

UNIVERSAL
LIBRARY

OU_152617

UNIVERSAL
LIBRARY

OSMANIA UNIVERSITY LIBRARY

Call No. 104/A ~~71-W~~ 1955—Accession No. 9205

Author Aristotelian Society.

Title What can Philosophy Determine?

This book should be returned on or before the date last marked below.

ARISTOTELIAN SOCIETY.

Supplementary Volume XV.

WHAT CAN PHILOSOPHY DETERMINE ?

THE SYMPOSIA READ AT THE JOINT SESSION
OF THE ARISTOTELIAN SOCIETY, THE
MIND ASSOCIATION AND THE SCOTS
PHILOSOPHICAL CLUB AT ST. ANDREWS,
JULY 3RD—5TH, 1936.

HARRISON AND SONS, LTD.,
45, ST. MARTIN'S LANE, LONDON, W.C.2.

1936.

Price Fifteen Shillings net.

PROGRAMME.

FRIDAY, JULY 3rd.

At 8 p.m. Chairman : Professor J. L. Stocks.

Address by Professor G. F. Stout.

SATURDAY, JULY 4th.

At 10 a.m. Chairman : Professor Norman Kemp Smith.

Symposium : "The Nature of Memory Knowledge."

Professor H. H. Price, Professor J. Laird, Mr. J. N. Wright.

At 2 p.m. Chairman : Professor L. S. Stebbing.

Symposium : "Is there a Problem of Sense Data ?"

Mr. G. A. Paul, Miss H. M. Smith, Mr. A. R. M. Murray.

At 8 p.m. Chairman : Mr. G. Ryle.

Symposium : "Are there Synthetic a priori Truths ?"

Professor C. D. Broad, Mr. A. J. D. Porteous, Mr. Reginald Jackson.

SUNDAY, JULY 5th.

At 10 a.m. Chairman : Professor L. J. Russell.

Symposium : "Is Existence a Predicate ?"

Mr. W. Kneale, Professor G. E. Moore.

At 8 p.m. Chairman :

Symposium : "Can Philosophy Determine what is Ethically or Socially Valuable ?"

Professor J. L. Stocks, Mr. A. K. Stout, Mr. W. D. Lamont.

CONTENTS.

	PAGE
THE INAUGURAL ADDRESS—UNIVERSALS AGAIN. By Prof. G. F. STOUT	1
SYMPOSIUM: MEMORY-KNOWLEDGE.	
I. By H. H. PRICE	16
II. By J. LAIRD	34
III. By J. N. WRIGHT	42
SYMPOSIUM—IS THERE A PROBLEM ABOUT SENSE-DATA ?	
I. By G. A. PAUL	61
II. By H. M. SMITH	78
III. By A. R. M. MURRAY	88
SYMPOSIUM—ARE THERE SYNTHETIC A PRIORI TRUTHS ?	
I. By C. D. BROAD	102
II. By A. J. D. PORTEOUS	118
III. By REGINALD JACKSON	141
SYMPOSIUM—IS EXISTENCE A PREDICATE ?	
I. By W. KNEALE	154
II. By G. E. MOORE	175
SYMPOSIUM—CAN PHILOSOPHY DETERMINE WHAT IS ETHICALLY OR SOCIALLY VALUABLE ?	
I. By J. L. STOCKS	189
II. By A. K. STOUT	201
III. By W. D. LAMONT	219

The Aristotelian Society Publications.

PROCEEDINGS : Annual Bound Volumes. New Series begun in 1900. Prices 10s. 6d. to 25s. (Volumes I to VII and IX are out of print.)

A few parts of the Old Series are obtainable. Price 2s. each.

SUPPLEMENTARY VOLUMES.

- I.—LIFE AND FINITE INDIVIDUALITY. 1918, pp. 194. Price 6s. net.
- II.—PROBLEMS OF SCIENCE AND PHILOSOPHY. 1919, pp. 220. Price 12s. 6d. net.
- III.—RELATIVITY, LOGIC AND MYSTICISM. 1923, pp. 184. Price 15s. net.
- IV.—CONCEPTS OF CONTINUITY. 1924, pp. 240. Price 15s. net.
- V.—PHILOSOPHY AND METAPHYSICS. 1925, pp. 212. Price 15s. net.
- VI.—METHODS OF ANALYSIS. 1926, pp. 205. Price 15s. net.
- VII.—MIND, OBJECTIVITY AND FACT. 1927, pp. 249. Price 15s. net.
- VIII.—MIND, MATTER AND PURPOSE. 1928, pp. 221. Price 15s. net.
- IX.—KNOWLEDGE, EXPERIENCE AND REALISM. 1929, pp. 225. Price 15s. net.
- X.—INDETERMINISM, FORMALISM, AND VALUE. 1931, pp. 200. Price 15s. net.
- XI.—PHENOMENOLOGY, GOODNESS AND BEAUTY. 1932, pp. 219. Price 15s. net.
- XII.—CREATIVITY, POLITICS AND THE *A PRIORI*. 1933, pp. 223. Price 15s. net.
- XIII.—MODERN TENDENCIES IN PHILOSOPHY. 1934, pp. 240. Price 15s. net.
- XIV.—SCIENCE, HISTORY, AND THEOLOGY. 1935, pp. 217. Price 15s. net.
- XV.—WHAT CAN PHILOSOPHY DETERMINE ? 1936, pp. 239. Price 15s. net.

PUBLISHED BY

HARRISON AND SONS, LTD.,

45, ST. MARTIN'S LANE, LONDON, W.C.2.

THE INAUGURAL ADDRESS.

UNIVERSALS AGAIN.

By PROF. G. F. STOUT.

INTRODUCTORY.

My theory of Universals seems so far alive at the present time as to be still worth discussing and refuting. I therefore take this opportunity of restating and defending it. I find a convenient starting-point in Mrs. Helen Knight's article "Stout on Universals" which appeared this year in the January number of "*Mind*." This article seems to represent very fairly both the way in which my view has been commonly interpreted and the sort of criticism which has been considered fatal to it.

Mrs. Knight begins with what purports to be an exposition of my theory and then proceeds to criticism. But I find that the criticism is already blended with the exposition. If I really said what she makes me say I should be helpless in the face of her objections. At the outset she charges me with using the word "character" in two senses which I do not clearly distinguish.* According to her I use it both for a common character and also for instances of the common character. This is misleading because it implies that there are characters which are common characters. But this is precisely what I deny. What is called a character characterizing a plurality of particular things is really a general kind of character. It is no more itself a character than the class of horses is itself a horse. Now Mrs. Knight admits that this is true of generic universals such as redness or shape. The term "red" or

* *Mind*, N.S., No. 177, pp. 45 seq.

“redness,” according to her, covers an indefinite variety of entirely specific shades of red. According to her, when we say “This billiard ball is red” we mean that it is one completely determinate shade of red to the exclusion of all others. It is only this determinate shade of red which really characterizes the particular thing. No particular thing is “redness” or “red in general.” Hence for her redness is not a character at all. It is a general kind of character including a variety of specific cases, and the red of any particular thing is always one of these specific cases to the exclusion of the others. If therefore, it is true that I give two meanings to the term “character,” it is in the same sense true that Mrs. Knight does the same. Further, she could defend herself only in the same way as I do, by saying that the so-called common character turns out, when we analyse what we mean by it, not to be a character at all. She might also rightly urge, as I do, that the difference in meaning cannot in ordinary language give rise to ambiguity. It cannot do so, because in saying “This is red,” though we mean to predicate only an entirely specific red, yet this specific red is predicated as being a specific case of red in general—the general kind of character which includes this and an indefinite variety of specific “reds.” So far there is agreement between Mrs. Knight and myself, though she seems to think otherwise. Redness in general, according to both of us, is a Universal, but is not a character of any particular thing. Whether Professor Moore’s position* is, as Mrs. Knight assumes, identical in this respect with her own is a question to which I shall recur at the close of this paper. It is, at any rate, clear that they agree with each other, and differ sharply from me, in their account of the generic as distinguished from the specific Universal. According to both of them, a perfectly specific shade of red really is a single character which may be truly predicable of a plurality of particular things. According to me, a precisely determinate shade of red is still not a character

* * *Are Characteristics Universal or Particular?* (*Proc. Arist. Soc.*, Supplementary, Vol. III), quoted frequently by Mrs. Knight.

but only a general kind of character. It can, of course, have no specific cases, differing as such from each other, but, if I am right, it can have a plurality of particular instances. In other words, there may be particular reds of exactly the same specific kind, and therefore exactly resembling each other. The white of this piece of paper may be of exactly the same sort as the white of that piece of paper; nevertheless there are two particular whites and not one individual white. It follows that an entirely specific shade of colour, though it is a Universal, is not a character characterizing any particular thing. The only characters are the particular whites which are particular instances of this Universal. I may say that a certain specific shade of colour is common to all the particular colours which are examples or instances of it. But it is common to them only as being a common kind of character which includes them all. It is common, therefore, only in a way analogous to that in which redness is common to all specific reds. Similarly, when I say that several persons eat a common meal, I do not say that the same food is put into the mouths of each of them. Just as the same word "red" is used for red in general and also for its specific cases, when we say that this or that is red, so the same word "red" is used both for redness in general and the particular reds which are its instances. This in ordinary language gives rise to no ambiguity, just because the particular red is predicated as a particular instance of red in general. In the proposition "This is red" both meanings and their distinction from each other are involved. There is an analogous distinction and relation between the meaning of the word "two" used as an adjective, as when we speak of two pebbles, and its meaning when we speak of "the number two." "The number two" is not a character predicated of anything; it is not a character characterizing particular couples. It cannot be so, just because it is the class which includes all couples. By adding one pebble to another you get two pebbles, but you cannot get the number two by adding one unit to another unit.

It is easy to see how the phrase "common character" comes to be used for a common class of characters, each of which to the exclusion of all the others belongs to one and one only of a plurality of particular things. In ordinary life we do not attempt philosophical analysis where our language is sufficiently understood for ordinary purposes, and even when we have made the analysis, it would be intolerably cumbersome to substitute this for the less exact language of daily life. Analogous abbreviations are very common; for example, we say that the same thing has occurred before, though we know that the same event cannot occur twice. What we mean is that a very similar event has occurred before. In like manner, when we say that two men have the same thought, we do not mean that the thought of the one is identical with the thought of the other. We only mean that they are thinking of the same thing.

· THE GENERIC UNIVERSAL.

So far my aim has been only to state my own view, in order to avoid misunderstanding. I have now to justify it, and defend it against criticism. It is important to consider separately generic universals and absolutely specific universals. It is quite possible to deny that generic universals, such as colour and shape, are characters and to assert at the same time that specific universals are so. Those who hold this view maintain that a character characterizing a particular thing must be completely specific, but deny that it is, or can be, particular. According to them there are absolutely specific reds, but no particular reds. This is the position of Mrs. Knight and Professor Moore. They assert that an absolutely specific shade of red is literally a single character belonging indivisibly to a plurality of things. There cannot, according to them, be particular instances of it. I say that there can, and this is the main question at issue between us. We agree that the generic universal is not a character but a class of characters. Notwithstanding this agreement, I cannot leave the generic universal without further discussion,

for I have to show why I call it a *distributive unity* and so make clear what I mean by *distributive unity*. I have also to show that some of the objections brought by Mrs. Knight against my doctrine of specific universals are, if valid at all, equally valid against her own doctrine of generic universals. I shall provisionally assume that my opponents are right about perfectly specific universals. I shall assume for the sake of argument that they have no particular instances, but are themselves ultimate characters of particular things.

Consider such a proposition as "This is a shape," or "This thing has shape," or "This is a colour," or "This thing is coloured." To be a shape or to be of a shape is to be, or to be of, one and only one of a number of relatively specific kinds of shape: for example, circular, square or triangular. But these terms are still generic. To be a triangle is to be exclusively either scalene, isosceles, or equilateral; but these again are generic terms. In the long run, we must come to absolutely specific shape; for example, to triangular shape which is completely determinate in all respects, such as relative lengths of sides, degree of straightness of sides, size of angles, area. If in any of these respects there is the slightest difference, though it may be beyond our power to detect by observation or measurement, there are two specific universals and not one. Yet all these species somehow belong to the one generic universal, triangularity, which itself is a species, though not a completely determinate species, of shape. Apart from the specific universal the generic universal is nothing. There is no shape which is merely shape. To be a shape consists in being this or that entirely determinate shape. And yet shape in general is one universal and not a plurality of distinct universals. We can think of it as a whole without thinking severally of all its species, and even without knowing what many of them are. Hence I regard the generic universal as a complex unity including a diversity of what I can only call specific cases, and in the long run absolutely specific cases. This unity is of a certain type. It is what I call *distributive unity*. What I mean by this ought

not to be difficult to understand. A perfectly determinate shape is one of an immense number of perfectly determinate shapes included in the generic universal *shape*. When we say that this or that thing has a certain shape we mean that it has one of these shapes to the exclusion of all others, and when we say that another thing has a different shape we mean that it has another of these shapes. Thus the several determinate shapes are distributed among several things, each having its own determinate shape. The best way I can find of expressing this is by calling the generic universal a distributive unity. Similarly, when each of a number of things is a different shade of red, these several shades of red are included in the generic universal *redness* and are distributed among the several things, each having its own share.

Mrs. Knight does not like this view of the generic universal as a complex unity. She would prefer to substitute for it a relation of resemblance between specific universals. But her whole discussion of the question seems to presuppose what she attempts to exclude. In the first place, any resemblance which can be supposed to account for the generic universal must itself be a generic universal including a variety of specific resemblances. Reds, for example, resemble each other more or less closely, but an absolutely specific resemblance cannot have different degrees. The similarity theory thus reduces itself to the assertion that ultimately the only generic universals are generic resemblances including a variety of specific resemblances. But colour in general and shape in general are not general kinds of resemblance. Their absolutely specific cases are not specific resemblances but specific colours and shapes. How then are we to account for them in terms of the similarity theory? There can be only one answer: what is required to constitute colour in general is a generic resemblance between all specific colours, and what is required to constitute shape in general is a generic resemblance between all specific shapes or between any one specific shape and any other. But when we speak of all shapes or any shape we are directly naming the generic

universal *shape*. In order, therefore, to determine what resemblance constitutes the generic universal we must already start from the conception of the generic universal which has to be accounted for. Hence the similarity theory is a *petitio principii*. Mrs. Knight seems to be aware of this difficulty. She tries to meet it as follows, "If anyone were to ask me '*What do you mean by red?*' I should point to a number of different shades and say, 'You see that all these resemble each other, some more, some less; I mean by *red* any shade which resembles these at least as closely as the least similar of them resemble each other'."*

Is it not plain that the procedure here described can only serve to make more precise a notion of red in general which is presupposed from the outset in a vaguer form? Why are reds selected rather than other colours? It is only because they are specific cases of redness in general of which there are, or may be, an indefinite number of other specific cases. These others are not severally pointed to, or named, or otherwise specified for thought. Yet there is a sense in which they are all thought of. They are all thought of as comprised within the unity of the generic universal, red or redness. The process described serves to make an initially vague general concept more precise, by removing the ambiguity and doubt which might arise in borderland cases, as when for instance it may be a question whether a certain colour is a red or an orange. But the process cannot originally give rise to a general notion of redness which it presupposes. Another objection which seems to me fatal to the similarity theory is this. When I look at a green field, I can judge at once that "all this grass is green," though the several blades may be different shades of green, some for instance yellower than others. But resemblance is a dual relation. It seems evident that in passing this judgement *The grass is green* I do not make an immense number of distinct judgements of resemblance: *This blade is similar to that, One part of this blade*

* *Ibid.*, p. 59.

is similar to another, and so on. I recognize the colour quality of the grass at once as being green. I may pass to compare this part of it with that, and estimate the degree of similarity between them, but this is quite a secondary process. The original process is the one sweeping judgement *The grass is green*.

3. THE SPECIFIC UNIVERSAL.

I must now pass to that part of my theory which is the real stone of stumbling and rock of offence to such critics as Mrs. Knight and Professor Moore. They agree with me that characters characterizing particular things or sense data must be specific, and cannot therefore be generic universals. But agreement ends when I go on to say that they must not only be perfectly specific, but also particular. This means that even perfectly specific universals may comprise a plurality of particular instances, differing from each other not in their intrinsic nature, but numerically. *A fortiori*, those which do differ in their intrinsic nature are also particular and, *quâ* particular, numerically different from each other. For Mrs. Knight and Professor Moore no characters are particular: for me all characters of particular things are particular. The issue between us is plain, and the rest of this paper will be occupied with it. What I have to say in defence of my own view will be best said in considering the objections brought against it.

I may begin by dealing with an initial difficulty raised by Mrs. Knight in expounding my view before criticizing it. She lays stress on the fact that what I call particular instances have no names in ordinary language distinct from the names of universals. I reply that perfectly specific universals also have no names in ordinary language or indeed in any other. When we say *This is red* we mean a perfectly determinate red, but we do not name it. The word *this*, used in a given context and circumstances, may point to it, but does not specify what it is. The word *red*, taken by itself, is the name, not for any one specific shade but equally for a variety of other specific shades. It is only context and circumstances which determine its application

to one rather than the others. If I am right in asserting the existence of particular reds, the application of the term *red* to one particular red is determined in the same way by context and circumstances.

Another objection which, like the above, is intended not to refute my view but only to raise an initial presumption against it, is the alleged fact that in treating characters as particular, I am breaking with the traditional doctrine of philosophers. But this is not a fact at all. On this point Nominalists and Conceptualists such as Hobbes, Locke, Berkeley and Hume, and even Spinoza* agree with me, rather than with my opponents. They cannot even claim the unambiguous support of Aristotle.

Passing to arguments which are supposed to be fatal to my position, I have first to deal with one ascribed by Mrs. Knight to Professor Moore. I say that if two red patches A and B exactly resemble each other, there are two particular colours, each of which is a particular instance of one perfectly specific kind of colour. Professor Moore says that this use of "instance" is meaningless. His reason is that there is only one colour. According to him we must not speak of the colour of one patch as *this* colour, and the colour of the other patch as *that* colour; "for *this* does not mean anything different from *that*."† I reply that the question at issue just is whether there are two colours or only one. Hence the argument as it stands is an obvious *petitio principii*. I presume that Professor Moore does not intend it as an argument but only as a way of bringing out sharply the nature of the question. So far as there is an argument at all, it rests on a way of speaking frequent in ordinary language. We do often say that two things are of just the same colour. I have already explained that *same colour* in such phrases is a convenient abbreviation for *same kind of colour*. But we also, in ordinary language, say that the two colours are completely alike, or are exactly the same kind of colour. The two ways of speaking are in fact interchangeable, but the second is the more exact.

* Setting aside his "notiones communes."

† *Ibid.*, p. 56.

Further, if the appeal is to the ordinary use of language it is easy to turn the tables on Professor Moore. We may say not only that this patch is the same colour as that, but also that the colour of this patch is just like the colour of that, where it is not the patches, but the colours themselves which are asserted to be exactly alike. Resemblance being a dual relation, this is meaningless, unless there really are two colours and not only one. I might, therefore, charge Professor Moore with using meaningless words when he asserts that there are not two colours but one. He could only reply by maintaining that when we speak of two colours as being exactly alike, our language is inaccurate, and that what we really mean is that two patches have an identical colour. But how does the inaccuracy arise? What is supposed to be the accurate way of speaking is not more brief or convenient than the inaccurate. It is less so. I agree with Professor Moore that if he is right, I am talking nonsense, but it is equally true that if I am right, he is talking nonsense. The question is, which of us it is.

Though Mrs. Knight holds it to be obviously true that *this* and *that* "*if they only refer to the colour* do not name different entities" she admits that there is a strong temptation to think that they do. "And this," she adds, "requires explanation." I agree that explanation is urgently needed. I am anxious to know how we are strongly tempted to think what is obviously untrue. I would also put the further question: How is it that the plain man, unsophisticated by philosophy, yields to the temptation without any suspicion that he is being led astray? Mrs. Knight believes "that we are tempted in this way, when we fail to distinguish between the colour and its place in visual space." "Since we are certainly looking at different places we are likely to think we are looking at different colours." I certainly do consider colour and place together, but I do not confuse them. On the contrary, I expressly distinguish them. My point is that the same colour cannot at the same time be in two places. The only alternative to the view that there are two colours is that what

really is the same colour only seems to be, but is not, in two different places. But this suggestion, at any rate in the case of sense data, is excluded by the evidence of immediate experience. We may indeed say that the same colour appears in different places. But this does not mean that it only seems to be in different places, but really is not so. On the contrary, the word *appears* presupposes that the colour really is in two places and is therefore perceived to be in two places. It seems evident that if it really is in two places, it cannot be literally the same colour. I therefore interpret *same colour* as a short expression for *same kind of colour*. There are, in different places, two instances of the same specific kind.

I now add some considerations which may lead the unprejudiced to see the matter in the same light as I do. A colour, whether it is absolutely uniform or varied in shade, is co-extensive with the place in which it is. To use an expression once favoured by Professor Moore, it is spread out over a surface so that the larger the coloured surface, the more colour there is. There is more colour in a wide expanse than in a small speck. The extent of a coloured patch in visual space simply is the extent of the colour. Each part of the patch has its own bit of colour which is contiguous to some of the surrounding bits, and more or less distant from other bits. If, in part of a patch of uniform white, black is substituted for white, there is so much the less white. A bit of it has been subtracted from the extensive whole. Now I cannot understand how a universal, however specific, can be thus divided into separate bits. I cannot see how a universal can be beside itself, or at a distance from itself. It seems to follow that if a place is particular the colour which is co-extended with it must be particular too. In visual space coloured extension is simply identical with extended colour.

