



DELHI UNIVERSITY
LIBRARY

ARTS LIBRARY

(DELHI UNIVERSITY LIBRARY SYSTEM)

Cl. No. R3j M85

48

Ac. No. 67093

This book should be returned on or before the date last stamped below. An overdue charge of 10 paise will be collected for each day the book is kept overtime.

[illegible]



Thet & Th

L. SUSAN STEBBING

PHILOSOPHICAL STUDIES

ESSAYS IN MEMORY OF
L. SUSAN STEBBING

Published for
The Aristotelian Society by
GEORGE ALLEN & UNWIN LTD.
Museum Street, London

FIRST PUBLISHED IN 1948

*This book is copyright
No portion of it may be reproduced without
written permission
Inquiries should be addressed to the
publishers*

MADE IN GREAT BRITAIN
BY HARRISON AND SONS LIMITED
PRINTERS TO HIS MAJESTY THE KING
LONDON, HAYES (MIDDX.), AND HIGH WYCOMBE

FOREWORD

The essays collected together in this volume have been written by friends and colleagues of Professor L. Susan Stebbing in the Aristotelian Society. For many years Professor Stebbing took a prominent part in the philosophical discussions of the Society and she was a frequent contributor to the *Proceedings*, as will be seen from the bibliography at the end of this volume. Most of the essays do not bear directly on Professor Stebbing's work, but they deal with problems which she discussed time and again at the Society's meetings, enlivening the proceedings with her forthright remarks and criticisms.

The memorial note by Mr. J. Wisdom first appeared in the July issue of *Mind*, in 1943, and it is reprinted here with the kind permission of the editor of *Mind*.

A. H. HANNAY,

*Honorary Secretary of the
Aristotelian Society*

CONTENTS

	<i>page</i>
FOREWORD	v
L. SUSAN STEBBING, 1885-1943 an appreciation by J. Wisdom	1
MORAL ENDS AND MEANS by Prof. H. B. Acton	5
REFLECTIONS OCCASIONED BY IDEALS AND ILLUSIONS by Prof. J. Laird	20
THE WAY OF BEHAVIOUR by Prof. Beatrice Edgell	31
IS THERE REASON IN HISTORY? by Dr. Hilda D. Oakeley	39
THE LOGIC OF FLUCIDATION by Prof. C. A. Mace	61
PHILOSOPHICAL ANALYSIS by Dr. A. C. Ewing	67
THE CONCERT TICKET by Austin Duncan-Jones	85
LOGIC AND SEMANTICS by Prof. Max Black	98
THE GROUNDS OF INDUCTION IN PROFESSOR WHITEHEAD'S PHILOSOPHY OF NATURE by Ruth I. Saw	129
EPISTEMOLOGY AND THE EGO-CENTRIC PREDICAMENT by Prof. L. J. Russell	140
SUSAN STEBBING. PUBLICATIONS	155

L. SUSAN STEBBING, 1885-1943

AN APPRECIATION BY J. WISDOM

LIZZIE SUSAN STEBBING, M.A. (Cambridge), D.Lit. (London), was born in London near Wimbledon on 2nd of December, 1885. She was the youngest of the six children of Alfred Charles Stebbing, barrister, and Elizabeth Elstob. Her father died when she was two years old and her mother when she was sixteen and she was brought up under the charge of a guardian. She was a delicate child, not at first expected to live, and her education was spasmodic until she went to Girton College. Even then she was able to attend only a minimum of lectures. She wanted to read Classics, but it was felt that this would be too great a physical strain and she read History, taking Part I of the Tripos in 1906 and Part II in 1907. I think it was in her last term that she happened to open Bradley's *Appearance and Reality* one day in the library. She was instantly absorbed by it and determined to stay on to read Moral Sciences. Although unable to attend many lectures she took Part I of the Tripos in one year. She was coached by Mr W. E. Johnson.

When she left Cambridge she set to work on a thesis *Pragmatism and French Voluntarism* for the London M.A. degree which she obtained in 1912. From 1913 to 1915 she lectured at King's College, London. In 1915 she, with her sister, the late Miss Helen Stebbing, and a Girton friend, Miss Hilda Gavin, and Miss Vivian Shepherd took over the Kingsley Lodge school for girls in Hampstead, and here she made her home—at first teaching history and always in closest contact with the policy and personnel of what became a large and flourishing school. In the same year, 1915, she became part-time Lecturer at Bedford College, London, and in 1920 full-time Lecturer, Reader in 1927 and Professor in 1933.

From the time she came to London her philosophical development owed much to the meetings of the Aristotelian Society. She met there Russell, Moore and Whitehead. It was under

Whitehead's influence that she became interested in the philosophical foundations of science. But it was, I think, to Moore that she came to owe most.

Her earliest published work in philosophy was papers to the Aristotelian Society. She was president of the Society in 1933 and of the Mind Association in 1934. In 1931 she was visiting professor in the University of Columbia, U.S.A. The warm welcome she received on her visit to the States she always remembered with pleasure—and the view from the Empire State Building.

Her lectures were full of life. In discussion with her one could not expect to sit about in warm air—a stiffish breeze was usually blowing. But those who were given her vigorous teaching must, I think, have felt very great kindness and patience behind the sharp raps they were expected to stand up to in their training.

I always wished that she would write a book, or at least a paper, free from the pressure of other duties or any promise to have it done by a certain time. But no—there was always something, if not a committee meeting then a taxi for Ireland, and with a suitcase in her hand and a hat a trifle insecure upon her head she would be gone.

In 1931 *A Modern Introduction to Logic* came out. No other book of its kind had then been published I think. In it traditional logic is connected with what was then modern work in logic and metaphysics. Cohen and Nagel's *Logic* (1934) is simpler, much more readily grasped, and for the purpose of orderly description, without tears, of good arguments, better. But it does not bring out difficulties, on the contrary, it hurries past them and it does not pretend to make more than the slightest reference to metaphysical difficulties. Stebbing seriously introduces the metaphysical difficulties connected with the universe of discourse and knowledge by acquaintance and knowledge by description, induction, and the *a priori*. So does Mace in his *Logic*. His book is simpler than Stebbing's and he is readier to explore. But there is in Stebbing's something profoundly important, something the value of which has recently been more and more recognised—detailed examples presented seriously. Cohen and Nagel's is rich in examples. It is something about the way they are presented in Stebbing's which is so good. In her book students may easily get lost, but if they will exert themselves

they may well find more than they would upon shorter, better marked tracks.

In *Mind*, numbers 164, 167, 168, 170 and 171 Mr. Joseph and Miss Stebbing dispute certain points in her book. Throughout her life she wrote for philosophical periodicals of all kinds, often at short notice, because if she wanted something cleared up she was "always ready to make a fool of herself" as she used to say.

Logical Positivism and Analysis was a lecture to the British Academy in 1933. It is in the main a discussion of the relations between Wittgenstein, Carnap, Schlick and Waismann on the one hand and Moore on the other.

Philosophy and the Physicists (1937) shows up the meretricious philosophical writings of Jeans and Eddington. But it does more than perform an intellectual service. This something more is there too in *Thinking to Some Purpose, Ideals and Illusions*, and in the essay *Moore's Influence in The Philosophy of G. E. Moore*.

Thinking to Some Purpose is a widely read critical study of certain confusions and tricks common in our thinking. It is excellently illustrated with real examples.

Ideals and Illusions seems to stress the importance for living of clear thought about ethical principles. Those of us who immediately want to insist that such thought may be as futile and dangerous for living as clear thought about aesthetic principles for art, should remember that Susan Stebbing also wrote,¹ on page 286 of *Philosophy and the Physicists*, "Our greed, our stupidity and lack of imagination, and apathy, these are the factors upon which the present sorry state of the world is largely consequent," and "Our limitation is due not to ignorance, . . . but to the feebleness of our desires for good." More knowledge of why we are like this is needed and calls for the courage and determination which Susan Stebbing showed in such a high degree.

In Susan Stebbing's writings, especially in the *Logic*, in *Thinking to Some Purpose*, in *Philosophy and the Physicists*, in *Ideals and Illusions*, and in the essay, *Moore's Influence*, I find something big and excellent which gives happiness. It isn't what is written about, still less is it a matter of style, though it is seen in both of these. It is something that could be seen, too, in her face,

¹ Compare, too, her quotation from Locke on p. 475 of *A Modern Introduction to Logic*

in the keen and honest eyes, thoughtful yet full of life. Sometimes when a child wants something very much we are tempted to rig the cards a little in his favour. Some children accept the deception, but others won't have it, and that not at all because they care the less. Most of us are obliged to compromise before the end in one way or another. Susan Stebbing had power to live and still to scorn dishonesty and still to care for what once was precious. However much she desired a thing to be so she would accept no assurance without evidence. She would smile, I think, if we pointed out how her own life provided one piece of evidence for her own proposition, "Yet despair need not be the last word. It lies within our power, if we so desire it, to make the familiar world we inhabit more worthy of habitation by beings who aspire to be rational and are capable of love."¹

¹ *Philosophy and the Physicists*, p. 286

MORAL ENDS AND MEANS¹

By H. B. ACTON

INASMUCH as an inaugural lecture in most cases follows on the departure of the previous professor there is generally an element of sadness about it. In the present case this is especially prominent in that Susan Stebbing's departure was by death when she was at the height of her intellectual powers and might have continued to do and write much to the benefit of us all.

For years the main emphasis of her work was upon logic and associated subjects. I was still a student at Oxford when her *Modern Introduction to Logic* first appeared and I can still remember with what satisfaction I and my contemporaries read her plain yet vivid exposition of logical developments hitherto largely confined to Cambridge precincts. It is a book that has stood the test of time. While its title shows that it was intended to be a new sort of introduction, it placed the new in its context with the old with logical and historical skill. She took great pains in collecting her examples with the result that the book has a common-sense solidity not easily to be found elsewhere. Logic she treated not as a game or a dodge but as a practical discipline that at the same time was an essential element in philosophical thinking. Her method was not to display conclusions but to argue through to them. There is nothing in this or any of her books for those who want the prize without the race. In this connection I would mention how great was her zeal to follow the argument where it led. Students of hers here now will remember how she made it her business to give them as many opportunities as she could contrive for them to come into contact with thinkers, whether officially known as philosophers or not, who had things of importance to say which differed in emphasis or direction from what she taught.

In her last years the long discipline in logic which she had imposed on herself was having important results in her treatment of ethics, aesthetics, and the philosophy of science. Her *Philosophy and the Physicists* and *Ideals and Illusions* exhibit logical rigour, clarity of style, a justified contempt for fluff and gush,

¹An Inaugural Lecture delivered at Bedford College, University of London, on 26th February, 1946.

and a grimly humorous controversial power. But those who worked with her—among whom I am proud to number myself—and the students who had the benefit of her association and teaching in those last years will know that her powerful and candid mind was casting its light over an even wider area than had been generally revealed and would have done so for the benefit of a much wider public had her life been longer. The loss that her death has brought to this College, to the University, and to the whole intellectual world is incalculably great. To succeed to the Chair that she adorned is indeed an honour which could only be merited by constant endeavour to approach the standards of thoroughness, accuracy and sincerity which she so eminently succeeded in attaining.

There are today many people who express their approval of social policies which, in the process of achieving what is held to be a better form of society would, and perhaps do, lead to misery and death for millions. There are many more who, on the ground that by their means a bloody and increasingly devastating war was being brought to a speedy end, have approved the use of weapons which cannot but be indiscriminate in their effects. Those who oppose such policies are accused sometimes of not having the intelligence to see that once the end is chosen it only remains to select the means that will most effectively bring it about, sometimes of overlooking the evils of the existing state of affairs, and sometimes of not really caring about the end that is being aimed at. They for their part are frequently aware that there may be an element of captiousness about their criticisms which would diminish or disappear if they were themselves faced with the responsibilities of office and action. Thus on the one hand there are those who consider that conduct which is wrong when performed from passion or for gain may be right, indeed a duty, when in the service of a worthy cause. On the other hand there are those who, while they may admire the guile of the disinterested cheat, the courage of the self-sacrificing assassin, or the devotion of the unscrupulous public servant, refuse to allow that the conduct they may admire in certain of its aspects is anything but reprehensible from the moral point of view or that the worthiness of a cause justifies departure from the recognised rules of right conduct. Vacillating

between these extremes are those who doubt whether worthy causes can or should be promoted by conduct which, apart from these causes, would certainly be regarded as wrong, and yet at the same time recognise that counsels of perfection may be irrelevant or worse in an imperfect world. It is in the context of such problems that the proposition that the end justifies the means is supported or rejected. It is supported by those who feel quite sure that the main thing is to win the worthy cause. It is opposed by those who feel quite sure that the main thing is to play the game whatever the result may be. To the rest it is a source of some bewilderment which, in this lecture, I shall endeavour to lessen.

In the first place it is worth noticing that the proposition "the end justifies the means" is not an ordinary sort of moral proposition like "So and so is a bit mean about money but is honest and kind," or "Such and such would be the right kind of thing to do," or "What he did was quite unjustifiable because he lied deliberately." We often differ about the truth or falsity of propositions like these, but unless we are involved in philosophical discussion, we are not in doubt about their meaning. The proposition that the end justifies the means differs from these in that it is the result of theorizing about morals. Someone who asserts or denies it is considering, not the goodness or badness of an individual, not the rightness or wrongness of an action, nor even the applicability of a specific moral rule, but rather some alleged relationship between all moral ends and the means to them. He is advancing a moral theory, the acceptance or rejection of which will, it is thought, affect our subsequent moral judgments about people, activities and principles. It is as though someone were to say that pleasure is the only good and then, like Bentham, appeal to this theory in support of some social or political policy. Thus I hope it will be admitted that there is nothing captious or eristic in our proceeding to discuss what is and can be *meant* by saying that the end justifies the means. In doing so we are not raising difficulties about statements that people use adequately in their normal moral concerns. Rather are we endeavouring to get clear about what is in effect a theory propounded to justify courses of action about the rightness or wrongness of which there is legitimate cause for doubt.

The word "end" can mean either an aim being pursued or an aim achieved. On the basis of these different meanings the expression "the end justifies the means" can mean three different things. In the first place it can mean that actions normally considered wrong can be right if performed by someone genuinely *trying* to achieve a good enough end. In the second place it can mean that actions normally considered wrong can be right when performed by someone who *succeeds* in achieving a good enough end at which he genuinely aimed. In the third place it can mean that actions normally considered wrong are right when performed by someone who, although he did not aim at anything good, in fact brings about a good end. Interpretation (1) would justify the sincere and ruthless idealist whether or not he was successful. Interpretation (2) cautiously reserves justification for the ruthless idealist who is both sincere and successful. Interpretation (3) looks to the result only and would justify whoever brought about the good enough result, whatever he had aimed at.

Interpretation (3), I think, can be dismissed quite briefly. It is conceivable in theory that someone who did not aim at anything good and who performed a series of wicked actions might bring about a highly valuable state of affairs. Should something so unlikely happen, we should congratulate society for its good fortune rather than justify the deeds of the individual in question. It would, indeed, then be possible for this individual, like Napoleon on St. Helena, to claim that his aims had been creditable all along. If his claims were correct, then the case would be that just described as interpretation (2), in which a ruthless idealist is both sincere and successful. If his claims were incorrect, then the fortunate result provides no justification for him. It will thus be sufficient for the proposition "the end justifies the means" to be discussed in terms of interpretation (1) according to which the end justifies the means irrespective of success so long as the aim was genuine, and interpretation (2) according to which the end justifies the means when the good enough end was genuinely sought and was also secured.

Before I pass on to the main discussion of these questions I must mention an argument which might, at first sight, appear to make further examination unnecessary. It may be said that, if someone really believes that the end justifies the means, then,

whatever interpretation he may put upon the expression, he is justified in acting in accordance with it and is therefore acting rightly even if he finds it necessary to violate the ordinary moral rules in consequence. This situation, which springs easily both from the scepticism and the sentimentality of the present age, can of course be generalized so as to cover all actions performed by an agent who thinks them right, so that the most atrocious conduct would be right so long as it was performed by someone who thought it was. It is not difficult to see, however, that if we mean anything at all by "rightness" and if we admit that people ought to do what they think right rather than what they do not think right, there may well be a difference between what any given person thinks right and what really is right. If there were no such difference then we could most easily induce right conduct by training people to think that nothing is wrong. Once, therefore, the distinction between what is thought right and what is right is apprehended, it can be seen that we cannot dismiss discussion of the proposition that the end justifies the means in the way just suggested. However sincerely someone may accept it and however conscientiously he may endeavour to carry out its practical implications, we still need to consider whether any clear meaning may be attached to it and whether there is any sense in which it is true. For even though we grant that an individual is justified in doing *anything* he really thinks right, it remains clear that it is better when what is done is both right and thought right, than when it is only thought right. Furthermore, it is only in a rather limited sense that we can regard people as always justified in doing what they think right. For there is also the very fundamental duty of ascertaining what is right in order to be able to do it, and it frequently happens that people fail to do what is right because they have not given adequate attention to the question of what is right in the given circumstances. Now the proposition that the end justifies the means is, as I have already suggested, a rather sophisticated proposition and therefore not to be accepted as a maxim of conduct without due examination.

We cannot, therefore, avoid a frontal approach to the question whether the end justifies the means in sense (1) according to which success is not essential or in sense (2) according to which success is required as well as sincerity. And from what has

just been said we can see that when someone is sincere in the sense that he thinks the end good and considers the means he undertakes necessary to achieve it, his conduct may be so far forth justified, even when the end is not achieved or even when the end is not really good at all. But it is also clear that someone whose conduct may be justified in this narrow sense may nevertheless, in a wider sense be acting unjustifiably, if he has not given due thought to the nature of the end, or to the means necessary to achieve it, or to any other relevant circumstances.

Before someone is justified in believing that the end justifies the means and in acting accordingly, he has, in my view, to consider whether the following propositions are all true. (1) We can conceive of states of affairs which we know would be very good if they existed (2) When such states of affairs have been conceived we ought to try to bring them about. (3) There are some such states of affairs which we know to be so good that, in order to bring them about, it would be right, if necessary, to violate even the most binding of what are normally accepted as moral rules (4) Situations do arise in which, if the very good state of affairs is to be achieved it is necessary for actions to be performed which violate the most binding of what are normally accepted as moral rules. (5) An individual can get knowledge that such a situation exists sufficient to justify him in acting accordingly.

Propositions (4) and (5) have of course been frequently criticized both by preachers and philosophers who have argued that it is highly improbable that the only means of bringing about some very good state of affairs should be actions which, apart from the state of affairs in view, would be regarded as heinous breaches of the moral law, and that it is highly improbable that an individual could be so sure that the good result would follow as to be justified in violating the moral law in question. The line of argument generally employed is to point to historical examples of the failure of such conduct to achieve what was aimed at, as with the Inquisition. Some of these historical moralizings are certainly impressive and it is possible to reinforce them from fairly common experience. On reflection most people will admit that to employ deceit or worse in pursuit of an end, however worthy it may be, frequently leads those who are doubtful whether or not the end is a worthy one,

to decide that it is not and to hinder those who are pursuing it. Furthermore, when such reactions are aroused, the consequences become difficult to gauge. Unforeseen situations arise making it seem necessary to embark on still further violations of generally accepted moral rules. Retaliation in kind not infrequently results so that the conflict is heightened and standards lowered. Considerations such as these do, I think, make it unlikely that any very good state of affairs could be brought about by any policy of conduct that subordinated everything to the end to the extent of constantly violating accepted moral rules. Moralists have moreover, extended the argument further and maintained that however creditable the original aim may have been, a course of Machiavellian conduct will inevitably debase the agent and make it improbable that he will continue to pursue it. Psychologists, moreover, may add the observation that self-deception is widespread and that someone who thinks it is often necessary to violate accepted moral rules in the interest of some important end is very probably using the alleged goodness of the end as an excuse for doing the wrong things he wants to do. To these arguments I would add the further suggestion that we get our best founded knowledge of people's aims from what they do rather than from what they say and that therefore it is hard to believe that someone whose conduct frequently diverges from the accepted moral rules really is seeking an acceptable ideal. It is, I suggest, a tacit recognition of this truth that so often engenders opposition to alleged good causes pursued with what is commonly regarded as lack of scruple.

The combined force of these arguments is great and I have no desire to minimize them. It will be seen, however, that they only purport to establish probabilities and relate primarily to *courses* of conduct rather than to some individual breach of a generally accepted moral rule with some great good in view. Nothing that has been said so far shows that it would be wrong to commit some individual crime for the sake of some very good end. What has been shown is that it is most improbable that *courses* of wrong acts will promote any good cause or that anyone could have the knowledge that would justify him in acting on the belief that they would. In order to strengthen the case against the proposition that the end justifies the means we must further discuss what is involved in the use of the word "end."

We must, therefore, consider the remaining propositions already mentioned as having to be accepted by someone who is to act on the principle that the end justifies the means viz., (1) that we can conceive of states of affairs which we know would be very good if they existed; (2) that when such states of affairs have been conceived we ought to try to bring them about; and (3) that there are some such states of affairs which we know to be so good that, in order to bring them about, it would be right, if necessary, to violate even the most binding of what are normally accepted as moral rules.

The first of these propositions, viz., that we can conceive of states of affairs that would be very good if they existed, seems innocent enough and fairly obvious. For can we not imagine a state of affairs in which there is no pain or grief or ugliness but rather pleasure, joy and beauty? It is true that we can *talk* in this way, but can we really *conceive* definite states of affairs embodying such characteristics as these, all unmixed? The vague, pallid and depressing nature of most descriptions of heaven suggest that at any rate it is extremely difficult. Hell on the other hand can be most definite and stimulating. The reason for this is, I am afraid, that we are much nearer hell than heaven, and that if we could describe heaven in detail we could also make it, just as we can make hell. The conclusion I draw is that we can easily exaggerate the extent to which good states of affairs can be conceived of. It is more accurate to say that we can conceive better states of affairs than what now exist but that the farther removed from what is the state of affairs to be conceived, the vaguer it is and the less definitely good it is. That is, we can fairly easily talk sense about something better than what is in certain specific respects, but the farther away from what is that we let our mind wander the nearer it gets to absurdity. Yet it is in favour of remote ends, regarded as ideals determining whole courses of action and even the policies of nations or classes, that the proposition that the end justifies the means is generally invoked.¹

¹ In parenthesis I should like to mention that it has been a merit of Utopian thinkers that they tried to describe in detail the world that was to be striven for. Thus, for example, Fourier: "Mondor's day in summer. Sleep from 10½ in the evening to 3 o'clock in the morning. At 3½, rising, getting ready. At 4, court of public levée, news of the night. At 4½, the délicate, first meal, followed

We have now to consider the proposition that when very good states of affairs have been conceived we ought to try to bring them about. If what I have just said is correct, then at any rate we have no duty to engage in the pursuit of any vaguely conceived remote ends. It may, however, be objected at this point that surely it sometimes is someone's duty to leave all and follow some high aim perhaps hitherto unconceived. I admit that it may be, but here again it is important to describe the real state of affairs as concretely as possible. There is no such thing as just following some high aim, any individual has to follow his aim in certain specific ways. Generally these involve talking to other people about it, endeavouring to get their agreement, and forming an association through which the pursuit is organized. Once specific steps of this nature are taken, moral relations are established between all the individuals concerned and between their organization and the rest of society. It may indeed still be argued that the aims of the organization may be so important that they transcend any such specific duties and make it right to avoid performing them. To this I can only reply that such aims must not only be very good indeed, but also clearly conceived, specific, and likely to be attained by certain definitely specified courses of action. The position of John Rosmer in Ibsen's *Rosmersholm* can, I think, be used to illustrate this point. Rosmer, a highly respectable and influential member of the community, whose wife has not long before been found drowned, has changed his political and religious convictions and thinks it is therefore his duty to announce this conversion and engage in politics against the established, conservative elements of the town among whom most of his friends are numbered. He imparts

by the industrial parade At 5½, attendance at the hunting group. At 7, attendance at the fishing group At 8, breakfast, newspapers. At 9, attendance at an agricultural group. under cover At 10, at mass. At 10½, at the pheasantry group, at 11½ at the library. At 1, DINNER. At 2½, at the group of cold green-houses. At 4, at the group of exotic plants. At 5, at the group of fishponds At 6, luncheon, in the fields. At 6½, at the group of merinoes. At 8, at 'Change. At 9, SUPPER, fifth repast. At 9½, court of the arts, ball, theatre, receptions. At 10½, bedtime.' (*Selections from the works of Fourier*, translated by Julia Franklin, pp. 167-168). This leaves us in no doubt about what is in store for us, and while we may not ourselves be able to conceive any alternative very good state of affairs, we have no difficulty in deciding whether or not we want to aim at this one.

this to the leading local representative of the party he now wishes to adhere to. This expert politician, however, is not nearly so impressed with the new accession to the cause as might have been expected. In the first place he advises silence on the religious issue as a complicating factor that might well diminish the value of Rosmer to his new party. In the second place he sees that the incursion into politics of a man of Rosmer's position and antecedents will lead his opponents to look for mud to throw at him. There are certain very specific lumps of mud that may well be selected, and if Rosmer cannot remove them from his person skilfully and without trace, his accession to the cause might turn out to be more of an embarrassment to it than a help. However convinced Rosmer may be of his own integrity, he may not be able to convey a similar conviction to his political associates and opponents. Once he is in politics what will count is not the real state of his soul but the view of it that circumstances will enable to be presented. John Rosmer, we can say, was living in a vague moral world, not really knowing what his aims were nor what he meant by throwing himself into the new cause. He may have had a picture of some better state of affairs, but he had no definite link connecting him with it and no precise thoughts on the things he next had to do.

This brings us to the last proposition under consideration, viz., that there are states of affairs which we know to be so good that, in order to bring them about, it would be right, if necessary, to violate even the most binding of what are normally accepted as moral rules. I have suggested that this could only conceivably be the case if there were some very definite aim that would be realized by the performance of some definitely specified action or series of actions. These conditions therefore would certainly require the very good state of affairs not to be far in the future and the necessary actions not to be many or too complicated; for the farther into the future the attainment of the end is placed, the greater are the chances of miscalculation or failure. Thus, if the arguments I have used are sound, it would only be in cases where some sufficiently important and definite good is realizable immediately or very soon as the result and only as the result of some single action or short sequence of actions contravening the normally accepted moral rules, that it could reasonably be said that the end justifies the means. I should not be

prepared to deny that such cases do sometimes arise, nor that, when they do, violation of some accepted moral rule would, if the end were important enough, be the right course. My point is that they are likely to be rare, and that we are likely to exaggerate their frequency if we conceive of moral behaviour as a pursuit of distant ends.

It is perhaps worth adding that these considerations may be reinforced by three further arguments, all of which indicate how easily we can make misleading abstractions in considering moral ends. (1). When we consider aiming at some end we are prone to overlook concomitants of the end that will come into existence in the very process of achieving it. (2). Furthermore, we sometimes try to consider the end as quite distinct from the specific course of conduct required to bring it about, whereas we should, in conceiving an end, think of it as what follows when such and such actions are undertaken (3). Again, we sometimes think of ends as if they were the finish of all activity, the final achievement of moral equilibrium. But just as an end is really what follows when such and such actions are undertaken, it is also what necessitates the undertaking of further actions. The probable consequences of achieving an end are therefore factors involved in its assessment. The less clearly such consequences can be envisaged, the less capable are we of assessing the value of the end.

So far in this lecture I have been trying to show that the maxim that the end justifies the means is both intellectually and morally misleading because it leads to vague conceptions of future states of affairs and diverts attention from the nature of the conduct that is our immediate concern. Insufficient time remains in which to consider at all adequately the other question raised at the beginning of the lecture, *viz*, the contention of those who say that no end can ever be so good as to justify any departure from the recognized rules of right conduct—that, whatever the aim or consequences, no departure from rules of moral conduct is justifiable. I will, however, try to indicate some directions in which this attitude can be criticized.¹

¹ It would clearly be possible to argue that, just as the believer in the proposition that the end justifies the means makes a misleading abstraction that leaves out of account the actions leading up to the end, so the extreme

In the first place, then, I suggest that this is not an attitude that could be maintained consistently in the sphere of private conduct. Let us suppose a doctor who by a series of accidents has been deprived of all means of transport to a patient who must be tended by him if he is not to die. If this unfortunate condition coincided with a London rush hour, it might be the doctor's duty (supposing he is unable to convince a surly and cynical bus queue of his good faith) to try to get on board a bus out of turn or with the exercise of more violence than would normally be right. No one, I think, could seriously maintain that the particular job he was going about did not, in the circumstances, justify departure from certain of the moral equities. It may indeed be objected that in jumping the queue he is not really behaving inequitably at all, but that on the basis of knowledge that *he has and they have not* he is behaving equitably as between them and his patient. This may well be so. There is no doubt, however, that he is violating a rule to the effect that we should, when there are queues, take our place in them. This rule is rightly abrogated if a human life is at stake—with the agreement of all concerned if they know the facts and are not perverse, or by guile or moderate force if they do not know the facts and cannot be convinced.

Now it seems to me that all definite moral rules, from those which, like the one I have just cited, are not a great deal more than manners or conventions, to the most serious of all, are subject to possible abrogation in this way. It is right to keep promises—except in those very exceptional cases when it is not. It is right to tell the truth—except very occasionally when it is our duty to lie. It is right to refrain from killing other people—except on those occasions when killing is not murder. The more trivial the rule, of course, the more subject it is to rightful violation, and hence the rule about keeping place in a queue is one that we should not uphold pedantically. Now if it is said that the man who jumped the disbelieving or callous queue did not break the *real* moral principle involved, which is not that people should keep their places in queues but that they

stickler for moral rules makes a different sort of misleading abstraction that leaves out of account the end and consequences. Propositions can, however, be true and antithetical without being particularly illuminating, and I think this would be one of that sort.

should act with a proper appreciation of the duty they owe to certain special persons as distinct from mere passers-by in the street, then a very different and less definite type of moral rule is being appealed to. It is *always* right to pay due heed to the moral claims that others have upon us. It is *always* right to act equitably. It is *always* right—to repeat a principle that has already been discussed earlier in the lecture—to do what one believes right rather than not. Such principles, however, are not *definite* moral rules. The principle that we are to tell the truth requires a definite sort of conduct and we generally know when we are not performing it. The principle that we should do what we think right is more general and less informative. To allege exceptions to these less definite moral rules is to betray moral imbecility or to propound villainy. Now it seems likely to me that at any rate some of those who say that it is always wrong to make any exception to any moral rule are confusing these two different sorts. They are so intent in upholding the right that they import into practical moral maxims a necessity that belongs only to the principles that define morality itself. There is plenty of excuse for this since moral philosophers have done little to distinguish the various types of moral statement and to exhibit the fallacies to which confusion of them gives rise.

In the rather simple example I have just made use of, it was seen that departure from some relatively trivial moral rule became the right course when the doctor could not persuade the members of the queue of the real state of affairs or could not move them to the action appropriate to the circumstances. Ruse or violence was justified when negotiations had failed—though in fact negotiations in such a case seldom would fail. Now some analogy to the situations that arise in public life¹ is provided if we suppose that when the doctor addressed the queue about his predicament and showed his stethoscope as evidence of his good faith, several members of the queue stated that they were themselves doctors on similar or even more pressing errands and others expressed the opinion that the

¹ To distinguish public from private life is not easy, as there is a gradual transition from the one to the other. But public life, for moral purposes, includes, besides politics and the state, the life of churches and much of commerce.

stethoscope was a dummy or a blind. That is to say, the conduct generally required in public life differs from that normal in private life in that it is confronted with a greater number of existing wrongs, more complicated circumstances, and fewer opportunities for resolving problems by personal approaches.

It was with the manifold existing wrongs in view that Machiavelli wrote: "a man who wishes to act entirely up to his professions of virtue soon meets with what destroys him in so much that is evil."¹ What he should have said is that in so much that is evil, absolute adherence to the practical maxims of private morality would be morally wrong. What matters is not so much, as Machiavelli appears to suggest, that the agent is destroyed as that his conduct is not what the situation requires. It may be, for instance, that in the past a government has given a number of undertakings which subsequent events show to be incompatible. Rules about keeping promises help very little in this situation, where the decision has to be which promise shall be broken. There is no need for me to emphasize the complication of the moral problems of public life. It is worth mentioning, however, that because of this complication the different parties to a dispute will generally have different sets of facts in mind and will consequently urge quite different settlements—a situation which occurs, but is much less common, in private concerns. Again, in public affairs individuals are generally acting as spokesmen or representatives. Therefore their responsibility is different from what it usually is in private matters, and they rightly consider that they are less justified in acting promptly on generous impulses of their own, than if they had been mere private persons.

