the disruption of the afflicted association, until there are as many associations as policies. It is a curious reflection of the state of mind of many critics that they at once picture the complete breakdown of all association—as though they were convinced that nothing but force could maintain in existence so universally unsatisfactory a method of human intercourse. At the same time they extol the indispensable benefits of Society. They can't have it both ways. What is it they want to preserve? What is their Policy? Society? Society is only a means to an end, not an end in itself.

The recognition of this fact is a cardinal feature of Social Credit. "Social Credit is the Policy of a Philosophy." Douglas has never tired of stressing the indissoluble connection between any and every policy and a philosophy, which, plain or obscure, occult, hidden, is *its* philosophy. Doubtless what led to the previous presentation of Social Credit as a Policy before any extensive treatment of its Philosophy (which is, nevertheless implicit in all that Douglas has written) was the belief, justifiable until 1918, that the traditional philosophy of at least the Christian nations (peoples) was still essentially whole, buried and misrepresented, perhaps, but not destroyed. The belief may be still justifiable. The existence of doubt concerning so vitally important a matter warns us that at least one matter which is assumed rather than explored in the Lectures should receive some attention.

The Policy of Social Credit is Liberty, or, in other words, "Life, and more abundantly." It is assumed that all men, free to choose, desire "Life more abundantly". If this assumption is false, Social Credit enjoins the right to contract-out, with no penalty *for contracting out*. In such circumstances the validity or otherwise of the individual's policy would be discovered. Social Credit is applied Christianity: it reflects in its actual structure the characteristic doctrines of the Christian Religion*. "Now the word 'religion', again going back to its etymological derivations, derives from a word meaning to bind back: it is related to the word ligament, and so forth, and sometimes it is defined as meaning to bind. Well, it obviously would have a slightly unpleasant flavour if you define it as being to bind, but I think that the agreed definition, its original meaning, was to bind back. In the sense that I am going to use it, and I think I will be using it correctly, the word religion has to do with a conception of reality. It is the binding back either of action, or of policy—particularly of policy in the sense that I was using the word policy—to reality.... It does not necessarily mean, for instance, that your conception of reality is a correct one, but it does mean that you are postulating that there is something which we refer to as real, and you are basing your policy upon that reality." (C. H. Douglas, June 26th, 1937).

*See several articles by Mrs. Best in *The Social Crediter* on and at intervals before June 15th, 1946.

Now, one has not to go far before one realises that there are current in all communities more or less well-defined concepts of law and of sanctions. Our community is particularly distinguished at the present time—or, perhaps, we might say particularly during the period between 1880 and 1938—by the currency of conceptions of a mechanical order, of the operation of the so-called laws of motion, and so on (which it is disastrously misusing), and all communities, however primitive in their customs, recognise limitations set upon human activities by weather, season, seed-time, harvest, and so on, as well as limitations which may or may not exist otherwise than in the minds of those who invoke them to explain the conduct of themselves or of other people. "Man does not live by bread alone," although he cannot do without bread, using 'bread' as a term indicating his basic sustenance; and it would be rare to find a human individual who would assert that the material interests of life exhaust its possibilities. As the interests of Life have expanded, so there has spread the recognition that Law operates on other planes than those which are the special interest of physicists and chemists, as such; and that such Laws are as inviolable as any others. But it is as generally recognised, perhaps, that assessment, of the mode of operation of these Laws is difficult and uncertain in proportion as the individual lacks experience of their consequences, while their range and time of action outspans the lives of individuals, who are nevertheless subject to them. It may well be that the charting of this cumulative experience of mankind is subject to distorting agencies—that the social credit is, in this respect, falsified, as in so many other cases. But the very existence of a Social Credit movement is evidence that the

effect of this distorting agency is not absolute.

It is not a matter of speculation but of fact that there have been relatively settled times in history, when men seemed to advance towards their dimly perceived but real goal, when Life was more abundant, when manners were inspired by a general if not an universal apprehension, or intuition, of the sources of satisfaction, when Faith (“the substance of things hoped for”) was wider spread, and “the evidence of things unseen” more credible.

We are not theologians; but it is not outside the province of Social Crediters to enquire into the features which distinguish such times, to discover, if possible, the nature of the inspiration which guided them or made them possible, or what forces overturned their benign projects. A priest of one of the great Orders of the Church once enquired of Major Douglas what was *the policy* of Social Credit, and, being answered to his satisfaction, said: “ You know, WE know that what men generally call the Sins of the world are not of much greater consequence than the pimples on a man’s face. But, behind all that there is a diabolical wickedness which it will take you all your time, and us all our time to surmount.” We know it.

There is not long, in our opinion, for the contest to continue.