I might also argue that there is a universal *place-in-general* and, since places are admittedly particular, they must be particular instances of the universal *place-in-general*. Mrs. Knight and Professor Moore would probably reply either that place is not a character, or that there is no

universal *place-in-general*. I pass therefore to consider *shape*, which presents the same difficulties for this view without admitting of the same ways of escape. It will not be denied that *shape-in-general* is a generic universal comprehending specific shapes. Following Mrs. Knight in confining the inquiry to sense data I ask what a shape is in visual space. The only answer I can find to this question is that the shape is a particular place having a certain uniform or approximately uniform colour and that this particular place is bounded off by a qualitative difference between this colour and that of the surrounding visual field. But what is thus demarcated is still only a particular place. If places are particular, then a place bounded off in this way is also particular. But a place bounded off in this way is just what we call a shape. Hence *shapes* are particulars and not universals.

But difference of place is not the only reason for regarding characters of particulars as themselves particular. Take, for instance, two notes heard by different persons, or by the same person at different times, but otherwise quite similar to each other. I grant that we do not naturally speak of the pitch or loudness of one of them as exactly resembling the pitch or loudness of the other. The reason for this is obvious. Likeness and unlikeness of pitch or loudness is a matter of degree. One pitch is higher or lower than another. One loudness is more or less intense. But where we are dealing with quantitative likeness or unlikeness we use the specially appropriate terms *equal* and *unequal*. We say that two notes are of exactly equal pitch or loudness. We do so just as we say, not that the length of one line exactly resembles the length of the other, but that the lengths are exactly equal. Now equality is a dual relation. Where the equality is exact, and there is no qualitative unlikeness, the equality must be between two particulars as examples of the same specific universal.

My general position is further confirmed, if we consider not sense-data but properly subjective feelings—for example, feelings of pleasure and pain. In using the adjectives *pleasant* or *painful*, we characterize feelings, and feelings are certainly

particular, but the pleasures or the pains are themselves felt, and only exist in being felt. The pleasures and pains are part and parcel of the feeling itself. The feeling being particular I infer that its pleasureableness or painfulness is also particular. Indeed, I do not see how a universal could be immediately felt.

I hold that a thing is nothing but the complex unity of its characters, so that to predicate a character of it is to assert that the character predicated forms part of the complex unity. I cannot here discuss this question as a whole, but I should like to urge that sense-data at any rate are constituted in this way. Take any sense-datum such as a sound, or a colour in visual space. The sound has a certain pitch and loudness and the colour a certain extent and shape, and perhaps other qualities, united with each other in a certain peculiar kind of unity, quite different from the distributive unity of the universal. Now besides such characters united in this distinctive way, I find no sense-datum lying so to speak behind them, to which they belong or in which they inhere. The pitch, for instance, belongs to the sense-datum only as a constituent entering into the complex unity, and in no other way. Hence, if the several characters are universals, it follows that the whole complex is a complex of universals. It would be, as some English Hegelians have maintained that it is, an "interpenetration of universals." But if it is really particular the characters which enter into its constitution must be particular also.

Entirely specific universals, no less than generic universals, are complex unities of the type which I call *distributive*. They distribute among particular things and sense-data, not a variety of specific characters, but characters of precisely the same kind, which are therefore only numerically diverse from each other.

If this account of the specific universal is correct it cannot be constituted by a literally single character belonging indivisibly to each and all of its instances. Besides the particular reds of exactly the same shade there is no single quality belonging indivisibly to each and all of them. We must here fall back on the conception of a class or

kind of character as ultimate and unanalysable. But it may be urged that even if this is granted for the specific universal it is not true of the generic. Several specifically different reds may all be characterized by a single indivisible character, redness or red in general. I am inclined to think that this is the view expressed by Professor Moore in a passage quoted by Mrs. Knight. He there says "I perceive with regard to R (a shade of red) that it has a certain character P which belongs also to the shade R_2 and to an immense number of other particular shades, and what I mean by 'is red' is simply 'has *some* character of the kind P'." At the close of this statement P is referred to as a "kind of character" whereas at the beginning it is spoken of as itself a character. If Professor Moore really means *kind* of character there appears to be no important disagreement between us, but if he intends to assert that P is itself a character I cannot follow him, for, in spite of Mrs. Knight's denial, the supposed character P must be single and positive, and, as such, belong indivisibly to each and all of an immense number of different shades of red. It is necessary to examine this view. First I ask how the generic character P is supposed to be related to the specific characters R_1 , R_2 , etc. Here we have to decide between two alternatives. P is either itself a colour quality contained within each specific red, or it is a predicate extrinsic to the colour quality itself. On the first view each specific red would have two constituents, distinguishable though inseparable. There would be on the one hand the generic quality, and on the other its specification. My difficulty is that I cannot by any kind of scrutiny discern any such complexity in any specific red. Something no doubt is in some sense specified, but it is not another quality discernible in any particular shade of red. My difficulty is greatly augmented when I consider that we should have to recognize not only one generic quality, but an immense number corresponding to all the generic universals to which the given shade of red belongs. There would have to be one generic quality for colour, another for redness, yet another common to red and orange. Indeed, whenever there

is the slightest difference between two specific universals we should have to assume a corresponding generic character. I have to add that even if we grant Professor Moore his generic character he has still to take another separate step to reach the generic universal. Not only must the generic character be seen to belong to the perceived shades R_1 and R_2 , but it must also be seen to belong to an immense number of other particular shades which are not themselves perceived. This is a fresh departure, and only when it is taken is there any awareness of the generic universal as such. When Professor Moore has taken this step what he has thus reached is redness in general, as a general kind of character to which all specific reds belong. But this is just what I start with as ultimate, and I do not see that it presupposes a generic redness conceived as one colour quality included in each specific red. On the other hand, if we regard the generic character not as a colour quality contained within each specific red, but only as truly predic-able of all specific reds, I cannot see wherein it could consist, except in the reference of the several shades of red to one general kind—which is just my own position. The question is difficult to argue and I am inclined to think that the difference between Professor Moore and myself may at bottom be one of language, but I should like to know what he has to say on the subject.

SYMPOSIUM: MEMORY-KNOWLEDGE.

By PROF. H. H. PRICE, PROF. J. LAIRD AND
MR. J. N. WRIGHT.

I.—H. H. PRICE.

IN this paper I wish to discuss two main topics. First, I wish to offer some arguments in support of the distinction which some philosophers have drawn between memory-knowledge and memory-belief. Secondly, assuming the distinction to be accepted, I wish to discuss certain questions which consequently arise with regard to the nature of memory-images.

It is held by those who make this distinction that we sometimes (not very often perhaps) directly apprehend or know the past, but at other times we only have beliefs about it. Knowledge of the past, as of anything else, is of course infallible, *ex vi termini*. But belief, however reasonable and however well supported by evidence, is always fallible. And it would be maintained that the failure to distinguish between them has resulted in endless confusion both in psychological and in philosophical accounts of memory. This is the distinction which I wish to consider.

In support of the distinction it may be urged that any argument designed to prove that all memory is fallible must assume that *some* memory is infallible. Suppose we argue, as Descartes did in his doubting mood, that my memory has often deceived me, and that therefore all my memory-cognitions are fallible; *i.e.*, that all memory-cognitions are beliefs (true or false) and none of them are knowings. Obviously there is a difficulty about the premise of this argument. For it is itself a proposition about the past. The evidence for it, if there is any, can only come from memory. I remember a number of past remembering, and I remember that many of them were mistaken. But if all memory is fallible, what right have I to assert that those

past rememberings of mine occurred at all, or, that (if they did) they were mistaken? It may be said that I have evidence that they occurred and were mistaken, though I cannot know this. But this will not do. For the evidence has got to be evidence about the past, and where am I to get this except from other memories? If all memory is fallible, the evidence will be just as suspect as the propositions which it is supposed to support. Further, I am not entitled to assert that a past memory-act *m* was mistaken, unless I now know not merely that *m* occurred, but also that there was a certain previous state of affairs *s* which *m* mis-reported or failed to correspond with. Thus in order to assert that my memory has deceived me even once, I have to know a number of facts about the past. Unless some memory is knowledge, I have no ground whatever for asserting that some memory is only belief. And I could not possibly have *any* ground for asserting that all memory whatever is only belief, or that all memory whatever is fallible.

In order to bring out the full force of this argument, let us take the following example. Suppose I remember spending the whole of last Wednesday in London, and on consideration I become convinced that this memory-judgment of mine is mistaken. What sort of evidence would convince me? It might be the evidence of testimony; Smith might tell me that he had tea with me last Wednesday in Oxford, and Jones might tell me that he heard me give a lecture in Oxford that morning. Or it might be the evidence of documents; I might find an entry in my diary saying that I played golf at an Oxford golf-course that afternoon. Or it might be the evidence of other physical signs; I might find a pound-note in my pocket, whereas if I had gone to London I should certainly have spent it. Now none of these kinds of evidence is independent of memory. Why should not Smith and Jones be lying? What ground have I for trusting their statements? My ground is that they are reliable men. But what is my evidence for that? It is that I *remember* that I have been able to verify many of the statements which they made to me on previous occasions; or (more remotely) I *remember*

that I have been able to verify statements made by other men who resembled them in face, or manner, or social status. Much the same is true of the evidence of documents. When I use the evidence of my diary, the grounds which make it reasonable for me to do so are very complicated, and presuppose the validity of memory several times over. First I must assume that when I write things in my diary, I usually believe them at the time. This is by no means a self-evident proposition. A diarist can very well be mendacious, even if he is myself. I must therefore either *remember* that on other occasions I have usually believed what I was writing down, and so conclude by analogy that I probably believed it on that occasion ; or else I must just remember directly that I did believe it on that occasion. Also I must assume that I usually record events in my diary very soon after they have happened, and further that my beliefs about the recent past are usually true. If I have any evidence for these assumptions, it can only come from memory. Lastly, I have to assume that ink-marks retain a more or less constant shape for long periods of time. If the words written in my diary were to change their shape over-night, my documentary evidence would not be worth much. And why should they not? This proposition about ink-marks is not self-evident (though some who philosophize about history seem to think that it is). It is nothing but an inductive generalization. And the evidence for this induction can only come from memory. I remember that I have often looked at written words at a date t_1 , and then have looked at them again at a date t_2 , a day or a month or ten years later ; and I remember that they did not change their shape appreciably during the interval. Similar considerations apply to all use of documents, whether their author be myself or somebody else, whether they are recorded in ink or on stone or bronze, or in any other way. In so far as the use of them is reasonable, it derives its reasonableness from induction and analogy ; and the premises* of the induction or analogy are provided by

* That is, the *empirical* premises. Some philosophers, of course, hold that every induction must have at least one non-empirical premise.

memory and nothing else. And this applies to the documents which psychologists compose in the course of their experiments on memory as much as to any other documents. To reach their conclusions (which are often sceptical enough) they have to trust their records. But if all memory without exception is fallible—and some of them might claim that their experiments proved this—then they have no ground for trusting any record, whether their own or anybody else's.

•It is the same with the use of other physical signs. When we use them (as we often do) to verify or refute our own memory-judgments or somebody else's, we are really using memory over again ; or rather, our procedure is only rational if we use memory over again. The proximate premise is an inductive generalization, and the ultimate premises are certain particular facts about the past, from which the generalization derives whatever probability it has—facts which are only accessible by means of memory. In the case of the pound-note, the generalization is about my own monetary habits, but it is none the less inductive for that. It is not self-evident to me that I have such and such a character or such and such a habit (though again some writers seem to think it is). I have to *learn* about my habits, as about other people's, by induction and analogy ; and the premises of my induction are, that I remember doing so and so, or feeling thus and thus, on such and such past occasions. Or again, consider this case. You say you remember waking up and hearing heavy rain at 5 a.m. this morning. How do I verify or refute this ? I go out and see whether the grass is wet and the road muddy. But this would be an entirely irrelevant proceeding unless I had grounds for believing the generalization that whenever it rains heavily the grass is wet and the road muddy for several hours afterwards ; and my grounds are entirely derived from memory.

These considerations—if I may digress for a moment—have some bearing on the modern theory that all empirical judgments, including memory-judgments, are really judgments about the future. For if they were not (it is asked) how could they possibly be verified ? And if they could

not be verified, it is held that they would not be judgments at all, and the sentences in which we profess to be uttering them would be just nonsensical concatenations of noises. Now there seems to be a lacuna in this theory, at least so far as it concerns memory-judgments. Let there be a memory-judgment *p*. How am I to know *just what* future situation will verify or refute this judgment? Only by asking myself what future consequences will follow or probably follow if the judgment be true. But how am I to know just what consequences there ought to be? I cannot see how I can possibly know what they ought to be, or have any ground for a reasonable belief about it, unless I have some *generalization* to go upon, of the form 'if *p*, then *q*,' or 'if *p*, then probably *q*.' And this will always have to be an induction, the premises of which are themselves provided by other memory-judgments. If those memory-judgments are themselves predictions (as the theory maintains), we have the same difficulty over again. To verify them—and if we did not verify them we should have no business to use them as premises—we shall need still other inductive generalizations, about whose justification the same difficulty would arise afresh. To escape this, we shall have to maintain that some at least of our memory-judgments do *not* have to be verified by future events and are in no sense predictions. Some at least among them will have to be direct apprehensions of the past; so that they need no verification, and can themselves be used for the verifying or refuting of other judgments, *i.e.*, of those which are not apprehensions, but only beliefs or opinions or takings-for-granted.

There are three other criteria which we commonly use for testing the memory-judgments of ourselves and others: namely, *recency*, *vividness*, and *consistency*. It should now be clear that the first two (like the criterion of future consequences) are not ultimate, but presuppose the validity of other memory-judgments. First we will consider recency. We do think that a memory-statement about a recent event is in general more likely to be true than a memory-statement about a remote one. The criterion is a pretty shaky one, but we do use it with considerable confidence with regard

to reports of events which happened (say) less than 24 hours ago. But the difficulty about it is glaringly obvious. A recent memory is to be trusted more than a remote one. But how do I know that such and such a memory *is* a recent one? A recent memory is one which occurs shortly after the event. But what is 'the event'? Obviously not any event you please, but a certain specific event to which (and to nothing else) this memory-act somehow refers, or which it is about. I must know that this event did in fact occur; otherwise I cannot possibly know whether the memory which I am testing is a recent one or not. Also of course I have got to know that the interval between that event and this memory about it was of such and such a length and no more. And how can I know either of these things except by remembering? If I am to apply the test of recency to a memory of someone else's, or indeed of my own, I must have direct access to the past. Otherwise I have not the faintest prospect of discovering what is recent and what is not.

This difficulty concerns the application of the criterion. But there is also a difficulty about establishing the criterion at all. The proposition 'memories of recent events are likely to be correct' is obviously inductive, and the premises of the induction, such as they are, must themselves be *remembered* correlations. We must have *memory-knowledge* that on a number of occasions in which the interval between a *memory-belief* and its object has been short, the belief has been true more often than not.

It is obvious that the criterion of vividness is also established inductively. The generalization is that when there is a vivid memory-image, there is usually a past event corresponding to it. If it is reasonable to attach any probability at all to this generalization, I must be able to remember a number of past memory-images (some vivid and some not) and a number of past events which preceded them; and I must also be able to remember that the vivid images corresponded to the preceding events more frequently and more accurately than the faint ones did.

We must now consider the criterion of consistency. Surely there can be nothing inductive about that? And if

there is not, we can use it to test our memory-judgments without having to presuppose the validity of other memory-judgments in the process. We shall have to presuppose nothing but the laws of Logic, which are either self-evident or analytic. But it appears to me that when we say we are applying the criterion of consistency to our memory-judgments or other people's, we are not usually thinking of logical consistency at all, but only of *causal* consistency, if the phrase may be allowed. If I remember being in London at 4.15 on Wednesday, and you remember seeing me in Oxford at 4.17 on that day, we should commonly say that these two memory-judgments were inconsistent. But there is no *logical* inconsistency between them whatever. The compound statement 'H.H.P. was in London at 4.15 and in Oxford two minutes later' is not a self-contradiction. What it states is not logically impossible. It is only at the most causally impossible. And who knows whether it is even that? There may be some day a flying-machine which will cover 54 miles in two minutes. Of course this compound statement is exceedingly improbable. We have the strongest grounds for believing it to be false, and consequently for believing that one and only one of its two constituted statements is true. But the grounds, strong though they are, are only inductive: they consist of certain physical and physiological laws which are neither self-evident nor deducible from self-evident premises; they derive their probability (for it is no more than probability) from certain observations and experiments. And these observations and experiments are all in the past. At least it is only past ones which make it reasonable for us who are not physicists to believe in these laws. For we are not now engaged in observations and experiments such as would validate them; and even if we were, it would take us a very long time, so that we should have to remember our earlier observations and experiments while we were doing our later ones.

But suppose I remember being in London at 4.15 and you remember seeing me in Oxford at the very same moment? Is not this a logical inconsistency? Not if by

'I' and 'me' you mean a certain mind or self. So far as I can see (though I expect that some authorities would disagree with me) it is not *logically* impossible for a mind to be in two places at once, in so far as a mind can be said to be in a place at all. The suggestion that the same mind could simultaneously animate two organisms, one in London and another in Oxford does not seem to me self-contradictory. It may be very improbable, but if so its improbability is, I think, only inductive. But what if by 'I' you mean only a certain body? On the ordinary definition of 'body' it is I think self-contradictory to say that the same body is in two places at once; for the proposition that a body must be in one place at one time is then analytic. But if analytic, it is also trivial. For it remains logically possible that there might be the most intimate correlation between a group of sense-data in Piccadilly circus and another group of sense-data existing at that moment in Oxford, a correlation such that any alteration in the one group was always accompanied by a corresponding alteration in the other. This may be as improbable as you please, but it involves no self-contradiction whatever. And if there were such a correlation it would be proper to say that the two groups of sense-data were manifestations of a single *something*, which would accordingly be present in two places at once; though it would not be proper to call that something a single body. When one person says that he saw a body *A* in Oxford and another that he saw it in London at the same moment, it may be that they are both misdescribing a situation of this queer kind. And if they are, their judgments are logically consistent with each other, though formulated in unsuitable words. We could not say that the truth of either logically entailed the falsity of the other, and the falsity of either the truth of the other. We should indeed have strong inductive grounds for saying that the truth of either would greatly reduce the probability of the other. But here again our inductive grounds would rest ultimately upon other memory-judgments.

The position which we have now arrived at is this. There cannot be reasonable grounds for asserting or even for

suspecting the falsity of any memory-judgment unless the infallibility of *some* memory judgments is assumed. And we likewise assume the infallibility of some when we use various every-day criteria for establishing, or at least making probable, the truth of those which are initially doubtful ; such criteria as vividness, or recency, or the occurrence of verificatory consequences. And this is a way of stating that some memory is knowledge in the strict sense, *i.e.*, that it is a direct or immediate apprehension of past events or situations. Of course we must also admit, and indeed maintain, that much memory is only belief. And the beliefs might have various degrees of adequacy or reasonableness, according as the evidence for them is great or small. Some perhaps are very low-grade beliefs, having hardly any evidence at all. And some perhaps are merely non-rational takings-for-granted, where the taker has strictly speaking no evidence for the proposition which he accepts, but just adopts it without question as soon as it occurs to him (though of course the proposition may happen to be true none the less). I think there is even a stage below this, where we merely contemplate a familiar-feeling image and behave as if we were taking for granted, although there is no proposition before our minds at all. This might be called 'quasi-memory'—compare Professor Broad's 'quasi-belief about the sensum'—and we may suspect that this is the highest that non-human animals attain to. Finally there is the stage where we merely behave as if we remembered, without having even an image before our mind, still less a proposition. This might be called 'memory in the Behaviouristic sense.' It is perfectly compatible with the utterance of long and complicated concatenations of noises, and with the production of large masses of handwriting, as for instance in an examination.

If some memory is knowledge, as we have contended, we are at once confronted with a problem. How are we to account for the existence of memory-images ? In memory-*belief* we should indeed expect to find them ; it is by contemplation of them, perhaps, that we get the evidence (great or small) upon which our belief is based. But where we are

directly apprehending the past itself, in memory-knowledge, what need is there of images? It will not do to suggest that they are present but unnecessary, being mere residues of an earlier stage of evolution at which only quasi-memory was possible. For it seems clear that we *could* not have memory-knowledge without some sort of image. What we might be tempted to describe as 'imageless memory' is really memory in the purely practical sense of remembering *how* to *do* so and so. The doing might of course consist in uttering words; and the words might make up a sentence which did *de facto* correspond to a past situation; but we should not be remembering that situation (in the cognitive sense of 'remember') though other people might think that we were.

To solve this problem two different theories may be suggested. One says that the so-called image is just the past event itself, the object of our memory-knowledge; the other says that it is a kind of means or instrument, which brings us into relation with such and such a past event, just as in conceptual consciousness a word or other symbol brings us into relation with the universal which is the object of our conceiving. We will now briefly consider these two theories.