I am afraid that some people who know enough about politics to have heard of some of its scandals and insufficient about ethics to appreciate that departure from a single maxim of private morality is not the same as departure from the moral standards that really apply to the case in hand, are prone to think that there can be no public morality and that only power can count beyond the personal sphere. The answer to them is, it seems to me, that people are doing different things when they engage in public concerns from what they do in private life, so that it should not be surprising if the specific rules that generally apply to the latter should more often require exceptions when

¹ *The Prince*, ch. xv

applied to the former. Justice and equity permit of no exceptions in either sphere. They are among the terms that define morality. But they are exhibited in different sorts of rules of conduct in the various levels of behaviour from personal affairs to the relations of states. A comparison of the notions of a promise, a contract, and a treaty is instructive in this regard. In the sixteenth century Grotius tried to show how certain public matters, notably war, could be carried out in accordance with the fundamentals of morality. It is, I think, a scandal of twentieth-century thought that the efforts made in this direction are so few and so trivial by comparison with the problems that confront us.

REFLECTIONS OCCASIONED BY *IDEALS AND ILLUSIONS*

By J. LAIRD

THERE is general agreement that Miss Stebbing's *Ideals and Illusions*, though nothing like a failure, is somewhat below the very high level of her best work. Its reviewers for the most part were reluctant to commend it without considerable reserve; and I, who was one of them, murmured with the majority. Breaking her general (I think she said her invariable) rule, she wrote me to the general effect that despite the book's shortcomings she was glad she had written it. That was a healthier though not a less candid reaction than her habitual disconsolateness when her wide public expressed its gratitude. Then her attitude was: "Nearly the whole of it needs to be rewritten and much scrapped. I could almost wish it hadn't been published." She never quite wished that, regarding any of her later books. Regarding *Ideals and Illusions* she didn't wish it at all.

I shall not, too late, here attempt a second review of the book, or try to undo the first review now that the author's feelings cannot be roused by anyone's pen. What I shall endeavour to set down are certain reflections occasioned by re-reading the book. They are still rather more critical than I could have wished, but that needn't matter. Judging from experience, I am likely to antagonize a considerable proportion of readers. However that may be, *Ideals and Illusions* is memorable. Written in some haste and under stress of deep emotion in times whose horror, even now when the worst may be over, has numbed most of us into an indefensible degree of near-acquiescence, the book is characteristic of a lady whose intellectualism, impatient of vague abstractions, was bent upon helping the lives, through the minds, of her contemporaries, whose zest for principle invariably had the purpose of social betterment. If in the anguish of these days of horror she was less zealous for the discipline of a balanced philosophy than in the other writings which made her so easily the first philosopher among the academic Englishwomen of the present century, the main contentions of the book are scarcely if at all less interesting or less informative on that account.

In a general way there should be no quarrel with Miss Stebbing's contention that ideals need not be Utopian or impracticable, that "realists" like Hitler and Mussolini had "ideals" in the sense that they wanted to change the world in a direction which they proclaimed and probably believed to be for the better, and that "spiritual" ideals need not be dismissed as visionary vapours on the mere ground that they may be unattainable in their full perfection or that conscience, taste and intelligence are wandering aliens in an implacably "materialistic" universe. What I suppose a cautious "realist" might urge in reply would be that a practical policy can seldom afford to put all its eggs into one ideal basket, or even into some few such baskets and that practical policy, regrettably or not, is often a mere programme supplemented by a series of improvisations with plenty of compromise (always on points of principle) and a pachydermatous tolerance of inconsistency. In that case the argument is not about the existence of principled or idealistic attitudes in men, but about their place and preponderance.

To that I shall return, pointing out here that moral principles offer a special difficulty since they claim to be *final*, not mere competitors with other principles, when their nature is understood. If so there is quite special difficulty for statesmen and for other such people. When Gladstone appealed to the "conscience of Europe" he was appealing to something, that is to say there were Europeans who responded to the appeal. When belligerents proclaim the justice of their cause they appeal to something in the breasts of their nationals; and similarly when there is a demand for a brand-new "law" to punish vanquished "war-criminals." Yet if "conscience" and "justice" were accepted in the spirit to which they lay claim, they would tolerate no rivals and no superior and no statesman, not Gladstone in his appeals to the conscience of Europe, not Woodrow Wilson in his attempts at an *Astraea Redux* has ever tried to govern on a basis of pure morality. Being a candid secularist Miss Stebbing had to show in her defence of this-worldly but entirely authentic ideals, both that materialism was not enough and that theology was too much. Hence, her method being characteristically polemical (and sharply polemical at that) she had to fight on two fronts; and it may be unfortunate that she divided her forces so evenly. It was necessary for her

to say that her defence of spiritual values did not rest on theological grounds, she had to attack when the theological contention was that the choice is between God and Mammon and that the best of "good pagans" is on Mammon's side however much he may protest and however skilful he may be in putting a good face upon Mammon. Since she believed what she did believe, it is perhaps surprising that in writing this tract for the times she paid little or no attention to what was very prevalent in those years (and may still be lingering) namely the resurgence of naïve Christian fundamentalism among many of the allies outside Russia and China. Instead she made her polemical selection from those who took high theological ground; and she was, broadly speaking, as effective as her eclectic polemics permitted. All the same, her rapid and repeated transitions from one front to the other are distracting to the reader. Even if there had to be a major offensive on the theological front, it would have been easier for the reader had the offensive been all in one piece. And, after all, her principal quarrel was with the "realists" not with the theologians. "Materialism is not enough" For define your terms. If you mean fleshly materialism, it is not true that nobody seeks anything other than ease, comfort and the flesh. Men also seek vision and understanding and justice and freedom and love. If you mean the metaphysical theory that all is matter in motion, it follows that if vision, understanding, and the like exist (as they do) they also are matter in motion; and this particular philosophical debate has no relevance at all to what any plain man means by building a better world.

Another train of reflection is set agoing by a consideration of Miss Stebbing's logical methods. Time and again she asserted that moral vision was of greater moment than the steadfastness with which the vision was pursued. Our moral deterioration in the present century, she held, was a decline in our moral standards, not in our relatively considerable fidelity to such standards as we had. This judgment seems odd to me. Without vision the people perisheth, but it also perishes if, having the vision, it responds but slackly. I do not see how it is possible to say with confidence which of the two is the more important; but no doubt there might be a direct moral judgment on the point based either on intuition or on induction. What seems to me to have happened in Miss Stebbing's case was that she

took the point to be logical. Logically a principle is prior to its application.

If that was what happened, I think she was an intellectualist in a sense which may be censurable. The very idea of logical deduction is based upon a theory of logical priority *in ordine ad universum* which is very hard to justify in a host of particular cases, so much so, indeed, that in many cases of "deduction" we have either equivalence or a merely arbitrary priority; and when we are dealing with *operative* principles, with "practical" principles in that sense, it seems to me to be a mistake to maintain that the *modus operandi* is subordinate in any final and necessary way. Throughout her discussion Miss Stebbing maintained that as between a principle and the machinery of its application the latter was of little account. Certainly without an end the means or instrument to that end would be nothing but a derelict machine; but that particular reflection is insufficient to show that the pains and attention that the means may require may not be very much greater than the pains and attention properly given to the end.

Another recurrent logical theme in the book is the paramount need for "definiteness" and the way in which one may succeed in being definite. "Children be definite," it would seem, ought to be the very first entry in every copybook. That may be; but it is not quite clear that the best way of being definite is to "think in adjectives not in capitalised abstract nouns" and that *this* in the main is what is meant by "speaking plainly."

In general when an adjective is derived from a concrete noun it is vaguer than that noun. "Buttery" for instance is vaguer than butter. This leaves open the possibility that, in reverse "lend lease," an abstract noun which "capitalises" an adjective is vaguer than the said adjective; but surely it need not be so. (How is warmth vaguer than warm?) Indeed it is permissible to doubt whether it often or ever is so. On the contrary it might be argued that the effect of "capitalisation" is to lay stress upon the force of the adjective in itself alone.

However that may be, another of the things Miss Stebbing was fond of saying about "definiteness" would apply equally to nouns and adjectives. It was saying in effect that to "say what you mean" requires you to avoid *very* general terms and to supply a set of narrower specifications. You may save time by just

saying "war"; but you will speak more plainly if you speak about the organized attempt on the part of a State to kill, maim, starve and terrify the members of another State until it gives in. Certainly this supposedly "plainer" way of speaking might be a useful curb upon soap-box oratory bent upon glorifying war without adequate recollection of its horrors. But in the last analysis how is the "plainer" way of speaking more *definite* than the other? Again, how far does the principle reach? Is it, for example, a sin of indefiniteness to speak about "boots" and a logical rule to speak instead about "footgear covering the ankles either laced, or buttoned or elastic-sided, capable of being lined and of having fur tops"?

This pursuit of "definiteness" led Miss Stebbing to disparage "pseudo-questions" such as the query whether the enjoyment of beauty was better than the enjoyment of a good digestion—a query which could be formulated quite well in terms of the adjectives *aesthetic* and *eupeptic*—and accept only such "definite" questions as whether Nero should fiddle while Rome is burning. This looks like an exaggeration. It is difficult to see why Nero should *not* fiddle during the conflagration unless life-saving *had* priority over fiddling *and* unless Nero could be useful in the emergency.

Some of these remarks about logic have a rather disquieting application to Miss Stebbing's main argument, namely her defence of what she called "democracy". Her formula was "All men alike ought to be free and happy" which formula, she said, although inevitably abstract was "not unclear." Made more definite it expressed the "tremendous assertion" "All men, whatsoever may be their race, skin-colour, social status, creed, mental, or physical ability, ought to lead free and happy lives, ought—that is—to be free each to shape his own mode of living in accordance with his own abilities and needs." As already explained, I have difficulty in believing that "all men" does become more definite by the addition of the explanation that a man may be yellow or black, Christian or heathen, clever or stupid. The concluding statement about freedom, to be sure, is much more definite. It is sufficiently definite to raise a swarm of stinging questions, but not sufficiently definite to answer any one of them.

Matters are not made easier when we turn to Miss Stebbing's

more detailed discussion of her central theme. Her text was a part of the American Declaration of Independence. This in its turn was (a) a declaration of each man's natural right to life, liberty and the pursuit of happiness, (b) the deduction that political institutions should be based upon the consent of the citizens to the end of securing the aforesaid natural rights, and that a government should be dismissed by the decision of the citizens if it failed in this primary purpose. The deduction (i.e., democracy proper and the foundation of the Republic) does not follow by any known rules of logic. Even if the people was unanimous it might consistently consent to the rule of an Emperor or of a Fuhrer, not to anything declared to be government by the people, and since, in any government, the ruler is invested with a status which is not the status of a simple citizen, only a part of any assumed initial equality of the citizens can be retained if there is any government at all. Thus at the best the question becomes one of retaining as much equality as is practicable and we have all the familiar problems on our hands—whether majority-tyranny may not be among the worst of tyrannies, whether a popularly elected “planning” state leaves any appreciable measure of individual liberty, whether under many despotisms the great majority of the subjects have not been freer and happier than in many democracies, and so on. It may very reasonably be maintained that political democracy seems nearer in spirit to the equalitarianism of a brotherly community than any other form of government yet devised; but that is the most that could be offered in the way of a logical deduction.

Miss Stebbing, however, declared, in a way that would have amazed Thomas Jefferson and his friends, that democracy, in its essence, was a “vision of good living” and *therefore* “free voting for everybody” was only an incidental, a subordinate affair of mere political machinery; and similarly of so-called “economic democracy.” What mattered supremely, she said, was not the machinery, but the vision itself, more fully described as “an association of free men in which the free development of each is the condition of the free development of all”—a formula much more difficult to interpret than the simpler declaration of the Three Musketeers, and in any case a vision stupendously difficult to elaborate in detail.

It may be pedantic to remark that democracy, by etymology, does mean popular *government*, and that universal adult suffrage, one adult one vote, and a secret ballot is frequently regarded, not as a mere piece of machinery, but as the best practicable way of giving each several citizen a certain governing power by assigning to the votes of each the enormously important office of determining the making and unmaking of the government on an equalitarian basis. Even if there be pedantry here, however, the question of *rule* can hardly be dismissed as irrelevant. The victors in the recent war do not think so when they deal with elections in Greece or Bulgaria, or are doubtful whether the ideology of Spain or of any of the vanquished powers is consistent with the new democratic order. Suppose, however, that the victors are wrong in this, a not impossible supposition. Could we then say that "economic democracy" is merely a matter of equality of income and has nothing to do with the question whether all industry should be State-managed, or if not managed by the State, whether the workers should not elect their own bosses? On the contrary, there *are* questions in which matters of rule and its machinery are essential.

Despite all this, it is certainly possible if not altogether prudent to maintain that the vision of a democratic "way of life" has priority over every question regarding forms of government, and clearly, had democracy been understood to be *only* a form of government, it would not have become the battle-cry of the "free" peoples in the late Armageddon. If so the question "Why then call it 'democracy'?" may perhaps be dismissed. Call it what you like. In that case, however, the proper conclusion would surely be the conclusion of a logician much inferior to Miss Stebbing, namely Alexander Pope. Only fools would contest about forms of government. The ideal would be that all men alike should be free and happy *no matter how*—in detail, that they should be free and happy whether theoretically governed, monarchically governed, communistically governed or Fuhrer-governed. This may be a legitimate attitude, but it tends to ignore the amount of hard thinking necessary to make the vision operative. In the main, Jefferson might have been more nearly right than Miss Stebbing.

More generally, the wide ethical question of which the above is an instance can hardly be settled by fervent insistence upon the

quintessentiality of the spirit. In all ethical affairs it may be true that the vision, the spirit, the inward light is the root of the matter; but it is an illegitimate inference, in silviculture or elsewhere, that if the roots be sound the stem and the branches need as good as no attention. Benevolence cannot be translated into actual beneficence without immense labour, especially in vast world-arrangements. Again the niceties of justice and equity require a strict and strenuous application which, even if in some sense subordinate, is scarcely (if at all) less important than the initial vision.

It would not be fair to say, however, that any of Miss Stebbing's ideals were more appropriate to the visionary than to the woman of vision. She made it abundantly plain that an idealized "democracy," such a democracy for instance as Thucydides makes Pericles describe in the magnificent Funeral Oration, was not attained in Athens and has never been attained in Britain, France or America; and if—small blame to her—she was reticent about large new constructive ideas for the building of a better world, she was very outspoken indeed about much that could be and should be undone. Here she was very much of a realist. Materialism was not enough; but the neglect of the material conditions of gracious human development was unpardonable.

A large part of her argument was about poverty and the slums, her fundamental contention being that squalor, poverty and disease should not be regarded as a mere physical evil but also as the frustration of cultural and spiritual development. These things are evil *however arising*, and that is the main reason why those who could alleviate but do not are morally so gravely at fault. In this (I submit) she was plainly in the right and was exposing a prevalent error. It is a moral man's duty, if he can, to prevent evils in themselves non-moral, such as animal suffering, and it is absurd to hold that the animal suffering itself is *not* an evil. There is, as she showed, much confusion among contemporary and other moralists on the point; and even her more vehement utterances, though they may be rather incautious do not (I think) deserve so much as a mild censure.

"As a first step to clarity," she said, "we should do well to ask ourselves whether it would be worth while to be kept alive for years (supposing this to be possible) on condition that we

were, throughout those years, confined in a crowded shelter while a perpetual air raid was in progress, and finally to die without emerging from the shelter. The answer, I assume is clearly that it would not be worth while."

She explained on the same page that "excellences of moral character" might flourish under these conditions, and that this was a "big" and "from a certain point of view the all-important exception" although she, for her part, could not admit that moral excellences were the only spiritual values. Accompanied by this addendum, is there anything so very wrong with the statement, especially if the "first step to clarity" is just a first approximation to clarity? If the statement is incautious, the reason is only that the supposition is deficient in frightfulness. Make the supposition a little more horrifying and you must reach the conclusion that moral excellences themselves would have as good as no chance of emerging. Imagine incarceration for life and from infancy in a Belsen camp with religious, moral and all other instruction barred, and with a flogging in wait for all who seemed to be contemplative. In what respect would such a life be worth living? Where would moral excellences have the opportunity to develop greatly? Not improbably, many of Miss Stebbing's critics at this stage of her argument were theological moralists ready to pounce. In their view a secular ethics will always let its exponent down, all that is necessary is to await the revealing statement. How different, they say, is this view of a lifetime spent in an incessantly bombed shelter from theirs. They remember the saints whom dirt did not affright nor tortures appal. For them the miseries of this present life are spiritual opportunities less inimical than life's felicities to a heavenward progress. They seek a better country; and in Miss Stebbing's "first step to clarity" they find a most instructive introduction to the radical insufficiency of every this-worldly theory of ethics.

As I have said, I doubt whether this reply would be so much as plausible had Miss Stebbing imagined a *Schrecklichkeit* which prevented all moral development and all devout contemplation. Nevertheless it is clear that the miseries of this present life would have a very different perspective if they were an evangelical preparation for another life clean out of the world; and since belief in such a life is not demonstrably absurd it is perhaps

unfortunate although characteristic that Miss Stebbing called her chapter on this subject "The last illusion."

The "illusion," of course, was only that morality *requires* these other-worldly prospects, not that the prospects themselves are necessarily baseless. Still the title was unfortunate. As I said on an earlier page Miss Stebbing had to assert, as she did assert with great vigour, that a this-worldly ethic need not describe the attitude of a Mr Carnal Minded nor of a Mr. Worldly Wiseman. It need not be earthly, sensual and, in the end, devilish. Believing as she did in the goodness, the authentic goodness, of love, and freedom, and clear-mindedness and a peaceful spirit in this present life, believing also in the evil, the authentic evil, of hatred, and servility, and ignorance and a distracted soul in this present life, she was bound to maintain that, without as much as a glance towards heaven, there was a moral duty, thoroughly well-founded, to ensue these goods and to eschew or destroy these evils. To those who, like Canon Peter Green, thought that such a secular ethics was at the best pathetic and just a little mad she could only say, *more suo*, "To me it seems that there are several muddles in the argument; but I am quite aware that the muddle may be my own."

Perhaps also polemical methods were not very suitable here. If So and so is a person of influence and gives tangible ground for definite attack something is gained by transfixing his arguments and adding them to a collection of exhibits. Still So and so was only speaking for himself, and his discomfiture, however politely expressed, only disposes of *him*. The reader suspects, not unjustifiably, that there is much more to discuss. He might even think that a book would be more appropriate than a short chapter. Consider some few of the possible arguments. According to some, moral obligation is sacred, and a secular account of it necessarily ignores the fact. According to others it is non-natural whence some infer that it must be supernatural in the sense, whatever it may be, which Christian theologians either avow or are at pains to transcend in a "sacramental" view of "nature". According to others still, human judgments concerning right and wrong, good and evil, are beyond any mere man's capacity to formulate by himself and so must be God-given to have any claim to credence. These are but a few of the things that are said. They are not easily treated in a few polemical

pages. Many, I think, who share Miss Stebbing's belief in the sufficiency of secularist premisses for ethics are sorry that she chose this method, especially in her last chapter. I for one regret it, and would do so even if I were in a smaller company than I suppose I am in.

Certain secularists in morals are apt to debate these matters either in a spirit of defiance or almost boastfully as if much virtue should be imputed to them for a courageous renunciation. That is weakness, not strength; and it is weakness both logical and moral. If the good that living men may achieve on this planet is worth the attaining it *is* worth the attaining. That is a worthy practicable ideal and therefore justifies the effort involved. There is no occasion for regret, for apology or for the inverted apology of defiance.

Miss Stebbing, I think, showed no such weakness. True, she always wrote with passion, with a passion for logic and with a passion for ethics. The stimulating quality of her pages is largely due to this. She could be and she was vivacious in her manner of writing, but her vivacity itself sprang from the intensity of a serious burning conviction. The passion, though controlled, was eager, and *Ideals and Illusions*, wrung from her in these desolate years, has all the dignity of unconquerable sincerity. Hasty it may have been and in some ways more of a fragment than it set out to be; but we should be very glad that she wrote it.

THE WAY OF BEHAVIOUR

By BEATRICE EDGELL

"THE ability to think depends upon the power of seeing connexions. Reflective thinking consists in pondering upon a given set of facts so as to elicit their connexions." "The similarity between objects having many differences that would be important in *other* connexions may be noted because it is relevant in this connexion. Hence the importance of abstraction. Without abstraction there can be no recognition of similarity; without recognition of similarity there can be no advance in knowledge."—Stebbing, *A Modern Introduction to Logic*, pp. 4 & 7.

In a recent article in the *British Journal of Psychology* entitled "Some Biological Aspects of Thinking" Professor Wolters claims "the route to a useful psychology of thought is by way of behaviour, and not by way of ideas, if we mean by idea a mental entity, or content, something before or in the mind."¹ Professor Wolters' contributions to psychology always deserve serious consideration and suggest lines of study worth pursuing. This must serve as my excuse for examining his theory in this volume. There has been little or no progress along the lines followed by the Wurzburg school in the first decade of this century. That was certainly by way of ideas. We owe to it the recognition of the importance of the "ausgabe" and of "Einstellung." Behaviourism made its contribution by stressing language habits, but left the core of the problem untouched.

The Gestalt school might be called "biological" in trend, though it would claim to be much more in its metaphysical outlook. In thought it has found the same principles of organization it traced in perception, the laws of closure and good continuation in systems under stress. It has found in problem solving the same dynamics of tension which it found in all behaviour. Fundamental for its doctrine is the theory of isomorphism and of traces. The experimental verification of deductions based on these theoretical assumptions has to serve as substantiation of the assumptions themselves.

Wolters is then in line with the modern trend of psychology in putting forward a biological account of thinking. He is

¹ Vol. xxxiii, p. 183.

developing more fully the views which he put forward in 1933 "On Conceptual Thinking."¹ He regards psychology as the study of human beings considered as behaving organisms; moreover it is the study of "organisms engaged in securing control over their environment to the end that they may continue to live."² Thinking is directed to preserving or extending the integrity of the organism. It is "schematic" behaviour, behaviour which is in part determined, in part variable, a flexible skill, an adaptive response to a situation, developed to meet problems. Concepts are skills in reacting. They are not "objects of attention but patterns of behaviour. Animals remain at this level, and young children seldom get far from it."³ Wolters says that "organized tendencies determine the reaction without obtruding themselves as moments in it. The concept directs activity without being an object of thought and its value lies in that function."⁴ But Wolters goes on to point out that difficulties and new types of problems give rise to the need to rebuild schemata. It is at this point that the organism has "to turn round on itself." Schemata have to be made accessible to the thinker. This he recognizes may be difficult. "There are limits to our power of envisaging the structural principles of our thinking."⁵ He sketches out the way in which an individual living in a community which valued freedom might reach the concept of "liberty." He would observe how members of the society act towards each other; he would notice that well-being depended on acting in these ways. He would study the pattern, try to trace its growth, to understand the explanations of motives, so far as his own schemata permitted.

One would wish to agree with Wolters in his stress on the purposive character of thinking, to agree that it will develop as the individual's behaviour becomes more complicated, to agree that it may serve the function of self-preservation, but for all that one may protest that in discarding ideas as objects before the mind, Wolters is attempting to travel too lightly, he is leaving essentials behind. Generality, he says, is "to be

¹ *British Journal of Psychology*, xxiv, pp. 133-143.

² *Ibid.*, xxxiii, p. 177.

³ *Ibid.*, p. 181.

⁴ *Ibid.*, xxiv, p. 138.

⁵ *Ibid.*, xxxiii, p. 182.

sought in the manner of thinking, not in introspectible concepts."¹ Does he mean by this that psychology is not concerned with the general reference ideas may have or is he denying that we can be aware of ideas which have such a reference? One would have expected that schemata when they became objects of contemplation would have some generality of reference. "Liberty," since it refers to conduct, should fit Wolter's theory admirably. As a pattern it will have to be detected in instances of behaviour. The investigator will need to compare instances of behaviour in himself and others, and what is more he must see the pattern as the same pattern in spite of differences. Why such knowledge may not be called a general idea of the pattern "liberty" I do not know.

We undoubtedly do become interested in patterns of behaviour quite early in life. The schoolboy recognizes the pattern "sneaking," and I suspect he has a fair concept of a "pi-jaw." But possibly even before they are interested in patterns of behaviour children are interested in the patterns of the world in which they behave. In using the Rorschach personality test I have been struck by the readiness with which children can justify their view of the characteristics proper to things in their world. The test uses large ink blots in varying shades of grey, red and grey or in colour. The subject is asked to say what he can see in the blot as a whole or in any part of it. Insight into the subject's knowledge or even into his interests is not a primary aim of the test. Incidentally one does gain a good deal of information about both. The questions asked by the experimenter after any response are directed to finding out as precisely as possible what is seen, the area of the blot used and the features which determine the response, e.g., form, colour, shading, perspective. Here are some examples: The age of the subject is given in brackets. (vi) "Banana" (the part of the blot indicated was blue). "A blue banana?" "It's pointed like a banana." (vii) "Two funny things like a pig's foot, not a horse's foot because that is round." (vii) "Bird with no legs—A pigeon, the neck is right for a pigeon, but the colour is wrong!" (xi) "A mouse because of its pointed nose!" (xii) "Holly berries." "Why holly berries?" "No other berries are formed in that way on a branch." (xiv) "There's a camel's head." "Why a camel?" "There's his beard." "Does

¹ *British Journal of Psychology*, p. 176.

it look hairy?" "Yes, and you can see the nose slits." I should say that these responses point to general ideas, of varying degrees of adequacy, there is conceptual knowledge of the objects named. This is an A and not not-A. I contrast them with recognition based on the memory of a particular instance or incident, (vii) "Robinson Crusoe's shoes." This was followed by an eager description of the pantomime then being given at the local theatre. (vii) "The brickwork chimney at the gas-works. You can see it from Dad's allotment." (ix) "Like Pluto in Mickey Mouse." (xii) "Bridge, the Suspension Bridge at Bristol." (The boy had just returned from a visit to relatives at Bristol.) (xiii) "The slope from Leckhampton Hill with the Devil's Chimney."

No doubt schemata may function in what one may roughly term "the same way," they could then be said to be ways of reacting to kinds of situations, but in memory and conception there would surely be knowledge that they were so functioning. One can accept Wolters's warning that "nothing but confusion can result from ignoring the psychological distinction between the object of thought and the instruments with which we think!"¹ When, however, he goes on to say that the object to which thought is directed is a form of behaviour I fail to follow. Sometimes indeed it may be. Again, when he says that generality is not introspectible in contents, I agree, if by this he means the processes taking place when we think, but when he says it is to be sought "in the manner of the thinking," I am puzzled to know what is meant by "manner." I should hold that generality lies in the object or reference of thought. When mental development is mature no specific variety of process appears to be necessary for a thought reference that is general: an image may give a memory in one connection, a concept in another, a word may be understood as a sense-determined particular or as a class name.

I should endorse James's principle of constancy: "The mind can always intend, and know when it intends, to think the same."² Why should we try to say that in such cases there is no object before the mind? The problem of sameness is not solved by throwing it to the side of the organism

¹ *British Journal of Psychology*, xxiv, p. 141.

² James' *Principles of Psychology*, vol. 1, p. 459.

The attempt to regard cognition as a form of behaviour seems to me to force psychology into a false position. I do not want to belittle the importance of biological knowledge for psychology, but I think there is a real danger that biological psychology may distort cognition. It is so easy to claim that perceiving is a "doing," thinking is a "doing," since all the descriptive terms, analysing, selecting, etc., are operational terms. To behaviour belong the notions which centre round causation, acting upon and being acted upon. There is no place in the causal relation for the relation essential for cognition, awareness of an object, be that object perceptual, conceptual or relational. Just as facilitation in perceiving is not tantamount to recognition, though it may accompany it, so "skill" is not an adequate description of conception. Were my ear trained to detect over-tones I should be skilled and should detect them readily and easily. If then I made the statement, "Those are the same notes that I heard before," is my statement to be interpreted as "That is the way in which I have listened before?" The words to me express different relations between me and the environment. The latter is a statement about behaviour, but the former is not. However great its influence on knowing, likeness and difference in ways of behaving fail to take the place of knowing that X and Y are alike or different.

Before accepting the way of behaviour as the road which will lead to psychology's "V" day, one may stop to consider how far the conceptions which are used in the biological standpoint are established as facts. Basic for Wolters's theory is the notion of schemata—a notion which presumably is itself a skill. Recently the doctrine of the schema as it was formulated by the late Sir Henry Head and adapted by Prof. F. C. Bartlett has been examined by Oldfield and Zangwill and by Northway in the *British Journal of Psychology*.¹ The writers point out that Head while rejecting the previous doctrine of "traces" did not give any material basis for the physiological dispositions which serve to shape present responses, although he referred to the cortex as a storehouse of past impressions. Bartlett repudiated the storehouse metaphor, "Schema refers to an active organisation of past reactions, or of past experiences, which must always be

¹ See *British Journal of Psychology*, vols. xxx, xxxi, xxxii, xxxiii.

supposed to be operating in any well-adapted organic response."¹ They operate as a unitary mass. Head regarded schemata as built up chronologically. At any given moment a reaction has behind it the weight of the series in which it has occurred. Such an organization might serve well enough for the rote reactions, but Bartlett saw that some principle other than chronological sequence was required to account for selective behaviour. He suggested that impressions belonging to the same sense-organ might give rise to a schema. He stressed the part that might be played by instinctive needs in giving prominence to this or that member of a series. Such interests might cut across the chronological order in which schemata were built. It is here that Bartlett finds a function for consciousness. "A new incoming impulse must become not merely a cue setting up a series of reactions all carried out in a fixed temporal order, but a stimulus which enables us to go direct to that portion of the organized setting of past responses which is most relevant to the needs of the moment. . . . An organism has somehow to acquire the capacity to turn round upon its own schemata and to construct them afresh. This is a crucial step in organic development . . . it is what gives consciousness its most prominent function."² For the old theory of traces Bartlett says he has substituted "interest determined, interest carried traces."³ Two points stand out in his presentation of schemata, the stress on interest and the introduction of consciousness. Both points raise difficulties. What are "interest determined, interest carried traces?" Do schemata supply both the material for reconstruction and serve to initiate the reconstructive process? These difficulties are brought out by Oldfield and Zangwill and by Northway in a series of articles.

Northway suggests that Bartlett uses the term in different senses. One might perhaps summarize these by saying that it is used at one and the same time both as a cause and as an effect or resultant. How far does Wolters's view of schemata agree with Bartlett's? In the first place he insists that schemata are acquired tendencies, open and flexible. While he quotes with approval Bartlett's description of schemata as "momentary

¹ Bartlett *Remembering*, p. 201.

² *Ibid.*, p. 206.

³ *Ibid.*, p. 212.

settings belonging to the organism or to whatever parts of the organism are concerned in making a response of a given kind."¹ Wolters wishes to insist that this setting retains commonly some degree of adaptability. Secondly, he stresses the point that schemata are not entities which the organism has, but are acquired characteristics of itself. In "turning round" the organism is reacting to itself as now modified by its racial or individual past. There is, he declares, nothing new in the nature of such reaction. Oldfield and Zangwill seem to regard this view of schemata as overcoming some of the difficulties which they have found in Bartlett's account. I question whether this is really the case. Flexibility in schemata might ease reconstruction, but will not of itself explain how it comes about. One may say, of course, that the organism reorganizes its own tendencies in response to the demands of environment, and that that is all there is to it. Gestalt psychology does say something very like this, but saying it necessitates the doctrine which I doubt whether Wolters would accept; viz., isomorphism. Is the mystery of "turning round" lessened by saying "the organism turns round on itself as schematized?" We cannot, I take it, read this as a parallel to the earth turns round on its axis. "On itself as schematized" implies that some aspect of the organism is an object to some other part as—What? Agent? Spectator? How far has Wolters retained Bartlett's view of the function of consciousness? Can reorganization be set up by an "unwitting" turning round and can a new pattern function unwittingly? In view of what Wolters says about animals and children this would seem to be implied. The more sophisticated reconstructions where there is difficulty in envisaging the principles of structure would certainly require consciousness.

When I read Bartlett's account of the turning round and of the function of consciousness and (or?) of interest, there comes into my mind the words James attributed to many of the readers of his chapter on Mind Stuff Theory.² "Why on earth doesn't the poor man say the soul and have done with it?" He would probably repudiate any desire for such an utterance. Neither Bartlett nor Wolters, however, give any material

¹ *British Journal of Psychology*, xxxiii, p. 178.

² *Principles of Psychology*, vol. 1, p. 180.

account of these organized settings or dispositions. We are left to think of them (by means of some other schema) as physiological or mental or both. Sooner or later one must get down to the question what is it that is organized and how is the organization brought about? There is also the question of the unit of organization. Is it the organism as a whole or are there sub-systems? Are patterns to be looked for solely within the organism ("the organism as schematized") or are there patterns in the environment and reciprocal relations between patterns in the organism and patterns in the environment? Wolters says that those who still hanker after idea as an entity which the mind contemplates must be prepared to answer the question, "Where does it exist?" One might say this is a fallacy of many questions, but is he prepared to answer the questions: "Where is the organism schematized?" "What is the nature of the process?" The Gestalt school is ready to speak of the "ego column" and the "trace column" as factual, to find selection and analysis within systems of stress and to recognize reciprocity of change between the organism and the geographical environment as within one field of force. But these trace columns, these systems of stress are still hypothetical. Perhaps they and schemata are as "mystical" as general ideas. It may even be that, pending direct evidence, they can both rank in the world of knowledge as general ideas contemplated by the psychologists who seek to advance their science.

We need a psychology of thinking which shall be a basis for the logic of thought. Without recognition of the subject-object relationship as fundamental for cognition, and as other than the causal relationship, such a psychology seems to me an impossibility. The three old laws of thought, A is A , A is not not- A and A must be either A or not- A , embody profound psychological truth. They are the acknowledgment that sameness can be found and discriminated from differences, that in the progress of knowledge patterns are built up, oppositions and incompatibilities determined. To regard such patterns not as ideas but as ways of behaving, closely as the latter may be associated with pattern formation, is to cut away from the psychology of thinking the character upon which Professor Stebbing declared the ability to think depends, "the power of seeing connexions."

IS THERE REASON IN HISTORY?

HILDA D. OAKLEY

I

THE title was suggested by Ortega Y Gasset's contribution to the volume on *Philosophy and History* presented to Professor Ernst Cassirer.¹ (The subject seemed suitable for this volume, as Susan Stebbing was at one time a student of history and always, I think, deeply interested in the problems of the present and the past. She contributed to *Philosophy and History*.)

The question would mean for many practical people, including some philosophers—Can a general purpose be traced in the historic process beyond all the confused and conflicting purposes of the peoples and individuals concerned in it? Whether an answer to this question would be sufficient to decide the main problem, at the present stage of historic experience, may be a matter of doubt. Reason, if discernible in history, is not necessarily of the type to be found in the individual life. Yet it must be of a form intelligible to the individual as the conception of divine goodness must not be incomprehensible to the ordinary man. What do we understand by History? In this essay it is assumed that it is essential to recognize the individuality of history. The historic process involves primarily not laws, categories, principles, institutions, but individuals practically unlimited in numbers and in their experiences. History as lived is a vaster thing than history in the usually accepted meaning because human experience is indefinitely wider. What we possess as historic record, including inscriptions, buildings, etc., as well as writings, relates to the facts which, through the ages, men have regarded as of chief importance in those civilizations known to history, and on which have been based concepts of appropriate categories, historic forces, and the like. On different developments and pursuits of mankind different types of history may be constructed. Philosophies of history have inclined to treat certain kinds of events and institutions as having a more universal significance than that which ought to be claimed for them, as in Hegel's theory of the State and its function of war. Not only the interpretation of history, but the historic experience itself

¹ "History as a system."

depends upon its original subject source, the mind of man. Without this all that happens would be an amorphous mass lacking meaning. Or if, conceivably, it could be contemplated by a non-human mind, the human activities would appear as anthropology, not history. History then comes to be as the result of the emergence of the subject in a world of objects. The central line of evolution proceeds from matter, through life, to mind. From life to mind as subject is an immensely long process. There are the first intimations of mind in the life of the higher animals. But here the subject has not appeared, though self begins to be obvious even in the lower animals. Only in man is mind to be discerned as subject. With this, together with memory, conditioned by the evolution of the brain, history begins, because mind constitutes with value the course of events. The basic (though not first) form of the ultimate subject seems to be mind in knowledge where it is always implied, though unconsciously by the immediate subject in any mental experience. But together with the experience of knowing begins that of valuing, whether in an idealistic or a realistic view of knowledge. In the case of consciousness of the historic factor the value seems to be both brought and found by the subject. The order of the stages in the theory of knowledge is from this point of view, sense-perception, cognition, valuation—though valuing seems always to accompany cognition, in however slight a degree. Hence the intellectual factor in the ethical judgment. The Platonic idea, or form of virtue, is both object of knowledge and of aspiration. That reason in history is that of the individual life seems to be assumed by those philosophies which have inclined to the conception of history as a continuous being, even when they deny individuality.

“The individual is the historical situation of the universal spirit at every instant of time, and therefore the sum of the habits due to the historical situation.”¹

This in application to all individuals appears to make actual history meaningless. The power of memory which is, as it were, the ideal type after which recorded history strives, and the

¹ *Philosophy of the Practical*, section II—V B Croce, translated by Douglas Ainslie.

first discovery of the historic, is limited by the bounds of the individual life. The makers of the new age cannot draw into their memory the value that belongs to another time since no power can restore life to that which is no longer living. Croce's further view that all history is contemporary seems to imply that history is nothing but that which present memory holds. "The past does not live otherwise than in the present as the force of the present, resolved and transformed in the present."¹

But the function of history is to reveal a world in and for which past and present are equal in status. The past that the present is *now* and the past *then* does not count. It is only a difference of place in the series. For history—"Tomorrow I shall be with yesterday's seven thousand years."

In almost direct contrast to Croce's standpoint is Ortega Y. Gasset's conception that the reason of history consists in the total pressure of the past upon man.

"History is a system, the system of human experiences, linked in a single inexorable chain." He seeks for a principle of reason which would provide an illumination of life, as the rationalistic and scientific faiths which were substituted for the religions in the Renaissance, the Cartesian and modern eras have not, in his view, served. But the form of faith which he presents does not throw light on the meaning of human life. The nation acts thus because formerly it was or acted thus. The narrative gives the reason. Historical experience is "a dialectic of historic reason, a series of experiments which are all preserved to be avoided where unsatisfactory." Thus man is what he has done. Yet Gasset insists on the changeableness of the human factor in contrast with the unchangeableness of nature, something, it seems, *is* added which is not learned from the past. But the only explanation of this addition is that in contrast to the tiger the human being finds himself in a society or humanity already developed. He does not start from zero. The *crux* remains—How does this advance come about? The problem is not, I think, fully envisaged by this author because he conceives man as a continuous being rather than as the vast multitude of individuals with their countless modifications of the type. He has not given the clue to the changes which prevent history from being for ever repetitive.

¹ *Theory of History and Historiography*, part 1, v.

There seems no reason for progress whether experienced or hoped for, unless there exists for man a standard or ideal. To concentrate upon the past is not enough. He does indeed recognize in the self a reality transcending man's theories, But he does not seem to discern that which distinguishes the human self from all other creatures of nature, the freedom inherent in man to transcend his own nature as a member of the organic world. His conclusion confirms the impression that it is difficult to distinguish the reason he finds in history from a form of necessary succession of the present on the past consciously accepted, since he quotes with apparent agreement Comte's observation—

"On peut assurer aujourd'hui que la doctrine qui aura suffisamment expliqué l'ensemble du passé obtiendra inévitablement par suite de cette seule épreuve la présidence mentale de l'avenir."

The principle of historic succession as thus stated is obviously incomplete as an explanation of history unless some more ultimate principle on which both past and present rest is included. The reason of the past has still to be sought in its beginnings, and the regress is practically infinite.

If history simply contemplated as a process of linked events does not yield an inherent principle of reason as its explanation, no greater success can be held to attend the attempt to force upon it categories of logic. Hegel's doctrine of the rationality of the real demands either an application to history or the total rejection of history as devoid of reality. Since (as McTaggart points out)¹ the dialectic movement is from abstract to concrete, it would appear *a priori* impossible to apply in a field where the individuality of things is an all-pervading characteristic. The impossibility is confirmed by actual history. According to the application of the dialectic to history, for example, "The Greek spirit brought forth a threefold work of art—Subjective—the individual "Sich bildende," Objective, the "Gottewelt" of religion—Union of subjective and objective—the political work of art—the State in which the general mind (Geist) rules the individual, a noble democracy."

The defect of this type of interpretation (found also in some

¹ *Studies in Hegelian Dialectic*.

other types) is that the stages of mind assumed to be manifested in a nation's history, seem to have little or no relation to the ideas of the people themselves, in their transition from one age to another. Actually the factors of individual character, of mythological religion, and political development grow side by side, though one or other may be more evident at any one period.

Hegel's law of the dialectic might be applied to the development of an individual life with less violence than to that of national history. In this case as in others the analogy between the individual and the community is deceptive. From the Hegelian standpoint the chief paradox lies of course in the application of the logic of the dialectic to the temporal process. Bernard Bosanquet who is near to Hegel in his general metaphysic accepts the alternative (to forcing logical categories upon history), viz, the rejection of history by philosophy.—“History is a hybrid form of experience, incapable of any considerable degree of being or trueness.”¹

No metaphysics which finds reality in the whole, and conceives all individuals as “finite centres” or particulars of that “concrete universal” which is all, can consistently concede to history an important place in the system of things, if indeed it is allowed any recognition. Spinoza had carried farther than any other great thinker the principle of necessity in his system “The idea of an individual thing actually existing is caused by God, not in so far as he is infinite but in so far as he is considered as affected by another idea of a thing actually existing of which he is the cause, in so far as he is affected by a third idea and so on *ad infinitum*”²

This conception annihilates any philosophy of history, because such a philosophy could only be deduced from the nature of that substance which so far as the values and disvalues which are the life-blood of history are concerned, is unknowable. For all we know in this respect according to Spinoza is that the possibilities of good and also of evil are infinite,³ and these notions themselves are relative to the limitations of our ignorance.

¹ *Principle of Individuality and Value*, lecture 11

² *Ethics*, part 11, proposition 18 Translated by H M Flues

³ *Ibid*, part 1 Appendix

II

What then is indispensable to the presence of reason in history? By what signs should we recognize that the course of history reveals a rational system? It may be expected that this would be found in a consideration of the essential nature of history. The reason proper to it should involve that this essential nature is realized in the process of events. It has been argued above that history becomes possible with the emergence in the world of life of the mind as subject, having consciousness of objects of experience, as containing value and disvalue, and arousing an interest in their pursuit and avoidance—which is more than the struggle for life. Interest in general may be defined as the human reaction to the value in things, and events. We can conceive the emergence of mind in the world of nature, in strength adequate to complete dominance of the course of human events. On this hypothesis the response of all beings in whom mind was present to value in the temporal process would result in good. *History* as we know it, manifesting as in Lord Acton's, perhaps over-simplified view, the conflict between good and evil, would not be necessary. Those absolute idealists who conceive the nature of reality as the whole, and all individual things as its finite centres do appear to assume mind to be supreme in the actual world as we know it. Hence the historic process as recorded in history is an offence to them as philosophers, and they deny reality to the "fragmentary" narrative, only allowing it to the "complete interpretation of the social mind, of art or of religion" (Bosanquet). But it must be admitted that the sway of mind in the world as it is is very imperfect, and it is in the process of history that its weakness is most evident. In the individual life a certain continuity and completeness is not unattainable though the attainment of that value which is its meaning is rarely if ever complete. In the historic life of a community there is not a like continuity. It is prevented by the break and succession of ages. Or, perhaps, for less evident causes, fresh interpretations of the values arise. It is largely on account of this lack of continuity that the problem of reason in history is so baffling. The essential nature of history, as consisting in progress in the realization of its proper value, seems in the history of civilizations again and again to escape fulfilment. In this failure there comes about the decay of the civilization.

Since the field of history lies primarily in the domain of practice, it is the values of practice, or the province of the moral reason with which we are mainly concerned. The problem is, however, wider than this, since no civilization can be held to have reached historic greatness which has not added to the riches of human experience in the spheres of knowledge and intellectual creativity. Reference to a few illustrations of the problem of value in history will be clearer if the operation of the historic mind is regarded from the standpoint of the two aspects of value as brought by the subject and found in the object. The distinction has some correspondence with that between values as the timeless objects of the mind, and as characterizing the temporal process. It arises because humanity belongs to the two orders, the organic with the temporal process, or development in time, and the order of mind transcending the organic order of life. Contemplation of the values as timeless may be called the Platonic view, their consideration as temporal, the evolutionary, with the affirmation of the self in the organic world at a higher stage. The evolutionary may also be termed the Christian view, for the Christian starts from the values that belong to the simple mind, as the Platonic from the intellectual. Both types are found in every civilization but one or other is dominant. It must never be forgotten that mind in history is not one but many minds, though the intellectual view tends to the conception of the unity of mind. Unity of mind is essential to the highest creativity of value. This unity is only adequately found as yet in the individual. To every civilization great personalities are essential. In all there must be principles of order. On the relation of these two factors depends in an important sense the entrance upon new ages in the history of civilizations. When the factor that has been dominant sinks into subordination the values of the civilization probably suffer eclipse. The community passes under the influence of a new *idolon* in Bacon's sense, the Idol of the tribe, popularly called the spirit of the age, in which there is a change in many of its standpoints. The more obvious of the immediate sources of this change, is the rise of a new generation reacting against the *Éthos* of the old. Though these shocks to the continuity of a people's history do not necessarily involve either progress or retrogression a steady advance on any one line is precluded by their occurrence. As new

ideals or ends are substituted for the old the struggle starts afresh.

More particularly to specify the "Platonic" type of principle, reference may be made to Aristotle's account in *Metaphysics* M. (XIII) of the speculations attributed to certain Platonists who held that the Ideas were numbers. That it is Plato's own view that Aristotle is examining (chapters vii & viii) is the opinion of the chief authorities.¹

In some form the neo-Pythagorean doctrine appears to have had strong support in the Academy. In relation to the present argument, the interest of this view, if adopted by Plato in what was probably his latest stage, is that it would seem to be the climax of his belief in the value of order. Aristotle himself observes "The chief forms of beauty are order and symmetry and definiteness, which the mathematical sciences demonstrate in a special degree."² Plato's inclination to the number form of the Ideal theory would help to explain the place given to mathematics in the higher education of the philosopher-statesman in the *Republic* as an essential condition of knowledge of the Good. This would be due to an increasing conviction of the great part played by timeless principles in giving order to experience together with realization that the mathematical were the most perfect of these. Not that Plato can be supposed to have failed to appreciate the importance of what we may term the temporal values, those which belong to the common life, and which, in the dialogues generally are treated as having the status of forms. As is evident from his life he was no mere theoretic student of practical problems. His insistence on the indispensability of mathematical knowledge to the future statesman does not indicate an over-valuation of the intellectual virtues with the application that proficiency in mathematics would be an indispensable preparation for the most virtuous life. It is, however, not inconceivable that in his final standpoint the conviction that if cities are to cease from their ills philosophy must rule, may have inclined him to assimilate the principles of value to the highest scientific principles. Unfortunately we have no account of his esoteric lectures to the Academy, unless in Aristotle's notes which seem somewhat garbled.³ His central

¹ Cf W D Ross *Aristotle's Metaphysics*, vol II Commentary M & N.

² *Metaphysics*, XIII, ch III, translated by W D Ross

³ Cf *Les Idées de Platon selon Aristote*, L. Robin

position in regard to the values and the good life is probably represented in the dialogues attributed by modern scholars to his later middle period. In the *Philebus* the supremacy of the principles of order is strongly expressed. It is on the nature of the Good, as measure, symmetry, beauty, that Socrates dwells, not the personal struggle after righteousness, or the basis of virtue in the relation of persons. It is the completely objective view. Here as elsewhere it is the superiority of the limit to the unlimited (*πέρας—ἄπειρον*) which seems to be the underlying principle giving the pattern of virtue as order brought into the disorder of the passions. It might be thought that the position of the *Timaeus*, "No man does wrong willingly," attributes evil-doing to intellectual error. But the intellectual error is due to a blindness which is more than intellectual. All men desire the good. Even the most miserable of men who pursues power without any moderation supposes himself to be seeking his own good (*Gorgias*).

It should be added that the application of an important phase in the Platonic ethics to an interpretation of historic tendencies has no authority in Plato himself—except in so far as the underlying currents of practical life must stand out in history. It may also be argued that those principles which have been termed timeless in the foregoing are only timeless for the mind which views them and for which they are objective. It is because the subjects of history are minds that they need to contemplate certain principles essential to the practical, and historic order as beyond time and change. Hence the various forms in which, from the days of early civilizations to the present, men have striven to express their sense of the importance of these principles in impressive ways, personifications of the gods and goddesses in Homeric mythology, changeless forms as in Plato, or from the personalities of the ancients to the laws and imperatives of modern thought.

III

We may turn to examples of civilizations to test the view stated above, that reason in the historic process ought to be found in the realization of the essential nature of history. History becomes possible through the emergence in the world of life, of the mind as subject conscious of value in the objects of

experience. In accordance with this truth, the value manifested in a civilization might be expected to increase in the course of events. Failure in this advance would signify a failure of reason, threatening the decay of the civilization. To consider one or two of the greatest tragedies of history in this light we may take first the case of ancient Greece. The end of the period of the most brilliant culture known to history was directly brought about by the devastating wars amongst the Greeks themselves, the original cause of which was the rivalry of Athens standing for freedom and democracy and Sparta for an authoritarian order. The deeper cause of the failure, especially of the Athenians, was that unlimited individualism which was the defect of their quality of genius, the greatness of personality. Hence the fierce rivalry of leading men within the city-state and of the cities with each other. It was a strange paradox of history that Alexander of Macedon made the attempt to realize his ideal of the unity of mankind upon the foundation of a community of the city-states in Europe and Asia, whose disunity had brought down their unique civilization. The Hellenic world as he left it rapidly broke up into the successor states. Any possibility of successful resistance to the growing power of Rome was frustrated by incapacity for co-operation amongst the cities of the mainland, islands, and Asia Minor, and when Leagues were formed, Achaean and Aeolian, by their hostility to each other, as no city would give up its sovereignty and liberty to make war as it chose.¹ To grasp the full significance of the human property of individual self-assertion in the form it has taken in history it would be necessary to consider its biological antecedents, the place of man in the organic order, the self-affirmation of every living thing, the ineradicable tendencies in nature of the struggle for life, competition, conflict unlimited in the majority if not in all species. The incredible over-production of the animal species is its basis. The expression of this self-assertion as a metaphysical principle is given in Spinoza's *Conatus in suo esse perseverandi*. Controlled in some degree in humanity by the development of mind it is transcended in individuals and for brief periods in nations of genius, but resurgence recurs and leads to failure. The chief sources of the repeated triumphs of unreason in history are to be traced to this ground.

¹ Cf. *Tarn—Alexander and the Unity of Mankind*, British Academy lecture

The civilization of Rome, built as it was on the principle itself of stability, order and law, showed a much greater stability than that of Greece. Gibbon attributes the fall of the Empire of the West to the most obvious cause, the onslaught of the German tribes.¹ But in the opinion of modern students² the more fundamental cause of the Roman failure to withstand the barbarian invasions was corruption and decay within. Of this the most disastrous symptom was the loss to Rome of the loyalty of the peoples of the Empire. This in turn was due to the bureaucratic tyranny which was strangling the life of the *municipia* whose freedom and self-government in domestic affairs, and whose culture and prosperity had been the glory of the Empire. The leading citizens of these little states came to be compelled to take office no longer as honourable service but for the collection of taxes and financial extortion. Thus the special value of the Roman civilization in relation to the world, the genius for organization and the upholding of law—order in its highest practical form, was debased into an unintelligent bureaucracy.

The conflict of Rome with Greece illustrated primarily the contrast and clash between the principles of organization, planning, rational order, on the one hand, and individualism, freedom, the opportunity of personality on the other. As in every great civilization—as pointed out above—these typical characteristics can be traced more or less present in both. The difference is in the extent of their prevalence in the shaping and endurance of the societies. It must also be taken into account in estimating the nature of the clash that the greatest era of Greek civilization was over before the first encounter with Rome, whilst that of Rome had not yet reached its zenith.

The causes of the historic struggles of these two peoples were of course various but prominent was the Roman consciousness of power meeting the Greek passion for liberty. Reference is here made only to those dominant qualities in their ethos respectively, which best illustrate the present thesis. We may see in a high light in the cases of Greece and Rome, a loss in differing forms of the reason we are led to seek in history. This consists, it was argued, in the endurance

¹ *Decline and Fall of the Roman Empire*, vol. IV, ch. XXXVIII

² W. T. Arnold, *Roman Provincial Administration*. This seemed to be Henry Pelham's view. (Unpublished lectures.)

of that value on which the origin and existence of history depend, as history in distinction from a mindless anthropology. It is obvious that to attribute failure is in no way to doubt the greatness of the contributions of Greece and Rome to later civilization nor the value they achieved for human life in their own periods. From a point of view different from that of the problem here discussed it can be maintained that the success of a civilization does not depend on the length of its history or its resistance to ultimate decline. But the question of this essay is whether history as so far known has revealed principles which demonstrate its pervasion by reason. An enquiry is therefore necessary into the problem whether the values to be traced in its course endure and increase in the civilizations which manifest them, or whether communities of mankind appear incapable of creating and experiencing these values so that they endure in permanence. The question is not whether an increasing proportion of individuals have shown the presence of reason in their lives, but whether what we term history can be held to be informed by reason. And this involves primarily, not men as individuals, but mankind in their communities and the civilizations they have created. A survey of Greek history seems to show the following stages to be implied—First, the rapid development in the Greeks and especially the Athenians of the organic property of self-assertiveness—under the control of the mental genius which appeared in their best men—into that quality of creative personality which transcends the conditions of nature. After a brief period during which the expression and activity of this genius in many directions reached a height never since surpassed, or even equalled, there followed a decline. The creative power though not exhausted was more limited and on a lower level. The self-assertiveness and tendency to internecine strife, together with oppression of one city by another and especially of her “Empire” by Athens, the most brilliant—increased. In general the characteristics proper to the struggle for life in nature became more prominent and inimical to progress in the highest culture. In the Roman civilization the process of evolution in the order of value seems to have been originally from the consciousness of power, the natural form of self-assertiveness in this people. With the growth of this characteristic developed the conviction that

Rome could not fail in any enterprise she undertook.¹ In the Roman community the assertiveness of the group rather than the individual seems to have been the more characteristic form, and the end pursued, to be success through planning and instituting order rather than the transcending deeds of the individual. Thus the evolution of the Roman genius in those men who chiefly founded the greatness of Rome was towards the creation of law and order which was especially associated with what has been termed the "classical mind." The best representatives of this spirit may be conceived to have had before their thoughts, the idea of a vast community of Roman citizens in many societies or groups of different races having reasonable liberties, raised above the disordered existence of barbarous peoples.

In these great peoples we may see in large letters the effects of neglect of the fundamental values of their own histories. In Professor Arnold Toynbee's view of the origin of civilizations the presence of men of creative leadership in a community threatened by a great danger such as the destruction of their means of livelihood by some cataclysm of nature is the one essential source of the origin of a civilization. These leaders inspire the rest to meet the danger, not by retreat, but by developing their own powers in devising means to withstand it. Thus personality is all in all—the advance in civilization continues so long as this inspiration does not cease. It is implied, I think, in his argument,² that when an age of organization sets in, instead of the leadership of personality the stage of decline is not far distant. The case of Rome, however, seems to show that the genius of a race may from the first be chiefly manifested in the gift for organization in a steadily widening sphere. In so far as the civilizations of both Greece and Rome did exhibit in their lack of endurance, a failure of the reason proper to history, though at an earlier stage in the case of the Greeks, what were the more ultimate causes of these failures? How does a people lose its own genius; what are the hidden sources of the irrational in history? The answer does not seem difficult on the ordinary historic plane. We may see in the Greek experience the havoc wrought by excesses of individualism in inter-individual, and inter-state relations. We can trace

¹ Cf. *Polybius*

² *A Study of History*, vol. i and vol. iii, p. 217, seq.

in the Roman Empire the decline following on the poisonous transformation of rational order into a mechanical, e.g., mindless system. Or we may try to find the cause in the changing outlook, purposes, motives of individuals, the impoverishment of this fountain-head of value. These latter factors are often not disclosed or only partially in the records and histories. It is not possible that they should be fully disclosed because they cannot be fully known. Here we meet with the ultimate problem of historic knowledge, as knowledge of the individual and unique. To this reference will be made later.

IV

It must still be asked at this point whether a more universal and profound answer than that proper to the ordinary historic quest can be sought. It was assumed that the reason proper to history consists in the endurance and increase of the values essential to its very being. How then are the recurrent phases of retardation to be explained, whether through loss of personal force or of the principle of an undecaying order? It was observed earlier that an unbroken progress was not inconceivable. It would appear indeed to be implied in the nature of history. Can the philosophic historians supply an answer? To Professor Toynbee's view reference has already been made. He does not, I think, clearly suggest the cause of the loss or weakening of creative leadership.¹ Its emergence at the moment of crisis is not less concealed in profound obscurity. According to J. B. Bury—the great man is “the greatest contingency.” But it is not merely his advent which is contingent. The events of his life and death, his opportunities of success and failure, have very frequently the appearance of accident. Human personality, the bearer of the values of life, seems to be the “sport of chance,” favourable and unfavourable. The predominance of contingent circumstances stands out as most destructive of progressive movements at critical moments when progress and retrogressions are in the balance. Thus the Liberal movement in Germany in the middle of the last century came to nothing on account of a chain of conditions, of which the following were the chief—the long life of William of Prussia, first Emperor of Germany, favouring the rise of Bismarck with his militant Prussian policy,

¹ *A Study of History*, vol. iv “The Breakdowns of Civilizations.”

and the exclusion of the Liberal Crown Prince Frederic's influence during thirty years. There must be added the death of the latter on ascending the throne, already a sick man, and the volatile, and self-advertising character of his son. The climax of this chain of contingencies, of which there were many other instances before 1914, was the advent and career of Hitler before 1939. Similar if less impressive illustrations of this type of irrelevance of circumstance to a rational trend in the course of events strew the pages of recorded history, and seem to justify the conclusion of the late H. A. L. Fisher.¹ in this matter. But what is "contingency?" Contingency, it will be said, is a name for our ignorance. This ignorance, it may be added, is due to the impossibility of knowing all the data affecting the historic process, in view of their incalculable number and the limiting conditions of historic research. The postulate that could all be known the course of history would be seen to be in all respects necessarily determined, is unaffected by the difficulties of demonstration in every particular. Adequately to deal with the position indicated would be outside the plan of this essay. It can only be said here that to accept the hypothesis that history must be treated as a science, its facts in every province in complete accord with the laws of cause and effect, would be to furnish no principle of historic reason. For this must be sought in the conditions which have created history, viz, the values brought by the human mind to experience. It may be added that it is involved in this view that there would be no history for scientific treatment, on the hypothesis that history must be studied as an objective science. It appears to follow that the difficulty which the prevalence of contingency presents in the search for reason in history cannot be treated as a result of our ignorance, which would be removed by more adequate knowledge. It is not due to failure to perceive the causal succession on account of our insufficient equipment as knowers, an obstacle which must always attend the investigation of the past. The problem is not that what Aristotle calls the "efficient" cause is hidden, but that his "final cause" is undiscoverable. Certainly its existence in the Aristotelian sense as, together

¹ He could see "only one safe rule for the historian, that he should recognise in the development of human destinies, the play of the contingent and the unforeseen" *History of Europe*—Preface

with the other three kinds of cause, an instrument of explanation of every scientifically examined fact, is not to be looked for in history. But, as standing for an increase on the whole and in the course of time, of those properties or qualities of history without which it could not be a foundation of all the interests through which humanity comes to be, the final cause does seem essential to historic rationality

W. B. Cochrane in his philosophic treatment of the final stages of the Roman decline attributes it to the failure of the "classical mind." The ideas expressed in Livy's observations on Roman history "involve the assumption that it is desirable and possible to erect a future upon the basis of an idealized past."¹ Cochrane points out that the notion of progress implied in Christian teaching was wholly incongruous with the thought and practice of classical antiquity. He sees the Eternal City in its last stage of authority and power, under Theodosius, trying vainly to reconcile the new ideas of the Christian order with the preservation of the classical. It presents a picture of "immobility"—a significant image of the system of bureaucratic autocracy which was the nemesis of the Roman order, a form of paralysis. But again the question must arise. Why did the classical mind fail? We may say that this failure is an outstanding example of the coming of a new age, which is blind to the value of its predecessor. But, as already indicated, this is no final answer. The course of these events does indeed well illustrate the feature already emphasized—viz., that a sharp change in the relative valuation of the principles of order and of personality seems to be the source of other changes in the "Weltanschauung," when men speak of a new age. A civilization which faces a clash of this extreme type in its dominating system of ideas, even if it does not break up as in the case of the Roman, must fail to present that character of continuity in its history which, according to the argument of this essay, seems essential to the principle of historic reason

A different kind of break in continuity is illustrated by the departure at decisive moments of history from lines of development which appear to many—on looking back—to have promised a happier future for civilization than those actually followed. Such a departure occurred in the beginnings of the industrial

¹ *Christianity and Classical Culture*

development at the close of the 18th century with the disquieting effects attendant on its course, mechanization and industrial materialism, instead of "a healthy agricultural and mercantile prosperity."¹ Occurrences of this kind are apt to engender the suspicion that we are still in the dark in regard to the true nature of human progress as an increasing realization of the essential values of history. The hope however of discerning sufficient grounds for the belief that the process discloses rational principles cannot be abandoned. History, if mind created, must have a rational root. Can the missing clue be found in the truth that no limit can be set to history, since none can be set to time? Historic experience seems to us as it did already to Plato to have covered long ages. But it may be necessary to accustom ourselves to the idea of the pettiness of experience hitherto if we are to face the question whether history can ever emerge from the stage of unreason. A comparatively brief experience may not reveal the pervasion of reason, and yet may disclose facts inexplicable unless it is there.

If past history shows the mind of man endeavouring to impose on nature (and primarily his own nature) an order of value which does not inherently belong to it, and assiduously returning to the task after defeat, it would not be strange that the difficulties, set-backs, adverse trends, etc., should have been tremendous, and contrary principles have often been stronger. Rather should there be wonder at the success from time to time achieved by the men and the ideas whose acts and transmission have moderated the rude course of history. If at long intervals there had been found a few who could so far renounce the intense self-affirming instincts of the whole organic genus and in particular their own animal and human ancestry as to throw life away, stimulated by the thoughts of the mind, this might be held to reveal traces of reason in history. But such sacrifices have been innumerable. For the justification of history then it is conceivable that we have to wait for the verdict of time, and be content that the answer should be received by other men in other ages—*γένουτο δ' αὖν πᾶν ἐν τῷ μακρῷ χρόνῳ*.²

Regarding the form which such an answer might take, prediction in the nature of the case, is obviously precluded. A single specu-

¹ *English Social History*, ch. iv. G. M. Trevelyan.

² *Herodotus*, Book E, 9

lation on one aspect of the problem may be permissible. The difficulty which, as the argument has insisted, seems most inevitable in preventing rational progress in history, is the repeated lack of continuity. This appears mainly due to the fact that history is essentially the work of many individual minds. Recognition is given by historians and social students to the "collective" or common mind. This is no revelation of universal mind but a growth from the individual, having value for some practical purposes, but not capable of taking the place of the individual in leadership. Is the greater development of such a common mind a consummation to be desired? The following considerations present themselves.

Although history appears intrinsically the creation of mind in individuals, its whole course hitherto points to the necessity of a nearer approach to unity of mind in men, and in communities of all types, if the greatest evils that have attended it are to be overcome or diminished.

The course of civilizations, however, also reveals unmistakably the indispensability of those creative personalities who are rare and unique in their gifts. It reveals also the value of this diversity of genius, and that genius seems inseparable from the oneness of the self, in all its faculties.

The power of personality depends largely upon the unity of purpose, single-mindedness, self-guidance undistracted by influences not freely chosen.

How then are we to conceive a growth of unity in the form of a common mind in humanity or human communities which might bring about that much-needed continuity and take the place of the leading personality?

If this could come to pass, would it not involve a serious loss to civilization to which the individual genius seems indispensable?

The only solution which might bring the needed gain without the apprehended loss would appear to be one which would enable the growth of a unity of the moral mind, in the realm of practical values. Individuality in other qualities of the good life would be *ex hypothesi*, unaffected—for instance diversity, independent originality in the purely intellectual, and aesthetic, genius, or in other fields. Such a dividing line in the aspects and qualities of the mind could not be a hard one but it might be effective.

The ethical mind of the community as a whole must have the strength which in the individual mind is due to unity.