The first is as queer as it is attractive. The queerness however, is partly due to our habitual use of the word 'image,' which really begs the question against the theory. For by 'an image' we usually mean something which represents something else. But in this view the image does not represent anything. It is the past event itself *in propria personâ*. And partly the queerness is due to the ambiguity of the word 'present,' as Prof. Broad has shown. We tend to think that the image must be numerically different from the event remembered, on the ground that the image is present and the event remembered is past. But 'present' may either mean 'now existing' or it may mean 'presented to consciousness.' And perhaps the image is only present in the latter sense, not in the former. And if so, it may perfectly well be the past event itself. Nothing prevents a past event from being presented to

consciousness, though it may be a contradiction to say that a past event could be present in the sense of 'now existing.'

But there are more serious difficulties than these. The most important arises from what would ordinarily be described as the *inaccuracy* of memory-images. Suppose I remember the High Street in Oxford. If I do, I am certainly acquainted with something having colour, extension, shape, and internal pattern. This is ordinarily called a memory-image. This theory would say that it is really a past sense-datum (a complex one of course) which I was once acquainted with in the past, and am now being re-acquainted with. But the trouble is that there seem to be various differences of character between what I am now acquainted with and the sense-datum which I was acquainted with before. What I am now acquainted with is far less vivid than the sense-datum was. Its colour is altogether fainter and washier, and the internal colour-contrasts between its parts are far less marked. Moreover, what I am now acquainted with is far less complicated than the sense-datum was. All sorts of details are left out : chimneys, windows, dogs, motor-buses, pedestrians, bicycles, clouds—all these are either omitted altogether or very greatly simplified. What I am now acquainted with is a pale and poverty-stricken entity, like a highly schematised black and white sketch. Moreover I cannot hold it before my consciousness ; it is always twisting and changing and flickering. But the original sense-datum was rich, complex, full of bright colour and crammed with internal detail ; and so long as it endured at all, it was stable and unflickery. And I do not think it can be said that the image differs merely negatively from the sense-datum, in that it does not possess a number of features which the sense-datum did possess. There is also a positive difference in respect of form-quality and pattern, much as there is between a pencil caricature and the face which it is a caricature of.

Thus if we insist on saying that the image is numerically identical with the past sense-datum, we shall have to hold that the past sense-datum when I am remembering it appears to have qualities which it did not really possess ; or

else we shall have to introduce the notion of 'points of view in time,' and say that from my present point of view in time it does actually possess qualities which it did not possess from that earlier point of view in time at which it was located when I originally sensed it.* Neither of these alternatives is very plausible, and I suspect that the first (the 'appearing' one) is even self-contradictory.

Further, not only do these differences exist between the image and the sense-datum; we also know that they exist. I, who am acquainted with the image, *know* that there is so to speak something wrong with it; within limits, I even know *what* is wrong with it. For instance, I can say 'in the original view there were far more chimneys and windows than there are in this image,' and the like. How is this to be explained? Shall we not have to say that I have direct access *both* to the sense-datum as it now appears *and* to the sense-datum as it originally was; or both to the sense-datum as it is from the present point in time, and to the sense-datum as it was from an earlier point in time, when I first sensed it? But if this *double access* be admitted, I see no theoretical advantage in insisting on the numerical identity of the image and the past sense-datum. Why not say that there are two numerically and qualitatively different entities, (1) the image which exists now, and (2) the sense-datum which existed earlier; that we are directly aware of both, and can to some extent compare them?

There is another curious difficulty in this attempted identification of memory-images and past sense-data. When I say that I am remembering the High Street in Oxford, what exactly is the object of my memory? Is it the High Street as a whole? But that is obviously not just one sense-datum. On a Phenomenalistic theory it would indeed *consist* entirely of sense-data actual and possible†; but it would consist of many thousands or perhaps millions of sense-data—namely all those which anyone could sense

* Cf. Professor Broad. *The Mind and its place in Nature*, Ch. 5.

† On a non-Phenomenalist theory, the object would have *insensible* constituents as well as sensible ones. And the insensible ones could also be *unimagable*. And then where should we be?

who looked at it from any point of view. (Perhaps the number of them is even infinite.) But when I remember it, do I contemplate thousands or millions of images? Clearly I do not. I contemplate only two or three at most. And if I did contemplate more, they would not fall into one specious present; and so I should have to *remember* the earlier ones while I was inspecting the later.

It may however be said that we do not really have memory-knowledge of the High Street as a whole; that we have memory-knowledge of only *some* of the sense-data which compose it, and memory-beliefs about the rest. Let us then confine ourselves to the memory of *one view* of the High Street, say the view looking westwards from Queen's College. Even here we have a difficulty; it is something like those which arise from the celebrated *Type-Token* ambiguity. When I am said to remember 'the view' of the High Street from that spot, is it just one single past sense-datum that I am aware of? If I had only visited Oxford once, it might be. But that is not my own situation. When I say that I remember the view from that spot, what I remember is not just one particular having a determinate date in time. What is it then? We might say that it is a *class* of sense-data, viz., the class of *all* the sense-data which I have ever sensed from that particular spot on all the thousands of occasions when I have been there. But is even this quite right? I certainly cannot *enumerate* the different members of the class. What I seem to be remembering is rather that there have been many sense-data satisfying a certain description. We may say that I am remembering a class if we like. But the truth is rather that I am remembering *that there is* a class of a certain sort. My memory-knowledge is here knowledge of a *fact*, not of a particular; whereas in the ultra-Realistic theory which we were discussing it ought always to be knowledge of a particular—for a memory-image is a particular, and the object of memory-knowledge was alleged to be identical with the memory-image. And it is a very queer sort of fact too, namely that sort of fact which verifies an existential proposition.

If I am right, then, there is no good ground for holding that the memory-image is identical with the past sense-datum. We might, however, suggest a modified form of the Identity-Theory. It does not give the 'Identifiers' all they want, but it does come fairly close to their view. When I know that my image is inadequate (we might suggest) what I am really knowing is that I could if I tried replace my present image by *another image* different from it in assignable respects. Thus in the case of the High Street, I might know that I could replace my present sketchy image by another and more detailed image, containing more windows and chimneys and more numerous colour-differences. This modified theory would be analogous to a well-known theory of perception, namely to that which regards a material object as a complex or family of sense-data and sensibilia. That theory of perception permits us to distinguish between a 'good' view of the object and a 'bad' or inadequate view of it; and yet this does not imply that we are ever acquainted in perception with something which is not a sense-datum at all. We do not detect the inadequacy or badness of a certain sense-datum by comparing it with something which is not sensible at all; we do it by reflecting that we could, if we liked, sense other sense-data of the same family which are more vivid and more differentiated than this one is.

So too with the detection of the inadequacy of a memory-image. There is no such thing (we shall say) as an isolated memory-image; or at least if there is an isolated image, it will not be a *memory-image*. A memory-image, we shall have to maintain, is always a member of a group or family of images, a group such that the members are progressively more and more vivid and more and more rich in internal detail. In virtue of this fact, the group will have an ordered structure, and its members can be graded as better or worse, less or more inadequate. We shall then say that in most of our every-day remembering, we are acquainted only with the inferior or more inadequate members of the relevant image group. But we always *could* be acquainted with more vivid and more detailed members if we tried. And

thanks to our knowledge of this possibility, we are able to *detect* the inadequacy of the image which we are actually contemplating at the moment.

We might then maintain that 'the real past event' is to be identified not with any one memory-image, but with the whole ordered group ; that is, with the whole group of all those images which would commonly be said to represent it. Or we might hold instead that the real past event is to be identified with the *limit* of the series of progressively more and more detailed and vivid images, but not with any one member of the series, nor with the series as a whole ; and by progressing along the series from worse images to better and better ones we might be able to know in what direction the limit lay, even if we could never be actually acquainted with the limit.

I am not sure whether a tenable theory of memory-knowledge could be worked out on these lines. Possibly it could, at any rate with regard to the remembering of sense-data. But there do seem to be certain difficulties in it. It is clear that in remembering a past event we do not usually trouble to run through the whole group of images which on this view either constitute the event or approximate more and more closely to it. It seems likely indeed that we *never* run through them all, or even never could. The most we actually do (and that not very often) is to run through three or four images, each more vivid and more detailed than the last. Even the best one that we get to is still schematic and inadequate, and is recognized by us to be so. Now what sort of recognition is this ? How do we recognize that there are other images to be had which are better—that is, more vivid and detailed—than the best one which we have actually reached ? It seems clear that on this theory the so-called recognizing can only be *inductive*. We have found that in our past rememberings we have been able to get progressively better and better images by making an effort (or rather perhaps by making our mind blank in a suitably expectant way) ; and we conclude that we could do the same in the present case too, if we tried. But this conclusion can only be inductive. And therefore it cannot

be knowledge, but only probable opinion. But *is* that all that is? I seem to be as certain as I can be of anything that my present memory-image is defective. Not only so : I seem to be certain that all the images which I ever have been acquainted with, by whatever effort, have also been defective in some degree, though no doubt many of them have been considerably better than this one.

A further curious point arises on the first form of the theory, which identifies the past sense-datum with the whole group of images which would commonly be said to represent it. This is that the past sense-datum must as it were multiply itself after it has happened. For where there was originally just one single sense-datum, there is now at the time of remembering a whole group of images. How can a group of particulars be identical with one single particular? We shall have to say that the original sense-datum contained this multiplicity within itself from the beginning, though in a concealed way ; thus the brightly coloured and variegated colour-expanse which I am now sensing must conceal within itself a whole series of dimmer and paler and less variegated constituents which I am not now aware of at all, though later on, when I remember it, I shall be aware of some of them. It will have to be like some strange kind of nest of Chinese boxes. This seems extremely paradoxical. And I think we shall be well-advised, if we adopt this kind of theory at all, to prefer the second form of it, which identifies the past particular not with the whole serially-ordered group of memory-images which are commonly said to represent it, but rather with the limit of that series.

In view of these difficulties it is well to consider quite a different theory which may be held as to the relation between memory-images and the events which we remember. According to this theory (which I think is substantially Prof. Stout's*), the image and the event remembered are numerically different entities, and in memory-knowledge we are knowing both of them. What then is the function of the image? Its function, we reply, is *directive*. It gives a

* *Studies in Philosophy and Psychology*, Essay 16. (Cf. also Essay 8.)

specific direction to our act of memory-knowing. It directs our attention upon just this part of the past as opposed to other parts. This function is very like that of words and other symbols in thinking. When I think, I am usually acquainted with various words, whether heard, or seen, or imaged. But something more is present to my consciousness, namely various universals, or whatever it may be that I am 'thinking of.' The words however are not otiose. On the contrary they perform an indispensable function. They serve to direct my attention upon certain universals (those which they are said to mean) and to avert it from others.

The theory may be amplified by giving it a Bergsonian turn, as follows. There is a sense, it may be said, in which we never forget anything, but are always remembering every event that we ever experienced. But as these events are so numerous and so various, we cannot possibly attend to them all at once. And even if we could, it is biologically essential that we should not. If we are to solve any of the problems which confront us, whether theoretical or practical, it is indispensable that we should be clearly conscious of a few relevant past events (at least if the problem is too difficult to be solved in a merely habitual way). But it is equally indispensable that we should *not* be clearly conscious of all the other past events which we have experienced in the course of our lives. For they are irrelevant to the problem in hand, and their inconceivable multiplicity and variety would be hopelessly distracting, indeed paralysing both to thought and to action. Accordingly we have memory-images to prevent us from remembering too much ; they shut out from our attention the far greater part of our past, leaving only that little bit which is relevant to the present problem, whatever it may be. Thus they are part of that machinery of forgetting whose physical organ, according to Bergson, is the brain.

The difficulty about this theory is that it is apt to use the word 'remember' (likewise the word 'forget') in two different senses. I remember everything that I ever experienced. Yet in another sense I don't ; I remember only those past happenings to which my present image

directs my attention. Again, in one sense of 'forget' I never forget anything ; in another, the whole point of the image is to make me forget *almost* everything—everything in fact except that little bit of the past which is at present relevant. This difficulty however is merely terminological, and can easily be avoided. We have only to reserve the word 'remembering' for that attentive knowing of a small part of the past which is made possible by the memory-image. And for that sense of the word 'remembering' in which we are said to remember the whole of our past always we can substitute the word 'retention.' Or we can say that we have a *permanent contact with* the whole of our past, both with those parts which we are now remembering and with those which we have now forgotten.

This theory (of which there could, I think, be several variants) concerning the function of images in memory-knowledge, seems to me to be the most plausible one. I should like, in conclusion, to insist that it is quite different from the old-fashioned Representative Theory of Memory with which it might perhaps be confused. According to the Representative Theory we do not know the past at all. The only knowledge we have when we are said to be remembering is acquaintance with the present image. And we then proceed to take for granted (*not* to know) that there was a past event resembling it more or less. It could only be taking for granted ; it could not possibly be rational belief or opinion, for we could not have the faintest *evidence* for thinking that there had been a past at all, still less for thinking that it contained an event of just this sort. The present theory is quite different from this. It says that on some occasions we know *both* the image *and* the past event to which the image directs our attention. This is what happens in memory-knowledge. And since we do have some memory-knowledge, we can use this knowledge on other occasions to form memory-beliefs and opinions. And those beliefs can now be rational. For now we have got some evidence as to the existence and character of past events ; though no doubt much of what we call our remembering is in fact no better than irrational taking-for-granted.

II.—By J. LAIRD.

MR. PRICE says that "in the strict sense" memory-knowledge is a "direct or immediate appreciation of past events or situations." This he contrasts with memory-belief, and, on the mental side, he frequently speaks of memory-judgment, sometimes of memory-cognition and once of a memory-act. In most cases he uses the simple term "memory-object" for that which is known, believed, judged or cognized in memory.

It would commonly be supposed, however, that what is judged, believed or "known" is a proposition. Hence the natural inference would be that, according to Mr. Price, the "object" of memory either is or resembles a proposition, infallibly grasped in "knowledge," fallibly grasped in "belief"; and it may very well be true that much that is called memory may be correctly described as the affirmation of a memory-proposition. I am very doubtful, however, whether such language describes either all or most of what is fundamental in memory.

The most important sense of memory is the memory of some particular past event that the person who remembers has formerly observed and is aware of having observed. If we keep to this case, and neglect Mr Price's excursion into the more complicated theory of something like the High Street in Oxford that has been repeatedly observed, we should conclude, I think, that the apprehension of a particular event in our noticed past is analogous to the apprehension of a sense-datum rather than to sense-knowledge or to sense-belief. The most striking difference between present and past, on the one hand, and future, on the other hand, is, we should say, that we have sense-data and memory-data (which are particulars) and that there are no futurity-data which are particulars.

Now we should not normally describe the process of sensing as either sense-knowledge or sense-belief, for we

should normally say that sense-knowledge, if it exists, is based upon but is not simply identical with sensation (and we should continue to discriminate between sensing and sense-knowledge even if both were "infallible"). I submit that we should similarly discriminate between the apprehension of a memory-datum and memory-knowledge or -belief.

A certain confirmation of this opinion, I think, may be obtained from consideration of the "specious present" (although this term seems to me to be so dubious a description of fact that I hesitate to regard it as very important). The "specious present," I am informed, is a stretch of time having appreciable duration. Therefore even if the whole of it is "present" it contains earlier and later portions. Therefore (I suppose) during the earlier part of it the later part is apprehended as present, and during the later part of it the earlier part is apprehended as present. The first part of this inference seems to me to be absurd, the second, viz., that something which has *passed* appears to be present, not past, is conceivable. Let us, then, tentatively accept the second part of the inference. In that case what we have to consider is the relation between something, on the one hand, that has passed although it is speciously present, and something, on the other hand, that has passed *away*, being no longer even speciously present but quite definitely past. In the former case there is apparent continuity within a shifting present, in the latter case there is a definite breach of continuity *a parte ante*. It is not plain, however, why the existence of such a retrospective gap should alter the fundamental analysis, or why the passed part of a sensum should be a "datum" and the apparent past never a "datum."

Mr. Price has supplied cogent (indeed admirable) arguments in favour of the view that, in the last resort, nothing but memory can be memory's effective critic. He therefore infers that "some memory is infallible" (and consequently is memory-knowledge).

I do not see that he has proved this conclusion. If any particular memory is infallible, I should like to know

what it is. If no particular memory is infallible although, in some other sense, "some memory is infallible" I should like to know what this other sense is.

As it seems to me, all that Mr. Price's argument proves is that wholesale distrust of memory is absurd. From this it cannot be inferred that any particular memory is infallible, and Mr. Price's explanations at the end of his paper do not seem to me to ease the situation. He there argues that memory-images perform (a) the function of blinkers by shutting out the irrelevant and keeping one's eyes on the road; (b) the function of spectacles by clarifying what is (that is to say, what *was*) on the road, and that, as a result of (a) and (b) combined we do sometimes know for certain that such and such a particular image does direct us towards a particular past event of which we have infallible and (as I gather) independent memory-knowledge.

In other words, Mr. Price seems to demand *two* infallibilities, infallible guidance on the part of certain memory-images and infallible knowledge of certain past events. This seems to me to be asking for a lot; but if his view were (as I think it isn't) that the whole of our past is in some sense infallibly retained, we should have a still more difficult view viz., that what is said to be infallibly known is, for the most part, not known at all because forgotten.

It is true, I think, that if and so far as there are memory-images (so-called) which are distinct existences from any past event (either because such images are present phenomena or for some other reason) *such* images must have the sort of function described by Mr. Price unless they are mere encumbrances. In the language of the late Professor Morrison of St. Andrews we should call them "adjunct" or "adjuvatory" images. Nevertheless although the illustrative services of adjunct images may be considerable, these entities may be very embarrassing, obtruding themselves in place of the past when our interest should be in the past and not in them.

Some further remarks on this matter of memory-images seem to be desirable.

Most people seem to hold that an image *ex vi termini*

is a present event and consequently cannot be literally identical with any past event whatsoever.

If so (as Mr. Price properly notes) the question arises whether the term "memory-image" is not, in fact, a misnomer. May it not be the case that what is called a "memory-image" is a mis-description of a memory-datum which is past, not present? Such a datum, if past, could not be an image if every image must be present, but it might easily be called by a wrong name.

Here the difficult and important question is how far we can say with confidence whether anything either is or even appears to be present.

Presentness, we may agree, is a fundamental note of our experience, but there is room for endless controversy regarding what does and what does not belong to anyone's "experience" at any given time. Suppose, however, that we can distinguish pretty clearly between so-and-so's process of experiencing and (in Mr. Price's language) the "object" of any such process.

In that case the experiencing plainly has the flavour of presentness, and the object need not have it, for there is no contradiction (say) in remembering *now* what does not now exist. As regard the object, we should say that if it appears to be simultaneous with the process of experiencing it, it appears to be present; and that, if there is no good reason for holding that this appearance is delusive, there is no good reason for denying that what seems to be present really is present.

I suggest, however, that this affair is much more obscure than is commonly supposed. There are plausible reasons (to say the least) for holding that the sun I see now is eight minutes old; that the Orion I may see now is very much older; and, in general that there is always a time-lag, although perhaps a short one, between any perceived object (if a part or a phase of a physical object) and the perceiving of it. I think, indeed, that it would be much more accurate to say "Does not appear to be non-simultaneous" than to say "Appears to be simultaneous." What we find is that we are *now* observing *this*. Further enquiries may

always be necessary regarding the date of *this* relatively to the "now" of the mental process of observing.

With regard to images, the obvious conclusion would be that all we can safely say is "I am imaging this now" and not "this image is now existing." Indeed it seems to me that the question of the time at which an image exists (or existed) is, in general, indeterminate. In certain cases there may be sufficient reasons for believing that such and such an "image" is a present reconstruction. In many cases, on the other hand, it would be reasonable to hold (with Coleridge) that the "image" is past but dateless and so to say homeless; or, again to discriminate between "free" and "memory" images on these lines. Moreover, examining the instance of dream-images, have we any right to say that these appear to be present existences? Is the date of them really determinate? Does it, in general, even seem to be determinate?

If anyone were to say that remoteness in time is analogous to remoteness in space, that waking images as well as dream-images at least appear to be *near*, and that consequently it is futile to deny that images appear to exist *now* (or approximately so) I should reply that the position of images in any sort of physical space is surely very indeterminate indeed, and that the question of *where* the image appears to be is essentially vague, unless, indeed, the image appears to be projected upon some neighbouring surface.

Mr. Price seems to be pre-occupied with the question whether (as I should put it) a memory-datum can or cannot be literally identical, in whole or in part, with an earlier sense-datum.

Objection, I think, may reasonably be taken to this way of stating the question, for it might be simpler to ask whether the memory-datum could or could not be literally identical with any part or phase of the past *event*. If a sense-apparition were the whole of the event with which we were acquainted through sense, Mr. Price's question would be the proper question to ask. If, however, sense-data may be selections from the relevant event, or, in Mr. Price's language, members of a family, it would be quite possible

for memory to select as well as sense, even if there were characteristic differences between memory-apparitions and sense-apparitions.

Let us suppose that the correct analysis of sense-perception includes the apprehension of a sense-datum on which the entire perception is somehow based. In that case the sense-datum either may or cannot be literally a part (or phase) of some physical object or physical event. If it cannot be such a part, some sort of representative theory would seem to be inevitable, and we need not boggle over a representative theory of memory if we are constrained to adopt a representative theory of sense. If, however, it *can* be such a part, what prevents us from holding that sense and memory may both involve authentic selections although they do not make the same selections? (Mr. Price's "families" are so enormous that he can house any number of bashful members as well as of more aggressive ones.) Each would select what it can select, although the selections need not be the same. What would be important would be that the event sensed at time t_1 by a subject S could be remembered at a later time t_2 by that same subject S , although the total event was not exhausted in either apprehension.