The development of personality in the society of the future as it is conceived by General Smuts in "Holism" would prepare for this unity of the community mind in the moral world "Personality is a growing factor in the universe and is merely in its infancy. Its history is marked by the thousands of years, whereas that of organic nature is marked by millions. Personality is as yet but an inchoate activity of the whole but nevertheless its character is already distinct and well-marked; and its future evolution is the largest ray of hope in human, if not terrestrial destiny."¹

I would only add that (as earlier noted) the self in developing into a person exchanges the intense rivalry with other selves for a capacity for understanding and co-operation, which makes possible new creative activity of many in unison

V

In the argument of this article what may be called the plain historian's view of history was the starting point. The question—How is history possible?—was indeed raised—but it was raised from the standpoint of the great corpus of history with its status as known to have been lived, and as existing in record. The answer was that it is possible because the mind imparts value to events. The previous question whether and how there is historic knowledge was not raised, or not in the critical sense. Kant in answer to the question—"How is knowledge possible?" replies in the first instance: "There is knowledge, viz., mathematics and pure science of nature." He proceeds to explain how this comes about by adducing the principle (later) expressed in the form "the mind (understanding) makes nature but out of a material which it does not make." The answer in the present article as regards history, conforms in the main to that of Kant. Without the work of the mind there would not be history—there is a process which becomes history for the mind. Is it possible also to appeal in the Kantian form to the fact that there is history? On the surface this answer does not seem equally available in this form. In the first place we have to meet the

¹ *Holism*, General Smuts, pp. 306 and 308, quoted by Arnold Toynbee, op. cit.

objection (which does not exist in the case of the mathematical sciences) that what has often been regarded as history is not truly such. There are formidable rivals to history in the fabrications of the imagination, only opposed by the uncertain evidence of memory, direct and indirect. These fabrications may appear in the guise of historic records, as well as the sagas, Homeric epics, and other forms of early tradition. Here is something that looks like, but is not history. The question therefore of truth comes first. How is truth in history possible? Reference has been made to some of the empirical difficulties attending on this question. They are familiar to every student of history. But the student does not abandon his search. These difficulties do not seem inherent in the very nature of the subject. Theoretically they are not insurmountable. The obstacle which to some enquirers does seem insurmountable derives from the epistemological standpoint. This is the individuality of all historic facts, whilst knowledge is of the universal. The problem is well stated by Theodor Litt in a discussion of the views of Rickert and Dilthey.¹ In every real historical representation proper names must be present as "an infallible sign that its concern is with something unique which cannot be repeated. But what is to be asserted about this unique has to be apprehended in universal meanings of words—Thus a universal—viz., the universal meaning of words—expresses itself in statements on the one hand of universal content, on the other of individual." Rickert argues that the universal only enters as an indispensable means—the end is something unique. The particular, however, Litt points out, has first to be reckoned as member of a class. Classification then must have preceded, and classification means attending to what is common in single phenomena. Thus the universal cannot be dispensed with. In regard to this difficulty he suggests that "the purpose which reveals itself in the use of proper names—pervades also the universal expressions which are brought in to complete the content of what they indicate." But "the historical object can achieve life and fulness of content in presentation—only in so far as it is met by that inner sympathy which is so characteristically different from the cool activity of abstract thinking." Without sub-

¹ "The Universal in the Structure of Historical Knowledge," T. Litt, *Philosophy and History*, op. cit.

scribing to Litt's further (Hegelian) conception of the identity of the particular and the universal which is felt in this consciousness of the historical object, the view of history which has been taken in this essay is on the whole in agreement with this interpretation.

The subject's own experience as a historical being is necessary for an insight into historic truth. And this means his experience in feeling and willing, as well as in knowing, the experience which belongs to his nature as bearer and finder of value, his whole nature as a person. Thus knowledge of the historic fact is possible since in this province the object of knowledge includes a subjective-quality which enables the unique to be known, analogous to self-knowledge. Yet it may still be asked—what is the test of truth on this interpretation? The criteria demanded in the sciences of nature, the possibility of prediction and verification are not available here, or can very rarely be applied.

The extent to which past judgments of historic characters and events have been questioned, revised and again revised, even suggests the conclusion that the epistemological difficulty in regard to knowledge of the particular and unique does enter into history and invalidate all historic record, and threatens to render fallible from the outset the whole attempt to find reason in history. The measureless importance of personality has been emphasized. But here is the chief seat of the problem. The greater part of the good and a still greater proportion of the evil in the historic record is attributable to this source. There has to be added at every remove from the primary event the personality of the recorder and historian, necessary, as has been argued, to his knowledge, source in some cases of his misinterpretation. How are we to be assured that the historian's insight is enough? To this question there can be no indisputable answer. Does not the epistemological problem here reflect the problem of all knowledge of human life? In so far as it is objective awareness of the external fact, it may give us the truth. But where the subjective relation between knower and known enters in, there enter in the difficulty and doubt. The fact here is individual. The particularity of the individual can only be known through the personal factors on both sides in life, on one side only in history. It might be suggested that the truth which escapes our exact knowledge because we cannot know the particular, cannot make a difference to our historic

judgment, because this truth belongs to a different order of knowledge from that in which it could affect that judgment. As it is in this different order to us intrinsically unknowable, we may conclude that it does not affect the object of our enquiry as reason in history. It appears however that the epistemological problem cannot be dismissed from living experience. Though not usually recognized as a philosophical problem in this relation, it is a source of uncertainty which may profoundly effect practice. The peculiar nature of historic knowledge in a wide sense, including knowledge of life in the present, due to the fact that the knower is himself a historic being, thus confers on it both a superiority of insight to the objective knowledge of the sciences and an inferiority in respect to certainty.

Finally it may be objected that history can not exist in the sense in which Kant could maintain that the pure sciences exist. In the case of the sciences we have both the original objects and the secondary, the interpretation, or work, of man's mind in science. In the case of history the original objects do not belong to our present. If existence can be affirmed only of that which has present being they do not exist. We have only the secondary objects, the immense structure of historic record and inference based on many sources, none of which can enable us to grasp the original in its life and action. In face of this last wave of scepticism there remains the assurance which is, I think, strong enough to meet it, already implied in what precedes. There is a means of revealing the existence of history which does not admit of doubt, because it lies in ourselves. We know that there is history because we *are* history. The student who begins from this basis may have a well-founded confidence that truth in regard to the nature of history is in some degree attainable. In this respect Croce seems to be right. "We know that history is in all of us, and that its sources are in our own breasts."¹ The historicity of experience is so inseparable from all its phases that we are in general unconscious of it. We cannot think ourselves into a world which is not passing from past to present. I do not say "future," because though all our thoughts may be turned towards the advent of the future it is wholly unknown. All our being is past except the thin film of the present. The self is in this sense an epitome of history.

¹ *Theory of History and Historiography*, part i-iii

THE LOGIC OF ELUCIDATION

By C A MACE

IT is characteristic of the greater amiability of contemporary philosophical discussion that philosophers are less disposed than hitherto to accuse each other of being *utterly*, if not culpably, mistaken. It is in fact almost as difficult to be *utterly* mistaken as it is to be *absolutely* right. A philosopher nowadays can say almost anything he likes, but—and this is the snag—almost anything he says will be challenged as “*misleading*.”

His peril is the more pervasive since on almost any issue both *p* and *not-p* are equally misleading. Is the material world more or less the sort of world that it appears to be? It is misleading to say that it is; it is misleading to say that it is not. Do minds exist? If you say that they do someone will be misled; if you say that they do not you will be misleading someone else.

One reason why so many statements are so very misleading is that so many people are so easily misled, and philosophers in particular are apt to be misled to a degree proportionate to their knowledge of the history of philosophy. Their peculiar proneness to mutual misunderstanding arises in some measure from the fact that philosophy contains so few propositions, either true or false. The most original philosopher must accordingly repeat what someone else has said, his originality consisting in the fact that he makes an old statement in a new sense or for new reasons. Hence it comes about that the words are hardly out of his mouth before what he has begun to say is completely identified with some incredible doctrine. He is open to attack by the simplest of all techniques—to interpret your opponent's thesis in the silliest of the senses of which words admit and then point out how extremely silly it is. He is thus refuted before he can say “Wait.” But it is the logic of the situation, rather than the ethics, which calls for examination. Can words be used so as not to mislead? Is there any way of preventing a statement from misleading those who hear it, short of leaving what you have to say unsaid?

It is extremely difficult. Any statement, especially in a philosophical context, is apt to mislead. A statement of the form “*S is p*” has the effect of a comparison, and will almost

certainly be misleading until the comparison is explicit "I have a body and I have a mind." Under all ordinary conditions these would be taken to be simple, incontestible and homely truths, but in a philosophical discussion something seems to happen. The philosopher says "I have a body," and someone whispers to himself, "Yes, just as I have an Austin." The philosopher says "My body has a mind," and someone quickly adds for his own misinformation, "Yes, just as my car has a driver"; and on we romp into a labyrinth of interminable nonsense.

Even to say, on a cloudless summer's day at a philosophical conference "The sky is blue," may prove to be exceedingly misleading. You can mislead a fellow philosopher just as you can mislead a child. You say "The sky is blue," and the child thinks, "just like Patricia's frock," and your fellow philosopher says to himself, "Yes, just as it is extended." Maybe you yourself were going on to say: "Different things may 'have the same property' in very different ways, and different properties 'belong to things' in very different ways." Everyone has been misled because they have found comparisons more quickly than you have found your words. Nor will it do for the comparison to be left as entirely non-specific. To say "The sky is blue just as something else is," or to say "The mind is like the driver of a car in some respects," is to make a pointless observation. Everything is like everything else; and everything is what it is and not another thing. Everything is like *everything* else in some respect, and in some respect it is unique. A philosophical statement is incomplete until the comparison is explicit. Hence the appropriate reaction to a philosophical remark is not to say "How true," or to say "What nonsense," but to say "Tell me more."

As Socrates discovered, the practice of philosophy is an art of interrogation, in which the pupil leads the teacher to discover what he, the teacher, already knows.

"Mind is a substance," says the teacher.

"Like what?" asks the intelligent pupil.

"Like . . . like . . . like, oh, what shall I say?" ponders the teacher.

"Like matter?" suggests the intelligent pupil.

"No, that is just what it is *not* like," replies the teacher feeling that he is once more hot on the scent. "At least it is

like matter in some respects and very unlike matter in others "

"But did you not remark that everything is like everything else?" observes the intelligent pupil, tactfully pointing out that so far nothing has been said. But though nothing has been said something has been seen. There was something there. Men do not make unprovoked remarks. The philosopher had no doubt caught a fleeting glimpse of some resemblance, something that made him say that mind is a substance. Many of the most puzzling concepts of philosophy seem to arise from the perception of elusive similarities. In what way is the sound produced by striking the middle C on a baby grand like the smell produced by breaking a rotten egg? This conundrum did not come out of a cracker. It is the opening move in a very pretty game that establishes a strong attacking position in the middle of the philosophical chess board. Sounds are like smells, it is said, just as smells are like patches of colour and patches of colour like aches and pains. To mark one at least of the respects in which all these things are alike we call them all "sense data." But it is hard to say what this respect is. Squares are like circles and circles are like triangles since all three are made up of lines. So generally, two things are alike in as many respects as there are identical statements to be made concerning each.

Contemplating a patch of blue sky, the buzz of a bee, the comfort of muscular relaxation and the flavour of strawberries and cream, what strikes one most, apart from their pervading pleasantness, is not their similarities, but their outstanding differences. There are, of course, many similarities. They all have marks of spatial and temporary location and by observing these marks we can get to know about the location of other things. But to do this is to study science. What can we do with such raw material in philosophy, apart from saying what we do with it in science? An interest in philosophy is not exhaustively defined as an interest in the methodology of science. It includes the interest in similarities and differences as such. To pursue this interest we need not only a logic of proof and refutation, but also a logic of elucidation.

To elucidate is to exhibit the pattern of similarities and differences in objects presented to the mind, and so to remove the feeling of strangeness that attaches to familiar things. We have a curious itch to show that different things are in some

respects alike, and having found that they are in fact alike we feel another itch to show that we were right in supposing them to be different. Many factors contribute to this peculiar ambivalent tendency. There would appear, for example, to be almost an inherent misleadingness in the function of language. Some philosophers have said that the act of knowing modifies the nature of what is known. Others have said that nothing is true or false but thinking makes it so. These are strange sayings, but something about knowing and thinking has provoked these reflections, and one might easily be tempted to make not less paradoxical observations about the act of description. The act of describing modifies that which is described. Nothing is the case but description makes it so. "Come! come!" we say to such remarks. But absurd as these statements may be they are not *utterly* absurd, William James gives a pretty example of the way in which the mere act of *stating* a similarity seems to increase the resemblance that has been observed. He records how on a winter's day he noted a peculiar and at first indescribable character in the snow. But presently he found a word for it. The snow seemed "micacious," but when so described the quality stood out with greater prominence. The snow seemed to become even more micacious than before.

There is, however, another reason why language is all but inherently distorting, in effect another reason why "S is p" is almost always an exaggeration, or a caricature of a fact. Any logic of elucidation must take account of the theory of stereotypes—a generalization of the theory of caricature. It is now fairly generally admitted that the relation between a word and its meaning is a one-many relation holding between a symbol and a family of "objects." Every such family is apt to have a representative member who can represent the family in its typical (or stereotypical) character on all conventional and official occasions. The stereotype is the meaning that most readily comes to mind when a word is presented in isolation or in a context which imposes the minimum of restrictions. The stereotype for "red" is what is apt to come to mind when we are asked to think of the colour "red," or if we are asked in a casual non-specific way to buy some red paint (as contrasted for example with a situation in which we talk of "red tape" where what we think of is a certain rather distinctive shade

of pink). Stereotypes are eminently picturable meanings; and philosophers no less than ordinary men are apt to be at the mercy of their pictures.

Concerning the relations of words and pictures much has been written, but on one point at least there appears to have been a common misunderstanding. It has been generally supposed that thinking in visual and other pictures is more primitive than thinking in words, and that is probably true. But what has not been so clearly recognized is the fact that when men use words their visual pictures are profoundly modified and in general controlled by the words they use. It is perhaps chiefly in this way that stereotypes are formed. This is evident even in the primitive imagery of dreams. When we dream we do not in general revert to prelinguistic thought. On the contrary to dream is to become extremely "literal." Freud, for example, cites the case of a boy who was terrified in his dream by a creature with green face and red eyes. This dream apparently had its origin in a remark of the boy's parent who, solicitous of his health, had referred to his sickly "green" complexion and his tired "red" eyes. It is apparently one of the "mechanisms" of the dream to translate the relatively plastic imagery of waking into stereotypes. The boy had dreamt in the stereotypes of "red" and "green." But the imager of waking life is only relatively plastic. All our thinking is apt to have a bias towards the "literal." What the townsman calls a black pig the farmers will describe as his old blue boar. If we lean with him on the gate of the sty we see what he means and why he calls it "blue." But if, returning to town, we ask a painter of inn signs to paint a sign for the Blue Boar Hotel he will do it in an Oxford or a Cambridge shade of blue, employing the stereotype appropriate to the dwelling in a university town. What happens in ordinary conversation to words like "red" and "blue" may happen in philosophical discussion to words like "causality" and "substance." We only clearly understand a word when we "see" what it means. When we "reconstruct" a meaning we build with stereotypes. The difficulty in philosophy is that we have to "point out" things that cannot be "pointed at." If you ask the farmer leaning on the door of the sty, "Is the boar blue?" he will say "Of course," and he will point out what he means by pointing at the boar.

If you put the same question to him in the cool of the evening, when he is in a philosophical mood, he will say "It is and it isn't." He knows that to say that the boar is blue is an "exaggeration." The philosopher knows too that to say that mind is a substance is an exaggeration, and so is inclined to say of this too "It is and it isn't." He can amplify this judgment and he can formalize it. To say that "S is p" is more often than not an exaggeration. Any comparison that is brief is apt to go too far. The unit of philosophical discourse is not the statement of the form S is p. The characteristic philosophical thesis is of the form: S is p just as T is, but not quite because T is p¹ just as R is, but not quite because R is p¹¹ . . . The philosopher needs time to remove the misunderstandings that arise from this opening clause. Elucidation follows the zig-zag course of an Hegelian progression: Thesis, Antithesis and, perhaps, a Synthesis. But by saying this no doubt someone has been misled.

PHILOSOPHICAL ANALYSIS

By A. C. EWING

THIS subject has been chosen by me as one which has both puzzled myself and in a very considerable degree seems to have exercised the thought of Professor Stebbing,¹ and its choice appeared specially suitable when in the course of reading what she has to say about it I found her putting forward a view as to what analysis does which seems to me to come nearer to the correct solution than any other statement which I have seen on the topic.

Few, if any, contentions put forward in our day have had as great an influence on the current of philosophical discussion as has Professor Moore's doctrine that we know common-sense propositions and that the business of the philosopher is not to criticize or justify but to analyse them. He has made it quite clear throughout that, if we call the original proposition or concept the *analysandum* and the proposition or concept reached at the conclusion of a process of correct analysis the *analysans*, his view is that the *analysandum* and the *analysans* are in a very important sense the same proposition or concept, and he has reaffirmed this in his reply to his critics in the recently published *Philosophy of G. E. Moore*² where he says that "any expression which expresses the *analysandum* must be synonymous with any expression which expresses the *analysans*." He adds that for it to be a case of analysis it must be impossible for anybody either to know or to verify that the *analysandum* applies to an object without knowing that the *analysans* applies to it. I am not clear what he means by the distinction here between knowing and verifying, but at any rate it is obvious that he means by "analysing a proposition" making clear the proposition itself and not giving another proposition in some way connected with the first one. Yet most of those who, inspired by his example, have practised the method of analysis have felt grave difficulty in maintaining that this was all they did when they analysed. And Professor Moore himself has now admitted that he does not know at all clearly what he means by

¹ Academy Lecture on *Logical Positivism and Analysis*; and *The Method of Analysis in Metaphysics*, Proceedings of Aristotelian Society, vol. xxxiii, p. 65 ff.

² In *The Library of Living Philosophers*, vol. iv, p. 663.

saying "x is a brother" is identical with "x is a male sibling," and that even in the case of a straightforward analysis like this there is a sense in which the two expressions are not quite synonymous.¹ So the notion of analysis itself obviously requires further analysis.

As we examine the question, difficulties thicken. In the first place, we already, without having studied any philosophy, understand (know the meaning of) the common-sense statements the meaning of which the philosopher is to tell us in his analysis. What then does the philosopher tell us? No doubt we can say that "know the meaning of" is used in two different senses so that, when we use the words correctly at the common-sense level, we know their meaning in the ordinary sense, but may still not know their meaning in the sense in which it is given in a philosophical analysis. But nobody has yet made clear to my satisfaction what the difference between these two senses is. Clearly nobody but a behaviourist will admit that the plain man "knows the meaning of" statements such as that he has a body and lives in a house or that his wife exists only in the sense that he uses the words correctly in speech and acts as if he understood them. Nor is he merely aware that they express true propositions without having any notion of what the propositions are that they express. But if he has a notion at all he has either a clear or an obscure one. If the latter, he does not understand them properly or know clearly that he lives in a house or that his wife exists, a doctrine which is very paradoxical in itself and would be strongly denied by Professor Moore and most defenders of the analytic method. If the former, how does the philosopher clarify his meaning by analysing the propositions in a way which makes them look quite unfamiliar, and is it not superfluous to try to clarify his meaning since he knows it quite clearly already?

Again, if in the process of analysis the *analysandum* with which we start and the *analysans* with which we end are really only one and the same proposition, how can the process produce anything more than a tautology? If, on the other hand, they are different propositions, must not the analysis be *ipso facto* incorrect, because we have then not analysed the proposition of

¹ Op. cit. p. 667. I am not prepared to admit myself that this is true in anything like the sense in which it is true of a more philosophical analysis.

which we intended to give an analysis? Even if it is maintained that what the analysis does is simply to make clear what we already know obscurely, the difficulty arises that *S is P* known obscurely is either not a proposition at all or a different proposition from *S is P* known clearly, and in either case the view of the process as an analysis of common-sense propositions breaks down. This point of view is supported by a consideration of the specimens of analysis actually put forward by philosophers, which often give the strongest *prima facie* impression of being quite different from what the ordinary man means by the common-sense statements of the meaning of which the philosopher claims to be giving an analysis. If we are to judge by some of the specimens of analysis put forward by "defenders of common-sense," common-sense would be well advised to pray to be delivered from her friends even more than from her enemies. But I do not propose to rest my case on this, since it may always be contended that such an instance does not indicate that in the case of a good philosophical analysis *analysans* and *analysandum* are not identical, but only that the analysis in question is a wrong analysis. So let us put the problem in general terms. I assert the common-sense proposition *p*, and a philosopher says "*p* is *q + r*" But, even if *p* and *q + r* are identical as objective facts, the presupposition of the whole procedure is that I can assert *p* without asserting *q + r*. Otherwise the analysis would have been already achieved before the philosopher started on it at all. That analysis is a problem about which disputes are possible is due to the fact that we may apprehend or think of something as a whole without apprehending its elements as such. Now if the common-sense proposition I assert is *p*, and if I assert it without being aware of the constituent elements which make up the concepts present in *p*, it is difficult to see how the *analysans* *q + r* could ever be the same proposition as the *analysandum* *p*, for the *analysans* includes something more than *p*, i.e., that *p* is *q + r*. The difficulty is still more obvious if a man believes *p* but, not accepting the analysis offered, stoutly denies the truth *q + r*, as has happened in regard to every fundamental analysis yet proposed by a philosopher. But how can *p* and *q + r* possibly be the same proposition if a person ever, however mistakenly, asserts *p* and denies *q + r*, or if a person believes *p* but does not believe *q + r*?

Another difficulty is that there is a certain vagueness about common-sense propositions so that it would seem to follow that no definite ultimate analysis could ever be exactly right. A correct analysis of the indefinite cannot be itself definite. "A is a male parent" is indeed an exact analysis of "A is a father," but then it is not an ultimate analysis. To make it ultimate we should have to analyse the conception of a human being, or at least a living being.

No doubt it is open to the philosopher to meet all these difficulties with the reply that the word "same" has different senses and that the *analysans* and the *analysandum* are not the same but different propositions in one sense and also the same in another; but it will then be incumbent on him carefully to define the distinction between the two senses of "same" concerned. He can hardly say that the two different concepts for which "same" stands in this connection are both of them simple, ultimate and indefinable, but that would be the only alternative to admitting that in order to render the nature of "analysis" intelligible a definition must be given of at least one of them. And no philosopher has yet achieved the task of explaining adequately how they differ from each other. Professor Moore gives up the attempt,¹ and any explanation that I have seen involves a greater separation between the *analysans* and the *analysandum* than he would admit, and would make it quite impossible to say in any normal sense of the words that when analysing the philosopher only gave the meaning of the common-sense statements made by the plain man. I think that the acceptance of any clear distinction between the two senses of "same" that has yet been formulated would result in a radical change in the views put forward by Professor Moore, at least when he advanced his theory in its original form. There is, however, first one point to note that may make us somewhat less confident about our argument. It may be asked whether it would not prove too much. For there is no doubt that it is possible in certain cases to effect an analysis of a common-sense proposition in the sense in which Professor Moore uses "analysis"; and would at least some of the arguments I have given, if valid, not prove that no analysis in that sense was possible at

¹ "The Philosophy of G. E. Moore," in *The Library of Living Philosophers*, p. 663 ff.

all? "A is a male parent" does surely, it may be urged, express the same proposition as "A is a father" in the strictest sense of "same," yet could not the arguments I have used be applied to this case as well as to the much more doubtful cases where philosophers try to analyse physical objects or ethical propositions? And, if they could not be thus applied, where are we to draw the line between the cases where we are debarred from giving an analysis in the Moorean sense and the cases where we are not?

It seems to me that the difference rests on two points. Firstly, in the case of the proposition "A is a father" we cannot envisage the possibility of a person asserting the words intelligently without knowing that "father" means "male parent," though he may never have stated this even to himself in so many words. On the other hand it would seem silly to suppose that the plain man who asserts physical object propositions is aware that they are analysable in terms of "sense-data" even if in fact that be their correct analysis. But take an intermediate instance. When somebody says "England was at war with Germany," is he or is he not aware of the analysis of this proposition in terms of individual Englishmen and Germans? He is certainly not aware of any full detailed analysis which might be given by an analytic philosopher with a reasonable confidence that it was equivalent to the original proposition. Probably no philosopher is for that matter, since philosophers have confined themselves to indicating roughly the way in which such propositions can be analysed and have never given a full analysis of any of them. Yet anyone who uses the words is certainly in some degree aware of what the fact of war means for individual Englishmen and individual Germans and the kinds of activities by individuals which can constitute a war. So we cannot say that the plain man is completely ignorant of the analysis, and any detailed philosophical analysis would have to be based on his more or less confused understanding of the kind of thing meant by the statement. Further, even if we take the sense-data case, we must admit that the plainest "plain man" when he talks of tables, chairs, etc., usually has some idea of the kind of sensible experiences which are needed to establish their existence, and this is what the philosopher is talking about too when he speaks of sense-data. The distinction between these cases and

the case of the analysis of "father" seems to be a distinction between knowing the analysis completely before philosophical study and only being aware of it in a confused manner, and there are difficulties about preventing this turning into a question merely of degree. For most people who use the word *father* have probably never said to themselves in so many words that it was equivalent to *male parent*, and if so it is not clear in what sense they could be said to have known completely that that was the correct analysis. Yet there does after all seem to me to be some vital distinction here, though I find it very difficult to express adequately. In the case of "father" the analysis does merely restate in different words what is already known, it expresses exactly what the plain man means (i.e., intends to assert). We cannot contemplate the possibility of a person disputing the analysis and asserting that A was a father while denying the he was a male parent (unless he was using words in odd senses). In the other kind of case this possibility is a very real one, and there is an important sense in which the philosophical analysis does say something beyond what the plain man ever intends to assert and does not merely express in different words exactly what he is saying. But, as in so many other cases, it is difficult to say where one of the two classes differentiated ends and the other begins. If, however, we are to take this as a ground for denying the distinction, we should have similar grounds for saying that blue was the same as green.

The second point of difference is that the analysis of "father" in question gives merely linguistic information while a philosophical analysis gives something more. This difference may be regarded as deducible from the former. For, if anybody who normally understands the language knows the analysis prior to philosophical study, to state the analysis will only express what he knows already and not anything fresh, and it will therefore convey nothing new to anybody who is not ignorant of the language, but at the most state better what he had in mind but did not state so well. But with philosophical analysis the difficulty lies in seeing what sort of analysis it should be, i.e., in particular in determining the ultimate elements involved and their arrangement, and not merely in expressing more clearly what has already been expressed, for some purposes at least, less clearly.

Let us now consider Professor Stebbing's proposal. It would not, I think, accord with Professor Moore's views, for it involves the abandoning of any attempt strictly to equate analysans with the analysandum, but it is certainly well worth examining in its own right. In her article on *The Method of Analysis in Metaphysics*¹ she maintains that to analyse a proposition is to discover what it refers to, however indirectly. This is contrasted with knowing its "immediate reference," which we already know when we understand the proposition and which is not an object of philosophical study. What we are doing when we analyse a proposition is to say "what must be the case if we are asserting truly."² Thus, if I say truly that every economist is fallible, it must be the case that Lord Keynes is fallible, therefore the proposition may be said to be referring to him in a sense, even though I am not consciously referring to him and even if I had never so much as heard of him or did not know he was an economist. (To signify "consciously refer to" Professor Stebbing uses the term "indicate.") Now, if the analysis of *p* is an investigation to determine what propositions must be true if *p* is, it covers a wider field than merely the meaning of "*p*". (I use inverted commas to distinguish the statement from the proposition for which it stands.) For it might on that definition include any propositions entailed by *p*. However it is important to realize that, though it would go beyond the meaning of "*p*", it would also investigate the latter itself. For if "*p*" stands for a proposition at all—and it must do so, since otherwise it could not be true and there would be no common-sense beliefs (people believe propositions, not sentences)—this proposition *p* is obviously one which must be included in the propositions which are true if the statement "*p*" is true. But the view would explain how it is that a philosophical analysis can also appear strikingly new, since it would also include other propositions besides the one meant by the common-sense statement "analysed". Indeed Professor Stebbing thinks that "it is a muddle to suppose that this clarification is a pursuit of meaning. The word 'meaning' is too ambiguous, unclear, and vague, to be helpful in this connexion."³

¹ *Proceedings of Aristotelian Society*, vol. xxxiii, p. 65 ff

² *Ibid*, p. 79

³ *Logical Positivism and Analysis*, p. 34

Now I should like to develop a view like this independently¹ and am very grateful for the suggestion of Professor Stebbing, though I cannot appeal to her authority for the way in which I shall develop it, and still less should I claim that it represented the views of Professor Moore. But such an account as this seems to me to have the great advantage of cutting the knot and making it unnecessary to trouble about the question whether the analysis conveys what the persons who use the common-sense expression mean or not. What we have to be concerned about is whether it conveys propositions which are true, if the common-sense statement is so; whether or not they are in the ordinary sense of "mean" meant by a person when he asserts the statement to be true does not matter very much. But the philosophical importance of analysis will still depend on the fact that we know (or at least are justified in believing) some specific common-sense propositions to be true. If this were not assumed, there would be no reason to suppose that the discovery what they entail or what other propositions are true if they are true would give us any information about objective fact. This is not to say that the method necessarily assumes Professor Moore's view of common-sense propositions. For, if it were held that they were not, strictly speaking, known, but that we were justified in believing them, an inquiry as to what propositions are true if they are true would give us, not indeed knowledge of these other propositions, but at any rate justified belief, which is a great deal better than nothing at all. This is of some importance, because while many philosophers would not follow Professor Moore in holding that we, strictly speaking, know common-sense propositions to be true, most philosophers would hold that we were at least justified in believing them to be true. It is only if we have no justification for believing a proposition that its analysis becomes a mere historical curiosity.

It is, however, obvious that the "analysis" of p cannot be held to comprise all the propositions which are true if p is true. Among the propositions which are true if "London is capital of England" is true are all sorts of hypothetical propositions, e.g., that if London were occupied by fairies riding on unicorns

¹ I made a former attempt in a similar direction in my article entitled "Two Kinds of Analysis" (*Analysis*, vol. II, No. 4, p. 60 ff.)

the capital of England would be occupied by fairies riding on unicorns; but we could not say that all such propositions are included in the analysis of "London is the capital of England" which should be given by a philosopher. What Professor Stebbing at the time she wrote the papers quoted thought the philosopher to be interested in is indeed, not in giving *all* the propositions which are true if the common-sense statement to be analysed is true, but only those which help to make clear the ultimate constituents on which the analysandum is based and the relations of these. In order to make this clear she has in fact given a fairly elaborate account of the type of analysis, "directional analysis," which is of interest for the metaphysician¹ "The aim of metaphysical analysis is to determine the elements and the mode of combination of those elements to which reference is made when any given true assertion is made. The mode of procedure is as follows. Starting from a given proposition a progressive attempt is made to indicate" (=distinctly express) "sets of elements arranged in a certain way which is such that it is true *both* that the proposition refers to each member of the set *and* that no member of the set itself involves any further arrangement of elements"² There follows a more elaborate account, much too long to quote, of the process, of which this is a summary. The facts reached in the final step of the process are said to be the facts on which the non-basic fact asserted in the original proposition is based. The definition of "based" is simple—"A fact F is based upon a fact F' when F cannot be unless F' is,"³ but it seems to me much too wide. It cannot be that there are seven chairs in this room (F) unless it is a fact that there are more than $\frac{3}{125}$ chairs in this room (F'), yet I should be very surprised to learn that this would have been accepted by Professor Stebbing as an instance of F being based on F' in her sense of "based." It is plain that she thinks of the basic facts, not as all the facts which are entailed by the non-basic fact to be analysed, but as the simple elements of which the latter is composed. Thus a fact about a state or nation would be based on facts about certain individual men, and the facts about the individual men

¹ *Proceedings of Aristotelian Society*, vol. XXXIII, p. 77 ff

² *Ibid.*, p. 79

³ *Ibid.*, p. 80

would further be based on facts about their experiences together with facts about the pieces of matter we call their bodies (if the non-basic fact to be analysed had a reference to bodily action at all, as it usually would have), and also, if the pure Ego theory of the self is true, facts about their pure Egos. The interest which the analysis has for the philosopher would lie in showing how we can dispense with the notion of the State as an ultimate entity, and in discussing the more doubtful point whether and how we can dispense with the notion of the self as an ultimate, thereby throwing light on the nature of selfhood. For the interest does not lie merely in seeing what the ultimate elements are but in seeing how they are combined to make up the non-ultimate. Thus if we decided that the self was reducible to a series of experiences we should not have to be content with merely saying this, but should have to give an account of the relation between the experiences which constitute one self, differentiating it from the relations which hold between those experiences that belong to different selves.

It will be convenient if I mention now two points where I differ from Professor Stebbing's views in the above papers. (1.) I should agree with Professor Moore as against her in one or two passages where she speaks of the analysis of "expressions" or "sentences" in this connection. To analyse an "expression" or "sentence" would be to my mind simply to say what word was the grammatical subject, etc. However in the same passage where she speaks of philosophical analysis as "the analysis of a sentence" she suggests that it is also the analysis of facts,¹ with which I should agree. In *The Method of Analysis in Metaphysics*, she speaks of the analysandum as a "Fact,"² i.e., a non-basic fact, and a little earlier in the same article she speaks of analysis of "propositions"³ (2.) I could not admit that "Keynes is fallible" is part of the analysis of "All economists are fallible."⁴ It is not even entailed by the latter proposition but only by it together with a third, "Keynes is an economist." However Professor Stebbing herself seems to have wished a year later to amend her views on this point.⁵ These differences

¹ *Logical Positivism and Analysis*, p. 9

² *Proceedings of Aristotelian Society*, vol. xxxiii, p. 82.

³ *Ibid.*, p. 78

⁴ *Ibid.*, p. 79.

⁵ *Analysis*, vol. 11, No. 3, p. 35

between us seem to me on the whole to be more verbal than real.