If this were the truth there would not, I think, be any special difficulty in accepting Mr. Price's view that we *know* that every memory is "defective" in comparison with sense. In reality, I think, we should not accept this view without reservations. But suppose there were no reservations. In that case we might very well obtain the required "knowledge" by a simple comparison between present sense-experience and *any* memory we could conjure up at the time of sensing. The contention would be, quite simply: (a) "This paper in front of me does not flicker, has clear black marks upon it and (if you know what I mean) has a kind of indefinable 'body' to it"; (b) "I can never obtain a memory that has all these characteristics in combination although some percepts flicker more and are vaguer than some memories."

It may be said: "Surely you are arguing very oddly.

If by hypothesis you cannot remember an event unless you personally have previously sensed that event, what could your memory-datum *be* except either a former sense-datum or some pallid extract from the same ? ”

This objection is not quite accurately stated. I am restricting my discussion, for simplicity's sake, to the memory of a past event, and to events of the kind that may be sensed. In reality we may remember anything of which we were formerly aware, whether or not this awareness was sense-awareness, and our memories may be important rather because they help us to investigate the character of continuants than because of the insight into particular events that they afford.

Let us waive the point, however. In that case I should argue (*a*) that even if a memory-datum were a pallid extract from a former sense-datum and, so to say, a deflated member of a sense-family, the faintness and languor of the memory-datum would never disprove *all* identity between the extract and the meat ; and this would be true even if Mr. Price were correct in his assertion that there is always something more than mere omission in certain features of the characteristic difference.

It should be remarked, however, (*b*) that what is usually held to be a requirement of memory, viz., that we can remember that only which we have formerly observed is a general statement that cannot accurately be applied to every point of detail. There are numerous instances, from the literature of hypnosis and from other such sources, in which it would seem that we can remember more accurately than we originally perceived. We noticed, *e.g.*, that Brown was wearing a dark suit with a faint stripe. With an effort we may be able to remember more about the stripe and the colour and the cut of the suit than there is any reason to suppose that we noticed at the time. I do not say that instances of this order support one theory of memory rather than another, but I do say they are part of our evidence.

If, however, the memory of every event of the sensible order necessarily presupposed previous sense-experience

of that event, and if this requirement applied to all points of detail, there need still be no great mystery made if our memory-selections are authentic and yet are in some respects different from sense-selections which are also authentic. We should have to say simply that previous sense-experience was a precondition of memory-experience when sensible events were in question ; and this might be ultimate fact just as the absence of futurity-data is an ultimate fact.

III.—By J. N. WRIGHT.

I MUST preface this paper by explaining that by mutual arrangement Mr. Laird and I agreed that we should comment on the first paper in the Symposium independently. That is why practically no reference is made to the second paper in what follows. I had, however, seen Mr. Laird's paper ; but I have, to all intents and purposes, ignored it.

On some essential points I find myself sympathetic towards Mr. Price's general views. I agree that we must have some memory-knowledge. I also agree that the image does not appear to be part of, or a phase of the past event. But in many ways I must confess to a certain bewilderment at Mr. Price's paper. I am very puzzled about some of his statements. They may be loosely expressed ; but they are puzzling none the less. I had, previous to this paper, understood that Mr. Price held that the objects of knowledge were facts. In his paper to the Aristotelian Society last summer he writes " The chief difficulty is that in the strict sense of the word ' know ' we know very little indeed. We know certain facts about sense-data and images and about our own mental processes. We know certain mathematical and logical laws. But do we in the strict sense know anything more ? " (Proceedings Arist. Soc., 3rd June, 1935. " Some considerations about Belief.") In this paper he writes of the remembering of " events," where he means that past events can be known in memory. He also discusses the remembering of a " view."

Further, he gives the impression towards the end of his paper that his theory is identical, or partly identical, with that held by Professor Stout. But Stout expressly declares that *facts* alone can be known, although he means by fact, " proposition," and he holds this view because, in memory, the actual *event* cannot be recalled. Stout writes " To know, is always to know that . . .," it is to know, for instance, " that something is or exists or occurs," or " that something is of such and such a nature," or " that it is so and so related

to something else." Now a proposition, understood in this sense, is never a particular existence or occurrence . . . " (*Studies in Philosophy and Psychology*, p. 369.) But whereas a fact, for Mr. Price, is not a proposition, for Mr. Stout it is, so that I find it difficult to tell which theory Mr. Price is professing to hold.

That the theory outlined above is still held by Mr. Stout I have no doubt. It is reiterated fully in the last Edition of his *Manual of Psychology*. In his discussion on Cognition he writes, "The full object requires to be expressed in the form 'that something is or is not so-and-so.' This is most clearly seen when thought takes the determinate form of believing. We cannot believe the moon, we must believe something about it. Similarly when we are said to perceive or *know* (italics mine) something this may be taken to express the fact that we perceive or know that something is the case." (Stout, *Manual of Psychology*, p. 100, 4th Edition.) And again, "Events begin and cease ; but what the mind apprehends is not the mere event as it occurs, but the 'fact' that it occurs or the fact of its occurrence. Now though the event begins and ceases in time, the fact of its occurrence does not thus begin and cease." What, then, appears to be certain is that whereas both Mr. Price and Mr. Stout may agree in holding that the function of images is directive, they cannot hold identical theories of memory-knowledge, for, in the case of Mr. Price, knowledge does not include any reference to propositions, whereas on Stout's view, there cannot be knowledge without propositions. The fact that Mr. Price and Mr. Stout may disagree about the question as to "what a proposition is," as is most likely, only complicates the matter further. This, then, is one of my difficulties in discussing the paper. And I only hope that in raising it, I am not raising a false trail, for it may be "looseness of expression."

But when we consider the matter, it is extremely doubtful whether Mr. Price's difficulty is merely one of expression. There seems to be no division of opinion that events occupy time and that events have passed away. They are essentially transient. But there is not the same unanimity about

facts. In one important sense facts are timeless, and this Mr. Price himself recognizes. In his criticism of Mr. Wisdom's account of the difference between facts and events (*Mind*, vol. xlv, No. 175), he writes, "Secondly, is it not odd to say that a fact is *at a time*, or even, *happens at a time*?" Suppose I began sneezing at exactly 4 p.m. yesterday. Should we say "at 4 p.m. yesterday it *was* a fact that I began sneezing yesterday"—and now, presumably, it is not a fact any longer? Clearly we should not. We should say "It *is* a fact that I began sneezing then, using the 'is' in a timeless sense."

Now if it still is a fact that I began sneezing yesterday at 4 p.m. and if it is this fact which still is, and which I am now remembering, and if I can know facts only, then I cannot see that Mr. Price has left himself any loop-hole for knowing directly the past event. What I know are facts, and facts are not past. There seems to be no escape from this conclusion.

Mr. Price may reply that in the same article he suggested that in the end facts must be reducible to events, because, in his opinion, it is incredible that the world should "contain *both* facts *and* events, in the sense in which it contains both cats and dogs." On this statement I shall make but two comments. As Mr. Price is himself well aware, the history of philosophy is filled with statements that are incredible to one person and credible, and, indeed, obvious to another. Next, this way of stating the point really prejudges it, for it presupposes that facts are as like events as cats are dogs, and it is always open to reply that there are facts because there are certain types of events, that the two are very unlike each other, and that the relations between them is not a bit like that which holds when we enumerate particulars like cats and dogs.

But even so, I am not sure how far the theory that Mr. Price outlines would meet the special case of memory-knowledge and square with his other expressed views. He suggests in that article that a fact may be an "event or set of events in its capacity of making propositions true or false." And he continues ". . . Thus 'it is a fact that A is

B' might be equivalent to 'there is an event or set of events such that the proposition A is B is true, and A is B is false.' " Now suppose that we say, as is suggested that we should say, "it is a fact that I sneezed yesterday at 4 p.m." If we take the suggested substitution of set of events for fact, we get the following. "There is a set of events such that the proposition 'I sneezed yesterday at 4 p.m.' is true." But then we are faced with the difficulty that the events no longer are. They have passed away. Hence we ought to say, "There *was* a set of events such that the proposition 'I sneezed yesterday at 4 p.m.' is true." I am not sure that Mr. Price is not on the horns of a dilemma. Either he has to say that he is remembering something which happened yesterday, *i.e.*, a set of events, in which case, he is not knowing facts, as, *ex hypothesi*, (at any rate, on one of his statements) he has to say, or, if he is knowing facts, this fact is timeless, namely the fact that he sneezed yesterday at 4 p.m., and this is not reducible to the set of events.

But suppose that Mr. Price really holds that I both can know and remember events, and that the statement that I quoted contrary to this, namely, that facts are known, was a lapse of expression on his part. Presumably he would agree that in knowing the event he was having what Mr. Russell calls "knowing by acquaintance." Knowing by acquaintance would be direct apprehension of the event and in this, he would be apprehending directly a particular. But it surely cannot be the case that in remembering this event, I am immediately acquainted with it, in the same sense of immediate acquaintance, as I am when I am directly confronted with it in the same moment of time. For what I am then knowing is both the image, and the past event, and the fact that this image refers to this past event. This is a very odd sort of acquaintance, and I can only suggest that in order to deal with the situation, Mr. Price would be compelled to admit different *kinds* of knowledge, in addition to knowledge of different sorts of objects.

I raise these points at the outset because I have difficulty in finding out Mr. Price's theory of knowing, and this

difficulty is carried over to his theory of memory-knowledge. The trouble may, of course, be my own obtuseness.

Mr. Price's main concern in defending the case for memory-knowledge is to show the inconsistency of those who hold that although I can rationally believe propositions about the past, I can never strictly know the past. I think that he has certainly shown the inconsistencies in holding certain propositions. It is inconsistent to hold that I know that my memory has often deceived me and that I cannot rely on any memory-judgment, for the very obvious reason that I am asserting that some memory-judgments are infallible and, at the same time, that they are all fallible. It is also inconsistent to hold that induction is rational belief (as against mere belief, or opinion) and at the same time to deny that we can in any sense know the past. The reason is that the essence of an inductive argument is that it proceeds from examined instances to unexamined instances, or to a generalization, and we must be able to rely on our data. But the exposing of these inconsistencies does not establish the memory-knowledge of an event.

It is desirable, therefore, to look at some of the reasons why memory-knowledge is suspect. One of these is that we do feel less certain about memory-judgments than we do about judgments about sense-data, mathematical propositions and logical propositions. I do not pretend to know what Descartes meant by the "clearness" of an idea, nor do I want to be led into a discussion on Cartesian exposition ; but Descartes certainly did seem to be stressing what is a fact about knowing when he said that some ideas are "clearer" than others, and it is odd that in endeavouring to make his meaning plain he referred us to immediate experience, and that the clearness of immediate experience is shared by logical propositions and mathematical propositions. These are precisely the sort of object that we feel that we cannot doubt, whereas we all do feel a doubt about memory-judgments. I have used the word "feeling," following Bertrand Russell (*See Problems of Philosophy*, p. 121), and some may cavil at the word, but I am not concerned with what some present-day philosophers call the "noise,"

or John Locke, with more adroitness, "breath formed into a sound," but with what is a fact, namely, that there is something which we feel that we cannot doubt about some things which we say we know, and that this "feeling" is not possessed by most of our memory-judgments, and certainly not by what I should call the remembering of an event. I suggest that even Descartes did not really doubt his memory because it sometimes deceived him. It certainly did no doubt deceive him, (possibly not very often), but it also lacked that "clearness" which was one criterion of knowledge. I cannot believe that the questions about memory would have been so stubborn if we did not "feel" that memory-judgments did lack something. And I have no doubt that this is the reason why Mr. Price does not give instances of memory-knowledge of events, but confines himself to arguments. What they lack, as I shall urge later, is that which forbids us to conclude that we are knowing a past event.

Moreover, when we scrutinize the matter, we find that whereas there is no difficulty in holding that what we call "immediate experiences" are present to the mind, and what Mr. Broad happily calls "timeless relations of certain timeless and abstract objects," there is difficulty about holding that past events are present to the mind. The difficulty is that although the past event is "presented," it is "presented" in a very strange garb, and, also, it is "presented" but not "present." If knowledge is direct apprehension, as Mr. Price urges that it is, then memory-knowledge of a past event is a curious sort of direct apprehension, and I am not satisfied that Mr. Price has done much to clear the matter up, beyond making the assertion that it is. Nor am I satisfied that Mr. Broad has given the correct explanation when he says that "past events exist henceforth eternally." (*Mind and its place in Nature*, p. 263). It is this difficulty which Mr. Stout advances as one of the reasons for urging that we know "propositions," in his sense of the word, and not events, as such.

These two difficulties, of themselves, seem to be weighty enough to question the statement that "on some occasions we know both the image *and* the past event." Let us,

however, take an instance of an event and examine what happens in memory. Let us take an instance of a rattle of thunder. Presumably we could not now know the past event in memory unless we had previously known it when we were not remembering it. But in the strict sense of the word "know," we do not know a rattle of thunder, as an event. What we know is a certain sense-datum, with a given quale, intensity and protensity. This, I take it, Mr. Price would himself admit. When we say that it is a rattle of thunder we may be mistaken. It may be a bombardment. The assertion that it is a rattle of thunder is made on inductive grounds, and induction, at best, is not knowledge. Hence, at the most, we know a sense-datum and have "rational belief" in a proposition, namely, "This is thunder," or "It is thundering now."

This being the case, the event which Mr. Price is knowing is the occurrence of a sense-datum, and it would be this event which he is knowing when he is remembering. But it surely cannot be the case that when this event is remembered, the sense-datum itself is being known, for it is a matter of inspection that there is no sense-datum there to be known. There is, at the most, an image.

Certain alternatives then remain open. It may be that what I now know directly in memory is my belief that I was having a certain rational belief in a proposition, that is, that the directness of apprehension is of a certain act of believing. The act of believing is certainly an event, and it may be that I always do remember that this occurs, and that the image somehow directs me to this. This seems to be more acceptable than the view that in memory I am directly apprehending a sense-datum.

The theory would then be as follows. When I assert that I know an event, say a rattle of thunder, what I know (on Mr. Price's theory of knowing) would be the occurrence of a sense-datum of a certain sort and my believing that a certain proposition is probable. I cannot literally be said to know the rattle of thunder, because, at best, I can have only rational belief in this. I can, however, know the sense-datum and the act of believing. When I remember,

I do not know the sense-datum, but what I do know is "My believing that this is a rattle of thunder," that is, I know directly the original act of belief. This is the past event which is known in memory. This seems to me to be more plausible than asserting that I know both the image and the original sense-datum as events at one and the same moment of time.

There is, however, on the theory as I have attempted to state it, still one point on which both Mr. Price and Mr. Broad feel no difficulty, and which is part of the crux of the whole matter. The immediate object before the mind, when I first cognize, is the event, "My believing that so-and-so," or, to be quite accurate, "A sense-datum and my believing so-and-so." And it is the latter part of the statement which is now known in memory. But whereas on the first occasion the knowledge is of "My believing so-and-so now," it is remembered as, "my believing so-and-so then." The time-difficulty is still staring us in the face. I can but urge that if the theory can be saved only by saying that the event exists for a certain dated lapse of time, and from henceforward begins to exist eternally, then the word "existence" is being strained to breaking-point, and that Stout, when he holds that I never do, in fact, know merely the event as it occurs, but that an event of a certain sort is happening, is putting forward a much more plausible view of the matter. I suppose that the question is partly one of psychological fact, but psychological facts are particularly inaccessible. In any case, I do not know whether those who have definite views on the matter claim to substantiate their views by intuition, or by problematic induction. If it is by intuition, then either Mr. Price or Mr. Stout is a bad seer; if by problematic induction, then the conclusion can but be, at best, more precarious than most inductions.

My own view is that if we say that in memory we are knowing the event we are forced to stress the accuracy of memory in a way which is neither borne out by facts, nor is necessary for theory. Mr. Price seems to think that what is necessary is complete certainty with regard to the particular characters of an event which is known. It seems to

me to be a matter for inspection that this complete certainty is lacking. It is also obvious that in memory something is known, and that what is known saves memory-knowledge, and can, in the end, be used, as Mr. Price would like to use it, to substantiate reasonable belief, or inductive belief. At any rate, it saves what is a necessary, although never a sufficient, condition of induction.

It cannot be denied that when I am actually confronted with a certain particular, or an event, its characters are patent in a way in which they are not patent when I remember things about it. In Hume's sense of the word, it "discovers" its nature. It is useless to argue that, in memory, events "discover" their nature in the same way, or to a like degree. What is remembered is that an event of a certain general nature took place. This gives us the necessary reference to the past. Its precise nature is never unfolded. When we want to know its precise nature, we cannot rely on memory. We must use other means, and these means always include sense-data.

Part of Mr. Price's interest in the matter is that memory is important in "reasonable belief," and "reasonable belief," I take it, is always inductive. At any rate, Mr. Price rightly points out that induction becomes impossible unless we can rely on our memory, and this reliance must, in the end, be based on knowledge. Thus, I hear a noise, and I assent to the proposition that "this is a cat." This can only be reasonable if I believe that certain noises and certain other characters, namely those possessed by cats are connected; and it is because I believe in this connexion that I assent to the proposition "this is a cat." It is obvious that memory is involved, and Mr. Price has argued, as he alone can argue, that this is so. But there is no need to have direct knowledge of a past event in order to establish this. Or, at any rate, there is no need to have the complete knowledge of the event which we have when we are directly acquainted with it in sense-knowledge. I may remember that a certain sort of noise was accompanied by a certain sort of visual form, and when I hear a specific noise like the generic, I may argue from the generic likeness to another

generic likeness. This is what in all probability does happen in the early stages of knowledge. I remember generic characters although I am confronted with generic and specific characters. And, to refer back, it was probably this lack of particularity about memory which induced Descartes to doubt memory-knowledge and to use the unfortunate word "clearness" in other cases of knowing.

But when, in later stages, my knowledge becomes more accurate, and I get generalizations about more specific characters, then I find that the reliance on memory is useless, and we find that our scientific laboratories are filled with all kinds of devices; photographic plates, books, signs which stand for accurate quantities, which are all means of knowing accurately the past by means of sense-data, and not images. And when we really do want to be accurate about our memories, we always do use sense-data, and never our memories. The reason is that our memory is inaccurate about specific characters.

Mr. Price may well say, but this is giving me my theory with a vengeance. What I do give him in his theory is memory knowledge of generic characters. What I do not grant, is that, in remembering, we are knowing a specific *event* which is past. As, however, I have some difficulty in piecing together his theory, he may claim this as his own. But in order to press my differences with him, or to elucidate from him some more specific statements, (and this, I take it, is one of the tasks of a symposiast), I shall state categorically that the difference between knowledge of the present and knowledge of the past is that when I know what is temporally present, I know both the generic and specific characters of something, whereas when I remember, I know generic characters only, and I shall content myself with asking whether this can correctly be called knowing an event. My own view is that it is more correct to say that I know that an event possessing such and such generic characters occurred, and that this is not the same thing as knowing directly the event.

There are two further points that may be noticed in that Mr. Price has confined a good deal of his paper to the

question that it is impossible to establish reasonable (*i.e.*, rational?) belief unless we establish memory-knowledge. His use of the word "reasonable" lays him open to attack and it is doubtful what bearing his argument has on the establishing of memory-knowledge. A belief is "reasonable," presumably, when it is not *known* to be true, either by inference from self-evident premisses or by direct insight into the nature of the fact or event about which we are judging; but when we assent to it, or accept it, on other grounds. These grounds, from the nature of the case, are always inductive. Now whilst I admit that current usage has sanctioned the use of the word "reasonable" (I prefer "rational"), following Mill, for inductive "inference," it still remains the case that induction cannot be established as "inference" from any self-evident premiss, and the word "reasonable" or "rational" is, for that reason, something in the nature of a courtesy title.

I do not know which particular opponents Mr. Price had in mind when he argued as he did, but his argument would have no weight with those people who might hold that I have opinions about what I call a past, but these opinions lack the characteristics of knowledge. The arguments in this connexion put forward really amount to this; that if, and when, induction is proved to be "rational," then memory-knowledge will be seen to be a necessary condition of induction. It could never, of course, be a sufficient condition. This looks, on the face of it, a harmless enough statement, and *proves* nothing. The argument has been used with much more effect for deduction, as, for example, by Descartes.

How, then, are we to establish memory-knowledge? So far as I can see, it must bear its evidence on its face.* We must take the view that there is something in the experience which brings its past with it. This leaves open another question, namely whether, in all rememberings, there may not be some knowledge. This knowledge would never be that of the specific past event in its particularity,

* This, I think, is Stout's view.

but of some fact about the past. This memory-knowledge could then be used to establish induction ; but, of itself, it does not establish induction ; unless, of course, we hold the view that we have insight into causal relations. But that is another matter.

The second point is that there is one type of important proposition which seems to me to be, from the nature of the case, particularly difficult to establish because it involves a kind of remembering which is notoriously fallible. I refer to all the propositions which involve the measurement of motion. These all, in the end, depend on our measuring of time, and I am not in the least bit certain that as regards the measurement of time we can do anything but make assumptions that are merely pragmatic. In the end, all accurate measurements of time depend on our expressing the opinion that the same sort of change takes place in the same measure of time, *e.g.*, the same pendulum will swing the same distance in the same time. Now we may make the swing as short as possible, but we never get out of the difficulty of having to rely on our memory for the time element, and here it is important that our memory should be absolutely accurate. It is by no means self-evident that the same change does take place in the same measure of time, and I do not think that we can be certain that the measures of time are, in fact, equal. For this reason, I hold that it is more plausible to assert the probability of propositions about generic characters than it is to assert the probability of propositions involving time measurements, and, in this respect, I do not agree with Mr. Johnson's view that the more specific the generalization, the nearer we approach certainty. It seems to me to be much more the case that we can know that a certain type of noise was accompanied by a certain visual form than that we can know that the same pendulum swing occurred within the same region of time. And I cannot see that we can ever have any possible means of *knowing* this latter proposition, from the nature of the case.

It may be asked whether the two moments of time may not come in what is termed the "specious present," and

whether I cannot know their equality just as I know that two parts of the same colour patch are identical in shade. This seems to me not to be the case. The two colours are presented at once, whereas the swings of the pendulum are not. Nor is this case like other cases where what is apprehended involves a reference to the immediate past. If I sit in the garden and listen to a blackbird, I apprehend at once that the present note is different from the one preceding it, and I apprehend this just as certainly as I apprehend that the blackbird's present note is different from that of a sparrow which is chirping, at the same time. Or, again, I apprehend just as immediately, when a sparrow is chirping, that any one chirp is not the only chirp, but is one of a series, as I apprehend the character of the note which is presented to me at any time. I should say that I know these facts immediately. But even although I should admit this, it nevertheless appears to me to be the case that although I can know that the pendulum is swinging, that is, that a series of changes is taking place, I cannot *know* that any two sets of these changes take place in the same measure of time.

The second main point in the paper concerns images. Here, again, we are up against the difficulties of introspection and considerable disagreement about questions of fact. Mr. Price assumes without question that images are always present. I should admit this. But even so, we have to face the fact that a very large number of people have no olfactory or gustatory images, and yet they do say that they know what a certain smell or taste is like. The images present in such cases are generally images in connexion with the movements in the sense organs which are necessary in order to smell, or to taste, but I see no good reason for denying that they do know what the smell or taste is like. I myself find it extremely difficult to put much meaning on to the statement that images are coloured, and many other people seem to me to be in the same position, and if I am pressed on the point, I should have to make the preposterous statement that when I do image colours they are not coloured. And tests carried out with what must now be

hundreds of individuals convince me that my own case is not far different from a large number of other people. On this point I can but subscribe to the view of a former distinguished Professor at Aberdeen, Thomas Reid, who writes, "If you ask me why I believe that the smell exists, I can give no reason, nor ever will be able to give any other, but that I smell it. If you ask why I believe that it existed yesterday, I can give no other reason than that I remember it." (*An Enquiry into the Human Mind*, Chap. 2, Section 3.)

Hence the view that in memory I must have images and that these images are a literal part of the object is one that I cannot accept. I shall, however, add certain reasons which have not been mentioned as to why this naively realistic view of images appears to be untenable. Firstly, anyone who has seriously attempted to collect data about images knows that whereas people are unhesitant in their opinion that visual-sense data are located on the surface of the object which they are perceiving, there is considerable hesitation to say the same about images. They are mostly "in their heads" or "nowhere" and even if they are asked whether they are "on the object" there is considerable doubt as to whether this is the answer that they feel is the right one. Now it does seem odd, if they were literally seeing the perceived object through time, that they should have this very real difficulty about the location of the sense-qualities.

Secondly, if the differences between the intensity and general form of the image were due to the fact that in the one case the object is present at the same moment of time as the act of perceiving, whereas in the other it is distant in time, then it would be reasonable to suppose that, as in space, the further away in time the object is, the more schematic and sketchy would be the image. But this is by no means the case. There is no correlation at all between the sketchiness of the image and the length of time from the act of perceiving to the act of remembering. In the so-called "secondary laws of association" vividness is a separate criterion from recency. It would be deducible from recency if there were

any analogy between the time relation and clearness of image, and the space relation and clearness of perception.

Thirdly, it would be essential, on this theory, to hold that the sense-data by means of which we know the event, (or, on a realist theory, are part of the event), are the present constituents of the memory-situation. I cannot see how, if we take this view, we can possibly get out of what appears to be a denial of the plainest sense of "immediacy" about something in our experience when we remember situations. Most of us have vivid imagery when we remember states of our own body, and many states of our own bodies have, as ingredients, certain events. At any rate, let us take an event about which there can be no quibble that it is an event. Suppose a person makes a bad dive. There is an event which happens in his body, namely the feeling of pain when he strikes the water. This feeling of pain is dated. It begins at a time, it endures and finally ceases; and in all these stages there is an obvious sense of "immediacy." Can we really deny, when we introspect, that when we remember this event, there is the same "immediacy" about our images, organic and otherwise? And must we not admit that it is just this sense of immediacy which forbids us from asserting that we are literally knowing the same event which we did experience? I cannot resist here asking whether Mr. Laird could, by any possible manipulation of time, as measured by the physicist, assert that what is "immediately experienced" as a present state of my body, when I remember this is synchronous with what was "immediately experienced" as another state of my body when the event took place. And in this case, there can be no possible quibble, for it seems to me that part of both of the events, namely the diving and the remembering, is just the sensations and images that we experience. And these occur at different times; and the one event has ceased before the other begins.

Again, with states of the body, it is often the case that the image is transferred from the right to the left side of the body, and *vice versa*. Suppose that a person who plays a stringed instrument is trying to recall a passage of music.

He does so by means of images in his fingers, and the images refer him to a certain event, namely his playing of that particular bit of music at that particular time. It is well-known amongst musicians that the images can occur equally well in the right hand, as in the left, although, with stringed instruments, the fingering hand is the left hand. I cannot see that these images are part of any past event which has taken place ; for the sensations, which, in this case are events, occurred in another part of the body. The images are "directive," if you like, but they are not literally part of any event which has occurred. And I cannot see why knowing or remembering events which happen in the body should not be cognitive. I am cognizing that event which happened in my body, even although it may also be true that I know *how* to do something by means of my body.

Fifthly, if images are literally parts of perceived objects, then it follows that there would be no image which is not literally part of some object which has been perceived. This, however, seems to be not the case. There is an "image" which is *sui generis*, caused by what Stout calls the "nascent excitement of a disposition," which is part of no perceived past object. It may be argued that this is not an image properly so-called, but something else. To this I should reply that it is certainly not a sensation, or sense-datum, and that it also functions in memory. It may also be argued that it is an image of a previous state of my body. In this case I should urge the two previous objections.

If we decide against this theory, there is, as Mr. Price points out, the question "How are we to account for images?" This question is inconveniently wide. A proper answer would entail a discussion on all the problems which emerge when we ask what is the nature of the mind and its relation to the body, and the relation of one, or both, to the objects which are known. Even in the short space that Mr. Price gives to the matter he has asked one question and discussed two points that are quite different.

In the first part of the discussion he virtually asks "What are images?" and answers that they are not literal parts of past events, or perceived objects, or are not identical with the sense-data by means of which these are known. This leaves the problem on his hands, unless he is pursuing the "way of remotion." But instead of pursuing the enquiry as to what they are, he proceeds to tell us what their function is. And in answer to this, he tells us that their function is to direct our thoughts to the past event. This conveniently waives every problem about their nature, the apparatus of retaining and reviving, and how what is retained, and why what is retained, so completely changes its nature and yet can be read as a direction sign by the mind which is using it. Or again, why so many different direction signs seem to be able to direct us along the same road, or what is the nature of the mind which possesses these powers.

The term "biological function" scarcely helps. It may mean that an organism deliberately stores up those experiences which it thinks will help it to live. I cannot resist pointing out that this view was not completely foreign to John Locke. "For the narrow mind of man, not being capable of having many ideas under review and consideration at once, it was necessary to have a repository, to lay up^s those ideas, which at another time *it might have use of.*" (*Essay Concerning Human Understanding*, Book II, Chap. X) Locke, in answer to the question "Who thought it necessary?" would, doubtlessly, have answered "God." Now, I suppose, we should reply "Nature," or use the word "instinct"; neither of which replies is particularly illuminating.

I can only say that all of these questions, and a large number of others, seem to me to be relevant, that the present facts what we have about memory seem to be wholly inadequate to the solving of them, and that no merely "empiricist" theory, or mechanistic, seems to be able to account for them. There is much that is mechanical about memory and much that is purposive. If we believe the psycho-analysts it is all purposive, only there are many

purposes that we do not "purpose," and this is but another of the disordered rabble of facts and theories which make discussion on this topic so difficult. As none of these questions is raised, it may be better to pass them by, and not stir too much dust.*

Instead, and in conclusion, I shall raise one more question. Mr. Price holds that knowledge is neither active nor passive. (See his paper "Some considerations about Belief"). He holds this view because of "the absurdity of regarding knowledge as a causal relation." This is an absurd statement anyhow, but I think that I know what is meant, and, passing over Mr. Price's one reference to a memory-act, I shall discuss this point with special reference to the use of the word "directive."

In one sense of the word, the "directiveness" of images suggests causality. It is this. If the knower apprehends the image and, from the nature of the image, is directed to a past event, then it is clear that the image is causing him to think of that event. And it looks, on the face of it, as if he is both active and passive at the same time. He is being directed, and he goes in the right direction. This means that there is the possibility of a time-gap between the apprehension of the image and what is remembered. The shortness of the time-gap would, in most cases, make introspection difficult; but there is no doubt that in some cases there is a considerable time-gap between the occurrence of the image and the apprehension of the object towards which it is directing us; as, for example, when we are haunted by parts of a tune and cannot fit in the rest of the tune, or cannot recall when we heard it. This is an occurrence familiar to everybody. But this time-gap certainly is not noticeable in most cases, and it is always possible to hold, as Mr. Price undoubtedly does, that the knowledge of the image and what is past occurs immediately.

* I might add that these matters seem to me to be matters for speculation, and I hold that speculation, as well as analysis, is part of the function of philosophy. But all the theories that I know present difficulties.

But even so, we still have to face, in view of the denial of causation, the question "In what sense is the image directive?" Mr. Price, following Stout, holds that it is in no sense a copy theory. When this is asserted, we must be on our guard against certain misunderstandings. The image is a copy in one sense. It is, in certain assignable respects, like the sense-impression. In this sense, it is a copy. But the process of knowing does not consist, even in memory, in knowing copies only. We must know both the original and the copy. But, further, if causation is not involved, we must know them both at once. What we know is the image and the past object of knowledge at one and the same time. If this is the case, then "directive" is an unfortunate word to use. It may be that no single word in our vocabulary is appropriate for the purpose. Professor Morrison's "adjunct" or "adjuvatory" has advantages in that it stresses that what is primary is the reference to the past, and what is secondary, is the image; but he used it, if I remember rightly, for one type of memory image only. I can only suggest a plain English sentence. When we remember, there are images which bring with them something from the past.

SYMPOSIUM : IS THERE A PROBLEM ABOUT SENSE-DATA ?

By MR. G. A. PAUL, MISS H. M. SMITH,
and MR. A. R. M. MURRAY.

I.—*By* G. A. PAUL.

THE problem with which we shall be principally concerned is "Are there such things as sense-data?" We shall go on to consider also the questions, supposing there are such things, whether they are private, whether they can exist unsensed, and whether they can continue to exist throughout a period of time or are merely momentary.

About these last problems I shall perhaps be able to say something definite, but about the first I am unable to come to any decision. The difficulty about it is not that there is a problem which we can understand and to which we are unable to find the answer; the difficulty is on the contrary to find out clearly what the problem is itself. It is the difficulty of understanding what anyone is saying who says that there *are* such things as sense-data, and is due partly to the fact that not all the words used occur in everyday speech, a new technical term "sense-datum" having been brought into use. It is not, however, due solely to the fact that a word is being introduced which has not been used before, for there are many cases in which this is done where there is no such difficulty. For example the physiologists who wished to introduce the word "fovea" to describe a certain peculiarity of the structure of the eye can have encountered no such difficulty. They could say that they were using "fovea" as a name for the slight depression in the retina diametrically opposite to the pupil, and by dissecting eyes could point to instances of this depression. When they had done this no one would have any difficulty in answering the question "Are there such

things as foveas ? ” This is the sort of question with which, because of its linguistic similarity, we are apt to compare our question “ Are there such things as sense-data ? ” and in case we should be misled by this similarity we require to point out the differences which also exist between them. Once we know that “ fovea ” is being used to mean “ the slight depression in the retina diametrically opposite to the pupil ” we can find the answer to Qf* by dissecting some eyes and finding in each case whether there is an object which answers to this description. Before we even start the experiment of dissecting we have some idea of what it will be like to find such a depression and of what it will be like to be unable to find such a depression or to find that there is no such depression.

On the other hand if we are to find whether there are such things as sense-data we need make no experiment, and no experiment of any kind will help us. Sense-data, if there are such things, are objects which, so far from needing to seek by making an experiment, we cannot help seeing every time we see anything at all. It is sometimes said that we have only to inspect what happens whenever we have any visual experience of any kind to become aware that on such occasions we always do see an object of the sort which is being called the “ sense-datum ” sort. For example, it is said, you know what it is to look from an angle at the top surface of a penny lying flat on a table ; in such a case the surface which you can see of the penny is round but you see it by means of an object which is not round but elliptical. A great difference becomes quickly obvious between this and the answer to Qf, where the point of asking whether there were such things as foveas was that you would know what it was like to discover a retina which lacked a depression opposite to the lens, whereas in this case you do not know what it would be like to be seeing anything whatever and not be perceiving an object of the sort in question. It then seems that either there was no point in asking Qs † (since you can have no idea what it

* “ Qf ” = “ the question ‘ Are there such things as foveas ? ’ ”

† “ Qs ” = “ the question ‘ Are there such things as sense-data ? ’ ”

would be like for the answer to be "No") or that the point of asking such a question is very different from the point of asking such a question as Qf. If this is not obvious, we can try to make it so by further consideration of the situation where you look at a penny from an angle. Sometimes in such a case it is true to say "I see the round top surface of this penny, and I see that it is round, but it looks elliptical," and what some philosophers say is that you can become aware on inspection that it is true not only that you are seeing a round object but also that you are seeing an object which is elliptical (the elliptical object being related to the round object in a certain intimate way which we have expressed by saying that the round object is seen "by means of it").

Some people have claimed that they are unable to find such an object, and others have claimed that they do not understand how the existence of such an object can be doubted, which drives one to ask what it would be like to be unable to find such an object and what it is like to find one. A clue is given by the fact that the claim generally made is not what would sometimes be called the "more moderate" one that whenever we see a physical object we do in fact see a sense-datum but the "less moderate" claim that it is logically impossible that we should see a physical object and not see a sense-datum. To call one the "more" and the other the "less" moderate claim is misleading, for it obscures the fact that while the "more" moderate would be a simple empirical statement the "less" moderate is a statement that so and so is logically impossible, *i.e.*, in this case, a statement about the way a certain expression is to be used, *viz.*, that "I saw a circular penny, and I saw an elliptical object (by means of which I saw it)" is to be another way of saying "I saw a round penny, and it looked elliptical to me."

Is there any test which would be relevant to whether it is true that in such a case there is an object which is round and also that there is an object which is elliptical?

This brings us to the question what it means to say of a sense-datum that it is an object. To say that there are such

objects as foveas is to say that in eyes there is a shallow depression opposite to the lens ; to say that a fovea is an object is to say that it is a physical object or at least a depression in a physical object, that it is the sort of thing that several people can see at once, and can be pointed to by, for example, placing a probe in it. It is not in the same way clear what is meant by saying of a *sense-datum* that it is an object, for people ask about it "is it a physical part of a physical object ?," "is it private to one percipient ?," "is it the sort of thing one can point to ?" Such questions have the usual empirical look, but if we consider what facts we should consider relevant to their truth or falsity we see that they are not asking for information about "objects" but about the uses of words, *viz.*, is "observed surface" of a physical object replaceable in all sentences in which it occurs by "corresponding sense-datum" ?, "does it mean anything to say 'More than one person is seeing the same sense-datum at the same time' ?," "is there anything which is (to be) called 'pointing to a sense-datum' ?" In saying that the word "fovea" is to stand for a *thing* of a certain sort, meaning a *physical* thing, and at the same time *pointing* to an instance of a fovea, we say a great deal about the way the word is to be used—in fact we say all that any physiologist requires in order to be able to use the word successfully, *i.e.*, from our pointing only to one instance of a fovea and calling it "fovea" he knows at once what is meant by saying ever so many things about foveas, *e.g.*, that there are and have been foveas which no one ever has or will see, that a given fovea is the same one as we examined yesterday, that it continued to exist overnight when no one was looking at it, that the person standing beside me is looking at the same fovea as I am, that it is turning a deeper yellow, and so on. This is a simple thing to point out, but it is of importance here. All that seems to happen is that someone points to an object, and says the name of the object, whereupon by watching the behaviour of the object we are enabled to make all sorts of true statements about it. Similarly it seems in telling us what sense-data are, someone refers to a situation with which we are all familiar, *viz.*, seeing a

penny obliquely, and says "the elliptical object which is related in such and such a way to the observed surface of the penny is a sense-datum." One is thereupon inclined to behave in the way one is justified in doing when such a thing as a fovea is pointed out to one, *viz.*, to suppose that one knows what is to be meant by saying of such an object that, for example, objects of the same sort have existed which no one ever has or will see, that this object is the same one as I saw a short time ago, that it does or does not continue to exist when no one is looking at the penny from this angle, that it is turning a darker brown, and so on. That is, one is inclined to go on and talk as if one had just learned the name of some new kind of physical object which has just been brought to light. We know in the case of physical objects what it means to say "*this object* has such and such properties," and when someone tries to point out to us an object of the sort that is to be called a "sense-datum" we go on as if we knew in the same way what it means to say "*this object* has such and such properties," "this sense-datum has such and such properties." But in fact the case is very different: the word "fovea" was introduced as a name for a physical object, and we know how to use it in new cases because we know in general how words for physical objects are used in English. This statement is the crux of the present paper. There are certain general criteria which ordinarily enable us to decide whether a given physical object is the same object as we saw at a given previous time, whether it is the same object even though many of its properties are different, whether it is a different object from one we saw previously although it has very much the same properties, whether it is now changing its colour and shape, and so on. This being so, we are apt to think that all we have to do is to give a name to an object and then examine this object and watch its behaviour in order to be able to make up true statements about it in which this name occurs: we forget that the name-word is being brought into use as a member of a class of words whose use in certain contents is already given. *E.g.*, everyone can imagine circumstances in

which it would be true to say "He opened his eyes, saw a certain fovea, closed his eyes and did not see it for five seconds, opened them again and saw *the same fovea* again," and circumstances in which it would be false to say this (*e.g.*, if during the five seconds someone cunningly replaced the eye-dissection he had been examining by another exactly similar). On the other hand, can anyone describe or imagine circumstances in which it would be true to say "He saw a certain sense-datum, ceased to see it for five seconds, and then saw *the same sense-datum* again"? Would it be true to say this, for example, if it were true to say "He saw a certain penny from a certain angle, and it looked elliptical to him, he closed his eyes and did not see it for five seconds, opened them again and saw the same penny looking exactly the same to him"? The answer is that no examination of such a situation will provide us with an answer: in the one case it seems that examination of the situation in question *will* provide an answer; in the other that it will not. It seems that in one case examination of the object in question will tell us whether it continued to exist throughout a period; but that in the other it will not. In a sense it does not do so in either case; but in the case where we introduce the word "fovea" by pointing to one or more foveas everyone does as a matter of fact know under what conditions it is to be true to say that this is the same fovea as I saw five seconds ago, this fovea has been on this table for the last half-hour although no one has been in the room, and so on. They know this because they know under what circumstances it is true to say such things of other physical objects; but it is not *necessary* that the word "fovea" should behave like other words for physical objects. We might, for example, say "No fovea lasts longer than a single specious present" meaning this not as an empirical statement but as a statement of how the word fovea is to be used. We might have some good reason for adopting such a way of speaking; *e.g.*, suppose certain minute structures in the fovea were, we discovered, annihilated and replaced every five minutes, then we might very well say "During the last half-hour I have observed

five foveas succeed one another here, each differing from the last one in respect of the minute structures (M) " or " During the last half-hour I have observed the same fovea, the minute structures (M) in it being replaced every five minutes " and mean the same by these two statements.

The word " sense-datum " as people have employed it does not fall into a fully-prepared scheme for its usage as a word for a physical object does, but its usage is not purely arbitrary. By this I mean that its use is connected with the use of certain words which *are* in ordinary language, *e.g.*, " looks," " appears," " appearance," and with certain uses of " this," " after-image," and " image." We shall now consider some uses of such words with which it is connected, and how it is connected with them.

We so use language that whenever it is true that I am seeing the round top surface of a penny, and know that it is round, it is true to say that the penny *looks* (*e.g.*) elliptical to me, in a sense in which this does not entail that I am in any way deceived about the real shape of the penny. (I shall indicate this sense by means of a suffix :—" looks¹.") The rule which has generally been adopted is that the sense-datum is correctly said to have whatever shape and colour-property the corresponding surface of the physical object looks¹ to me to have. *E.g.*, suppose a red light is cast upon the penny as I view it obliquely, then it if is true that the surface which I see is round and brown, and looks¹ to be elliptical and red, then according to our rule it is true to say that the corresponding sense-datum *is* elliptical and red.