Professor Stebbing insists that "the immediate reference" of a proposition can be determined by simple inspection without philosophical investigation¹ and that it is a necessary presupposition of any attempt at philosophical analysis that we should have thus already determined it. For before we can start an analysis we must understand what is to be analysed. In *The Method of Analysis in Metaphysics*² she seems to claim that we must have complete understanding, but in the slightly later *Logical Positivism and Analysis*³ she regards the understanding as only partial. At least partial understanding is obviously necessary if we are to know at all in what direction to look for an analysis, but complete understanding need not be. I admit that there must be some sense, however difficult to define, in which we completely understand some common-sense statements, as well as a sense in which we only understand them partially, the partial understanding being improved by the analysis given by the philosopher

With Professor Stebbing, as I understand her, I should much prefer to think of so-called "philosophical analysis" as examining the implications rather than as determining the meaning of common-sense statements. I should rather think of the so-called *analysans* as a proposition or set of propositions entailed by, but, except in an extraordinary "Pickwickian" sense, not identical with the common-sense proposition selected for analysis. Where the meaning of a statement ends and implications not included in the meaning begin seems to me a question of psychology which may vary from person to person and from occasion to occasion. What is important is to determine what are the implications of those propositions which we absolutely or practically know to be true, since from their truth we can conclude that any propositions about the nature of the real implied by them are true. But what we are interested in philosophically is not the specific propositions entailed by a specific common-sense proposition, but the *kind* of propositions. Phenomenalists do not proceed to substitute for each physical object proposition a detailed phenomenalist analysis giving

¹ *Proceedings of Aristotelian Society*, vol. xxxiii, p. 81.

² *Ibid.*, p. 86

³ *Ibid.*, pp. 33-4

a list of the exact experiences which would verify it. They are content with describing the kind of analysis which would be required on their view. And similarly with other attempts at philosophical analysis. I think indeed that the analysts would have done very much better if they had oftener tried as an illustration to work out the analysis of a proposition in full detail, but if they had done that in a few instances so as to make their view fully intelligible that would have been sufficient. It might well be expected that they should give a full analysis of some physical object propositions to show that they could do it, and it would be very instructive if they had complied with the request, but nobody sensible would expect them, once they had analysed a proposition about, say, chairs, to give a full analysis of propositions about tables or apples. Nor, as we have seen, can we think of all the propositions entailed by a common-sense proposition as included in the "analysis" of this proposition, but only those propositions which disclose the kind of structure possessed by the facts to be analysed. In these remarks, I do not think, however, I am disagreeing with but only amplifying the views of Professor Stebbing.

Another admission I should have to make is that I am using "analysis of propositions" in a Pickwickian sense of the term. Strictly speaking, the analysis of a proposition should produce another expression which stood for just the same proposition but expressed it in greater detail, but this is no longer the case in regard to "analysis" as we now understand it. The justification for still using the term *analysis* would lie in the fact, if it is, as I think, a fact, that though philosophers have thought they were doing something else, namely, effecting an analysis of common-sense propositions in the stricter sense, they were really only doing so in my loose and Pickwickian sense. I do not think that "analyse" normally does mean "give a selection of the implications of the propositions analysed adequate to display the ultimate elements of which the objects to which it refers are composed and the relations of these elements," but this may well have been what philosophers were really doing when they said and thought they were analysing. And indeed they were not mistaken in supposing that they were analysing. They were only mistaken as to what they were analysing; they thought they were analysing common-sense

propositions, but they were really analysing not the propositions but the objects to which these referred, not the common-sense beliefs but additional truths beyond these beliefs about the several elements, which common-sense apprehended and referred to as a whole without splitting it up into elements.

If this view of "analysis" is accepted we can no longer object to a particular form of analysis on the ground that it is so complicated that it is incredible that the persons who asserted the analysandum really meant anything so highly complex and difficult to grasp. For it is no longer claimed that the analysis is giving what they meant except in the sense in which "mean" just signifies "imply." On the other hand it will still be a very serious objection to an analysis if it leaves out of consideration or explains away something which is included in what they meant, at least if this constitutes a factor of a different kind from the others included or implied. For the object of philosophical "analysis" is to show the *kind* of propositions which must be true if the common-sense proposition in question is so, and it will therefore be defeated if it omits any important kind. Thus it will still be a fatal objection to a "phenomenalist" analysis of physical object propositions if it is the case that common-sense propositions about physical objects refer not merely to sense-data of actual and possible human percipients but to objects existing independently of being perceived in a sense in which this cannot be reduced to a statement about sense-data or perceptions; but it will not be an adequate objection to a phenomenalist analysis merely to say that I may assert the existence of a physical object and attribute qualities to it without thinking of the conditions under which such qualities could be observed. This indeed is usually recognized, but I do not see how it can be justified except on a view like mine. If the analysis really gives just what the plain man means in the ordinary sense of "means" and not implications which fall outside the meaning, it is difficult to see how we can include in the analysis anything which the plain man does not intend it to assert. Likewise it will be a fatal objection to a purely psychological analysis of ethical propositions if it can be shown that when we talk about obligation in the ethical sense we mean something different in kind from any really psychological factor, but it will not be a serious objection that we may recognize that

A is under an obligation to do B without thinking of feelings of disapproval or whatever it is which is used as the basis of the psychological analysis. The object of philosophical analysis on this view is to give an account of the kinds of propositions which must be true if certain common-sense propositions are true, and the importance of it lies chiefly in the fact that we either know or at the very least are justified in believing some common-sense propositions to be true and therefore wish to see what follows from them in order to gain a better insight into the structure of facts and perhaps ultimately draw from them some more speculatively metaphysical conclusions. To achieve either end it is particularly important to decide whether certain concepts can be adequately analysed in terms of others (e.g. whether "values" are merely psychological facts about human beings, or whether besides human experiences there are independent extended non-mental objects so that the concept of physical object cannot be analysed entirely in terms of sense-data), and what concepts we just have to recognize as ultimate; and the study of this is Professor Stebbing's "directional analysis." (Professor Stebbing declines either to affirm or deny that speculative philosophical construction will ever be possible; what she does say is that, if it is to be possible at all, it must be preceded by a more adequate analysis of common-sense propositions¹ than any that has yet been achieved).

In *The Method of Analysis in Metaphysics* Professor Stebbing puts forward the view that the use of the method of philosophical analysis presupposes certain unproved metaphysical assumptions connected with the notion of basic facts, especially the assumption that the ultimate constituents of the world are simple.² In one of her last articles, *Moore's Influence*, in the volume on the latter in *The Library of Living Philosophers*,³ however, she retracts this view and takes up the position that what is basic is simply relative to the purpose of the particular investigation in which we are engaged at any time. She further concludes that the type of analysis which she had been discussing before, i.e., "directional analysis," which aims at reducing a complex whole to its ultimate elements is of little or no

¹ *Proceedings of Aristotelian Society*, 1932-3, pp. 93-4

² *Ibid.*, p. 85 ff

³ *Ibid.*, p. 527-8

value to the philosopher, but since her discussion of the point here only occupies two or three paragraphs it is not possible to tell how far and exactly where her general views of analysis had been changed by this admission. I have certainly an inclination to regard it as self-evident that the complex presupposes and consists of the simple, and that therefore there are basic facts in an absolute and not only a relative sense; but as regards the relation of this assumption to the practice of analysis I should like to suggest a view midway between the two views of Professor Stebbing. I should have thought that the practice of philosophical analysis did not indeed necessarily presuppose that everything could be reduced to a complex of ultimate irreducible elements, or indeed, that anything was absolutely simple, but that it did presuppose that *some* facts were *simpler* than others in a sense in which simplicity was not merely relative to the context and that in some cases the less could be analysed in terms of the more simple. These limited assumptions cannot be disputed by anybody who would admit, for instance, that facts about states or types of civilization could be ever analysed in terms of individuals and that individuals were more ultimate than states in an important sense of the word. And, as far as I can judge from the very short passage she has written on the subject, Professor Stebbing's objections seem to be objections not so much against directional analysis as such as against particular analyses which have been proposed. I agree with her that the philosopher must not analyse physical objects in terms of sense-data; but that, I think, is because sense-data (at least as usually understood) are not the simples of which physical objects consist, not because it is a fundamentally vicious process to seek for absolute simples. I think, however, the most important thing that philosophers have to learn from the study of directional analysis is that certain modes of directional analysis which seemed promising do not do justice to the facts. Since its results are mainly negative I cannot, therefore, ascribe such supreme importance to directional analysis within the subject-matter of philosophy as does Professor Stebbing's earlier view, but I still think that when we consider the various proposals which have been made for the directional analysis of certain concepts, we are discussing philosophical questions of great import. Only we must not vitiate our discussion at the

start by assuming prior to investigation that the analysis muts, to be philosophical, take some particular course, e.g., that the ultimate entities in terms of which it has to be effected are "sense-data."

If we admit that the so-called analysis which philosophers give is not equivalent to the original proposition said to be analysed, it does not of course follow that it need contradict it. We seem to have four other alternatives. First, the analysans may simply give additional information beyond any included in the analysandum about the things to which the analysandum refers. It indeed would not be accepted as a true analysans if it was not entailed by the analysandum, but there seems to me to be no reason whatever for holding that the propositions entailed by p are included in p . Secondly, the analysans may give what is thought to be the only element in the analysandum that is true or that can be justifiably believed, rejecting the others. Thus, if I decided that common-sense propositions about physical objects had to be interpreted in a realist sense but was unable to believe in realism, I might defend a phenomenalist analysis of physical object propositions in the sense of asserting that it gave not indeed the whole proposition but the only element in it which we were justified in accepting. Even if the Moorean view of common-sense propositions is accepted, this sense of "analysis" will still have some application, since there can be no doubt that it will be sometimes worth while analysing partly false propositions, e.g., confused political views. Thirdly, the analysans may be an account of the nature both of the analysandum and of other propositions entailed by it. Fourthly, the analysans and the analysandum may be the same proposition expressed in different ways. All four cases of analysis may occur, and all have their uses. With the first three it must be admitted that the sense in which we talk of analysing the analysandum is Pickwickian, but all cases of philosophically interesting analysis cannot be crowded into the fourth class. Further, it may be difficult in a particular case to decide in which of the four senses an analysis has been effected. But if we are dealing with ordinary common-sense propositions and serious philosophical points are raised, the analysis should be taken to be of the third type. It cannot be of the second type, for we assume the analysandum to be true, nor of the fourth for reasons given

above, and it should not be of the first because we wish to know with the greatest possible clearness the kind of facts known (or justifiably believed) by common-sense as well as the implications of these facts.

Now I said earlier that the *analysandum* was always vague, and I suggested that consequently there could be no analysis of it which was at once definite, ultimate, and correct.¹ It might seem to follow from this that any analysis which accorded with my theory too would always have to be vague, at least in part, for, even if the implications of the *analysandum* were definite, the *analysandum* itself, which I have said would have to be included in the investigation as well as its implications, is admittedly not so. Further, the implications of something vague are likely to be themselves vague and uncertain, so that it would seem to follow that the whole of the analysis will be affected with this vagueness. This would not, I think, be a very serious objection; it might well be that every correct analysis had to end with words such as "or something like this." The point has, however, been already covered by my proviso that what interests us in philosophical analysis is not the specific facts but the kind of facts referred to in the *analysandum*. The *analysans* would have to be vague if it were an exact equivalent of the *analysandum* or included such an equivalent, but since it merely gives the *kind* of facts involved if the *analysandum* is true it need not be vague except in the sense in which all propositions involving rather abstract universals are so.

The view I have outlined still leaves us with many problems, but it at least avoids what I think to be the pseudo-problems which arise through the confusion of the analysis of facts with the rendering of exact equivalents of common-sense propositions. The subject is a technical one of no great human interest in itself; but its implications are serious, since it is possible that a man's whole philosophy may be determined by the attitude he takes up to the question of analysis. And in view of the extent to which analysis has exercised the minds of those in Professor Stebbing's philosophical environment, and of the great though diminishing part it probably played in her thoughts, it seems by no means an unfitting subject for an article in the present volume, even by a person who would certainly not

¹ Vide above p. 70.

classify himself as specifically one of the analytic philosophers. Probably Professor Stebbing would in her later years have felt a similar reluctance as regards herself; but it is salutary to remember that there is a sense of "analytic" in which every philosopher ought to be, and Professor Stebbing certainly was, in the first place, if not in the last, analytic. The business of the philosopher is not to indulge in striking, but groundless, fancies; he must support what he has to say by solid and careful thought, and though he need not and cannot disclaim intuition he must strive to separate what he does from what he does not really intuit. He must in order to achieve these ends distinguish very carefully different senses of words, both in common and philosophical use, so that he does not vitiate his arguments by confusions, and he must be adept in analysing confused ideas so as to distinguish the worthless elements in them from the good. As Professor Stebbing rightly points out,¹ he will be in error if he holds that everything which can be said is either perfectly clear or nonsense, or that everything can be made perfectly clear; but he must be ruthless in making whatever he thinks or says, if not absolutely clear, at least as clear as he can make it without doing violence to the facts. Analysis is absolutely necessary at least as a propaedeutic to philosophy, and indeed, more than that, as a part of the philosophical enterprise itself.

¹ *Logical Positivism and Analysis*, p. 37

THE CONCERT TICKET

By AUSTIN DUNCAN-JONES

I ONCE heard a group of moral philosophers discuss for about an hour this question: 'Supposing I had one ticket for a concert, and supposing I knew that X would appreciate the concert just as much as I should and no more, ought I to give him my ticket or go myself?' The philosophers may have had theoretical reasons for their discussion, but no sensible man discusses questions like that.' (A.D. Lindsay, *The Two Moralities*.)

This is part of a passage which Susan Stebbing quotes in *Ideals and Illusions* (ch. 3). She adds that if, as she thinks, she was present on the occasion referred to, the philosophers did in fact "have theoretical reasons for their discussion": they were testing the ethical principle that pleasure alone is good. One party, perhaps, held that pleasure alone is good, and therefore it didn't matter whether Y, the holder of the ticket, used it himself or gave it to X. Another party may have held that, while pleasure is good, beneficence is also good: therefore Y should give the ticket to X, since by doing so he would realize a greater amount of good than by keeping it.

These imaginary practical problems serve a certain purpose in ethical discussion, by allowing us to perform a sort of intuitive induction. We don't really want to know how Y should act about the ticket, we want to know how in general people should conduct their lives. But we may be more certain how Y should act in this one case than we are at first glance about the principle that pleasure alone is good. If we can become quite certain that Y should act in this way, not in that, we may be able to abstract those features of the case which make us certain. And we may then be able to see that, in accepting such and such a solution in this one case, we are virtually accepting a similar solution for all cases which have those features. It is as though we looked at an equilateral triangle and saw that it was equiangular; then abstracted the properties of being equilateral and being equiangular, and saw that any triangle which had one must have the other.

• But the attempt to reach ethical conclusions by intuitive

¹ Written in October, 1944.

induction does not seem as straightforward and generally acceptable as this. We may decide, as the Master of Balliol did in the passage quoted, that the problem is too trivial to worry about. If we succeed in taking the problem seriously, we may find that our solution in this one case leads to no intuitive induction about other cases ; or that it is just as hard to decide about the single case as about the general principle. I propose to use the imaginary problem about the concert ticket for a rather different purpose, namely to illustrate one way in which one kind of person might come to reflect about moral principles.

Before considering what Y's train of thought might be about the concert ticket we must make the hypothesis more definite: some of the relevant factors aren't stated in the passage quoted. We need to know, for instance, how Y acquired the ticket. If he bought it for himself he has already prejudged the question who is to use it, though he may after buying it feel scruples. Or Z may have given it to Y, having bought it as a present with the intention of giving Y pleasure. Then Y may feel some obligation to Z not to give the ticket away.

For simplicity I shall assume that Y acquired the ticket casually. Z bought it for himself and couldn't go, he gave it to Y because Y was the first person he met who liked concerts, not from any special intention of giving pleasure to Y rather than someone else.

In practice Y's decision to go to the concert, or to give the ticket away, will often be an example of a general decision, or habit of deciding in a certain way in situations of a certain class. The habit may not have been reflectively formed, and the individual decision may be still less so. But it may be that for some reason Y does reflect on this particular situation more deeply than he would on most situations of the kind. (Let us suppose him to be an Oxford Greats tutor, a good conscientious man.)

It is assumed that Y knows at least one person who would enjoy the concert "as much as he would"—he may of course know several (I need not consider here what is meant by "comparing amounts of pleasure". We certainly do make comparisons which can be so described.) But no decisive reason may occur to Y for one of these people to use the ticket rather than himself. It may be that they are all in easy circum-

stances, and can buy themselves concert tickets as often as they want to. If so, Y will probably hardly give a thought to the possibility of giving the ticket away, but will use it himself with little reflection and no qualms of conscience.

It may be, however, that this is some specially attractive concert, and that all tickets are known to be already sold; or that Y has some friend who enjoys concerts but can seldom or never afford to buy tickets. In either of these cases Y will know that by going to the concert he may be depriving someone else of something which he is likely to have few or no other chances of enjoying ("Yehudi's only visit to Oxford"; "X's first concert this season").

In either of these cases Y, on reflection, is likely to have an uneasier conscience about using the ticket himself. The uneasiness doesn't turn on the comparative amounts of enjoyment from the concert, which *ex hypothesi* are equal. It turns partly on the selfishness of consuming a scarce commodity when it might be given up to someone else. And if what makes Y uneasy is that he has a music-loving friend X who can't afford concert tickets it perhaps turns also on something deeper.

It is in this last case that Y is most likely to feel himself constrained to ease his prickings of conscience by forgoing the concert. One sometimes evades the need to solve a basic question of moral principle by acting, in a particular instance, in the way which would be required by the most rigorous decision in principle.

The decision was not so difficult when the problem arose only from the scarcity of tickets—for even if Y used the ticket himself he could assume that his friends would have other opportunities of similar enjoyments. So although his decision would be relatively selfish it would be less disquietingly so.

The disquietingness, for the scrupulous Y, of the case in which he might have given the ticket to a poor friend lies in the fact that it forces him to look down an endless perspective of possible self-denial. Since Y is not presumed to be a saint or heroic ascetic, he has probably formed the habit of ransoming himself temporarily from this haunting view by casual acts of self-denial, many of which are not excessively costly.

The case of the concert ticket thus poses, more or less pressingly according to the qualifications one adds, the general

problem of the limits of self-denial. The imaginary Y already has some bias towards self-denial, and feels uneasiness when acts of selfishness present themselves to him too nakedly. His immediate problem is to act in a way which will give him an easy conscience; and he would like to find some general principle applicable to these cases of conscience, as a moral labour-saving device. The principle which will satisfy him may not satisfy others, and to somebody other than Y the concert-ticket situation might have presented itself quite differently. Here I am concerned only with the way it might present itself to one kind of person; but I don't imply that there is not a right and a wrong way of dealing with the situation.

The anxiety which Y feels over the concert ticket would, if he pursued his train of thought, be something like this. "Both X and I should enjoy the concert, but X goes to fewer concerts than I do, and has fewer pleasures of other kinds. It would be selfish for me to go when as an alternative X might go. By all means let X go then. But similarly there are many other things which I do for my own enjoyment, to the exclusion of someone else who would also enjoy them—only some of the best things in life are free. Why should I, for example, buy myself cigarettes when I might give them to others who can't afford cigarettes? Why should I spend so much of my time just in ways that happen to appeal to me, when other people—who possibly bore or irritate me—would have a use for my time? Where can I draw a line between my actual habits and the extreme of self-denial? In practice, while refraining from the more striking forms of positive selfishness, I organize my life very largely for my own convenience. I sometimes put myself out on other people's behalf if I am fond of them, or if they have some special claim on me, or if their needs obtrude themselves on my notice; but this is in the main a matter of occasional impulses, and is an exception to the general tenor of my life. Moreover, whatever conclusions I may come to in theory about the limits of self-denial, I know myself well enough to think it unlikely that they will greatly modify the general tenor of my life."

It is not social justice which bothers Y. We cannot imagine any social arrangements in which poverty, pain and frustration would be so perfectly eliminated in practice that Y's scruples would never have the chance of troubling him.

The claims of Y's endless perspective only become pressing, it seems, when he is faced with choices in which there is some special exclusiveness in the self-satisfying act, or some special disparity between his own needs and those of some other person. He would not be so much concerned about his own selfishness in using the concert ticket if he knew that all his friends could easily buy tickets for themselves, or could go to other equally good concerts. He might, then, conclude that the obligation to self-denial (or others-satisfaction) only arises, or is only pressing, in certain circumstances which make the selfishness of preferring one's own enjoyment specially conspicuous. He might argue something like this. "I am seeking a general moral principle on which to act when I have to choose between my own enjoyment and that of someone else. But which I am to choose depends on the exact circumstances. In some cases, my going to the concert on this occasion doesn't lessen the chance of other people going to this concert or others equally good. One enjoyment the more for me doesn't in any precise way mean one enjoyment the less for them. In such cases there is no reason why I should not often decide in favour of my own enjoyment, though probably to avoid forming a habit of selfishness I should not always do so. On the other hand, as many philosophers and moral teachers have said, I should avoid morbid scrupulosity, and I need not search my conscience deeply whenever I have to make a choice of this type. But there are other cases in which by choosing my own enjoyment I exclude other people whose enjoyment would be equal, or whose needs are greater than mine. It is in these cases that the obligation to self-denial is imperative."

If Y considered this as disposing of the problem he would be very easily satisfied. For it is only on a cursory view of the circumstances that he can distinguish the two cases. This kind of argument makes it seem as though the only circumstances relevant to a decision were those which obtrude themselves on the agent's notice. But a little reflection will show Y that the former case can seldom arise. If the concert is worth going to at all, as *ex hypothesi* it is, there will always be someone to whom the ticket might be given, for whom this will be a rare chance of going to a concert or the only chance of going to this concert. Of course such people may not be known to Y, so that when

the occasion arises he can't dispose of his ticket to someone who needs it more except by questioning passers by in the street or some other Arabian Nights method. But this is a consequence of the general organization of his life—by the time he has to make his decision the disposal of the ticket is already a *chose jugée*. The act of self-denial, at this moment, is made remote or difficult by the fact that Y's life and habits have not been based on acceptance of a comprehensive duty of beneficence.

But as the Master of Balliol pointed out, the example about the concert ticket really is rather a trivial one, and is probably not typical of the situations from which reflection on moral principles usually arises. Philosophers are apt to feel a sort of schoolboy shyness about introducing less trivial examples into ethical discussions. Thus they do not often hit upon the sort of practical problems which, by the difficulty of making a practical decision in a single instance, force the agent to reflect on general principles. I venture to give some examples of situations which might have this effect. (1) Those in which the agent's decision may have widespread or momentous effects on the lives of others; for instance the situation of an employer or administrator who has to make decisions about engagement, promotion, dismissal and so on of subordinates, or that of the doctor in Bernard Shaw's play, who can save the life of one only of two sick men. (2) Those in which the decision may have prolonged or momentous effects on the agent's own life, for instance the decision whether to get married, whether to get divorced, what profession to enter, and so on. Decisions which belong to either or both of these two kinds may be called pregnant decisions. (3) Situations in which the agent has difficulty in adopting one of the contemplated alternatives, which it is thought may be the right alternative. The particular situations which have this effect must vary a good deal according to individual people's temperaments and circumstances. Perhaps a not uncommon example would be that in which there is, or seems to be, a conflict between the claims of my career and those of my family—from ambition or adventurousness I may be inclined to neglect my wife and children; or from torpid contentment with domestic placidity I may neglect chances of doing the best work I am capable of. These three kinds of situation overlap. For some people the question "shall I become a conscientious

objector to military service?" might combine all three elements.

When a practical problem arouses acute moral discontent, such as the concert-ticket problem is supposed to have aroused in Y, several different levels of moral principle come into play. Y may be influenced by one kind of principle in his habitual unreflecting decisions and another when he begins to reflect. To bring this out more clearly it will be convenient to introduce the notion of a "Morality", which I have discussed rather more fully in *Notes for a Treatise on Ethics* (*Proc. Arist. Soc.* 1943-4). A Morality is any set of moral principles, vague or precise, which is or might be accepted by some individual or social group. The simplest statement of a Morality would be a list of acts favoured or condemned. A moral principle is a general moral judgement—a judgement for or against a certain class of actions. Moral judgements are those which involve a reference to some standard which is thought to apply to conduct in general, and not just to some limited branch of conduct, as do the rules of a game, a profession, or a club. As the phrases are used here, a habitual practical attitude might be called a moral judgement or moral principle.

Moralities may be roughly divided into three kinds: (1) limiting; (2) purposive; (3) comprehensive. A limiting Morality might also be said to be conditional, in contrast to purposive and comprehensive Moralities, which might be called categorical. The most distinctive precepts of a limiting Morality are negative—"don't lie", "don't oppress the weak" (or "don't betray the Nordic race") and so on, but it may also include such precepts as "help your friends when they are in trouble", "give your children the best education you can", and so on. While it need not be wholly negative, a limiting Morality is conditional in the sense that it only gives you rules for meeting certain types of situation as they arise—"if someone asks you a question answer truthfully", "if you see a man drowning try to rescue him", and so on. It doesn't tell you what situations to seek or how to model your life; at the most it tells you what situations to avoid.

The Morality which most commonly enters into popular discussions is of the limiting type; and it is a limiting Morality which is so lamely expressed by contemporary writers who praise the qualities of "decency" or "kindliness". (I think

what makes expressions like these embarrassing is that they are often used with a view to distinguishing the "democratic" from the "totalitarian" way of life. But what is wanted seems to be a distinction of categorical rather than conditional precepts. The limiting Morality of ordinary people in commonplace situations is too frail a craft for this momentous load.)

The discomfort of Y's situation above is that, by a reflective attempt to deal with a practical situation with the aid of his customary limiting Morality, he has stumbled on the teasing vista which leads towards a categorical Morality.

By a "purposive" Morality I mean one which lays down some general aim, whose realization is relevant to many different types of situation.

By a "comprehensive" Morality I mean one which lays down an aim, or a standard of conduct, which is relevant to every possible situation.

I don't pretend to be drawing rigid distinctions. Every Morality actually adopted by an individual or a social group is likely to contain at least a limiting and a purposive element. But I think these distinctions are worth drawing. The distinction between a comprehensive Morality and a purposive Morality laying down some very widely relevant aim might be more or less arbitrary, but the difference between a comprehensive Morality and a purposive Morality which was not near the border line might be very marked. And the difference between any purposive Morality and a Morality consisting mainly of good form and "decent behaviour" will usually be very marked, although formally we might devise a Morality of the limiting type which would be almost purposive. When I say that such and such a Morality is limiting, or purposive, I must only be taken to mean that this or that element is most conspicuous.

It is easy to see that most social groups have their own limiting Moralities, which show themselves most readily in a negative way. In this country flagrant and visible violations of common honesty, common neighbourliness, common kindness to children, and so on, are usually condemned. This is negative in the sense that what we condemn is usually the breach of a prohibition—stealing, cruelty, and so on—rather than lack of perseverance or scrupulosity in fulfilling some positive injunction. It is more difficult to discern the acceptance of

any purposive Morality by any large social group. One might, however, hazard the guess that in this country today some vaguely conceived ideal of social justice, or of an equal chance of self-development for all individuals, is widely accepted. Elsewhere the same place may be held by the ideal of a classless, or a racially pure society. A generalization such as this must raise questions for a sociologist as to the relation between theory and practice, between publicly professed ideals, practical policies, and private standards of conduct, and so on; but these need not be considered here.

The purposive element is more readily seen in the Morality of an individual than in that of a society, and whether in a society or an individual, it is more readily seen when it is the product of a conversion or revolution than when it has grown up gradually. (Thus we feel less hesitation in diagnosing a purposive element in the common Morality of Russia than in that of England.) In the Morality of an individual the purposive element might take the form of the wish to be a good citizen; or to promote socialism or world peace; or, more generally, to promote the happiness of others. It may be objected that in my description of a purposive Morality I am confusing moral with political convictions. I do not think I am doing so. When someone's acceptance of a political outlook is whole-hearted, as it often is, and not nominal or passive, it involves a resolution to make the realizing of some political end a major purpose of his life.

A comprehensive Morality will seldom be the actively held Morality of a social group, unless perhaps of a very small group—perhaps, for example of some monastic community. But comprehensive Moralities have been inculcated by some moral teachers—by some exponents of Christian doctrine, for instance—and are accepted with varying degrees of conviction and seriousness by some individuals.

When the limiting Morality which has served the imaginary Y well enough from day to day fails to satisfy him, he is led to consider the more rigorous demands of a purposive or a comprehensive Morality of which his acceptance hitherto has been partial and confused.

It is clear that I am considering only one special case of moral perplexity, as it would arise if Y's temperament and mental background were of one particular type. The guess

may be hazarded that the train of thought described is likeliest if Y has been brought up in a society which has inherited a Christian outlook. But whatever Y's special characteristics might be, in some situation or other he would find, if he were sufficiently clear-sighted, that no limiting Morality settled all problems of conduct.

The end of the vista which Y contemplates is a comprehensive Morality of a particular type which might be called "absolute altruism". This is not a name for any one Morality, since the rule "always prefer others to yourself" is incomplete unless we specify the particular kinds of service to others which are thought important. I have briefly stated a Morality of this type in *Notes for a Treatise*, referred to above, where it is suggested, perhaps naively, that the duty of making others happy is an adequate guide to a large part of our conduct.

One feels various discomforts about any Morality of the absolutely altruistic type, some of which I will record briefly.

1. It is impossible in practice for most human beings to come anywhere near acting on such a Morality. This is all the more the case since people are seldom brought up to think of such a Morality as a practical guide for day-to-day purposes, even if it has been placed before them as a vague and remote ideal. In general it is only after reaching maturity that some people come to consider whether such a Morality should be taken seriously. Mature people are usually people whose major decisions are already taken—their "choice of life" is already made. They have taken root in a profession, and have formed family ties and other personal ties and particular obligations. Thus if they tried to make a moral revolution in their lives they would be impeded, not only by selfishness, lethargy, and habit, but by a moral framework of which they had become part

2. It may be doubted whether an impracticable Morality can be correct. "Ought" implies "can", it is often said. But even if it were correct it would be in a certain sense incomplete. For in order to use such a Morality as a guide to conduct, knowing it to be impracticable, one would have to compromise. There would presumably be better and worse compromises, and supplementary rules of compromise would therefore have to be found. It might not be possible to define the goodness or badness of a compromise in terms of approximation to or remote-

ness from an ideal; for it might not be possible to find any quantitative scale in which the various compromises could be arranged.

3. "When we compare the life of service to mankind, involving so much sacrifice of pure pleasure, which is lived by men whom in our consciences we think best, and which they reproach themselves for not making one of more complete self-denial, with the life of free activity in bodily and intellectual exercises, in friendly converse, in civil debate, in the enjoyment of beautiful sights and sounds, which we commonly ascribe to the Greeks . . . we might be apt, in the first view, to think that, even though measured not merely by the quantity of pleasure incidental to it but by the fullness of the realisation of human capabilities implied in it, the latter kind of life was the higher of the two." (Green, *Prolegomena to Ethics*.) I borrow my quotation from a "secular" writer, Mr. Wyndham Lewis (*Paleface*), who adds, referring to what Green says one might think "in the first view", "I find it impossible to rescue myself from that initial error". It is indeed difficult to rescue oneself. Let us suppose that we accept an absolutely altruistic Morality, which lays down the rule that we should try to procure for others the sort of life which Green ascribes to the Greeks. In proportion as more and more people accepted this Morality, the aim laid down might become less and less realizable. For there would in the end be no beneficiaries left to enjoy the goods supplied by the universal class of benefactors.

Yet if the absolutely altruistic kind of Morality is for most people impracticable, there is no danger of this *reductio ad absurdum* taking place. An advocate of such a Morality might say "I am not concerned with what might happen in an imaginary world, but with how we should act here and now". He might add that the wish to enjoy the kind of life ascribed to the Greeks is, for a cultivated person, precisely what stands in the way of the acceptance of his duty.

It may be thought that I have given too large a place in my description of Moralities to the element of choice between altruistic and non-altruistic conduct. In many choices we have to make this does not seem to be the main point. For instance I am invited to join a certain society; in deciding whether to agree I quite likely balance, on either side, both possible services

and disservices to other people, and possible satisfactions and vexations to myself. I should enjoy certain activities of the society and find others tedious; I could play such and such a part in the society's affairs, which perhaps so and so could play equally well; I should have to give up this other activity, which I enjoy, and which might be impeded by my absence; and so on. Whichever way I decide, it is probably not a matter of one seeming the selfish the other the unselfish choice.

But decisions like this, or like the decision about the concert ticket, are not the most profoundly difficult kind. The difficult decisions are those in which one feels strong resistance to one of the alternatives and could all too easily slide into some other. Such cases do seem often to be properly described as choices between selfish and unselfish conduct. I have tried above to *give instances of situations which may be of this kind*, but I am doubtful how far one can generalize as to the types of concrete situation which will present themselves in this way. A situation which to one individual seems momentous to another might seem trivial; and a kind of situation which has, perhaps, been met dozens of times by a given person, and disposed of in a commonplace way, may suddenly by some freak of moral insight or scrupulosity present itself as momentous. The speculation on moral principles which results may lead us to some conclusion which seems applicable to all our conduct, including our conduct in such commonplace situations as that of the concert ticket.

All that I have hoped to do here is to display some of the ways in which we come to reflect on moral principles—to give part of the natural history of moral judgments. We do in fact come to conclusions as a result of this kind of reflection, in the sense that we come to accept some moral principle which enjoins or condemns a general type of conduct. I think our conclusions can be correct or incorrect, but I cannot hope to deal here with the all-important question how we are to decide whether they are correct. For practical purposes a philosopher may have to decide questions about conduct with no better equipment than an unphilosophical person. But as a philosopher he is professionally obliged to try to stand outside this process, examine the means used in reaching a decision, and see how to distinguish right from wrong means. I will hazard the guess

that he should not hope to reach this result, either by mere ratiocination, or by the mere working of his own conscience supported by clear apprehension of the relevant facts. Something which I venture to call an appeal to authority may be needed—the authority, that is, of classical moral teachers. But this can never be a simple solution of our difficulties. For classical moral teachers don't always agree. And even if we found a consensus of judgement among them, we should be asked what the criterion was for deciding that such and such an authority was to be accepted.

LOGIC AND SEMANTICS

By MAX BLACK

Sie sprechen eine Sprache
Die ist so reich und schön
Doch keiner der Philologen
Kann diese Sprache verstehen

I

Introduction

THE technical language of "semantics"¹ and the wider subject of "semiotic" of which it is a part must be agreed to be both rich and mathematically elegant—if the shade of Heine will pardon this mis-application of his rhyming sentiment. Yet many beside philologists are puzzled today by the new language and the discipline whose instrument it is. We may discount as much as we please the mere technical difficulties of mastering a symbolism which makes the language of *Principia Mathematica* seem transparently lucid by comparison. There remains, even for those philosophers for whom gothic letters are no impediment, a more serious cause for disquiet. If the interest aroused by the birth and growth of semantics has been tinged with perplexity, the reason is largely the difficulty of understanding the full import of the primitive assumptions which determine the character of the subject and its potential usefulness.

It is, of course, easy to forget that semantics has many precisely distinguished subdivisions—and, so forgetting, to submit irrelevant criticism.

¹ The best elementary exposition of semantics is included in Professor R. Carnap's monograph, *Foundations of Logic and Mathematics* (Encyclopedia of Unified Science, vol. 1, No. 3, Chicago, 1939). Professor Alfred Tarski's article on "The semantic conception of truth and the foundations of semantics" (*Philosophy and Phenomenological Research*, vol. 4, pp 341-375) is very useful, likewise Professor Charles Morris's *Foundations of the Theory of Signs* (Encyclopedia of Unified Science, vol. 1, No. 2, 1938) which provides a general setting for the whole subject. A more exact exposition is Carnap's *Introduction to Semantics* (Harvard University Press, 1942). I shall refer to these works by the abbreviations, 'F.L.M.', 'S.C.T.', 'F.T.S.', and 'I.S.', respectively. In referring to Carnap's earlier *Logical Syntax of Language* (English ed., 1937) I shall use 'L.S.L.'

It would be idle, for instance, to complain that in *pure* semantics the crucial terms receive no definition, being introduced into the discussion by means of rules or postulates which determine only how the words are to be used in the subsequent deductive elaboration of a system defined by those very same rules; or to lament the fact that in *pure* semantics the objects under discussion are whatsoever elements may happen to satisfy the axioms—"signs" only by proleptic courtesy. For such abstractness and indefiniteness of reference are necessary in any discipline which aspires to be "pure"; the hopes of positive achievement in semantics, *qua* formal algebra of meaning, rest upon just such self-imposed limitations; and to charge it, in the mathematical aspects of its work, with lack of empirical reference would be quite to misconstrue its purposes.

But semantics is hardly interesting enough as pure mathematics to be pursued for its own sake; and, but for the wider claims of philosophical relevance which have been made on its behalf, the subject would have aroused little interest outside the ranks of specialists in symbolic logic. When a well-wisher claims that "the recent discovery of semantics is of fundamental philosophical importance"¹ it must be presumed that the reference is to *descriptive* semantics rather than to a branch of pure mathematics. The department of semantics for which such claims of philosophical relevance are made must then be prepared, like any other empirical discipline, to demonstrate the adequacy of its basic concepts and the fruitfulness of its empirical and analytical procedures in the solution of the problems which define its purposes.

A comparison of descriptive semantics with some other empirical subject—the theory of optics, perhaps, or the psychology of sign-using behaviour—leaves an impression of relative poverty of factual data and conceptual analysis. The basis for the three-fold analysis of the sign-using situation into *sign-vehicle*, *designatum*, and *interpretant* ("that which acts as a sign, that which the sign refers to, and that effect on some interpreter in virtue of which the thing in question is a sign to that interpreter"²) seems to be nothing more searching or

¹ A. Hofstadter, "On semantic problems," *Journal of Philosophy*, 35 (1938), 232.

² Charles Morris, *F.T.S.*, 3.

epistemologically sophisticated than common observation. And this simple conceptual framework becomes still further attenuated in *semantics* where all reference to the interpretant, the locus of all that is distinctively human in the use of signs, is excluded by definition. When a still more advanced level of abstraction yields the subject of *syntax*, in which reference is made neither to designata (extra-linguistic entities) nor to interpretants (acts of interpretation) Berkeley's quip about the "ghosts of departed quantities" takes on a new meaning.

Initial hesitations such as these—and more specific qualms concerning the usefulness of the blanket application of primitive terms such as "designatum" to a heterogeneous diversity of items—are best resolved by reference to the degree of success of the new subject in the solution of its problems. But what are these problems—apart from the interesting, but for present purposes irrelevant technicalities of pure semantics?

An answer is suggested by Professor Hofstadter's claim that "with the appearance of semantics as a new scientific discipline, those problems which could not be handled with the apparatus provided for in earlier statements of logical empiricism are now in the way of receiving definite treatment."¹ For among the most important of such problems I take to be those that have in the past troubled all plausible versions of empiricism; those which arise whenever the attempt is made to account, in a manner consistent with exclusive reliance upon experience as a source of knowledge, for the privileged cognitive status of the so-called "necessary" truths of mathematics, logic, or for that matter, philosophy itself. "Logical empiricists" of the Vienna School, inspired by the stimulatingly oracular pronouncements of the earlier Wittgenstein, have constantly sought some *linguistic* interpretation of "necessary truth", the promise offered by semantics of completing what has been called the "vindication of analyticity"² accounts for the honoured place of the subject in the affections of those who wish to be consistent empiricists.

Instead of making further preliminary comment, while loitering at the entrance to semantics, the more useful procedure suggests itself of tracing in detail the contributions of the new

¹ A. Hofstadter, *Ibid.*

² G. Bergmann, *Mind*, 53, 243.

subject to the linguistic interpretation of necessary truth and more particularly, for the purpose of this paper, to the linguistic interpretation of *logic*.

But here we meet an initial difficulty. In spite of the philosophical importance of the thesis that logic can be subsumed without remainder under semantics, it is impossible to find either a sufficiently clear statement of the meaning of the thesis or a reasoned defence of its truth.

My first task in this paper should be, then, to try to *formulate* with reasonable precision a claim of the linguistic character of logic, in a manner conforming to the intentions of logical empiricists. I shall be content, however, to do this for a single illustrative proposition belonging to logic; the aim will be to test the plausibility of "the linguistic thesis" (as I shall say by way of abbreviation) in its application to a particularly simple and perspicuous example. Since the simplification of semantical method which this procedure will require need not involve misrepresentation of the methods applicable to more complex instances, we may hope that the conclusions may also apply to the more general thesis.

The sections which follow are arranged in the following way: First (section 2) I reproduce some statements made by Professor Carnap (to whose views the discussion will be confined) in order to establish significant variations in the linguistic thesis according as logic is identified *either* with syntax *or* with semantics. Next (section 3) I describe the simple proposition that is to serve as a test-case for the validity of the linguistic thesis, and meet some preliminary objections. In section 4, a *syntactical* version of the linguistic thesis is described in a presentation free from all unnecessary technicalities. Section 5 outlines criticisms of the syntactical version. Finally, in section 6, I try to show that the *semantical* version of the linguistic thesis is, in certain essential respects, identical in import with the syntactical version, and needs, therefore, to answer the same objections.

In view of the restriction of the discussion to a particular application of semantics, it may be as well to say explicitly that I have no wish to belittle the value of a mathematical approach to the morphology of linguistic systems. Some of the methods already developed (for instance by Gödel and Tarski) have considerable interest in the study of the structure of

deductive systems. But we are here concerned with the philosophical value of semantics—which has yet to be established.

II

Carnap's formulations of the linguistic thesis

It will be convenient to assemble a number of alternative statements of the type of position to be further examined in this paper; I have chosen passages from books written by Professor Carnap¹ at different stages in the development of his opinions concerning the functions of "scientific philosophy" and its methods of "logical analysis."

"... we must acknowledge," says Carnap, "that all questions of logic (taking this word in a very wide sense, but excluding all empirical and therewith all psychological reference) belong to syntax. *As soon as logic is formulated in an exact manner, it turns out to be nothing other than the syntax either of a particular language or of languages in general.*" (*L.S.L.*, 233; italics in original).

"... 'non-formal logic' is a *contradictio in adjecto*. *Logic is syntax.*" (*L.S.L.*, 259.)

These quotations are typical of many statements in the *Logical Syntax of Language* in which logic is summarily identified with syntax. A related insistence, common to positivists from Hume onwards, is that logic is non-factual; or, as Carnap more explicitly says, logical and mathematical theorems

"... do not possess any factual content. If we call them true, then another kind of truth is meant, one not dependent upon facts"² (*F.L.M.*, 2.)

In Carnap's more recent work, reference to semantics almost, but not quite, replaces the earlier reference to syntax:

"... logic, in the sense of a theory of logical deduction and thereby of logical truth, is a special part of semantics." (*I.S.*, 56.)

"... logic is a special branch of semantics ... logical deducibility and logical truth are semantical concepts. They

¹ Carnap has written the most fully and explicitly upon these topics. But his views are, of course, shared by many logical empiricists and others.

² The further arguments of the monograph make it clear that Carnap intends to establish the "theorems of logic and mathematics" as what is technically described as "L-true statements of semantics." (Cf. *F.L.M.*, 15.)

belong to a special kind of semantical concepts which we shall call L-concepts." (*I.S.*, 56.)

But we are also told, in a similar context, that the equation of logic with semantics

"... does not contradict the possibility of dealing with logical deduction in syntax also." (*I.S.*, 60.)

As syntax is a special branch of semantics (distinguished by the absence of explicit reference to designata) there need be no inconsistency between the later and the earlier formulations. The earlier statements were made at a time when Carnap did not yet hold reference to extra-linguistic designata, which is characteristic of semantics, to be an acceptable part of the new disciplines which were to replace "the inextricable tangle of problems which is known as philosophy"¹ (*L.S.L.*, 279). His gradual relaxation of the methodological restrictions necessitated by earlier positivist criteria of meaningfulness of utterance has clearly not shaken his acceptance of *some* form of what I am calling a "linguistic interpretation" of logic; the "theory of logical deduction" is still, as in the earlier days, regarded as "not dependent upon facts" *because* it deals, at least in part, with the consequences of *linguistic* rules. The intelligibility and plausibility of such a doctrine clearly depend upon the extent to which its advocates can make precise the senses of logic, language and dependence upon language to which they are committed; and for this purpose of mere clarification of the linguistic thesis, the shift of emphasis from semantics to syntax is no less significant than the constancy of the general mode of approach. It will be a major concern of this paper to discover what addition is made to the plausibility of the linguistic thesis by the admission of semantics into the company of reputable philosophical disciplines.

First, however, let us pause to ask what Carnap means by "logic."

It seems that he wishes the term to be used so broadly as to cover not only the theory of valid deduction and the construction

¹ Cf. the characteristic early statement, "... all theses and questions of logical analysis and therefore all theses and questions of philosophy (in our sense of this word) belong to logical syntax. The method of logical syntax, that is, the analysis of the formal structure of language as a system of rules, is the only method of philosophy." (*Philosophy and Logical Syntax*, 99)

of "modal" logics but even questions, more commonly assigned to metamathematics, concerning the structural relations between axiom systems (*L S.L.*, 233). But in any case, in presenting an analysis of propositions belonging to what he calls a "theory of logical deduction" *he must surely wish the sentences expressing these same propositions to be understood in some customary meaning.*

If the linguistic thesis were intended as a definition of what was arbitrarily designated as "logic"—independently of what that term is already, and with more or less consistency, established to mean, its philosophical import would be quite negligible. And the defence of what would in that case be asserted would be supremely easy, there is nothing easier than to assign our own meaning to a sentence (whether by using terms of semantics or those drawn from any other subject) if we are free to ignore how the words of the sentence are already used, and if this were Carnap's contention he might with equal justice and as little relevance to philosophical problems contend that logic was a part of mathematics, legal theory or systematic genetics.

None of this would, I presume, be denied by Carnap or those who agree with him in presenting a linguistic interpretation of logic, they would agree no doubt that philosophical enquiries into the nature of logic must concern themselves with the *present usage* of the sentences expressing the propositions to be analysed. And we must also concede the justice of the possible retort that "present usage" is often confused, indefinite and in need of revision. But such welcome unanimity of opinion on this elementary, but quite fundamental, initial issue, cannot be allowed to obscure the neglect, *in practice*, of this very need to relate logical analysis to current linguistic usage. I shall try to show, indeed, that this is one of the main defects of Carnap's attempted identification of "logic" with syntax or semantics; that, in short, what he thereby *calls* "logic" has, in certain essential respects very little connection with what, on the basis of current practice and the philosophical claims of significance for his procedure, we might reasonably have supposed him to be analysing.

* III

The definition of a test case for the linguistic thesis

I propose to test Carnap's versions of the linguistic thesis by tracing in some detail what implications his view would have

for the interpretation of some simple statement which would be generally agreed to belong to the field of logic. It is difficult, however, to describe the kind of statement which I have in mind without using language which would seem unfairly to beg the question of the validity of the linguistic thesis. The kind of statement I wish to present is one which might naturally be described as the assertion of a relation between a couple of propositions such that the first is a valid consequence of the second. Sometimes this is expressed by saying "*q could not be true unless p were true*" or again "*it is impossible that p should be true and q false,*" or "*q follows from p,*" or "*p entails q.*" On replacing "*p*" by "*Smith is a man*" and "*q*" by "*Smith is a husband,*" we obtain, as an example of the kind of statement by which I propose to test the linguistic thesis, the statement, "*that Smith is a husband entails that Smith is a man*" or, in more colloquial form, "*Smith could not be a husband unless he were necessarily also a man.*"

Now the objection that is likely to be made to the formulations which I have just used is that the colloquial forms are elliptic and the technical ones question-begging and vague. We may be asked whether the statement about Smith and his status as a man and husband is intended to express a relation between sentences, propositions, "propositional attitudes," other classes of mental events, or complex aspects of "sign-using behaviour." And if we should incautiously reply that we mean a relation between propositions (perhaps intending to emphasize primarily that we do not seem to be talking merely about sentences as a grammarian might), the semanticist may accuse us of so *defining* our instance as to make it impossible for him to present a linguistic interpretation; and enemies of flabby names will raise a determined objection to the very mention of entities so repugnant as propositions should be to all good pragmatists ¹

In order to anticipate such objections, it is necessary to make clear that the statement to be presented for analysis is not itself such as to imply *any* theory concerning its correct analysis. It makes for linguistic convenience to be able to say "*the proposition that Smith is a husband entails that Smith is a man*"

¹ See John Dewey and A. F. Bentley, "A search for firm names," *Journal of Philosophy*, vol. 42, 5-6, and the spirited examination of "proposition" in the latter author's "On a certain vagueness in logic I," *Ibid.*, 10-14.

but this form of words need not—and in the context of this paper will not—carry the implication that propositions are or are not subsistent entities; or again, that they are or are not classes of mental events. There need be no imputation of any sort concerning the ontological status of propositions or the proper analysis of statements in which the word “proposition” occurs.

All I contend is that there is some truth, however analysable, quite properly expressed by one or other of the sentences which I have cited. One may hear a person mentioned in conversation as being somebody’s husband and say at once “well in that case he’s a man”; now just such truths as the one perceived by the author of this ejaculation are the stuff of which logic as a theory is fashioned. Any philosophical theory concerning the nature of logic, aspiring as it will to give an adequate account of the more complex generalizations and principles of logic, must *a fortiori* be prepared to give an intelligible and persuasive analysis of humble statements of logical entailment of one proposition by another. If it can be shown that the linguistic interpretation breaks down in such a case, there will be no need to proceed further with the critical examination of the linguistic thesis.

In order to have a definite instance of the form “p entails q,” it will be desirable to choose an example in which the sentences expressing the two component propositions exhibit an obvious and simple morphological interrelation. For Carnap will want to argue that the chosen statement is to be analysed, more or less directly, into a statement referring explicitly to a morphological or “formal” relation of the sentences by which the propositions are expressed; it is therefore desirable to choose at first an example which is not obviously refractory to his proposed interpretation. I shall accordingly take as a standard test-case the true statement,

(1) Smith cannot be in New York without necessarily being either in Paris or New York.

From this point onwards it will be assumed that the reader has identified the truth which the statement (1) is intended to assert, recognizes it as a truth of logic, and understands that the statement is intended to refer denotatively to the truth thereby identified without prior commitment to any view, linguistic

or otherwise, concerning its correct analysis. I shall refer to (1) occasionally as a "statement involving logical implication."

Since we shall have occasion to refer constantly to (1), it will be convenient to introduce a few symbols. Let "P-or-N" and "N," therefore, be names of the sentences, "Smith is in Paris or New York" and "Smith is in New York" respectively (where the symbols used may help to remind us of the morphological part-whole relation between the sentences in question). Then it is characteristic of Carnap's view that he proposes to replace (1) by a sentence of the form

(2) P-or-N is a consequence of N,

which he will assert to have the very same meaning as (1). The term "consequence" will prove to have somewhat different meanings according as it is taken to belong to semantics or syntax, so that we are offered not one, but at least two sentences equivalent in meaning to (1); and the sentence (2) will in each case prove to be misleadingly elliptical. But however we repair these ambiguities and omissions in (2), the overt reference to sentences, through the presence of "P-or-N" and "N," will remain; it is this which stamps Carnap's translation of (1) as linguistic.

IV

The syntactical interpretation of statements about logical implication

Our task is now to learn what translation is offered in syntax for the statement

(1) Smith cannot be in New York without necessarily being either in Paris or New York.

(Later we shall try to discover what difference is made by adopting a semantical rather than a syntactical translation) The tentative translation previously offered was

(2) P-or-N is a consequence of N

with the understanding that supplementation and further specification would be needed. The first addition to be made is the insertion of explicit reference to some "language" or calculus; for the term "consequence," as Carnap uses it in his syntactical studies, is defined only in relation to some language or calculus to which it applies; we can no more speak of "conse-

quence'' in general than we can in legal theory describe some act as a felony without explicit or implicit reference to the legal code in which the act in question is properly so designated.

Carnap explicitly generalizes this point to apply to every syntactical concept:

''With regard to every sentence of syntax, and consequently every philosophical sentence that it is desired to interpret as syntactical, the language or kind of language to which it is referred must be stated. If the language of reference is not given, the sentence is incomplete and ambiguous.'' (*L.S.L.*, 299.)

This intentional relativity in the meaning of ''consequence,'' as of other syntactical notions, requires us to change our formula into some such assertion as:

(2a) P-or-N is a consequence of N, in the calculus K

But we have still to specify the denotation of ''K,'' i.e., still to say in *which* calculus we propose to establish the relation between P-or-N and N asserted to hold by (2a). (And afterwards, of course, we shall still need to explain what meant by ''consequence'' in that calculus.)

In deciding what ''K'' shall denote, there are two radically different courses that may be adopted. We might choose K to be some calculus whose elements and combinatory rules were arbitrarily defined by us, without any attention to the concrete exemplification of that calculus anywhere in the world, or again we might choose that ''K'' should denote an idealized and formalized version of some empirically given language.

If the first choice were made, we should have an interpretation of (1) by means of a statement belonging to *pure* syntax, for:

''*Pure Syntax* is concerned with the possible arrangements (of any elements whatsoever), without reference either to the nature of the things which constitute the various elements, or to the question as to which of the possible arrangements of these elements are anywhere actually realized (that is to say, with the possible forms of sentences, without regard either to the designs of the words of which the sentences are compared, or to whether any of the sentences exist on paper somewhere in the world). In pure syntax only definitions are formulated and the consequences of such definitions developed.'' (*L.S.L.*, 7.)

I have mentioned this first possibility of translating statements about the logical relations of definite propositions into statements belonging to pure syntax only in order to reject it immediately. Let us remember clearly the logical truth which was intended to be conveyed by the sentence (1), and let it then be understood that the "translation" offered in *pure* syntax could amount at best to an assertion that in some arbitrarily constructed system of symbols, two arbitrarily chosen elements had a certain specified relation. Whatever the correct analysis of the proposition expressed by the sentence (1), the meaning of the sentence is at least *definite*, now the proposed surrogate from pure syntax will have the form "some X has a certain relation to some Y," where "X" and "Y" are variables; or, in a slightly more plausible variation, "in accordance with certain definitions of 'consequence,' any X satisfying a certain condition A will be in the relation of consequence to any Y satisfying another condition B". In the first case we are offered a sentential form, in the second a generalization— but in neither case an adequate analysis of our original sentence

Probably nobody would want to defend the version of the linguistic interpretation of logic here rejected, once its implications were clearly apprehended. But so very large a part of the work of Carnap and other writers on semiotic is concerned with *pure* syntax, and so much of their work consists in elaboration of the "consequences of definitions"¹ that some philosophers have made the mistake of supposing these researches to provide a direct answer to the philosophical problem of the analysis or interpretation of statements belonging to logic

Supposing the first version of the syntactical interpretation to be rejected, we are led to adopt the second alternative and so to make our syntactical statement refer to some *empirically given* language; and in this way we shall obtain a statement of *descriptive* syntax. For this subject, we are told "... is concerned with the syntactical properties and relations of empirically given expressions (for example, with the sentences of a particular book)" (*L.S.L.*, 7). The empirical reference needed in the

¹ Only in *FLM*, (5-11), where a "fictitious language very poor and very simple in its structure" is analysed, have I been able to find anything approaching a detailed discussion of the syntax or semantics of "historically given languages."

context of our own problem is, of course, not to the usage of a single author, as exemplified in "the sentences of a particular book," but rather to the wider linguistic usages of those speakers and writers whose sign-using behaviour sets the currently accepted standards of "correct" English.

In place of the calculus, K, whose rules contain variables making reference to any elements which may happen to satisfy the definitions and axioms of the calculus, we have now to imagine a language,¹ E, say, whose rules are constructed in close conformity to the *actual* usages of those speaking correct English. The proposed translation of our original sentence now becomes :

(2b) P-or-N is a consequence of N, in the language E.

Before we proceed to the last part of our task of exposition, the explanation of the meaning of "consequence in E", let us become a little clearer concerning the character of the "language" E.

In accordance with the general specifications for a "language," as understood in semiotic, E will consist of a vocabulary, rules of combination of the vocabulary into admissible expressions (the so-called "formation rules"), and rules of transformation of admissible expressions into other expressions.² For our purposes, the vocabulary must be taken to include such words as "Smith," "is," "in," "Paris," "or," and so on, regarded as identical with certain words to which reference is made in standard English dictionaries. Thus the symbol "N" is, in the present interpretation, no longer the name of some complex object, not otherwise identified except as satisfying certain conditions of an abstract calculus, it refers instead to the specific sentence, "Smith is in New York," belonging to the English language as correctly spoken today; it refers to that sentence and to no other object, linguistic or otherwise, in the universe. Similar considerations apply to the rules of combination of E; they, too, must refer not to some imagined, or hypothetical, or abstractly delineated rules obeyed by "any elements what-

¹ Carnap uses the terms "language" and "calculus" as approximate synonyms. In this paper the former term will be restricted to refer to what Carnap calls "historically given languages."

² In semantics, further semantical rules of meaning will also be needed. See section 6 below

soever," but quite concretely to just those grammatical usages which are currently acceptable as "good English." If the rules of E tell us, as they must, that "Smith is in Paris" is, while "Smith Paris is in" is not, a correctly formed expression, the reason must be found not in the freedom of action of the constructor of the calculus so to define his rules; but rather in the circumstances that the rules of combination in question do closely reflect the manner in which words are combined in current English usage.

We are ready, at last, to learn the meaning of "consequence" as it is used in (2b); for it is by means of the transformation rules that "we determine under what conditions a sentence is a *consequence* of another sentence or sentences (the premisses)" (L.S.L., 27). In the present connection, where we are discussing a language E, intended to be modelled upon actual linguistic usage, the term "transformation rule" is liable to mislead us at the very outset. For it is bound to suggest some process of *replacement* of one sentence by another by the users of the language, just as a chess player literally *transforms* one position into another by each move he makes, so we might reasonably suppose that a rule of E to the effect that some sentence S_1 can be transformed into S_2 is justified by some habitual removal of S^1 in favour of S_2 on the part of those who speak good English. Now this seems to be no part of the intention of those who use the term "transformation rule" in speaking of descriptive syntax.¹ To say that S_2 is a transform of S_1 in E is to assert *only* that S_2 is in a certain relation to S_1 and *nothing more*, a "transformation rule" is an assertion to the effect only that a certain sentence (or class of sentences) *stands in* a certain relation to certain sentences (or classes of sentences).

What the relation in question is can here be described only in vague and general terms (since further details would call for fuller specification of the transformation rules of E). The relation is, in the first place, what Carnap calls a formal²

¹ The nearest that Carnap comes to assigning non-formal meaning to "transformation-rule" is in a suggestion that a transform of a proposition may sometimes be "'thought' simultaneously with it" (L.S.L., 27). There is elsewhere (F.L.M., 6) a suggestion implied that the empirical basis of a proposed transformation-rule may depend on whether certain sentences are simultaneously "*acknowledged as correct assertions*"

² "An investigation, a method, a concept concerning expressions of a

relation, i.e., one which can be established on the ground merely of the kinds and orders of occurrence of symbols of which the relevant sentences are composed; negatively, therefore, a formal relation between sentences cannot be grounded upon any reference to the *meaning* of the sentences. Let us pause to consider a few examples of formal relations between symbols; that one word (in the English language) contains more syllables than another; that two sentences have at least one word in common; that one is a part of another; all these are instances of formal relations, in the sense explained, since in all the cases the holding of the relation in question can be established by sole reference to properties of the "design" or "form" of the symbols concerned. Let us especially notice that our over-worked sentences, P-or-N and N, can be regarded as connected by a certain formal relation; namely, that which holds between two sentences whenever the first is a compound sentence composed of any sentence followed in turn by the word "or" and then by the second sentence. The relation is clearly formal since to establish its exemplification we need to compare only two sentence-designs without any attention to considerations of meaning. For this particular relation I shall coin the term "typographic alternation," in the hope that its very oddness may remind us that in saying P-or-N is *typographically alternate* to N we are saying that the former has the structure ". . . or N" and are saying *nothing more*. Now we can suppose the transformation rules of E to say in part that any sentence which is typographically alternate to a sentence shall be regarded as being a "consequence" of it.

What has been said about the relation of typographical alternation must now be imagined extended to apply to many other cases of formal relations between sentences of E. We have to suppose for instance that the rules of transformation provide that N shall be a consequence of N-and-P, if-not-P-then-N a consequence of P, not-both-P-and-N a consequence of if-P-then-not-N; and so on for a great variety of cases. In each of these many cases, the relation in question will be "formal" and might if we wish be appropriately labelled by a name of the form

language are called *formal* if in their application reference is made not to the designata of the expressions but only to their form, i.e., to the kinds of signs occurring in an expression and the order in which they occur." (I.S., 10.)

"typographic . . ."; and the rules of transformation of E can be summarily described as asserting that all cases of typographic alternation, typographic conjunction, typographic contra-position, etc., etc., through an extensive list of defined formal relations, *and those alone*, are cases of the relation of consequence.¹

After this explanation, we should at last be able to know what is being asserted by the sentence, (2b), offered as a translation of our original example. We may perhaps paraphrase the sense of (2b) as follows:

(2c) P-or-N and N are expressions composed of symbols belonging to the accepted vocabulary of "correct English"; they are, moreover, correctly formed sentences of that language; and finally, they stand in a certain general formal relation, for whose holding between them it is a sufficient condition that the first should be composed of the second with the addition of the word "or" and another sentence.

The reader should by this time have no trouble in seeing how this type of interpretation could be so generalized as to apply to such statements as "each proposition of form A-or-B is a consequence of the corresponding proposition A" and to other generalizations belonging to logic.

IV

Objections to the syntactical interpretation of statements involving logical implication

I shall present objections to the view just outlined in summary form, adding in each case some further explanatory comment:

1. *Supposing it could be shown that (2b) was true when and only when (1) was true—or let us say that a "linguistic correlate" of (1) had been produced—and supposing further that by a similar procedure a linguistic correlate could be produced for every statement of logic; it would still not have been established that logic requires a linguistic interpretation.*

What I am here supposing is that, with sufficient ingenuity,

¹ But other ways of defining "consequence" would be technically more convenient in any systematic syntactical investigation of languages as complex as E. I have deliberately omitted as unnecessary for the present discussion all reference to such complications as the need for distinguishing between a "definite" concept of "derivability" and the "indefinite" concept of "consequence." (Cf. *L.S.L.*, 172-3 and *passim*.)

in every case in which we present a proposition "belonging to logic" a materially equivalent (equipollent) proposition could be produced in which reference was made only to relations between syntactical designs of sentences. Even then, it might still be argued that the evidence for a linguistic interpretation of logic was inconclusive. For the sentences, such as (1), which *ostensibly* make no reference to linguistic entities *also* belong to "correct English"—if we grant philosophers the compliment of being supposed to speak correctly. If the parallelism between the ostensibly material sentences and the ostensibly formal sentences is evidence that the former are "really" linguistic, it might be argued, by parity of reasoning, that the parallelism is also good evidence for the ostensibly linguistic propositions being "really" concerned with non-linguistic objects. There may be quasi-syntactical sentences no less than quasi-material sentences.¹

Nevertheless, I regard this type of objection as having, on the whole, little force, and a detailed demonstration of linguistic parallelism (such as only a full development of the theory of syntax could be expected to furnish) should be regarded as good *prima facie* evidence for the linguistic thesis

2. *Some statements involving logical implication, however, appear to have no linguistic correlates*

A simple instance of such a statement is "my pencil cannot be red unless it is coloured," which appears to involve exactly the same logical relation between propositions as our original example; there is of course no difficulty in multiplying similar instances of entailment or logical implication between *atomic* (uncompounded) propositions. In this case there is at least no obvious "typographic" relation between the sentences "my pencil is red" and "my pencil is coloured," and the linguistic interpretation seems to break down irreparably.

I can think of only two even moderately plausible replies to this objection: (a) that the cases cited do not belong to logic and (b) that if they do there really is a syntactical relation of an *indirect* sort between the corresponding sentences. The first type of answer is quite arbitrary and, by defining logic as the

¹ Cf. C. J. Ducasse, "Concerning the status of so-called 'pseudo-object' sentences," *Journal of Philosophy*, 37, 309-324, especially section 8 of the paper.

assembly of propositions admitting of linguistic interpretation, comes dangerously near to reducing the linguistic thesis to triviality. On the other hand, I do not see how the second type of reply is to be made good except by providing that the rules of transformation of the language in question shall specify that any sentence of design "X is red" shall be regarded as a consequence of a sentence of design "X is coloured". But if *this* type of relation between sentences is to be legitimately regarded as "formal," then *every* two sentences whatsoever can be regarded as standing in formal relation; and all empirical propositions, no less than those of logic, will admit of linguistic interpretation in this extended sense.

I am not denying that the relation between "my pencil is red" and "my pencil is coloured" *could be* formalized, there would be no technical difficulty in including, among the transformation rules of the "language" to which the sentences are assigned, one rule which would permit the second sentence to be recognized as a "consequence" of the first on the basis of inspection of the corresponding sentence-designs, without appeal to meanings. For the practice of descriptive syntax permits us to obtain definite descriptions (without reference to meanings) of unique sentences.¹ Since we are permitted to refer to unique sentence-designs, without overstepping the boundaries of formal treatment, we can certainly introduce a formal rule to the effect that one designated sentence is a consequence of another.

Unfortunately, the same method can obviously be extended in such a way as to make any statement whatsoever a consequence of any other arbitrarily designated sentence. It would be easy enough by appropriate revision of the transformation rules of E to make the categorical imperative a "consequence" of the third law of thermodynamics, without thereby rendering the relation of consequence any less "formal."

This appears to be conceded by Carnap when he asserts that the rules of transformation of a language may also include what he calls "physical or P-rules" (*L.S.L.*, 180)—the "so-called laws of nature" and even "empirical observation-sentences". He explicitly tells us moreover that the P-rules are formal:

¹ Cf. *L.S.L.*, 155, where paragraph B₃ illustrates "Description of an expressional design by means of syntactical terms"

"It is a matter of convention whether we formulate only L-rules, or include P-rules as well; and the P-rules can be formulated in just as strictly formal a way as the L-rules." (*L.S.L.*; 186.)