Those who have in practice used the word " sense-datum " have not spoken as if what they were doing was introducing *merely* an alternative way of saying this same thing over again, but as if this new sentence which they substitute were in some way nearer to the facts. They have the idea that in some sense when a physical object looks¹ red to someone then something really is red, *i.e.*, that there really are in such cases two *objects*, one which looks¹ red and one which *is* red, and that somehow the one which *is* red has generally been overlooked, and its existence has

now for the first time been recognized. It is said that its existence cannot be doubted, for if we carefully inspect what happens when a physical object appears red to us we shall come to realize that we can see this object, and further that, while in every such case it is academically possible to doubt whether there really is a physical object which is appearing red, it is academically impossible to doubt that there is an object which *is* red. The point is that although I may have been mistaken in supposing that there was a round surface of a penny looking¹ elliptical to me, yet it is quite certain that there was an elliptical appearance (and that it is logically impossible that this appearance should merely have *looked* elliptical to me). I shall only point out that another way of describing the same situation is "I thought I was seeing a round surface of a penny, which was looking elliptical to me, but in fact there was no penny there at all." It is then asked: "If there was no penny there at all, what was really happening? what were the elements of the situation?" and it is answered that what I was really seeing was a sense-datum which was elliptical, but was not a sense-datum "of" a physical object (or at least not "of" a penny). It is an equally good answer to say "It only seemed to me as if there was a round penny which looked¹ elliptical. I was really not seeing anything at all." This says just the same as the statement which contained the word "sense-datum," and there is no question of the one saying it less or more adequately than the other.

Sometimes people explain how they are going to use "sense-datum" by taking the case when I have an after-image with my eyes closed, in which case it is quite certain that there is no external object which is appearing, say, red. They then say that a sense-datum is any object which is seen in the sense in which the after-image is seen, and ask us to notice that whenever we see a physical object we see¹ an object (in this sense, which I am going to call "see"¹). It is, however, not at all clear what this means. For it is not certain that whenever I see a physical object I see any *other* object in any sense of see. What is certain is that, suppose the physical object looks¹ red, there is nothing

to prevent me from expressing that by saying that an object which is red corresponds to the physical object, and nothing to prevent me from saying that I see¹ that object. Such a notation might be convenient for certain purposes, and is unlikely to mislead, because (1) it makes no sense to say of an after-image that it looks different from what it really is, and we are not tempted to say such a thing of a sense-datum, and certainly have not given any meaning to saying it of a sense-datum, and (2) it is possible, and may sometimes happen, that what we took to be an after-image turns out to be an appearance of a physical object, and *vice versa*. This way of talking at once suggests that there really is in such a case an object (*viz.*, a sense-datum) about which it is doubtful whether it is an after-image, or an appearance (sense-datum) of a physical object.

My intention has not been to deny that there are sense-data, if by that is meant that (1) we can understand, to some extent at least, how people wish to use the word "sense-datum" who have introduced it in philosophy, and that (2) sometimes statements of a certain form containing the word "sense-datum" are true, *e.g.*, "I am seeing¹ an elliptical sense-datum "of" a round penny." Nor do I wish to deny that the introduction of this terminology may be useful in helping to solve some philosophical problems about perception ; but I do wish to deny that there is any sense in which this terminology is nearer to reality than any other which may be used to express the same facts ; in particular I wish to deny that in order to give a complete and accurate account of any perceptual situation it is necessary to use a noun in the way in which "sense-datum" is used,* for this leads to the notion that there are entities of a curious sort over and above physical objects which can "have" sensible properties but cannot "appear to have" sensible properties which they have not got.

We shall consider now certain puzzles to which the use of "sense-datum" has given rise.

* *I e.*, there are no facts of visual experience in order to express which it is necessary to use a noun functioning in the way "sense-datum" does.

There is first the idea of the sense-datum as a sort of barrier, an entity which gets between us and the physical object. In trying to overcome the idea of its being a barrier people ask "Is the corresponding sense-datum identical with the observed surface of the physical object?" An answer to this question is relevant to many questions commonly asked, viz., are sense-data mental or physical, are they private or public, do they exist only when someone is seeing¹ them or can they exist while no one is seeing¹ them, are they merely momentary or can they continue to exist throughout a time? In order to be able to answer "Yes" to it philosophers have even been prepared to alter their use of "sense-datum" so that it makes sense to say that such and such a sense-datum appears to have sensible qualities it does not in fact have* ; for if the answer were "Yes," not only would the idea of a barrier be overcome, but also the second of each of these alternatives would be true, for we should say that what is a part of the surface of a physical object in this sense is physical, and we know what it is for more than one person to see the same part of the surface of a physical object, and for such a part to exist while no one is perceiving it, and for it to continue to exist throughout a period of time. The question whether a given sense-datum is identical with the corresponding surface has the air of being a question about two objects (or about one object) which is to be settled by inspecting the object or objects. Actually it is to be settled by examining not an object but our use of the two words "sense-datum" and "surface" ; if we find some sentence which says something true about the sense-datum such that if the sentence which results from replacing the word "sense-datum" in that sentence by the word "surface" is either false or meaningless, that is what we shall call the sense-datum and the surface being not identical. Thus if *ex hypothesi* the corresponding surface is really round, and the sense-datum I see of it is elliptical, to say "the sense-

* *E.g.*, John Wisdom "Problems of Mind and Matter" pp. 156-7, and Cp. IX *passim*.

datum is round" is either false or nonsense ; and so is " the corresponding surface is elliptical." This is what we call the sense-datum and the surface being not identical. Thus it is not true to say that in this case the sense-datum is physical if we mean by that that it is a part of the surface of a physical object in the sense in which the corresponding part of the surface is a part of the surface of a physical object.

It is suggested that in certain favoured cases it may yet be true that the sense-datum is identical with the corresponding surface. *E.g.*, suppose I am looking at the penny in such a way that it looks¹ to me the same shape as it really is, *i.e.*, the corresponding surface is round and the sense-datum of it is round. We have now to try and show a further difference between the way the two words behave, and at this point the most useful thing to consider is that future experience might lead us to believe that the surface in question had not been really round, whereas this same evidence would not lead us to doubt that it had looked¹ round to me, *i.e.*, that the sense-datum I saw of it had been round. That is, what is evidence in such a case against the truth of " the surface is round " is not evidence against the truth of " the sense-datum is round."

It is, however, not impossible to hold that in such a case it is the same object which is being called " round," but that it is being called " round " in two different senses, and that all that has been shown is that it is not round in one sense but may yet be round in the other.

This urges us to try to point out further differences in usage between the two words, and so we come to a problem which is thorny indeed. It is suggested that, say, a minute ago the surface, in question, of the penny was in existence but the sense-datum was not, that it only came into existence when I looked at the penny. If one takes one's cue for the use of " sense-datum " from the use of " looks¹ " this is the natural thing to say. Suppose that a minute ago the penny was in my pocket out of sight, then it is not true that " the penny really was round and looked¹ ϕ to so and so," and we incline to say that if it was not looking¹ ϕ to anybody then there was no sense-datum of it. We ask " How *can*

there be a sense-datum which no one is seeing?" and get the answer "A sense-datum is an object which you see. You know that other objects which you see exist while no one is seeing them. So why should not sense-data do so likewise?" We may then say: "Sense-data are only products, which are made by certain physical processes involved in seeing. They can have no existence apart from such processes." To this it will perhaps be answered "There is no reason to suppose that sense-data are manufactured by these processes. We may suppose that our sense-data exist unsensed and that all that the processes involved in seeing do is to select from among those already there." This sort of argument arises from considering sense-data as if they were a sort of physical objects. We know what it is for physical objects, which we see, to exist during times when we are not seeing them. We often do things which we call observing that a given physical object has continued to exist unperceived throughout a given period of time; but there is nothing which we similarly call observing that a given sense-datum has continued to exist unperceived throughout a given period of time. There are certain criteria which are ordinarily used as criteria for whether a physical object has gone on existing unperceived throughout a time; but there is nothing which is a criterion of this in the case of sense-data. We may if we care introduce such criteria, *i.e.*, we may describe what we are going to call "observing that a sense-datum has gone on existing unperceived throughout such and such a time"; but probably we are strongly disinclined to do so, because we incline to take our use of the word "sense-datum" from that of "looks" "appears," and "appearance."

It does not *make* sense to say that a sense-datum has existed unperceived; in giving the usage of the word we have not given a use to this, but it is open to us to do so if we care.

Perhaps it will be useful here to give an example of something which similarly does not make sense, but which we require to contemplate a little before we become quite clear that it doesn't. Whether rightly or wrongly there is

attributed to the President of this session the remark : " It is not true that I sleep *more* than other people, I only sleep *more slowly*." It takes just a moment or two to see that sleeping is not the sort of thing that one *can* do more slowly than other people, and perhaps another moment or two to see that this means that to say that one person sleeps more slowly than another is to say something which has no meaning. The world being as it is we are not inclined to give a use to this phrase ; on the other hand it is easy to describe circumstances in which we would be so inclined. Suppose, for example, that human beings were clearly divided into two kinds, those who walked and ate slowly and required a long sleep to recover from a given amount of exercise, and those who walked and ate quickly and required only a short sleep to recover from a given amount of exercise, then we should be very inclined to say that people of the first kind slept more slowly than people of the second kind.

Similarly, to say that a sense-datum has existed unperceived is to say something to which no meaning is given, but to which in certain circumstances we might be strongly inclined to give meaning. It is worth pointing out, for example, that sometimes we speak of an " appearance " of a thing which is not an appearance to anyone. *E.g.*, " What a fine sunset. It must present a wonderful appearance from the top of Mochrum hill " does not imply that there is anyone there to whom it would be presented. On the other hand, we frequently use " appearance " in a different way. *E.g.*, suppose I look at the round surface of the penny from a certain angle, then shut my eyes or go away for five minutes, then look at it again under similar conditions from the same place, we might describe this correctly by saying that " I saw two different appearances of it which were exactly the same in shape and colour." We do not describe it by saying that " I saw twice the same appearance which continued to exist during the period when I was not seeing it." Whether we are to say that in this case I saw numerically the same sense-datum twice or that I saw two sense-data which had the same qualities is a matter of

indifference, and perhaps we will never require to use "sense-datum" in such a case and so need never make any decision on the matter. The important point is that whatever we do is not demanded by the nature of objects which we are calling "sense-data," but that we have a choice of different notations for describing the same observations, the choice being determined only by the greater convenience of one notation, or our personal inclination, or by tossing a coin.

Whether the sense-datum in question is to be said to have existed between the times when it was observed is also, as I have tried to show, a matter for the people who wish to use the terminology to decide, should occasion arise. What is important is that whatever criteria are laid down for the existence of a sense-datum during a time when it is unobserved, to say that since these criteria are fulfilled *therefore* it is the case that there is an object exactly like a sense-datum, only that it is unobserved, is misleading. That there is such an object is not a further fact inferred from them. It is better to say that these criteria being fulfilled is what we *call* a sense-datum's existing unobserved. This is particularly important in considering theories which say that an unsensed sense-datum exists at a certain place if an observer at that place would see a sense-datum answering to the given description. We may use the fact that if an observer were to be at a given place he would see a sense-datum of a given sort as a criterion for there existing an unsensed sense-datum of that sort; but if that is all we use, the fact that an observer at that place would see such and such a sense-datum is what we *call* a sense-datum of that sort's existing at that time. This is extremely important in considering the kind of view which tries to "mitigate the severities of phenomenalism" by saying that physical objects are groups of actual and possible (or unsensed) sense-data. The attractiveness of such a view fades when one considers what is the criterion which is being used for the existence of unsensed sense-data, and what is the relation between the criterion and the object of whose existence it is a criterion.

It is also important in considering another thing which is said, *viz.*, that sense-data are a sort of things which only one person can ever see, *i.e.*, that it is impossible that you should ever see my sense-data, *i.e.* that you should ever see a sense-datum which I see, and vice versa. People have the idea of sense-data as sort of private physical objects which each person keeps behind a high wall, and that although two people never see the same sense-datum the order in which I see my sense-data is connected in a fortunate fashion with the order in which you see yours and other people see theirs ; but it is with a feeling of regret that people say "content can't be communicated, only structure can," and it is with a feeling of discomfort that they contemplate the possibility that although when an object looks to me green, I have a green sense-datum, yet it may always be the case that when an object looks to *you* green you may have a red sense-datum, and so long as the error is systematic it is undiscoverable.

In the first place we have to consider what is meant by saying that "content can't be communicated." This suggests that there is some process which we can describe but can't do, *viz.*, communicate content. It suggests that the walls between our private collections of sense-data are so high that we can't see over, but that it is not inconceivable that we should. That, however, is misleading. It makes us feel "If only I could show you my sense-datum, we could decide whether we see the same or not." But in fact there is nothing I can't do. I could show you all my sense-data if the words "showing you a sense-datum of mine" had any meaning. To say that content can't be communicated is to say that "one person has communicated the content of his sense-experiences to another" means nothing at all. To suppose otherwise is to treat sense-data as if they were a sort of physical objects, and so to assume that it makes sense to say that two people see the same sense-datum.

Ingenuous circumstances have been described in which we *should* feel urged to say that one person was having another's sense-datum ; but I do not propose to give such

an example here. I wish to consider only two things :—
 (1) suppose I look over your shoulder at a gas fire some feet in front of us both, and suppose that when I move my head into the position where yours is there is no difference in the way the fire looks¹ to me, and suppose when you move your head into the place where mine was you say that there is no difference in the way the fire looks¹ to you. Now suppose that we both have good eyes and have shown no signs of abnormal colour-vision. Then it is true that the gas fire looks¹ the same to both of us, and there is a sense in which it is true that it presents the same appearance to both of us ; but do we see the same sense-datum of the fire ? *I.e.*, numerically the same sense-datum of it ? Most people who have used the term “sense-datum” would with little hesitation say that the sense-datum you see is not identical with the sense-datum I see. Why ? Not because they see something about the nature of such objects which shows that they are not numerically the same, but simply because no meaning is given to “two people are seeing the same sense-datum.”

(2) This raises the problem, what is meant by saying of *someone else* that he is seeing a sense-datum of a certain sort ? When we think of such a thing we all think of a sort of inner vision inside the man's head directed on an object which we picture as a sort of screen, the whole thing being cut off from the outside world by a high barrier. We think that a man's behaving or not behaving in such and such ways is a symptom of some inner condition, *viz.*, whether he has in fact such an object before his inner eye behind the barrier, and we regard this thing of which his behaviour is a symptom as something which we can never directly observe, but as something which might conceivably not exist even if his behaviour were exactly what it is. Such imagery is pointless. If this entity which he alone sees did not exist and his behaviour were no different from what it is, the world would appear to us to go on just the same, except that he would never really see things as they are, but only appear to. This shows that we have made a mistake about the use of such a phrase as “other people

see sense-data similar to mine.” The mistake is, as before, the one about the relation between the criterion for a thing’s existence and the thing’s existence. What we call someone else’s seeing a sense-datum is his behaving in certain ways in certain situations, his reacting in certain ways to certain stimuli. A man’s being colour-blind is not his having pictures of *only* certain sorts in his private collection, at whose absence we can guess more or less reliably by certain tests. His being colour-blind is his behaving in certain ways. Similarly your seeing the same colour as I do on looking at a certain object, or seeing a different colour when we should expect to see the same, is not my having in my collection a differently coloured picture from what you have in yours, but my behaving in a certain way. We could easily mention tests which would ordinarily be taken as tests for deciding whether people have the same (*i.e.*, exactly similar) sense-data under such and such conditions. (*E.g.*, colour-choosing tests for colour-blindness.)

I do not deal with *the* problem about sense-data, which gives point to the introduction of the word at all. I mean “How are sense-data related to physical objects?” *I.e.*, how does our use of the word “sense-datum” compare with our use of our words for physical objects? and does the use of the word “sense-datum” help to free us from any of the difficulties we get into about our use of words for physical objects?

And I have not touched upon how our use of the word “sense-datum” is related to our use of the word “sensation.”

All I have done is to consider a number of questions about the way “sense-datum” is brought into use, which it seems to me must be considered before anything is said about the larger problems it was introduced to deal with.

II.—By HELEN M. SMITH.

MR. PAUL, so far as I can understand him, wishes to deny that "sense-datum," or any synonym for it, is a class name for a certain sort of actual entity. There is, in his view, no part or feature of the universe that *is a sense-datum*. "There are no facts of visual experience in order to express which it is necessary to use a noun functioning in the way sense-datum does." Yet "we understand to some extent at least how people wish to use the word sense-datum" and "sometimes statements of a certain form containing the word 'sense-datum' are true." It is a word such that the sentences in which it can occur provide an alternative notation in terms of which we can express statements about the appearances of physical objects. This sense-datum notation may be "useful": but it is no "nearer to reality." Thus there would seem to be no factual problem about the nature of sense-data and their relationships, but only the linguistic problem, or task, of defining the rules according to which sentences that do not employ the symbol "sense-datum" may be translated into sentences that do.

In support of these views Mr. Paul (1) maintains that he cannot discover anything that those who say sense-data are actual entities can mean, (2) indicates how sentences containing the symbol "sense-datum" are related to sentences about the appearances of physical objects. Mr. Paul confines himself to visual sense-data, and so shall I. The view that I shall try to put forward, in contradiction to his, is that there is a sense of "sense-datum" in which there certainly are sense-data, and that there are problems concerning sense-data which cannot be solved solely by reference to the relations between symbols.

I.

Mr. Paul finds it impossibly difficult to discover "what anyone is saying who says there *are* such things as sense-data." He does not know what experiences verify the application of the term. Now it seems to me that in the symposium on sensible appearance in 1926 Professor Moore gave a description of sense-datum which makes quite clear conditions under which the term is applicable.* Unfortunately the value of this description does not seem to have been appreciated by subsequent writers. Professor Price defines sense-data by reference to that hopelessly ambiguous phrase "the given." Dr. Ewing uses the term "sensa" defined as "objects of immediate perception other than physical objects . . . or spatial parts of physical objects" and so begs the question as against certain theories of perception. Other philosophers have spoken of the "indubitable" element in sense experience: but since upholders of common sense maintain that there is a sense of indubitable in which our perception of physical objects is so, this is not very satisfactory without an analysis of the term *indubitable*. What Moore has done is to give a precise description that is independent of the theory of perception adopted. It is—I hope to show—as good a description as one could wish—as good as Mr. Paul's description of a fovea. It must be familiar, and I shall not quote it in full. Certain conditions are very carefully specified and we are told that if we put ourselves in these conditions—roughly, in a normal visual perceptual situation—we are aware of an entity of which, and of which alone, certain things are true. It is true of it that (1) "if we raise the question," we are tempted to suppose it to be identical with the part of the surface of the physical object we are seeing, but nevertheless we do not know for certain that it is part of the surface at all, (2) it certainly appears to have sensible qualities, although unless it is identical with the surface of the physical object the sense in which it appears to have them is a

* *Proceedings of the Aristotelian Society*, Supplementary Vol. VI, pp. 180-2.

different and more fundamental sense than that in which the physical object appears to have sensible qualities.”*

There is no doubt that this description has application. How does it differ in principle from the description of a fovea, as the slight depression in the retina diametrically opposite the pupil, which Mr. Paul finds satisfactory? To verify the latter description we look at an eyeball and observe whether in these conditions we have certain visual experiences. The having of these experiences verify the application of the term. They are, I think Mr. Paul would say, what the term means. To verify Moore's description I look at any physical object, *e.g.*, this fountain pen and observe a black shape about which I can raise Moore's question and about whose relation to the pen I then opine and doubt certain things. The “facts of visual perception” that the sense-data notation alone can express are the experiences of these doubts. The only difference between the test for the application of the one term and that for the other is that one observation is sufficient in the case of the sense-datum experience, whereas we should hesitate perhaps to apply the term “fovea” till we had turned the eyeball about and experienced a series of visual impressions following each other according to certain rules.

To this Mr. Paul would no doubt object that he still “does not know what it would be like” *not* to find a sense-datum. I find it very difficult to see what precisely is involved here. There is a sense in which I surely *do* know what it is like not to find a sense-datum. I know what it was like to look at my pen without raising, and without ever having raised, the questions that resulted in the sense-datum experience. I often did it before I became interested in philosophy: and I see the sense-datum experience come to students now, and the difference between their finding sense-data and not finding them. Mr. Paul suggests that those who assert that there are sense-data give conditions for finding them such that it is *logically*

* Moore also says of a sense-datum that the perceptual judgement is about it, but this clause does not seem necessary to the description.

impossible that we should not find them, if there are any. For to say "look at a physical object" is to say in the sense-datum terminology "sense a sense-datum of a physical object." If we permit a sense-datum terminology "I see a pen" analytically entails "I sense a sense-datum." It is as if we defined "retina" in terms of "fovea" and then gave the foregoing description of the latter. The description would tell us nothing. We should in effect be saying "look at what we call a fovea and you will see one." This raises a point of importance for those who accept Moore's account as a satisfactory starting point for the philosophy of perception.