I submit that this represents an extension of the linguistic thesis to a degree that removes any plausibility it might initially have had. So long as some sentences, but not others, are agreed to stand in certain "typographic" or formal relations, there is a possibility of using the distinction as a basis for discriminating logical from empirical assertions. But as soon as we are told that empirical statements "can be formulated in just as strictly formal a way" as logical statements, there remains no basis within syntax for distinguishing one kind of statement from the other. If it is just "a matter of convention" whether empirical statements too are regarded as validated on formal grounds, the linguistic thesis suffers a truly portentous inflation. Whose convention is to determine the linguistic status of statements (such as those of logic themselves) whose proper interpretation is still a matter for debate? If the logical or syntactical analyst chooses that logic shall be linguistic, his remarks tell us more about himself than about the nature of logic; but if his reliance upon "convention" is a covert appeal to some more stable postulational procedure by a concrete speech community, we are left quite in the dark as to the location and authority of the justification thereby invoked.

What has been occurring in this extension of the linguistic thesis follows a pattern which is all too familiar in philosophical discussion. The critical term "formal" had initially a relatively narrow but correspondingly well defined reference; to say that statements of logic had the same truth conditions (were equivalent to, could be translated into) statements of *formal* relation between sentences was, therefore, to make a relatively well defined, though paradoxical, assertion. In the simplest cases of linguistic interpretation (such as that of the translation of the trivial example used in this paper), the term "formal" retains its initial meaning. But as more complex instances of logical statements are successively presented for linguistic re-interpretation, the initial meaning of "formal" proves no longer adequate, and begins to suffer a sea change which ends by robbing it of all definite meaning. We end, as we began, with the assertion that logic is syntax, but in so diluted and "tolerant" a sense

of the latter term that only by the grace of the "convention" of persons unknown are we prevented from including physics or any other body of empirical truth in the same hospitable discipline.¹

3. *In some cases where a formal relation holds between sentences, there is no logical relation between the corresponding propositions; the criterion of logical relation between propositions must therefore be that there is a special kind of formal relation between the corresponding sentences; yet there seems to be no way of properly delimiting the appropriate class of formal relations.*

The sentence "Roosevelt is President" has a certain formal relation to the sentence "Churchill is President," viz., that both sentences have the same number of letters; yet nobody would want to claim that the truth so expressed belongs to logic. How then are the formal relations between sentences used in defining "consequence in E" segregated from those other formal relations which have no relevance to logic? It is of course no defence to say that "consequence in E" is *defined* in the way which it is defined, for the question here is what basis, other than arbitrary fiat, there can be for such a definition. The only alternative appears to be to claim that the transformation rules are established by empirical observation of just those instances in which English speakers do assert statements of logical implication.² Now this view has the defect of rendering

¹ But after all, it might be said, is there not some striking significance in a demonstration that the "theory of logical deduction" *can* be "formalized" (supposing that proves to be the case)? And has not Carnap some justification for regarding this demonstration as being of "fundamental importance"? (*F.L.M.*, 17) I do not deny its technical importance, especially to those who are interested in the construction of comprehensive and useful logical calculi, but I fail to see any "fundamental" philosophical importance in the enterprise. There is a temptation to argue that if "logic" *could* be formalized it must *really* be a formal discipline. But this is no better than to argue that a man who claims to be frightened by unidentified objects is *really* frightened by tigers—using as a reason that if a tiger were to be introduced in just those cases in which the man is frightened we *could* say he was frightened only in the presence of tigers.

² So far as I can tell this is Carnap's view in *F.L.M.* (26–29) where he argues that in one way of regarding logic we are "bound in the choice of the rules in all essential respects."

such statements as (2b) empirical. For the proposed translation will now amount to this :

(2d) The sentences P-or-N and N stand in one of the syntactical relations which observation shows to be exemplified in instances in which those speaking correct English claim that one proposition entails or logically implies another.

I feel a strong reluctance to accept this sociological view of the criteria for the "truth" of propositions of logic. I cannot help feeling that if all users of the English language except one were taught to assert that N could be true while P-or-N was false, they would be wrong and he, though in a minority of one, still right. But perhaps this is just a lingering after-effect of addiction to metaphysics and insufficient schooling in language tolerance.

4. *The validity of a linguistic interpretation of logic finally rests upon the extent to which it reflects the procedures of verification which are actually used by us in establishing the truth of logical statements; the linguistic thesis fails to meet this test.*

This last objection gathers up many of the criticisms already made. It has already been argued that the linguistic thesis obliterates the commonly accepted distinction between empirical and logical propositions, locates the justification of logic in some equivocal and ownerless "convention," and requires constant *ad hoc* extension of the meaning of "formal," "syntactical" or related terms used in the formulation of the linguistic thesis. These points are objections only in the light of some settled notion of our own as to how the statements which we identify as belonging to logic are in actual practice used. We must not fall into the error of claiming that no statements are properly interpreted as "linguistic," or that no statements claimed by their authors to be non-empirical do "in fact" refer to the fruits of observation and experience, or even that many statements in good standing in philosophy and the sciences are not so vague as to require definition by more or less arbitrary convention as a preliminary to philosophical interpretation. If, therefore, we claim that these hedging generalities should give no comfort to the defender of a linguistic interpreter of logic, our defence must be that we have a relatively clear notion

of the procedures actually used in establishing logical propositions and obtaining agreement as to their validity.

I do not feel called upon, however, to provide here a positive account of the manner in which logical propositions are used in communication and the acquisition of knowledge; it is sufficient, for the purpose of criticism, to draw attention to the ways in which the implications of the linguistic thesis deviate from current practices of verification of logical propositions. And once again I can think of no better way to demonstrate such deviation than by invoking concrete illustrative cases.

Let us return, and now for nearly the last time, to our exemplary instance of the relation between P-or-N and N. Suppose we were trying to teach an elementary student the truth commonly expressed by "N entails P-or-N" (our original statement (1)). If we were fully persuaded of the truth of the linguistic thesis, honesty would require us to present the so-called "truth" as if it were a maxim of etiquette or decorum. We should say, perhaps, "observe the relation of this typographical design to that and remember that in such cases we speak *by convention* of the first being a consequence of the second". In order to proceed from this definition to any assertion capable of being true or false, I suppose we should add something of this sort: "You are to bear in mind, further, that it is a convention of the language which I am teaching you to master, that whenever A is a consequence of B, any body who asserts B will be taken to be likewise asserting A." And so, if our student at last asks "why should I speak *this* language?" We must reply, "You *need* not—there are no 'obligations' in logic—but common prudence may restrain you from suffering the inconveniences attendant upon misunderstanding and the other more general penalties of social non-conformity."

I suppose logic *might* be so taught and learnt, as a branch of prudent social behaviour, as I imagine physics might be taught as the art of imitative flattery of expert physicists. But I cannot help feeling that in either case the pedagogic technique would be peculiarly misguided, that when the unregenerate teacher of logic says, "reflect upon the meaning of this proposition and that and you will then see that it is impossible for the one to be true and the other false"—that in such a case the logician is not simply investing a social precept in the spurious attraction

of a mythical validity but is rather appealing to a source of evidence which still eludes the ingenious analysis of the semanticist.

VI

The semantical interpretation of statements involving logical implications

The criticisms so far made apply only to the syntactical versions of the linguistic thesis. But, as we have already seen, Carnap nowadays also offers a *semantical* version of the thesis; we ought therefore to examine whether the interpretation of logic within this more extensive branch of semiotic is able to meet the objections we have produced.

For the reasons already presented in rejecting a linguistic interpretation of logic in *pure syntax*, we may ignore any suggestion that logic is to be interpreted as *pure semantics*. We argued that no satisfactory interpretation of a specific assertion involving the logical implication of one proposition by another could be provided by assertions containing variables, as in the case of those belonging to pure syntax. Statements belonging to pure semantic will resemble statements belonging to pure syntax in containing variables; they will therefore be able to refer only to whatever objects of arbitrary character and properties can satisfy the defining axioms or abstract postulates of the subject. And, for exactly the same reasons as were used in rejecting the eligibility of the interpretation in pure syntax, we shall need to reject also the interpretation in pure semantics. The only version of a semantical interpretation having sufficient initial plausibility to deserve extensive consideration is one involving an attempt to translate statements about logical implication into sentences making reference to a specific language system modelled upon the actual sign-using behaviour of those speaking correct English.

Thus in translating our original sentence, (1), according to the new version of the linguistic thesis, we shall once again be making reference to a formalized and idealized system of the actual rules of good English usage. The first difference made by the transition from the syntactical to the semantical standpoint is that the rules which we took to define *E* are now supplemented by certain characteristic "semantical rules" of truth; to mark the distinction we shall call the new system *E'*. *E'* will contain, in addition to the rules previously described above, some

further "semantical" rules to be described immediately. We must become further acquainted with the character of the semantical rules of E' if we are to understand how the relation of consequence (or rather a substitute for it) is defined in the *semantical* interpretation of statements involving logical implication.

One distinctive feature of a semantical rule, differentiating it from the rules of formation and transformation to which previous reference was made in our discussion of syntax, is the explicit mention of the *truth* of sentences. Thus the simplest kind of semantical rule, of the type approved by Carnap, is an assertion that a sentence having the form "A is true" is logically equivalent to a related sentence from which reference to "truth" is absent.¹ As an illustration, we may suppose E' to contain these semantical rules :

(α) ("Smith is in Paris" is true) if and only if (Smith is in Paris)

(β) ("Smith is in New York" is true) if and only if (Smith is in New York)

(in whose formulation the parentheses are used merely as marks of punctuation). It will be noticed that each of these has the form we have claimed, the second, for instance, presents the sentence "N is true" as logically equivalent to the sentence N in which reference is made to an individual and a city but no longer to the truth or any other relational characteristic of a *sentence*.

In general, the structure of these two semantical rules and the many others of equally simple type which we must suppose E' to include, is such as to make it possible to *eliminate* the word "truth" in simple contexts, without alteration of the truth value of that context. In virtue of the form of (β), any assertion in which "N is true" occurs can be replaced by an equivalent assertion in which the sentence N occurs instead; and in the same way the rule (α) allows us to substitute P for "P is true" without altering the truth-value of assertions in which the latter occurs. •

The semantical rules of E' must also include rules in which

¹ For further discussion of this and related matters see my article, "The semantic definition of truth," *Analysis*, 8, 49-63

more complex sentences of the form "A-or-B is true," "A-and-B is true," "if-A-then-B is true," etc., occur. As illustrative of these we may suppose E' to contain:

(γ) ("(Smith is in Paris) or (Smith is in New York)" is true) if and only if ((*"Smith is in Paris"* is true) or (*"Smith is in New York"* is true)).

(δ) ("(Smith is in Paris) and (Smith is in New York)" is true) if and only if ((*"Smith is in Paris"* is true) and (*"Smith is in New York"* is true)).

Each of these presents a statement concerning the truth of a complex sentence (in the first case P-or-N) as logically equivalent to an assertion concerning the truth of simpler sentences (N, and P, respectively, in both cases).

What has already been said should be sufficient to suggest how the four rules, (α), (β), (γ) and (δ), can be supplemented so as to permit the occurrence of the word "true" to be eliminated from other and, if necessary, still more complex contexts without alteration of the truth-value of the total assertions from which it is eliminated. It should be clear, for example, that E' might be supposed to contain rules sufficient to ensure that the sentence

(N is true) and ((P is true) or (N is true))

becomes, in accordance with the rules, logically equivalent to

N and (P or N).

We have to suppose, then, that E' contains not only the rules cited (or more general ones of which these will appear as special cases), but also many others to ensure the elimination of the word "true" (without change in truth-value) in many other possible contexts. But for the purpose of illustrating the suggested translation of our simple example, the rules cited will suffice.

The importance of having semantical rules in which reference is made to truth arises from the fact that Carnap chooses so to define the relation to be substituted for logical implication, that explicit mention is made of the truth of the statements concerned. He names the relation "L-implication" and explains that the phrase " T_2 is an L-implicate of T_1 " means that "the semantical rules exclude the possibility of T_1 being true and T_2 false" or, in an equivalent formulation, "according to the semantical

rules, if T_1 is true, T_2 must be true''. (*F.L.M.*, 14.) Instead of saying that some proposition is logically implied by another, we are invited, in the semantical version of the linguistic thesis, to say some sentence is an L-implicate in E' of another or, in other words, that *appeal solely to the semantical rules* will determine that one sentence follows from the other.

We can illustrate the meaning of L-implication by verifying that, according to the explanation just given it is in fact true that

P-or-N is an L-implicate of N (in E').

For, according to the explanation, this statement will be true if and only if

If (N is true) then ((P-or-N) is true)

follows solely from the semantical rules of E' . Now appeal to (γ) reduces the last assertion to

If (N is true) then ((P is true) or (N is true))

and then appeal to (α) and (β) reduces that in turn to

If N then (P-or-N).

Finally, an elementary principle of deductive logic assures us that the last statement is true. In summary, we have used the normal procedures of deductive logic (which justified us for instance in substituting logically equivalent statements for each other) to prove, without appeal to any premisses except (α), (β) and (γ), all of which were semantical rules of E' , the assertion

If (N is true) then ((P-or-N) is true)).

So, in accordance with the explanation of L-implication, we have proved,¹ as we set out to do, that

P-or-N is an L-implicate of N

Now let us consider what advantages the semantical translation of

(1) Smith cannot be in New York without necessarily being either in Paris or New York.
as the statement

(3) P-or-N is an L-implicate of N in E'
has over the syntactical version of the linguistic thesis.

¹ Cf the examples given by Carnap (*I S.*, 79-80). (I have deliberately tried to avoid introducing "L-truth" and other "L-terms". The criticisms of this paper would not need to be modified if account were taken of such complicating detail)

At first sight the new formulation seems to be distinctly preferable. A major cause for disquiet concerning the validity of the syntactical version was, it will be remembered, the paradoxically arbitrary character of the relation of "consequence" in terms of which statements about logical implication were to be interpreted; this stumbling block in the path of a linguistic interpretation, at least, seems to be removed by the transition from syntax to semantics. For whether the new translation of statements involving logical implication proves on other grounds to be adequate or not, it may seem that the question whether the derived sentence (if *N* is true then *P-or-N* is true) is deducible from the semantical rules of *E'* without appeal to other premisses is one that admits of a perfectly definite answer. The fact that we were able to *prove* that *P-or-N* is an *L*-implicate in *E'* of *N* suggests that the relation now offered as a substitute for logical implication has a clear and definite character.

This illusion of the superior definiteness of the new version will however be dispelled by a little reflection. We have followed Carnap in saying that the test of the truth of a statement involving logical implication requires us (according to the latest proposal) to decide whether a certain derived statement about the truth of sentences *follows* or a synonym from the semantical rules of the language concerned. If these words "follows" and its alternative "deducible" were understood in their normal meanings, however, the proposed translation of statements involving logical implication would be guilty of the most blatant circularity; for the translation offered of statements expressed by using the word "deducible" or a synonym would itself use that very same word. In order to determine whether a statement involving logical implication were true, we should have to determine according to the new proposal whether some other statements (among them the semantical rules) were in that very same relation of logical implication. The proposed procedure would thus certainly *not* establish the alleged linguistic character of statements involving logical implication.

So obvious an objection has not been overlooked by Carnap, though the point, elementary as it is, is often neglected by those who urge that principles of logic are "true by definition"—i.e., are the *logical* consequences of definitions. (If there were no other reason for criticizing the proposed analysis, there would

be the sufficient technical difficulty that the account of L-implication reproduced in this section *mentions* the language in which the semantical rules are formulated, and cannot therefore be regarded as a definition *within* that language (the semantical metalanguage) of the notion of L-implication. Carnap is quite explicit on this point: "The given characterization of L-concepts are not definitions of these concepts but rather requirements which the definitions to be constructed either in general or in special semantics should fulfil." (*I.S.*, 81.)

But where does this leave us? In order to complete the account of "L-implication," we shall need to give a definition, in the language in which the semantical rules are formulated (the semantical metalanguage) of what it means for one statement to "follow from" or "be a consequence of" another. We shall have to supply a definition which allows us to determine, for example, whether

If (N is true) then ((P or N) is true)

is a consequence of the rules (α), (β), and (γ), without recourse to our preconceived and unformalized notions concerning the meaning of "consequence" and the correct principles of logical deduction. And if we are to be faithful to the guiding intentions of the whole programme of semantics, we shall have to accomplish this task in such a way that the decision whether two statements are in the desired relation depends only upon a "typographical" relation of the sentence-designs.¹ I shall not linger over the technical difficulties which hamper the execution of this programme of providing a *formal* definition of consequence in the general case, where we are not concerned with a specific language of assigned structure. We may grant that the difficulty of solving this general problem does not affect the problem of providing a formal definition of "consequence" in the language E' which more closely concerns us. And we may accept Carnap's assurance that such a definition, being already available in especially simple instances of languages, may be expected with some degree of confidence in the more general case.²

What we have rather to notice* is that the semantical version

¹ Cf. for example Carnap's exemplary definition of L-truth is a particularly simple semantical system (*I.S.*, 81-82)

* ² The general problem is discussed in section 16 of *I.S.* (83-88)

of the linguistic thesis, as we now begin to understand its import, turns out to be identical, in all essential respects, with the syntactical version which we have already rejected. For what did the latter come to in the end if not an assertion that the truth-conditions of our original statement (1) consisted in the manifestation of a certain formal relation, namely that of "consequence" between the sentences N and P-or-N? And what does the latest proposal for the interpretation of the same statement mean if not that we must finally establish some formal, typographical, characteristic of the compound sentence

If N then (P-or-N)?

There is a slight difference of presentation, to be sure. In the former case we had to compare *two* sentence-designs to verify the satisfaction of the alleged truth-conditions, and now we are asked instead to verify the presence of a formal characteristic of a single complex sentence. But this difference is quite trivial. The very same typographical relation whose exhibition by the two sentences N and P-or-N respectively will establish the second as a "consequence" of the first will likewise establish the single complex sentence

If N then (P or N)

as "L-true."

Whether we take the semantical or the syntactical version, then, we shall in either case be committed to regarding the truth-conditions of the statement to be analysed as consisting solely in the presence of a certain typographical relation between two sentence-designs. The only appreciable difference in the later version is that the character of the truth conditions involved is masked by the introduction of the "semantic rules." We are first asked to translate the original sentence in a specified way into a complex sentence in which the word "truth" repeatedly occurs, but the semantic rules are framed in such a way as to make it possible before long to eliminate all reference to "truth"; and so we arrive, by a roundabout way, at the very same truth-conditions which the earlier version offered as the basis of an adequate analysis of statements involving logical implication.

This reduction of truth-conditions of L-implication to those of the earlier presented relation of consequence is not a mere

by-product of the simplicity of our language E' or the semantical rules by means of which it is defined. No matter how complex the language or languages to which reference is made in descriptive syntax, the semantical rules, so long as they conform to Carnap's specifications, will be such as to make the presence of the word "truth" appear trivially redundant in the verification of the defining conditions of L-implications, and the truth of " T_2 is an L-implicate of T_1 " will always hold in just those cases where T_2 is a consequence of T_1 according to the older, syntactical version.

If this view of Carnap's later procedure is the correct one, we are in a position to understand why he passes so easily from saying that logic is identical with semantics to saying that it is also identical with syntax. For whatever differences there may be in *some* uses of the two theories (and I am not denying that there are such differences), they coincide in the uses which are here under consideration. The reason why logic is identical with both syntax and semantics is that the semantical procedures do not differ for present purposes in any significant manner from those invoked in syntax.

I conclude therefore that the later recourse to semantics does nothing at all to strengthen the case for a linguistic interpretation of logic, and is subject to the objections already discussed in the previous section of this paper

I believe accordingly that contemporary semantics and syntax have nothing of major importance to contribute to the philosophic question of the "nature of logic" (Perhaps there is no such "question"? But that itself is another and a wider question which I cannot discuss here) My reasons for this conclusion should by now be sufficiently clear to the reader. If a summary is desired, perhaps I may be allowed to recapitulate a central point in the preceding argument in the form of a concluding fable.

A certain man who was fond of playing Chess was much troubled by Philosophical Doubts about the game. "Am I *really* permitted to move the King in this position," he would say; and again, "Suppose the rules of the game allow me to move the King, how am I to justify the rules themselves?"

' On the advice of his friends he consulted a learned Semiologist.

ician, who informed him that his condition could be improved only by learning a new game which the Semiotician had just invented. Now this game proved to have the same number and kinds of pieces as were to be found in Chess, arranged in the same way on the chessboard. Indeed the only difference that the man could discover was that each piece wore a little cap on its head. And the name of this game was Heterochess.

The beauty of this new game, the Semiotician explained, consisted in this, that each piece moved exactly the same way as its uncapped brother in the game of Chess itself. "If you are uncertain whether you may move the King," the Semiotician said, "all you have to do is to refer to the other game and ask yourself whether you may in a similar position move the Heteroking." "And you need worry no longer about the justification of the rules of Chess," he continued, "for you will find that each of them exactly resembles a corresponding rule in Heterochess. Indulge no longer in Philosophical Doubts, for every question about Chess is answered in Heterochess."

This explanation proved quite satisfactory to the man, who continued to play both games with equal happiness. And the Semiotician assured the man's friends that in case of any relapse into Metaphysical Regression, he would never be at loss to invent still another game to effect a cure.

Cornell University

February, 1945.

THE GROUNDS OF INDUCTION IN PROFESSOR WHITEHEAD'S PHILOSOPHY OF NATURE

By RUTH L. SAW

AT the time when Professor Whitehead was producing the books containing his philosophy of nature, *The Principles of Natural Knowledge*, *The Concept of Nature*, *The Principle of Relativity*, and *Science and the Modern World*, Professor Stebbing was interested and excited. She felt that something very important was being done, and spent much time in elucidating the central ideas of these books, both for her own satisfaction and for the benefit of other people. She was not able to follow Professor Whitehead later, when he went on to work out the presuppositions and the metaphysical implications of his position, but she remained of the opinion that, taken for what they were, a setting out of that which is disclosed in perception through the senses, his writings were a valuable contribution to the philosophy of nature.

Professor Whitehead sets out very clearly the limits of his inquiry. Nature, for his purposes, is to be taken as "closed to mind," not in this, prejudging any epistemological issue, nor dismissing the relation to the percipient as of no importance, but simply defining the nature of his inquiry. Perception is an event, human bodies are objects, and as such, both are parts of nature. So far, we are not called on to have any opinion about whether the world is revealed in perception as it is, or whether the mind contributes anything to perception. We are simply saying that we can usefully examine that which is disclosed in sense awareness. At this level, the distinction between constitutive and regulative principles in inductive inference does not arise. Our question is: Are there any perceived characters of nature which yield knowledge of other parts of space and time?

It is axiomatic in Professor Whitehead's philosophy of nature, that any properties which we attribute to nature, however "abstract" they may be, must be derivable from the "immediate occasion of awareness." Thus for him, the problem of induction resolves itself into the problem of discovering what characteristics must be possessed by the immediately given to justify inference beyond itself. It is obvious that in working

out a complete answer to this question, all inter-relatedness among events will be relevant, and that from the analysis will emerge not only spatio-temporal relationships, but also some relation between events which might be called "community of character," so that there is in nature, some ground of generalization. Further, some relation between events corresponding more or less closely to the common-sense notion of a causal relation. This position is a full acceptance of Hume's statement of the problem. Hume pointed out that if there is any specific relation between events which may be called a "necessary connexion," it must be discoverable in the "single instance," for no amount of multiplication of instances will produce a new relation which was not present in the single instance.

Their respective accounts of the single instance however, diverge very widely; for Hume, perception discloses discrete entities, sense impressions, which it is the function of the mind to combine into sets. These sets are called things if their members are together in space and time, and causal series if they constantly succeed each other. Hume thus assumes connexion in space and time, but for him, no other connexion has its grounds in nature. For Whitehead, any sense impression is given "embedded in relatedness," so that a percept is not only given as a factor in a spatio-temporal continuum, it also "conveys percepts of other senses and exhibits its peculiar character in virtue of many other events, such as the events which are taking place at the source of light, at the retina of the eye and through the intervening medium." Thus for Whitehead, the fundamental fact of nature is not a sense impression, but a duration, which is a perspective of the universe from the point of view of a given percipient event. "Perception is an awareness of events, or happenings, forming a partially discerned complex within the background of a simultaneous whole of nature . . . This background is that complete event which is the whole of nature simultaneous with the percipient event which is a part of that whole. Such a complete whole of nature is called a duration."¹ Perception thus discloses the fact that any event is a factor within a larger whole, also the fact that a duration must possess "temporal thickness," i.e., must exhibit process

¹ *Principles of Natural Knowledge*, p. 68.

within itself. Perception then, is always of nature as a system of events continually passing into new events. Modern psychology affords *prima facie* support for such a position. Consciousness is not to be conceived as a series of momentary states. It is described by such metaphors as James's "stream of consciousness," and the "specious present" is essentially of the nature of process within which is to be discerned what Stout calls the "not yet" and the "no more" consciousness.

A duration may be analysed in various ways, by considering first one and then another of its properties, and each analysis will yield entities of different types. There are however, certain dominant characteristics which lead to the accepted modes of analysis. One such characteristic of events is that they are sometimes the situations of perceptual objects. This is a given empirical fact: it does not follow from the nature of an event that it should be the situation of a perceptual object. Another such character of events is that they are continually passing into other events. This passage is spatial as well as temporal, and may be expressed by saying that any event has no boundaries. Any boundaries that we set up in nature are made possible in virtue of the objects situated in events.

Within any duration, there is an area of complete discrimination shading off into an area of less complete discrimination, so that perception never discloses a complete whole for knowledge. Any discriminated event discloses relations to other events which may be partially discriminated or merely apprehended as *relata* in the spatio-temporal continuum of which the discriminated event is a part. These "*relata*" are "known by relatedness." Professor Whitehead also expresses this fundamental property of nature by saying that one event is "significant" of every other. Each event is significant of every other in the sense that the discriminated scheme of spatial relations within an isolated portion of experience, determines the scheme for the whole of experience. The same thing is true of temporal relations. That is to say then, perception discloses the fact that space-time is uniform and that this uniformity extends beyond the perceptual field so as to include all nature.

It will at once be admitted that perception does disclose a field of discriminated events, and also that this field bears the character of incompleteness in that there is a fringe of events

vaguely apprehended as being related in various relationships to events within the area of discrimination. Thus at any moment, experience includes events which are dimly apprehended as being before and after the event which is being discriminated, and there are events vaguely apprehended as being a spatial background to an event to which we are attending. It may however, be doubted whether this vague apprehension of an outer fringe is a sufficient basis for declaring that the uniformity of space and time observed within the field must extend to the whole of nature. Perception discloses the fact that it extends beyond the perceptual field, but can we go farther than that? Detailed spatio-temporal relations can be worked out as holding within the observed field, but can they be inferred to hold throughout nature? Spatio-temporal relations are derivable from the general relation of extension, so that if perception is to yield knowledge of the whole of nature as a uniform spatio-temporal continuum, the property of extension must manifest itself as belonging of necessity to every event. Within the field of discrimination it is certainly true that every event extends over others, and is itself extended over by other events. But this is also true of events partially discriminated within the outer fringe; in fact this is what we mean when we say that the perceptual field has no definite boundary. But if these partially discriminated events possess the property of extension, the field of the relation of "extends over" must be indefinitely extended so as to include wider and wider areas. When therefore we speak of spatio-temporal uniformity as reigning throughout nature, it is not a question of extending a property from an observed field to an unobserved field, but of drawing out the implications of an observed property. Otherwise this uniformity among events could not be used as a ground of induction, it would itself be an instance of induction.

All this, however, may be no more than saying that for a philosophy of nature based on experienced, "non-uniformity" of space and time must be meaningless, since by space and time we mean perceptual space and time, i.e., some property of events abstracted from perceived nature. The non-uniformity of space and time can then only mean a "discontinuity" within the apprehended processes of nature, and we do not know what such a perceived discontinuity would be like. The nearest

approach we make to "perceiving" discontinuity is our experience when awaking from a dream. This leads us to judge that our dream experience was unreal in an intelligible sense of the word. It is to be doubted however, whether Professor Whitehead is justified in using this judgment as evidence of the pervasive nature of the uniformity of our dominant space-time scheme. It is rather evidence of our determination to discover such uniformity, and suggests a completely different line of approach to the whole problem.

Any theory of the non-uniformity of space-time accepts this presupposition of common sense, but it claims that the uniformity is only apparent, and that the scientific interpretation of experience needs a theory of non-uniform physical space-time. However this may be, the fact remains that nature undoubtedly appears to us as a uniform spatio-temporal continuum, and for a philosophy of nature such as that elaborated by Whitehead, nature is what it appears to be. Nature may possess other characters which are derivable from the apparent characters, but the apparent characters are never delusive in the sense that an event could be completely characterized without reference to the apparent characters. Apparent characters are features of the real world.

It would therefore seem that the uniformity of space-time is given in the immediate occasion of awareness just as much as redness is given, and that for a philosophy which takes nature to be "that which is given, in perception through the senses," it cannot need demonstration. If "nature is that which is given, in perception through the senses," it cannot be true that an event may be apprehended as continuous, and yet may be made up of discrete parts. This would be to say that properties which belong to events do not belong to parts of events. This is of course, true of certain kinds of properties, if an event has the property of being the situation of a certain perceptual object, it is clear that this property does not belong to parts of that event. It is also clear that there are on the other hand properties which belong to events *qua* events; and these must also belong to the parts of the events. Of this latter kind is the property of extending over.

• It is of course, possible to hold that physical space-time must

be distinguished from perceptual, and that we are justified in assuming greater complexity in the former if physical considerations seem to require it. It is doubtful however, if this is relevant to our enquiry. It may be that it is desirable to postulate properties of events for the purposes of science which are not "discoverable" in nature in Whitehead's sense of the word. Such a postulation could not possibly invalidate any of the discoveries of sense for Whitehead. For him, there is only one nature, the system of interconnected events, and all entities are equally real characters of these events. Entities of different types emerge from different modes of analysis and stand in different kinds of relationships to the events, but space-time is an abstraction from events considered merely as events, and apart from the objects standing in various relations to them; objects are only in space-time derivatively, in virtue of their relations to events, so that space-time will possess the same properties whichever kind of object is being considered.

If the immediate occasion of awareness is to provide adequate grounds for inference beyond itself, not only must it manifest itself as a factor in a uniform spatio-temporal background, but also as a factor in a system of events the characters of which possess some kind of connexion with one another. It is possible to conceive a uniform spatio-temporal system in which changes occur with no further apparent uniformity, and in which the characters of the events have no connexion with one another. Mere spatio-temporal uniformity does not provide sufficient grounds for reasoning from the characters of the present event to the characters of other events. It will thus be necessary to examine more closely Professor Whitehead's analysis of the "immediate occasion of awareness," in order to discover if there is any further property of the given which will justify inference to the unobserved field.

The uniformities which induction seeks to establish are usually divided into uniformities of coexistence, and uniformities of sequence. Each of these two kinds of uniformities needs a specific property of the immediately given for its grounds within the present fact. It will be seen later that the processes by which these two kinds of uniformity are established have a common element, but the respect in which they differ is first to be considered. In order that the immediately given

may be seen to afford grounds for the establishing of uniformities of coexistence, i.e., from generalization from the fact of coexistence of qualities to the connexion of qualities, the immediate occasion of awareness must be apprehended as possessing qualities which do *not* merely coexist. This has purposely been stated in a self-contradictory manner to show the false assumption underlying the usual statement of the problem of induction. Hume has said the last word on this point. "It appears then, that this idea of necessary connexion amongst events arises from a number of similar instances, which occur, of the constant conjunction of these events, nor can that idea ever be suggested by any one of these instances, surveyed in all possible lights and positions. But there is nothing in a number of instances different from every single instance, which is supposed to be exactly similar; except only, that after a repetition of similar instances, the mind is carried by habit, upon the appearance of one event, to expect its usual attendant and to believe that it will exist."¹

Hume's conclusion was that there was no such relation discoverable in the single instance, and that therefore the notion of "necessary connexion" is strictly meaningless, in the sense that it stands for nothing in the natural world. A truer conception of the single instance, however, leads Professor Whitehead to the conclusion that we do not start with mere coexistence and attempt to infer connexion from a multiplicity of instances of coexistence. The necessary connexion is given in the single instance. It is not of course, a sense impression relating sense impressions. Nor need it be immediately obvious at a glance. There is no reason why reflection upon experience cannot disclose properties and relationships present within experience. It is an element in any perceptual situation. Any given percept, say green, is given "embedded in relatedness," and the kind of relatedness which is here relevant, is called "conveyance" by Professor Whitehead. The factor greenness conveys percepts of other senses, and this conveyance is not a mere association of formerly disconnected sense impressions. There is no such thing as a bare sensation, and when we are confronted by a new experience, we have a complex experience with unspecified details to be filled in later. The perceptual object exhibits

¹ *Philosophical Essays concerning Human Understanding*

itself by means of sense percepts, and it is thus a "control of ingression." What is immediately given is not a set of percepts apprehended as coexisting, but a perceptual object manifesting itself as possessing certain properties. We do not apprehend greenness, smoothness and coolness in coexistence; we apprehend a blade of grass.