We may be inclined to object to Moore's description as I have given it for the very reason that makes it obviously not open to Mr. Paul's objection. As has been already remarked, we often perceive physical objects without raising philosophical questions. *When we do raise* these questions we see that there is one and only one object about which *they are being raised*. But if Moore's description does not identify an element that is present in *all* perceptual situations it does not directly help us with the problem of relating perceptual beliefs about physical objects to sense-experience. I think, however, that we can know that when we perceived a physical object *without* raising the questions there was an entity—one and only one—about which they *could* have been raised. A sense-datum then is the entity about which we can ask, or could have asked, certain questions. This description pins down the indubitable element in perception by defining predicates that belong to it and to nothing else.

There is, however, I think, another reason why Mr. Paul does not recognize the actuality of sense-data. It is not only that he cannot connect the term "sense-datum" with a particular experience or indicate the entity to which it applies. It is also that he believes he can show that the statement "sense-data are things" is meaningless, because the symbols "sense-datum" and "thing" cannot be connected in this way and make sense. In asking whether "there are such things as sense-data" Mr. Paul raises two questions which he does not distinguish, (1) to what does

the term sense-datum apply? (2) Is that to which it applies an existant other than a physical object? Is some form of a dualistic or sensum theory true? Mr. Paul's view seems to be that epistemological dualism is due to a linguistic muddle. He explains this notion in the section on "what it means to say of a sense-datum that it is an object." From the drift of what he says I take his view to be as follows. To say that "a chair is a thing" is to make a syntactical statement. It is to say of the word "chair" that there are certain criteria *p*, *q*, etc., for its use. These criteria are the use of other words signifying *public*, *persistent* and so on, and for the use of these verbal criteria we have in turn other criteria which are experiences: "by pointing to one or more fovea everyone does as a matter of fact know under what conditions it is to be true to say that this is the same fovea as I saw five seconds ago, this fovea has been on this table for the last half-hour although no one has been in the room, and so on." Now Mr. Paul maintains that in connexion with the word "sense-datum" we have ultimately no criteria for the use of words like "public" and "persistent," and that therefore to say that "a sense-datum is a thing" is meaningless. It is true that "we may if we care introduce such criteria." Here Mr. Paul falls into an apparent contradiction. He is anxious to maintain the general principle that by giving criteria for the use of its terms, by giving them "a grammar," we give sense to a statement; and that we may give any grammar we please. But at the same time he denies that we may give to "sense-datum" the grammar of "physical object." I think, however, that this confusion is only apparent. If two terms had the same grammar they would, I suppose, be synonymous. Mr. Paul takes the view that a pseudo-problem has arisen in philosophy through giving to the term "sense-datum" the grammar of "physical object" while at the same time supposing that "sense-data" are entities "over and above physical objects." It is this muddle, I think he would wish to say, that has given rise to the notion of *sensa*.

Now I am ready to admit that questions have been asked about sense-data which could only be intelligibly asked about entities that had the characters of physical objects, *e.g.*, causal properties. But I cannot see that the notion of *sensa* derives from a verbal muddle. It may be that the entity whose identity with the corresponding surface I can doubt is, in fact, not identical with it. In the use of his term "object" Mr. Paul does not distinguish between a thing and an existant. Even if it is meaningless to say of sense-data that they are things, Mr. Paul has not shown that it is meaningless to say of the corresponding sense-datum that it is an existant other than the surface. It is here—now, and all that is true of the surface is not known to be true of it. This brings us to the question concerning the relations and characters of sense-data.

II

In the previous section I was concerned with the critical aspect of Mr. Paul's paper. In this section I shall consider its constructive aspect. It follows from the former that the questions that we ask about sense-data are not questions about actual entities. They are, on Mr. Paul's view, questions about the verbal contexts in which the word "sense-datum" may be used. It is a key-word in a possibly useful notation, and Mr. Paul tries to make clear how we operate with it. Incidentally, he does not say why the notation may be useful—in spite of the fact that all that can be said with it can be said as accurately and fully without it. Perhaps to expose the muddles that its use has generated. But also, I think, because we can in terms of it reduce statements about physical objects, images and hallucinations to partially similar forms.

Is such a view intelligible? What precisely does Mr. Paul mean when he says that the facts that are relevant to the truth or falsity of questions about sense-data are "facts about words"? In what sense, if any, is the statement true? I have the greatest difficulty in fully under-

standing the position from which Mr. Paul's paper is written. But I think that he is making both of two statements. (1) He is saying that in order to understand the technical term "sense-datum" we must know that certain sentences that we know how to verify are respectively equivalent to certain sentences that contain the word "sense-datum," and that such knowledge is sufficient. Thus we must know that "I see a round penny that looks elliptical to me" is equivalent to "I am sensing an elliptical sense-datum of a round penny." Now what is involved in obtaining knowledge of this new symbolism in such a case? Is it equivalent to learning a French idiom? If so, we shall not be able to deduce from knowledge of the foregoing that "I seemed to see a penny but there was none" is equivalent to "I sensed a penny like sense-datum but it was not of a penny." Every translation that involves a new type of sentence will have to be independently learned. Now it does not seem that this is in fact so. And the reason it is not so is that the form of the sense-datum expression is not arbitrary. The new notation is given in an attempt to reflect more adequately the form of the fact which the original sentence expresses; and it does so because it *names* an element not hitherto named. Anyone who recognizes the element in question as what the term "sense-datum" stands for can henceforward use the sense-data notation in other context—whenever, in fact, he recognizes a sense-datum. The sense-datum notation is understood because it is seen to be appropriate to the perceptual situation which the original expression located. Thus an understanding of how we use the word "sense-datum" involves consciousness of facts as well as of words—more specifically of a connexion between them which we make when we name. I cannot find that those who define meaning in terms of equivalence give any account of naming. They are ready to offer us elegant "languages" which we can learn to speak but which we cannot use. They have much to say, it is true, about the "use" of symbols. But for them to use a symbol is to make up a correct sentence with it.

(2) Mr. Paul is also saying that the questions that seem from their form to be about the characters and relations of actual sense-data are really questions about the equivalence of sentences. They ask whether two sentences p and q are equivalent or what sentence of a certain form is equivalent to a given sentence p . Either their answers are statements about terminology or they have no answers. Mr. Paul only deals with three questions, but he would certainly deal with others in a similar way. In the compass of this paper I can do no more than suggest the objections I feel.

To ask if the corresponding sense-datum is identical with the surface of the physical object is, on Mr. Paul's view, to ask if in a sentence which "says something true about a sense-datum" the term "surface" may be substituted for "sense-datum" without making the sentence false or meaningless. To find the answer we experiment with typical sentences. I find it difficult to know what, on Mr. Paul's view, can be meant by saying that a sentence "says something true about a sense-datum": and how *could* the term "sense-datum" be systematically replaced by the term "surface" unless they were synonyms which on Mr. Paul's view they are not, for if they were he would know what it means to say "there are sense-data"?

Again we are told that the question "can a sense-datum, as distinct from a physical object, exist unperceived?" has no answer, and is a stupid question. For a sense-datum sentence is a substitute for a sentence about how a physical object "looks" or appears"; when the physical object is unperceived it does not "look" anything, and no sense-datum sentence can be formulated. My difficulty here is to understand Mr. Paul's use of the term "looks." We are told that a non-existent physical object may be said "to look ϕ ," and if so, I do not know why an unperceived one may not. Indeed Mr. Paul elsewhere suggests that it may. Again, there is, Mr. Paul says, no equivalent sentence to "sense-data are public." We can observe that "my reactions and relations to such and such a physical object are similar to yours," but there

is no rule which permits us to substitute for this sentence "you and I have the same sense-datum." Such a rule, however, Mr. Paul suggests might be accepted. In this, and in what he says of other people's sense-data, he has departed from the original use of the term in connexion with "looks." So far as mere linguistic equivalence goes it is a coincidence that the term sense-datum should reappear in this context. But indeed how we have ever come to use the sense-datum notation is a mystery on Mr. Paul's view.

Finally Mr. Paul holds that to questions about sense-data that have no answers we may *give* answers. We do this by laying down relevant criteria for the use of the terms about which the questions are asked. Now does Mr. Paul mean by giving a criterion arranging for a translation, or indicating a fact? From what he has said about the term "sense-datum" it would seem to be the former. Thus we may, on this interpretation, lay it down that "I saw a physical object twice and it looked the same on both occasions" shall be equivalent to "I saw the same sense-datum twice." We should thus have established a linguistic convention. "The important point is that whatever we do is not demanded by the nature of objects that we are calling 'sense-data.'" But in the latter part of his paper Mr. Paul writes as if the criterion required is an observation. He says, for example, "We may use that fact that if an observer were to be at a given place he would see a sense-datum of a given sort as a criterion." And again "What we call someone else's seeing a certain sense-datum is his behaving in certain ways in certain situations." But now we do not seem concerned with the equivalence of one sentence with another, but with the relation of a sentence to the fact that is taken to be its meaning. Perhaps Mr. Paul would say that the relation is not between a sentence and a fact but between a sentence and an observation-statement. But what is the criterion for the use of the observation-statement? If it is not the apprehension of a fact it must be either the repetition of a similar observation-statement in which case we

seem to get involved in an infinite series of observation-statements, or alternatively it is the occurrence of a system of sentences that imply it and what is the criterion for them ? The idea that all observation-statements are mere postulates still seems to me grotesque. But if observation is required to determine our use of the sense-datum notation the problems of sense-data are not merely problems concerning the logical relations between symbols.

III.—By A. R. M. MURRAY.

EVEN those who, like Miss Smith and myself, disagree entirely with Mr. Paul's view that the problem about sense-data arises from the misuse of language will no doubt agree that it is always well to consider whether a philosophical problem *is* verbal before attempting to find a solution for it in the belief that it is real. It certainly seems to me that some philosophical controversies might have been avoided if the disputants had in the first place made some attempt to use the same terms in the same sense ; and that most philosophical controversies could be simplified if this were always done. But I do not agree with Mr. Paul's view that the "problem about sense-data" has been unnecessarily complicated by a failure to realize that the word "sense-datum" is superfluous, and that the terminology in which that word usually occurs is not any nearer to reality than "any other which may be used to express the same facts." On the contrary, I agree with Miss Smith that Prof. Moore's description of a sense-datum has application just as certainly as the description of a fovea to which Mr. Paul refers ; and that the "new notation," *i.e.*, the notation which introduces the term "sense-datum," is "an attempt to reflect more adequately the form of the fact which the original sentence expresses ; and it does so because it *names* an element not hitherto named."

It is unnecessary for me to make further reference to Miss Smith's elaboration of this criticism, or to her remarks about those who "are ready to offer us elegant languages which we can learn to speak, but which we cannot use" ; for she has stated very clearly what seems to me to be the general objection to Mr. Paul's whole position. I shall therefore proceed from where she has left off ; and attempt to show why the "language of sense-data" can, and must, be used as well as spoken.

Mr. Paul obviously belongs to that group of philosophers who, far from regarding sense-data as the only elements in

a perceptual situation which are truly "given," believe that, from the very commencement of perceptual experience, physical objects are present and are apprehended, and that the term "sense-datum" refers to nothing which cannot be fully and accurately described in terms of physical objects and the relation, or relations, in which they stand to the percipient. It seems to me that this point of view can be rendered at all plausible only so long as we ignore the facts of delusive perceptual situations. Mr. Paul makes several references in the course of his paper to the fact that what two percipients believe to be the same physical object always (or at least almost always) appears to one of them to have different qualities from what it appears to the other to have ; but he makes no reference to the fact that a physical object sometimes proves to be a different physical object from what a percipient at first believed it to be (*e.g.*, when the percipient believes that he is perceiving a real rose, and by smelling or touching it finds that it is only an imitation rose). And it has always seemed to me that the latter sort of fact is just as relevant and important as the former sort to a theory of perception. In particular, it seems to me that the reality and importance of sense-data only becomes fully apparent when the facts of delusive perceptual situations are considered.

Thus, when Mr. Paul says that "you would know what it was like to discover a retina which lacked a depression opposite to the lens, whereas in this case you do not know what it would be like to be seeing anything whatever and not be perceiving an object of the sort in question" (*i.e.*, the "sense-datum" sort) I should add that you can, and sometimes do, know what it is like to be perceiving an object of the sense-datum sort and not to be seeing what you think you see (as in an ordinary delusive situation) and perhaps not be seeing anything else at all (as would seem to be the experience of those who are born blind and recover their sight in consequence of an operation at a mature age). Moreover, Mr. Paul's own statement asserts nothing that is inconsistent with the view that the reason why you cannot see anything whatever without perceiving

an object "of the sense-datum sort" is that an object "of the sense-datum sort" is a necessary element in every perceptual situation, although few, if any, perceptual situations do not contain more than this element in their objective constituents.

There is a further respect in which Mr. Paul seems to misunderstand what I should regard as the only tenable form of Sense-datum Theory. He continually speaks as if those who employ the term "sense-datum" are introducing a set of objects to which they attribute qualities which are similar to, if never exactly alike, the qualities of the corresponding physical objects; and he asks whether there is "any test which would be relevant to whether it is true that in such a case there is an object which is round and also that there is an object which is elliptical"—the case being that in which "I saw a round penny, and it looked elliptical to me." Now it seems clear to me that in asking this question Mr. Paul is assuming that according to the Sense-datum Theory the so-called "secondary" and "primary" qualities inhere in both (a) the sense-data, and (b) the physical objects, in precisely the same way and the same sense. But when the facts of delusive perceptual situations are taken into account it seems to me impossible to defend a view of this character. It becomes, on the contrary, necessary to maintain (1) that physical objects and their qualities are very different from sense-data and *their* qualities; and (2) that these two sorts of entity are apprehended in different ways. And, if this be so, Mr. Paul's criticism that the Sense-datum Theory attributes to fictitious entities called "sense-data" qualities which actually belong to physical objects will no longer appear so plausible as it otherwise might; and it will, indeed, be possible to counter it by saying that Mr. Paul, on his part, has attributed to physical objects of a wholly fictitious character the sort of qualities which belong to sense-data, and has entirely misconceived the real nature of physical objects.

Let me now explain why I think the occurrence of delusive perceptual situations necessitates these conclusions.

In ordinary life we certainly do talk of seeing "things," and very seldom, if ever, of seeing "colours" (in the sense of particular existents). Thus a situation might very well occur in which I should say "I see a flower," and in which after employing other senses (such as that of touch or of smell), I should admit that I had been deceived, and that I had been seeing not a real flower but only an imitation one, like the poppies sold on November 11th. It may well be that a friend looking at the same time and in the same direction believed that he saw only an imitation flower; yet it does not seem to me that there need be any difference in the sensible qualities of the objects which we believe we are seeing to account for the fact that my friend's perceptual situation is veridical while mine is delusive. What may well be the case is that we "interpret" (in some important sense of that word) data which are qualitatively identical in all respects relevant to the interpretation. Or, again, it may happen that some mental association may suddenly make me cease to believe that I am seeing a real flower, although no discernible change in the sensible qualities has taken place. In such a case my "interpretation" changes, as we might say, "with a click," and I see an imitation flower in place of a real flower.

Now in cases like the above it is obviously impossible to maintain that we see the sort of objects which in ordinary speech we seem to claim to see; and since such cases differ in no relevant respect from the many cases in which no delusion is involved, it must also be admitted that even in veridical perceptual situations the objects which we seem to claim to see include more than the objects which we actually do see. The objects which we actually do see include nothing except colours, the shapes and sizes of colours, and the spatial relations between patches of colours; for about these we cannot be deceived, while about anything else which we believe we see in visual situations we are liable to be deceived.

In view of these considerations I think it is necessary to recognise two distinct kinds of "apprehension" in any perceptual situation. There is (if we confine ourselves for

the sake of simplicity to visual situations) in the first place an infallible apprehension of coloured patches and their spatial relations ; and in the second place a different form of apprehension which goes beyond this, but is always liable to error. I shall henceforth distinguish these different forms of apprehension as “sensing” and “perceiving,” respectively.

About “sensing” I do not think I need say anything further at present. What I mean should be sufficiently clear to all who are familiar with theories of perception in which the notion of sense-datum is fundamental ; and I do not see how anyone can deny that in every perceptual situation there is some indubitable element. Nor can I think of any better description for this indubitable element than the “sensing of sense-data.”

But the notion of “perceiving” is much more difficult to understand, and the view I take of its proper analysis may not commend itself to all who hold some form of Sense-datum Theory. Yet I do not think anything is likely to increase the plausibility of such a theory more than a correct analysis of the notion of perceiving ; and I do not think that anything has brought certain forms of Sense-datum Theory into disrepute more than the way in which they have involved the most difficult features of a doctrine of representative perception. Many forms of Sense-datum Theory—and not least those which appeared before the term sense-datum came into use—undoubtedly imply that sense-data do constitute a sort of intervening “barrier” between the percipient and the external objects which they more or less accurately represent ; and the difficulties involved in such a position are well known. But I think Prof. Price has shown us that a Sense-datum Theory need not take this form, and is much more plausible when it does not.

In his book *Perception* he has devoted considerable space to a careful analysis of the notion of “perceiving” (or, as he calls it, “perceptual consciousness”) and it is unnecessary for me to describe in detail which has been so well expounded there. I shall only recall a few points which are of special importance for the purpose of my own argument. Prof.

Price maintains that at its earliest stage perceptual consciousness takes the form of "perceptual acceptance," and that this consists, not in belief, but in absence of disbelief, or in not doubting that, or in taking for granted. But it is possible, by a series of perceptual acts, each of which confirms the previous one in the manner specified by Prof. Price, to proceed from perceptual acceptance to perceptual confidence (which is the form our perceptual consciousness usually takes), and sometimes from the latter to the still more settled conviction of perceptual assurance.

Now the point to which I wish to draw special attention is that all these forms of perceptual consciousness involve the "entertaining" of a proposition in one or other of the many forms in which a proposition may be "entertained," *e.g.* not doubting, or taking for granted, or feeling confident, or being assured, that so-and-so is the case. Some philosophers might prefer to say that perceptual consciousness always involves some form of "judgment"; but whatever language we choose to use the important thing to be clear about is that perceptual consciousness is not "intuitive" like sensing, but is a form of apprehension that is liable to deceive us, and can therefore be expressed in propositions that may be false. Prof. Price admits, however, that perceptual consciousness often appears to be very like some form of intuitive consciousness, and therefore calls it "pseudo-intuitive." But he recognises that it cannot be really intuitive, since what we apprehend by intuition must be real, whereas the existence of the objects of perceptual consciousness is not, even at the most developed stage, absolutely certain, and in delusive situations cannot be truly asserted at all.

It seems to me that, however intuitive perceptual consciousness may sometimes appear to be, it is necessary to maintain, in view of the facts of delusive situations, that it always differs radically from intuitive consciousness, and, as previously mentioned, involves the entertaining of a proposition, or some form of judging. There is, so far as I can see, nothing in ordinary experience which shows that such a view is psychologically false. If it sometimes seems

in ordinary experience that my consciousness of a book, *e.g.*, is just as direct and intuitive as my consciousness of its colour, I think this is because perceptual consciousness, though not intuitive, is also not inferential, and because it is generally not expressed in speech. And an act of judgment, which is not expressed in language, and does not involve an inferential process, always seems to me very difficult to distinguish, introspectively, from an act of intuition, such as sensing.

Prof. Price insists very strongly that perceptual consciousness does *not* consist in inference. I think that he is clearly right in this, and that all forms of "casual" or "sensus" theory which maintain the contrary view are simply inconsistent with the psychological facts of perceptual experience. Not only so, but, as Prof. Price has also shown, all possible methods of inference from sense-data to physical objects are invalid.

And if perceptual consciousness does not consist in inference, *i.e.*, is not a process which leads us from the sense-data, of which in the first place we are alone conscious, to the physical object, whose existence we should thus infer, a most important consequence follows, *viz.*, that perceptual consciousness is just as original and fundamental in our experience as sensing, even if it differs radically in nature. The sensing of sense-data is an essential element in all perceptual experience, but even at the earliest stages it is not the only element, and perceptual experience as we know it would be inexplicable if it *were*. It seems to me most important that supporters of a Sense-datum Theory should always make this clear. It is not the case that our experience begins with the mere sensing of sense-data. Unless we assume that from the very start of an individual's experience he has a capacity and tendency to judge (in one or other of the various possible forms of judgment) that his sense-data "belong to," or "refer to," or (as Prof. Stout would say) "present" physical objects, I do not think we can explain the fact that in mature experience he does have consciousness of physical objects. For we cannot, as Prof. Price has shown, explain that fact by inference; and,

even if we could, it would be psychologically false to say that perceptual consciousness involves inference.

The space at my disposal does not allow me to discuss further the nature of the distinction between sensing and perceiving, which I hope I have made sufficiently clear for the purpose of my subsequent argument. I must now hasten to what I feel is a still more difficult task—that of describing the nature of the distinction between sense-data and physical objects.

I think I can indicate the general nature of my view most clearly by stating it in contrast to Mr. Paul's. If I have understood him aright, he believes that those who advocate a Sense-datum Theory postulate the existence of fictitious entities called "sense-data" to which they attribute qualities which in fact belong only to physical objects. On my part, I consider that Mr. Paul is attributing to physical objects, whose nature he has misunderstood, the qualities which in fact belong only to sense-data. And lest the similarity of these objections to each other's views tempts Mr. Paul to suggest that we are both saying the same thing in different words, and that I mean by "sense-datum" what he means by "physical object", and *vice-versa*, let me say at once that if physical objects are *public*, i.e. can be *perceived* by more than one percipient at the same time, while sense-data are *private*, i.e. can be *sensed* only by the percipient who is actually sensing them, I do not see how the two terms can be regarded as synonymous. And the facts of the relativity of sensible appearance seem to me to make it necessary to regard sense-data as private, while the view as to the nature of physical objects which I am about to suggest certainly entails that they are public ; and I think that Mr. Paul's view clearly entails that they are public too.