It might be argued that this merely shows that any perceptual object must possess specific values of several determinables, and not what these specific values must be. It shows for instance that a blade of grass must possess a determinate colour, shape, temperature, etc., but it does not show any connexion between greenness and coolness, and it is this latter kind of connexion which is needed. The reply to this is that the essential connexion of determinables with one another is a sufficient *basis* for induction. The perceptual object is a limitation of pure contingency. It is not to be expected that the necessary connexions among the characters of the given instance should lie on the surface. It is enough if the given instance supplies grounds for reflection upon essential connexions. There is something in the given instance to be thought about, to supply grounds for experiment, in contradistinction to the view which describes it as one more item to be counted. Much knowledge of the characters of an event is necessary in most cases, before the connexions within the given are exposed. The trained eye perceives interconnexions within the given not apparent to the ordinary observer, but if they are to be discovered upon reflection, they were discoverable from the first.

It now remains to be seen whether the immediate occasion of awareness possesses any property which will justify causal inference, and if so, what this property is. Professor Whitehead says: "Each event essentially signifies the whole structure," and he goes on to point out that the cognizance of an entity implies awareness of something other than itself. It is only individualized in contrast to a vaguely apprehended background. That is to say apprehension of an event is always apprehension of the event as signifying something other than itself. In *Science and the Modern World*, Professor Whitehead goes even farther. Not only does each event signify the whole structure of events, it *is* the whole structure of events, viewed from its own particular standpoint. This further conception of the relation of a given

event to the whole structure of events is expressed by the notion of "mirroring." Each event is said to mirror every other, so that in a sense, each event is the whole universe, or rather a perspective of the universe. An event is the grasping of a "diversity of aspects into the unity of a pattern"; "Each event corresponds to two such patterns; namely, the pattern of aspects of other events which it grasps into its own unity, and the pattern of its aspects which other events grasp into their own unities"¹ An event then, cannot be confined to one spatio-temporal region. It is not a question of hunting for connexions so much as determining which among the many interconnexions shall be followed up. An event is wherever its influence is felt, but its influence is felt everywhere and at all times. "Whatever merges into actuality plants its aspects in every individual event." If by "aspects" is meant its characters, and not merely its spatio-temporal relationships, it would seem that Professor Whitehead's system in its later developments, is open to the charge which he himself foresees in *The Principles of Relativity*. Here he says that if an event is only completely itself with its relationships, and if its relationships embrace the whole structure of events, it might be thought that in order to know completely an event, we must know it with its relationships. That is to say, in order to know a single event, we must know the whole structure of events. Since the latter is impossible for a finite mind, it would follow that complete knowledge of a single event is impossible. If this objection could be sustained, Professor Whitehead thinks it would be fatal to his system, but he thinks it can be met in the following way. There are two kinds of knowledge, knowledge by adjective and knowledge by relationship. Knowledge of any given event, say of a green patch, is cognizance by adjective, but this involves knowledge of other factors. Any event is apprehended as having a date and a place. Date and place have meaning only in reference to other events, and these other events are known by relatedness. Thus in order completely to know an event, it must be apprehended as occupying a specific position within a uniform spatio-temporal system, and this is not an impossible condition. It would only be impossible if knowledge by adjective of its spatio-temporal

¹ *Science and the Modern World*, p. 291

background were required for complete knowledge of an event. Professor Whitehead also expresses this by saying that complete knowledge of an event implies knowledge of its essential but not of its contingent relationships. Its spatio-temporal relationships then, are essential, while its relationships to objects or characters are contingent.

If the relationship of events to objects is contingent, it seems that the conception of an event as a factor in a systematic structure of events will not afford a sufficient basis for causal inference. Professor Whitehead however, goes on to point out that there are some objects which by the simplicity of their relationships to certain specific events are limitations of contingency. Such objects are perceptual and scientific objects which stand in a simple two-termed relation to the events which they characterize. It is the aim of science to discover such simple adjectives of events, and in doing so, it is discovering laws of nature, or uniformities among the characters of events. Thus in apprehending an event as the situation of a perceptual object, we are apprehending within the given present fact, the laying down of conditions for the characters of further events. The perceptual object, as the control of ingression of sense objects into events, not only limits the contingency of the coexistence of characters, but also of the sequence of characters. In this connexion, it is important to remember that objects are the "permanences" amid the flux of events. They enter into experience by way of recognition. Recognition is not necessarily of an object known before; in its primary sense, it is of an object enduring within a present slab of time. The possibility of the recognition of similarity is an essential for an empirical account of nature, but that which is so recognized is for Whitehead, a permanence holding together the structure of events for knowledge. Moreover, in the scientific expression of the characters of objects, it is seen that some of them at any rate, e.g., "being made of iron," time is needed as well as space for the being of the character. There could not be "iron at an instant" any more than iron at a point. Time is needed for it to display its characteristic "pattern." In the same way, we could not give a satisfactory account of an organism without describing it as going through its characteristic processes, breathing, circulation of the blood, etc. Thus, the recognition of an organism means

the recognition of the given as already in process of determining the characters of future events.

Professor Whitehead thus conceives himself to have shown the "immediate occasion of awareness" as containing in itself grounds for inference beyond itself

EPISTEMOLOGY AND THE EGO-CENTRIC PREDICAMENT

By L. J. RUSSELL

I

IN his *Inquiry into Meaning and Truth*, Bertrand Russell distinguishes two kinds of inquiry each of which would have the right to be called "theory of knowledge." Only the second kind concerns us here. It arises from doubts about the satisfactoriness of the assumptions on which scientific procedure rests. We may start with the illustration given in the Introduction (p. 15). The account of sense perception to which physiology leads, appears to involve the consequence that every operation made by an investigator is an observation about what is occurring in a part of his own organism. This makes it difficult to see how the observations of different investigators could be brought together and used as the basis of a true account of events occurring independently of any particular observers and capable of being known by them. But science is a co-operative enterprise. It depends on the assumption that there are a number of persons capable of making observations all of which (when certain precautions have been taken) can be treated as on an exactly equal footing, and taken as reports of what happened in a world common to all observers. And this assumption seems to be put in doubt by the result to which the co-operative enterprise itself leads, in the physiological account of perception. A new inquiry then is called for, to clear up this doubt.

We can look at this situation from a slightly different point of view (cf. ch. ix). There is no common knowledge in the sense of a common knowing. There are individual knowers; and hence the fundamental problem of knowledge is that of discovering grounds on which an individual can legitimately conclude that he knows something. He can divide what he thinks he knows into what he derives by inference and what he thinks he knows without any inference. If he accepts as true any statements made by other persons, he must have reasons for regarding these persons as trustworthy witnesses, and for regarding their story as one which he can utilize in completing

the story of events he himself is trying to tell. If he accepts as evidence any record purporting to be made by himself in the past as a record of his own experience, he must have reasons for this acceptance. His task then, in trying to build up a theory of knowledge for himself, will be first, to find out what he can assert as known by himself without any inference, with as great certainty as he can achieve; next, to find what principles of inference he can trust, and with what degrees of assurance he can use them; and then, to test what he thinks he knows by inference, by attempting to derive it from his non-inferred premisses by his principles of inference.

II

Certain fundamental points emerge in the account of this programme. (1.) It is argued, in accordance with the above account of perception, that a statement about my own immediate experience involves less inference and is more trustworthy than a statement about what is occurring in a public place : e.g., that "I am now red-perceiving," or "There is now a red patch there in my visual space" is more direct and trustworthy than "There is now a red patch at S_1 in public space." Statements of this sort will then be among the most fundamental non-inferred statements. They are direct expressions in linguistic form of what I experience. One of the problems of this theory of knowledge will be to investigate the relation between experiences and the words and sentences which are uttered in connexion with them.

(11.) It is held that while I can be sure that experiences of mine are actually occurring while I am having them, my memory that I had an experience of a particular sort in the past is liable to err, but I am justified in taking my remembrance that I have just now had a particular experience, as having in general a very high degree of certainty. It is also uninferred. But the more remote memories I cannot so directly trust.

I stress these two points because they lead directly to certain major problems in connexion with science. On this view I am directly certain of the existence of what I experience, and (with the reservation about the immediate past) of what I experience *now*. But the co-operative enterprise which is science requires that I should be able to assume that in the world which I am endeavouring to know there are events not experienced

by me (and indeed not necessarily experienced by anyone else), and again that there are other persons, experiencing and recording their experiences in the same way as I do, so that what they record can be treated by me as material for my inferences about my world in exactly the same way as if I had recorded it myself. Hence if I am to reach complete conviction about the truth of what I infer, there are two major questions I must answer: (1.) How do I know that anything occurs when I am not observing it? (ii.) How do I know that there are other persons who have experiences, similar to my own, which are capable of being communicated to me and utilized by me in my knowing? Besides these questions, there are questions about the principles of inference. Some of these principles are regarded as demonstrative, some as only giving a degree of probability, even assuming the premisses are true. I must find some way of justifying these principles.

The task of answering these questions falls to theory of knowledge. If I cannot find satisfactory answers, I must either give some new account of science not involving the usual assumptions, or admit that a large measure of uncertainty attaches to the whole enterprise.

III

It seems clear that the main task of such a theory of knowledge is conceived to be to provide a more secure basis of certainty than science itself can provide. Here is Plato's criticism of science brought up to date, but where Plato (in the well-known passage in the *Republic*) sought for a method of getting into touch with a reality more complete than that with which science is in touch, in the modern version hopes are centred in a closer study of the processes by which the results of science are arrived at. In this particular form of the modern version certainty is sought in statements expressing the individual's private experience. The change is significant, but what I want to suggest is that in so far as it leaves the account of the relation between science and theory of knowledge substantially the same as that given in the past as holding between science and philosophy, it does not go far enough. The fundamental point I am referring to is the idea that there is an inquiry, different in character from any of the inquiries belonging to the particular sciences, and capable

of achieving greater certainty than can be achieved by the particular sciences either separately or in combination. And the question I want to raise is this: Admitting that the results of science even at its best fall far short of theoretical certainty, admitting that they rest on complex assumptions for which no independent proof is offered, is there any likelihood that a closer approach to theoretical certainty can be made by any other method?

There are two major points in Russell's account, on which I am in disagreement with his view. I hold (1) that it is a mistake to suppose that by dropping all reference to a world containing events not experienced by me, and containing other experiencing beings, I can make statements about what I now experience which have greater certainty than statements I make about myself as a person in that world; (ii) that while it is true that the co-operative enterprise of scientific investigation does not bring completely certain results, it is a mistake to suppose that any kind of investigation can achieve greater certainty. That in short the investigations brought together under the title "theory of knowledge," while necessary as a supplement to science, do not supplement science in the way of bringing independent proofs of statements which science is incompetent to prove.

The second point is wider in scope than the first. It relates not merely to discussions of the problem of our belief in an external world and in the existence of other persons, but to such time-honoured discussions as those of the principle of the uniformity of nature and of causality, in so far as they have the aim of providing independent justifications of these principles and so of giving to science a basis of certainty greater than its own operations can give. The propositions to which these discussions relate have one important characteristic in common, which can be brought out by rough reformulations (the adequacy of which I shall not discuss here). "There are events not experienced by me"; "There are experiences other persons have, not experienced by me"; "There are recurrences, or uniformities, in events"; "There are causes of events." They can be called "general existential propositions."

My view would be that convincing proofs of propositions of this type can be given, if at all, only in so far as general procedures can be determined, and warranted by their successful application to detailed cases, showing how we can discover what character-

istics particular things continue to have when I am not experiencing them, what experiences a particular person is having on a particular occasion, and so on. Thus the question how we know that other persons have experiences, cannot be satisfactorily answered until we are able to show satisfactorily what particular experiences some particular persons are having on some particular occasions. The question "how do you know that events have causes?" can only be satisfactorily answered by showing in detail that we can give satisfactory answers (*viz.*, by giving them) to questions such as "how do you know what are the causes of such and such events?" So called "proofs" of general existential propositions are merely general provisional partial discussions, sometimes paving the way for the detailed making out of processes for reaching particular results in science; and no greater assurance can be reached anywhere than attaches to these particular results. If this can be made out, it will follow that it is a mistake to suppose that it is a part of the business of theory of knowledge to supply "proofs" of the general assumptions made by the particular sciences, since the results of the particular sciences themselves are needed as part of these proofs. This does not mean that I think theory of knowledge to be a useless set of inquiries; but I think it is not a part of its business to provide for the sciences any warrant of respectability which they cannot provide for themselves.

The two assertions (i) that statements about my own experiences have no greater assurance than public statements, (ii) that the general assumptions made by science cannot be warranted independently of the detailed results of the particular sciences, are closely related, though the second is wider in scope. I have no space to argue both points in this paper, and my main concern will be with the first. I shall touch on the second only so far as it is connected with the first. But it seemed desirable to mention it explicitly, in order to bring out the wider implications of my views on the first point, and because it serves as a background for the whole discussion.

IV

My main purpose then is to bring considerations against the view that an individual has a more direct awareness of his own experiences than of anything else, that he can be more

certain of the truth of statements expressing his own experiences than of any other statements, and that he would still be certain of their truth even though he doubted the truth of any other statements. I shall argue that the question "How do I (meaning by 'I' any individual person) know what I am now experiencing?" is just as complex as the question "How do I know what so and so is now experiencing?" and turns on a similar set of considerations, although we are often in a better position to answer it. In his account of what I most directly experience, Russell makes use of the linguistic habits I have formed in the past, but holds that the question how I formed these habits is irrelevant to the question how I know that the sentences uttered by me under certain special circumstances express my actual experiences. It does not seem to me that this can be justified. The biological situation, in which he rightly places the whole discussion, is so closely interwoven with our experiences as to make it impossible to disentangle it from them and ignore it in our interpretation of them. I may discover, in a particular case, that "I am canoid-patch-experiencing" is more trustworthy than "I see a dog." But this discovery has no significance save as a discovery made by (and about) a biological person in a social setting of other persons, it does not take him out of this setting; and it involves the use of a scientific theory of sense-perception and of a criterion of trustworthiness which no individual would have a right to use if he really doubted whether there were events unobserved by himself, and other persons with experiences similar to his own.

V

I shall begin with a sketch of what I take to be the situation from which our inquiries must start, with particular reference, first, to the question of the grounds of belief in the continuity of the existence of things in the environment. I take this question first, because the points I want to make seem to me to emerge most clearly here.

For explaining the behaviour of an animal or of an infant, biological considerations seem *prior* to psychological, and even psychologically, the sensory qualities seem not to be primary. Things incite the organism to activity before they are explicitly perceived as having what we apprehend as qualities. The cakes

on which Alice saw the words "eat me," the bottle on which she saw "drink me" are a fit symbol. William James made the same point in his chapter on Instinct. Koffka puts it: "To primitive man each thing says what it is and what he ought to do with it, a fruit says, 'Eat me'; water says, 'Drink me'; thunder says, 'Fear me,' and woman says, 'Love me'." (Principles of Gestalt Psychology, p. 7) Again from the point of view of what is primary in perception: "The terrifying character of the thunder is its outstanding characteristic, its description as a noise of a certain intensity and quality, quite secondary; similarly a snake is uncanny before it is brown and spotted, a human face happy before it is of a certain hue and chroma" (p. 72). I think this point is fundamental. Modern psychologists have not followed Leibniz in his use of the terms "perceptio" and "sensio," but I think that there is an important point involved in it. For him "perceptio" is an awareness on a more primitive level than that made possible by the use of developed sense organs which provide distinct sensations ("sensio"), and in this I think he is right, although I can see no justification for his account either of its existence in the lowest monads or of the range of what is perceived by it. I think we must suppose that there is some kind of dim awareness connected with the main activities of any higher organism and related to its surroundings, and that more distinct sensory experiences fall within the field of this dim awareness. A mouse incites a cat to a standard set of activities, and it is within the setting of these activities, and relative to them, that any awareness on the part of the cat falls. Its sensory experiences arise in the course of its dealings with things, and serve to guide its activities. They are not the beginnings of its awareness. The same is true of an infant, which we should think of, from this point of view, not as lying in its cot, a mere spectator, too far removed from things to be able to react to them except by adjusting eyes and ears, but as reaching out for things with its whole organism, grasping, manipulating in various ways, and when it can crawl, going after them, and dimly aware of its activities and of its surroundings before it is clearly aware of colours and sounds, touches and tastes and smells. It is these reactions which are the primary basis of its beliefs, and it is in them that we should seek the primary conditions under which

it treats something as continuing to exist which is temporarily unobserved. A child throws its ball, and crawls after it; in the process, it may cease to perceive the ball; but the situation and the reaction continue. When the ball is once more reached, there is no question of its being a new ball, or of the old ball having ceased to exist, since the situation in which the ball was an element has persisted unbroken. The unity of the situation is very largely determined by the unity of the child's reactions; and it is the persisting situation which imparts persistence to the thing.

Thus at this stage the question is not so much why a child continues to treat as the same a thing which is intermittently perceived, but rather what should give rise to a belief that what is reacted to in the same way is a different thing and not the same. Does a child fed on milk in a bottle dimly believe that at its various meals it has not only the same bottle, but the same milk? Or is the discontinuity of its feeding times sufficient to make it dimly take the bottle and the milk as different? At what stage and on what grounds does it come to recognise the bottle as the same, the milk as different? These are not very pressing questions for the child, and they are answered in due course without ever explicitly arising. We need not stay to answer them. It is sufficient to suggest that the continuity of the reaction and of the situation cast continuity on to things in the situation that are only intermittently perceived

VI

The question is, how much of this are we to take into account in our epistemological inquiries? If we were to ask in general terms the question what are those features of things, of which we can assume a child to be explicitly aware, whose presence would, if the child were capable of logical reasoning, entitle it to conclude that things possessing these features continue to exist when not perceived, our answer would have to be that no generalization would suffice to cover all specific cases. Our answer in any particular case will have to be one of detail with regard to the concrete situation itself, and will depend on the characteristics of the situation. If, e.g., we want to know why on one occasion he would be justified in concluding to continued existence and why on another occasion he would not (as when a

sparrow disappears behind a tree and then reappears, or when a flash of lightning is followed by another, or when the same bottle is filled with different milk) generalizations will not suffice; particular reasonings in detail will be needed. And, as is clear from the examples, it is only as science advances that these particular reasonings can be given. No child could possibly be aware of them.

The case of a grown-up person seems to be no better. We cannot suppose a single mature individual to be able to find anything like even partially adequate grounds for his own mature beliefs, unless we suppose him to be endowed with a complex set of instruments (whose actual manufacture, together with the theories which determined their construction, their use, and the interpretation of their behaviour, implies the existence of vast numbers of other individuals, and the applicability of the results of their experiences to the world experienced by him) which he can scatter about his world, set functioning, and assume to exist when he is not perceiving them.

If however we are to understand the child's behaviour as a set of particular acts, we can do it only by regarding the child as of a piece with its environment, and by regarding both child and environment as having such continuities of characteristic as we find them to have. Thus we should be ready to admit that the child may in its acts express beliefs for which its own experiences can present no adequate rational grounds. The epistemological problem cannot be to find what experiences *of the child* can serve as rational grounds for its beliefs.

For example, *our* evidence that at different meals the child gets the same bottle filled with different milk, depends for its cogency on a vast amount of evidence which no single individual could collect. How do we know that the milk drunk by the child does not re-form in the milk jug (or even in the cow) and re-appear, the same milk, for the child's next meal? Only because the scientist, working as one of a team, can trace the paths of the various portions of milk differently. And if it is never finally conclusive, there is no other kind of evidence that can even remotely approach it.

The important point for our present purpose is that we can only get detailed evidence that some particular thing continues to exist when we ourselves are not perceiving it, by methods

which assume the continued existence of other things when we are not perceiving them, and the existence of other persons, and the applicability of their experience to the world experienced by us. And the question is, can we get any evidence to justify this vast complex of assumptions, which shall not assume it?

The question, how do we know that anything continues to exist when we are not perceiving it, is bound up with the question how we know what properties of things are causally connected with our perceiving them. This is a question of the detailed techniques by which the investigator discovers the causal conditions of any property, and cannot be answered in its general form. There are no *general* arguments by which we can prove that things *in general* have properties unaffected by our perceiving them, or even that *there are* such properties. Each case has to be made out in detail on its own merits. But the technique assumes the whole co-operative activity of science, and hence involves the whole body of assumptions mentioned in the last paragraph

VII

In section III I suggested that the question how we know that other persons have experiences cannot be satisfactorily answered without answering the question how we know *what* so and so is experiencing on such and such an occasion.

Let us look at this question from the standpoint of our infant, considering particularly the way he learns the use of words referring to persons being pleased or angry, etc. I begin with this case because I think that what holds of it holds generally. To understand the child's use and understanding of such words, we have to remember that they apply not to persons considered as isolated entities, but to persons in a social situation. It is through the entire situation that a person is construed as angry or pleased. It is here as with the appearance of a person's eye. The sad or cheerful, lack-lustre, or attentive look in a person's eye is actually seen by us as characterizing his eye; but we should be unable to see it if we had not the rest of his face (and the rest of his body and, often, the whole social situation) to help us. Similarly a person's facial and other gestures, separated from his social situation, are often ambiguous; it is not easy to determine what emotion they portray. In a social situation it may not always be easy, but their message is often clearer.

I take it then that words like angry, pleased, etc., are learned by a child as applying to a person in a social situation, and relate to his whole behaviour in the situation. A person is angry because he was pushed against, or because someone took his ball, etc. This type of situation the child experiences from several points of view; now as himself the object of someone's anger, now as himself the angry person, now as a spectator of someone's anger at someone else. Again he hears of such situations. He thus comes to build up a complex view of the situation so as to know what it is to be angry, and what it is to be the recipient or the spectator of another's anger. His own view of himself, angry, is not a mere introspection of his own feelings. It is a view of himself in a social situation of this type; and his introspection of his own feelings is closely bound up with his own behaviour, which is partly imitative and only partly native to himself. In short his awareness of himself as angry is bound up with his participation in and his awareness of the type of social situation; he would not know what it is for himself to be angry if he had not experienced the angry behaviour of other persons in a context proper to it. He is helped to an appreciation of it in himself by his own histrionic tendencies, for he learns to apprehend another person's anger partly by throwing himself into the postures of the person he is watching. There is no need to suppose that he must first be clearly aware of anger in himself before he can be aware that someone else is angry. He is aware first of the type of social situation, then of the way an angry person behaves, and his own behaviour when angry is partly imitative of this. Only gradually does apprehension of the details, whether of behaviour or of feeling, become clear.

If this account (which is by no means new) is correct, the answer to the question how I know that other persons feel and think, follows from the answer to the question how I know what some particular person is feeling and thinking in a particular situation; and the answer to this question is in the main the same as the answer to the question how I have become aware what I myself am feeling and thinking on particular occasions: viz., from my participation in and experience of social situations, which I have had from many points of view in the past, along with the particular forms of language associated with them.

The upshot of all this is once more, that any evidence we can have about ourselves and our own experiences is already dependent on the assumption that we are in a common world with other persons with like experiences, and if you deny the assumption the evidence falls along with it.

Thus I think that a mere feeling, separated from the bodily side of the state of anger of which it forms a part, and from any possible social situation in which anger is born and made significant, would be a mere mystery to us, even if we were capable of apprehending it with any distinctness. It belongs to the social situation, and is capable of being described and understood only as an element in that situation.

All this, it may be replied, is specious. We feel our own anger, and we cannot feel another person's, nor know that he is angry with any of the distinctness with which we know we are. I reply that the bare feeling, isolated, is no more expressive than a person's eye, isolated, it owes its character to its presence in the situation. It is of no particular importance then that I cannot feel another person's feeling. The situation in which he feels is as open to me as it is to him. His feeling is for him merely as the screen on which the features of the situation are thrown, and the interpretation of his feeling in terms of the situation overwhelms the bare character the feeling would have in isolation. If this is so, then I do know "what he is feeling," provided I have an adequate understanding of the social situation, which is in principle always possible, given the requisite education, sensibility, and attentiveness on my part. The sense of this qualification is no different from that of a similar qualification in regard to the possibility of my understanding some theorem in advanced mathematics or some nicety of style in literature.

VIII

The conclusions I have drawn in regard to my feelings of anger apply I think to all my sensory experiences. These experiences arise in the course of my dealings with things and guide my activities. They arise from the background of a dim awareness of my situation and of my activities and serve as a clarification of points in the situation. It is in this way that a young child comes to have its attention drawn to them and to the words relating to them. To a merely contemplative being they would be

meaningless, even if they could arise at all. It is true that no one can experience another person's sensation, but this is just as unimportant as the fact that he cannot experience another person's feeling of anger. The setting in which a person has particular sensory experiences, and the activities to which his experiences guide him, are as open to other persons as to himself. That setting includes the kind of behaviour through which the sensory experiences are gained. Thus if someone were to verify statements concerning colours not by using his eyes, but by smelling or by touching, we should be surprised, and our surprise would be all the greater if his identifications of colours always agreed with ours. But we should not regard him as living in a different world, and we should not find any insuperable difficulties in adjusting ourselves to his behaviour. For the most important features of sensory experiences are their function as guides to activities, and (in some cases) their existence as sources of delight or the reverse.

I may be misled by my sensory experiences, but when in consequence of this I reflect and refer them to conditions in my organism rather than to conditions beyond it, I am not freeing myself from my context, but rather relating my experience to a specific part of it. Thus when I hear a noise, and try to track it to its source or cause, I make precisely the same assumptions and use precisely the same tests when I finally decide that its source lies within myself as when I decide that its source lies in the hub of my bicycle wheel. The physiologist may argue that whether or not there is a cause of sensory experiences outside the organism, there is always a more proximate cause within the organism and in particular within the brain. But it would be absurd if he should conclude that when I have a sensory experience the only thing I can be sure of is that there is an event in my brain, and still more absurd if he meant that I could justifiably say that there was an event in my brain even though I denied that there were any events outside my brain. For the supposition that there are no events outside my brain would take away all significance and all conclusiveness from the investigation leading to the conclusion that there are events in the brain connected with my experiences.

It is then I think a mistake to suppose that there is a difference in regard to the kind of context that is being assumed when I

pass from "A dog is barking" to "Something is making a noise," and then to "I am now hearing a noise." All these statements equally have significance within the setting of a world of things and persons. I am trying to strip off sources of uncertainty by making fewer commitments. That is a sound process up to a point. It is a part of the process by which scientists have made their steadiest advances in knowledge. But it is fruitful only as a caution in my further dealings with the world of uncertainties. It may be argued that by taking it by itself, and pursuing it as far as possible, we shall reach a secure basis for our knowledge. But I do not think that the experiences I am aware of when I attend carefully to myself, stripped of all uncertain references to things and persons, are the evidence on the basis of which I infer (more or less precariously) that there is a world of things and persons. For I think the whole process of stripping is an impossible one, if taken by itself. All the evidence we can get by this process depends on the assumption that we are in a common world with other persons, and if you cut away the assumption the evidence falls along with it.

Russell argues (chapter ix) that there are three possible types of empiricist, momentary, individual, and social, and while regarding the first as the only logically satisfactory type complains that most empiricists are social. They use as basic not only statements expressing their own experiences, but statements made by other observers. If the considerations I have put forward are sound, then the social empiricists are justified at least in being social (I do not ask here whether their empiricism is justified) and momentary empiricism rests on a mistake.

IX

I have argued that any knowledge we have must rest on the assumption that we are in a world of things and of other persons. If this is so, then it is futile to ask what evidence we have for this, if we mean evidence which can be accepted independently of it. We can ask what we know about things and about other persons; and we get such detailed answers as we can—through ordinary social life, literature, science. We can disentangle the methods used, and discuss their possibilities and limitations. All these are legitimate tasks for inquiry. But here I should bring in my second point, and argue that our general discussions

of principles and methods, however valuable, are only partial and preliminary. They are important in so far as they help to bring forward new points of view, suggest new methods of investigation. They have no value as proofs, great value as helping toward a new kind of synthesis of the detailed facts.

As part of the systematic set of inquiries called "theory of knowledge," or "epistemology" their function and value is similar to that of the epistemological inquiries engaged in from time to time by the specialists in particular sciences in regard to their own work. There are periods in the history of a particular science when this is more urgent than usual, and it might be said that at these periods the specialists become "theory of knowledge" conscious. But these discussions have no independent standing, cut loose from the detailed investigations of particular fact. They are a part of the whole enterprise of investigation. It is useless to try to investigate facts unless you have some idea of the general pattern into which an account of the facts ought to fall; thus some kind of epistemological views an investigator must have. But it would be a mistake to suppose that a general pattern of this sort can be laid down definitely beforehand; if the facts prove recalcitrant, sooner or later it must be modified.

What is true of investigators in the special sciences seems to me to be equally true of all of us in our task of getting some sort of understanding of the world of things and of persons for the practical business of living. That task is distinct from the tasks of the particular sciences and more hazardous, and any results we may reach in the way of detailed synthesis are provisional. Our theory of knowledge is only part of our task, a kind of attempt to forecast the form our detailed synthesis should take. While it can suggest much it can determine nothing. Epistemological discussions concerning the nature of the world are like peace treaties; they are unavoidable, but their merits or defects can be seen only in the light of the detailed structures they help to produce. But a defence of this account of epistemology would require a separate article.

SUSAN STEBBING. PUBLICATIONS

1910. "Pragmatism and French Voluntarism. With special reference to the notion of truth in the development of French philosophy from Maine de Biran to Bergson." *Girton College Studies*, No. 6.
1913. "The Notion of Truth in Bergson's Theory of Knowledge." *Proceedings of the Aristotelian Society*.
1917. "Relations and Coherence." *Proceedings of the Aristotelian Society*.
1918. "The Philosophical Importance of the Verb 'To Be'." *Proceedings of the Aristotelian Society*
1920. "Is the Existence of the Platonic ΕΙΔΟΣ presupposed in the Analysis of Reality?" "Symposium" in the *Proceedings of the Aristotelian Society*.
1923. "A Note on the Philosophy of Hardy's 'Dynasts'." *Shama'a*.
1925. "Universals and Prof. Whitehead's Theory of Objects." *Proceedings of the Aristotelian Society*.
1926. "The Nature of Sensible Appearance" "Symposium," *Proceedings of the Aristotelian Society*, Supplementary volume vi
1927. "Is the 'Fallacy of Simple Location' a Fallacy?" "Symposium," *Proceedings of the Aristotelian Society*. Supplementary vol. vii
1928. "Materialism in the Light of Modern Scientific Thought" "Symposium," *Proceedings of the Aristotelian Society* Supplementary vol. viii
1929. "Realism and Modern Physics." "Symposium," *Proceedings of the Aristotelian Society*. Supplementary vol. ix.
1930. "Concerning Substance." *Proceedings of the Aristotelian Society*.
A Modern Introduction to Logic. Methuen.
1933. "Substances, Events and Facts." *Journal of Philosophy*.
"The Method of Analysis in Metaphysics." *Proceedings of the Aristotelian Society*.
"Logical Positivism and Analysis." *Proceedings of the British Academy*.

1933. *A Modern Introduction to Logic*. Second Edition, revised and enlarged.
 "The *A Priori*." *Proceedings of the Aristotelian Society*, Supplementary vol. xii.
1934. "*Logic in Practice*." Methuen's Monographs on Philosophy and Psychology.
 "Constructions." Presidential Address to the Aristotelian Society.
 "Concerning Solipsism." *Analysis*, vol. ix.
 "Directional Analysis and Basic Facts." *Analysis*, vol. ii.
 "Communication and Verification." "Symposium," *Proceedings of the Aristotelian Society*. Supplementary vol. xiii.
 "Mr. Joseph's Defence of Free Thinking in Logistics." *Mind*.
1935. "Recent Writings of Professor Carnap" *Mind*.
 "Sounds, Shapes and Words." Inaugural Address. *Proceedings of the Aristotelian Society* Supplementary vol. xiv.
1936. *Imagination and Thinking*. With C. D. Lewis. British Institute of Adult Education *Life and Leisure Pamphlets*, No. 4.
1937. *Philosophy and the Physicists*. Methuen.
 "Nebulous Philosophy." *Am. Scholar* 6.
1939. *Thinking to some Purpose*. Penguin Book.
 "Ethics and Materialism." *Ethics*, 50.
 "Some Puzzles about Analysis." *Proceedings of the Aristotelian Society*
1941. "Relations between Science and Ethics." *Nature*, 148. *Ideals and Illusions*. Watts & Co.
1942. *Contribution to Science and Ethics*. Allen and Unwin.
1943. *A Modern Elementary Logic*. Methuen.
 "The New Physics and Metaphysical Imperatives" "Symposium," *Proceedings of the Aristotelian Society*.
1944. "Men and Moral Principles." L. T. Hobhouse Memorial Lecture.