I have ventured to say that Mr. Paul has misunderstood the nature of physical objects, and I do so because he quite plainly regards them as possessing shapes and colours and surfaces in the sense in which sense-data alone possess these qualities. No doubt if the existence of sense-data is denied altogether it will be necessary to attribute the sensible qualities of which we are certainly aware in sense-experience

to something ; and in that case physical objects may be the only objects to which it seems reasonable to attribute them. But if we do admit the existence of sense-data in view of the facts of delusive perceptual situations, and recognize (as we surely must) that they possess sensible qualities (such as shape and colour), there is surely not the slightest reason to attribute such qualities also to the corresponding physical objects. For according to the Sense-datum Theory the only sensible qualities which we apprehend are those which belong to sense-data. We have not the slightest reason to believe that the physical object is something whose qualities are all a sort of " mean average " of the qualities possessed by the corresponding sense-data. Or, to take a specific example, I do not think that we have any reason to believe that a penny is round in the sense in which the corresponding sense-datum will be round if I look at the penny when it is perpendicular to my line of sight. If we do believe that the penny is round in that same sense then we are thinking of the penny as a sort of duplicate sense-datum.

But the fact surely is that when I sense a brown patch and am perceptually conscious of a penny, I am not judging (in some sense of that word) that the patch is part of the surface of the penny (for the patch might be elliptical, and the part of the surface in question would be round) ; or that the patch is a more or less distorted reproduction of part of the surface of the penny : what I am judging is that the patch is a member of a " family " of patches and other sense-data, connected and unified in the way described by Prof. Price. In less technical language, what I am judging when I sense the brown patch is that in a different situation I *would* sense a brown patch of a different shape, and that by the employment of other senses I *would* sense sense-data of the non-visual sort which I should ordinarily describe as the tactual and other non-visual qualities of a penny. I cannot find that I am further judging that these sense-data which I am not actually sensing are in fact existing, or that something exists which possesses sensible qualities of which *their* sensible qualities are more or less imperfect reproductions. And, if this be so, we must be careful not to speak

of a physical object as though it possessed qualities which are more or less imperfectly reproduced by the qualities of the sense-data through which we are perceptually conscious of it. If, borrowing Prof. Price's terminology, we conceive of a physical object as a family of sense-data, we must remember that a family of sense-data is not itself a sense-datum ; and that it cannot possess the sort of qualities which belong to its individual members.

I venture to submit that if in this way we avoid any notion of "representative perception", and insist throughout that the qualities of sense-data are in no sense reproductions of corresponding qualities in public physical objects, we can avoid most of the serious objections to which a Sense-datum Theory would otherwise lie open. For these, so far as I can see, only arise so long as we persist in regarding a physical object as a sort of prototype of which the corresponding sense-data are more or less imperfect copies. But I do not think we have any justification for regarding a physical object in this light. It is, *ex hypothesi*, impossible to *sense* a physical object, since a physical object is public, and we find, by experience, that anything we sense is private, and differs to some extent from what other people sense. It is true that in ordinary experience different people claim that they are capable of "seeing" the same *thing* at the same time, but it does not seem to me that philosophers are justified in taking this to mean that different people claim that they are capable of sensing the same sensible qualities when "seeing" the same thing ; nor are philosophers to my mind justified in asserting that the plain man believes that the public "thing" of which he can be conscious at the same time as other people possesses sensible qualities, such as colour, in the same sense of "possess" as that in which the coloured patches, of which he cannot be conscious at the same time as other people, possess sensible qualities. As I have already maintained, the plain man's consciousness of a public "thing" consists in a more or less inarticulate judgment that in certain situations he *would* sense certain sense-data, and that this judgment is made when he senses a certain other sense-datum (or sense-data).

in a certain situation. I do not, of course, suggest that the plain man is usually conscious that this is what he means when he says that he "sees a certain thing." The analysis of what he means is a matter of no practical importance, and he is therefore unlikely to make such an analysis unless he becomes a philosopher. But if he does become a philosopher, and make the analysis, then I believe that he will make it as I have described it if he makes it accurately.

My analysis, of course, only claims to be an epistemological one, and leaves it an open question whether a metaphysical analysis may not involve the recognition of something more in the "external world" than families of sense-data. But it seems to me to be of the first importance to keep the problems separate. Many of the difficulties which troubled Locke in his discussion of the notion of "substance" obviously arose because he was attempting at one and the same time to arrive at a conception of "substance" which would be consistent both with the physicist's atomic theory of matter and with the epistemologist's account of the perception of "things"; whereas the "things" we perceive are not constructed out of the physicist's "matter." There may well be such matter, and it may be causally related to the sense-data which we sense; but it seems plain to me that neither the thought of such matter nor of its causal activity is present in a perceptual situation; and that neither should therefore be introduced into the analysis of such a situation.

Before concluding I should like, in the light of the foregoing discussion, to elucidate the precise nature of the disagreement between Mr. Paul and myself on one or two points to which I have not previously referred. He refers to sense-data as "entities of a curious sort over and above physical objects which can 'have' sensible properties but cannot 'appear to have' sensible properties which they have not got." Here he is obviously assuming that on the sense-datum view physical objects *appear* to have sensible properties in the same sense of "have" as that in which sense-data really do "have" them. But this, as I have argued, is not the case. If physical objects can be said to

“appear to have” sensible properties at all, it is in an entirely different sense of the word “have” from that in which sense-data can be said to “have” sensible properties. There is nothing either in common-sense experience or in its philosophical analysis to justify us in regarding a physical object as a sort of prototype of sense-data.

Another statement of Mr. Paul’s involves a curious adaptation of the view which I have attempted to defend. He says : “ We may use the fact that if an observer were to be at a given place he would see a sense-datum of a given sort as a criterion for there existing an unsensed sense-datum of that sort ; but if that is all we use, the fact that an observer at that place would see such and such a sense-datum is what we *call* a sense-datum of that sort’s existing at that time.” The latter fact is not, as I have argued, “ what we call a sense-datum of that sort’s existing at that time ” ; what I maintain is that my judgment that that fact is so is what I call my perceiving a physical object of a certain sort.

Finally, when Mr. Paul arrives at what he calls the “ crux ” of his paper, and observes that “ we are apt to think that all we have to do is to give a name to an object and then examine this object and watch its behaviour in order to be able to make up true statements about the object in which this name occurs : we forget that the name-word is being brought into use as a member of a class of words whose use in certain contexts is already given ” I would ask him to consider whether it is not rather he who is making statements about physical objects which are true only of sense-data than supporters of the Sense-datum Theory who are making statements about sense-data which are true only of physical objects.

As I urged at the beginning of my argument, it is the occurrence of delusive perceptual situations which seems to me to render Mr. Paul’s rather uncritical acceptance of physical objects as the original and primary elements in a perceptual situation so indefensible. I think we shall be confronted by insuperable difficulties unless we commence our analysis by recognizing the indubitable nature of

sense-data, and the indubitable, if practically unimportant, knowledge which we acquire by sensing them. And it is to my mind quite certain that Mr. Paul is not describing these sense-data when he talks of "physical objects," since sense-data (as we find by comparing observations) are always private, whereas Mr. Paul is clearly trying to describe something public when he talks of "physical objects." But the fact, I think, is that in so talking Mr. Paul is describing nothing at all. He is using a description, derived from observation of his sense-data; and applying it to hypothetical objects which would possess the sort of sensible qualities which sense-data possess, while lacking their privacy. But, as I have argued, neither common-sense experience nor its philosophical analysis justifies us in postulating the existence of such public objects. Perceptual consciousness, however apparently intuitive, is not really intuitive at all, and it is therefore a profound mistake to conceive of it on the analogy of "sensing," or to suppose that, like sensing, it has a particular existent possessing sensible qualities for its object. It consists, on the contrary, in a form of non-inferential judgment about the relation of the sense-datum (or sense-data) being sensed to the family of sense-data of which it is a member; and that judgment may, as I have suggested, be alternatively described as a judgment about what the percipient *would* sense in a different situation from that in which he is while making the judgment. Such a judgment may, of course, be either true or false, and in a delusive perceptual situation it is always false. This analysis of the perceptual situation leaves it an open question whether or not there is also something that can appropriately be called "matter," and whether or not such matter stands in some causal relation to sense-data; but these questions, as I have maintained, do not arise so long as we are concerned merely with the epistemological analysis of the perceptual situation.

Like Mr. Paul I have been compelled, by lack of space, to ignore several important questions which would certainly have to be answered by any adequate solution to the "problem about sense-data"; and I have, in particular,

been unable to state why I reject a solution which in many ways differs fundamentally both from Mr. Paul's and from my own, viz., the theory of "appearance" which has been advocated by Prof. Dawes Hicks and others. But I hope that I have said sufficient to make clear the main lines upon which, in my judgment, a Theory of Sense-data ought to be developed, and, in particular, to satisfy its critics that it is neither a meaningless language nor a doctrine of representative perception.

SYMPOSIUM : ARE THERE SYNTHETIC A PRIORI TRUTHS ?

By PROF. C. D. BROAD, MR. A. J. D. PORTEOUS
and PROF. REGINALD JACKSON.

I.—By C. D. BROAD.

I SUPPOSE that the word "truths," in the question which we have been set to discuss, means either *facts* or *true propositions*. I am going to assume that anything which can be significantly said in terms of "facts" can be translated into a significant statement in terms of "propositions" and *vice versa*. Acting on this assumption, I propose to talk in terms of the latter. The question then becomes : Are there any propositions which are at once true, a priori, and synthetic ?

The adjectives "a priori" and "empirical" are, of course, ambiguous in the harmless sense that they are used in two different contexts with two obviously different meanings. They are used in one sense of concepts, as, *e.g.*, when some philosophers say that the concept of Cause is a priori and the concept of redness is empirical. They are used in an obviously different sense of propositions, as, *e.g.*, when some philosophers say that the laws of logic are a priori propositions and the laws of physics are empirical propositions. We are concerned here only with this second application and this second sense of the words.

I take it that a true proposition would be a priori if and only if at least one of the two following conditions were fulfilled. (a) If it were such that a rational being of sufficient insight and intelligence could see it to be true by merely inspecting it and reflecting on its terms and their mode of combination. (b) If it were logically entailed by premises all of which answer to the first condition. If the first condition were fulfilled, the proposition might be

called "intuitably a priori" ; if the second were fulfilled, it might be called "demonstrably a priori." When a certain person actually sees for himself that a certain proposition is true, merely by inspecting it and reflecting on its terms and their mode of combination, we may say that it is "self-evident to him." And we may say that a person "knows a certain proposition a priori" if either it is self-evident to him or he actually sees it to be logically entailed by premises all of which are self-evident to him.

The following remarks may be made at this point by way of elucidation. (i) A proposition might be both intuitably and demonstrably a priori. It might even be the case that every proposition which is either is both. However that may be, it is certain that, if logic and pure mathematics consist of a priori truths, many of the simpler truths in these sciences are both intuitably and demonstrably a priori. (ii) For any human being at any stage of his life some of the propositions of logic and pure mathematics will be self-evident and not demonstrated whilst others will be demonstrated and not self-evident. (iii) It is possible to believe a proposition, and to know that it is an a priori truth if true and an a priori falsehood if false, and yet not to know it a priori. A person who believes any general proposition of pure mathematics merely on authority or on inductive grounds is in this position if all the truths of pure mathematics are a priori. For, if this is so, the proposition which he believes must be in fact either an a priori truth or an a priori falsehood. But he does not *know* the proposition, and therefore does not know it a priori. He merely *believes* it on empirical grounds, good or bad.

It follows from our definitions that, unless there are intuitably a priori truths, there can be no demonstrably a priori truths. Therefore, unless there are intuitably a priori truths, there are no a priori truths at all. We cannot, of course, infer directly from this that, unless there are intuitably a priori *synthetic* truths, there are no a priori *synthetic* truths at all. It would be compatible with our definitions that all the intuitably a priori truths should be

analytic and some or all of the demonstrably a priori truths should be synthetic. Now we have not yet attempted to define "analytic" or "synthetic" as applied to propositions. But I think we can safely say that, whatever the definition may be, no-one would admit that *synthetic* propositions could be logically entailed by premises all of which were *analytic*. If this further principle be admitted, we *can* proceed to assert that there can be no synthetic a priori truths unless there be synthetic intuitably a priori truths. I shall assume henceforth that this is the case. This obviously lightens the task of a person who wishes to prove that there are no synthetic a priori truths. For we see now that it will be enough for him to prove that there are no synthetic *intuitably* a priori truths.

At this stage it will be worth while to consider what amount of agreement there is about points which are relevant to our question. (i) Everyone admits that there are propositions which *are not* a priori, and that there are propositions which *are not* analytic. And I think that everyone admits that all propositions which are not a priori are non-analytic. So everyone admits that there are truths which are synthetic and *not* a priori, if "synthetic" is taken to be synonymous with "non-analytic." (ii) It is not universally admitted that there are a priori propositions. Now, if it could be shown that there are no a priori propositions at all, our original question would of course be answered in the negative. I take it that we are not expected to discuss the wider question: Are there a priori propositions?, but only the narrower question: If there were a priori propositions, would any of them be synthetic? (iii) I do not know that it would be universally admitted that there are analytic propositions. The alleged instances of such propositions which are commonly given in logic-books are, in my opinion, not instances of propositions at all. It would be usual to say that the sentence "All equilateral triangles are equilateral" stands for an analytic proposition. But I very much doubt whether it stands for a proposition, *i.e.*, for something that can be true or false, that can be known or believed or entertained and so on,

at all. The *sentence* has the same grammatical form as certain sentences which do stand for propositions. It has a grammatical subject, a grammatical predicate, and a grammatical copula, like the sentence "All equilateral triangles are equiangular," which undoubtedly does stand for a proposition. This fact explains why it has been thought to stand for a proposition, but it does not justify that opinion. In fact we seem to have here just one more instance of the disastrous results of blindly following the suggestions of language.

* Now, if there were no analytic propositions, there could be no analytic a priori propositions. Therefore, if "analytical proposition" means "the sort of proposition which is expressed by sentences like *all equilateral triangles are equilateral*," I should answer our question as follows. There are no propositions answering to this description. Therefore *either* there are no a priori truths at all, *or* there are such truths and they are all synthetic.

At this point there are, I think, two moves open to persons who hold that there are a priori propositions and that they are all analytic. (a) They might give a different and wider definition or description of the phrase "analytic propositions," and there might be no doubt that there are propositions answering to this definition or description. (b) Instead of this they might admit that what are commonly called "analytic propositions" are not propositions at all; that they are, strictly speaking, incapable of truth or falsehood; and that therefore it is misleading to call them "truths." But they might answer that their doctrine needs only a slight verbal modification. Let us call a sentence which really does stand for a proposition a "propositional sentence"; and let us call a sentence, which seems from its grammatical form to stand for a proposition, but does not really do so, a "quasi-propositional sentence." Then there is no doubt that there are quasi-propositional analytic sentences. Now a person who held the opinion which is commonly expressed by saying that there are a priori propositions and that they are all analytic might restate his position in the following way. Strictly

speaking, there are no a priori propositions and no analytic propositions. But there are sentences which are commonly said to express a priori propositions. All such sentences are either quasi-propositional analytical sentences or are translatable into the latter by substituting and transforming in accordance with certain linguistic rules. He would then have to explain how the writing down and transformation of these unmeaning platitudes can be of scientific interest in itself and of importance in its applications.

It is evidently very desirable to discover, if we can, what precisely those philosophers who hold that there are a priori propositions and that they are all analytic mean by the phrase "analytic proposition." Now Mr. Ayer, a distinguished supporter of this doctrine, has recently published a book called *Language, Truth, and Logic*, in which these questions are discussed. As it is the most recent treatment of the subject in English, and is written by one who is thoroughly familiar with Continental work on the same topic, I shall make no apology for considering it in some detail at this stage.

On p. 103 of his book Mr. Ayer remarks that we may "say that a proposition is . . . synthetic when its validity is determined by the facts of experience." I take it that this is meant to be a *definition* of the word "synthetic" as applied to propositions. Now it is also the usual definition of "empirical" as applied to propositions. Therefore Mr. Ayer has *defined* "synthetic" in such a way that all synthetic propositions will be empirical. Now the adjectives "empirical" and "a priori" are always understood to be opposed to each other. Hence it is a matter of *definition* that no a priori proposition is empirical. It follows at once that no a priori proposition is synthetic. Thus Mr. Ayer has answered our question in the negative simply by giving such a definition of "synthetic proposition" that the negative answer is entailed by it. It is evident that no-one who entertains the possibility that there might be synthetic a priori propositions would be in the least moved by this argument. For it is evident that

he would not mean by "synthetic" what Mr. Ayer defines that term to mean.

Now Mr. Ayer does not define "analytic propositions" simply as propositions which are not synthetic in the sense which he has defined. He gives an independent definition, which we must now consider. On p. 103 he remarks that we may "say that a proposition is analytic when its validity depends solely on the definitions of the symbols which it contains." On p. 104 he gives as an example of an analytic proposition: "Nothing can be coloured in different ways at the same time with respect to the same part of itself." And he says of this proposition that it "records our determination to call a colour expanse which differs in quality from a neighbouring colour expanse a different part of a given thing." Lastly, on p. 105 he says of analytic propositions that "they call attention to linguistic usages of which we might not otherwise be conscious, and they reveal unsuspected implications in our assertions and beliefs." Let us consider these statements.

(i) If an analytic proposition states that the person who records it intends to use certain words in certain ways, it evidently makes a statement about the present experiences of the speaker and about his future behaviour. The former can be tested only by the speaker himself introspectively. The latter can be tested by seeing how the speaker does use these words in the later parts of his discourse. The analytic proposition is therefore quite plainly synthetic and empirical.

(ii) If an analytic proposition "calls attention to linguistic usages," it states an alleged matter of fact about the majority of writers and speakers of the language which the speaker is using. It can be tested by reading the works of a representative selection of persons who use this language, and seeing whether they do use words and phrases in the manner alleged. The analytic proposition is therefore quite plainly synthetic and empirical.

If, then, we accept either of these definitions of "analytic," it follows at once that all analytic propositions

are synthetic and empirical. And, if we hold that all a priori propositions are analytic in one or other of these senses, it follows that all a priori propositions are synthetic and empirical. The situation would then be as follows. (a) Analytic propositions are a certain sub-class of synthetic empirical propositions. (b) All a priori propositions are analytic in the sense defined. Now the first of these statements is of no particular interest, since it is merely an immediate consequence of the definitions of "analytic," "synthetic," and "empirical." It is the second of them on which attention should be concentrated.

We defined an "a priori proposition" as one which is either (a) such that it could be seen to be true by a rational being of sufficient insight and intelligence by merely inspecting it and reflecting on its terms and their mode of combination, or (b) is logically entailed by premises all of which answer to the first condition. Now I think it is evident that *no* proposition which was analytic in the second of Mr. Ayer's senses could be a priori in the sense just defined. No proposition about the linguistic usages of a certain language could possibly be seen to be true by mere inspection of its terms and reflexion on them and their mode of combination. And no such proposition could be entailed by premises all of which were of this nature.

If we consider the first of Mr. Ayer's senses of "analytic," we find that the situation is somewhat different. When a speaker makes a statement to the effect that he is now intending to use certain words and phrases in certain ways, *he* can see whether the statement is true or false simply by *introspecting* his own mind at the time and noticing whether the intention which he is expressing is the intention which he finds in himself at the time. But, even so, introspecting one's own mind is not the same as inspecting and reflecting on the terms of a proposition and the way in which they are combined. And no-one who hears or reads the speaker's statement can see whether it is true or false by the introspective method. The hearer or reader has to infer the truth or falsity of the speaker's statement about

his present intention as best he can from the speaker's subsequent use of the words or phrases about which the intention has been stated. It is quite evident then that *no* proposition which was analytic in the first of Mr. Ayer's senses could be a priori for *anyone but* the speaker. And it would not be a priori for the speaker himself. It is either an "hypothesis," in Mr. Ayer's sense of the word, or is something which Mr. Ayer rejects, viz., an "ostensive proposition."

Now, when an author's various statements lead to such a very odd situation as that to which, if I am not mistaken, Mr. Ayer's statements do lead, it is always charitable and generally reasonable to suppose that he has something intelligible to say but has failed to say it clearly. I shall therefore try to formulate in intelligible terms a theory which, I think, might be what Mr. Ayer is trying to express by the sentence: "There are a priori propositions and they are all analytic."

The theory is as follows. (i) There are no a priori propositions, in the sense in which I have defined the phrase "a priori proposition." (ii) There are, however, "ostensibly a priori propositions," *i.e.*, propositions which seem *prima facie* to answer to my definition. (iii) All ostensibly a priori propositions are really synthetic empirical propositions of a certain kind, viz., announcements by the speaker of his present intention to use certain words and phrases in certain ways or statements about the current usage of certain words and phrases in a certain language. (iv) Synthetic empirical propositions of this special kind are defined as "analytic propositions." (v) Therefore there are ostensibly a priori propositions, and they are all analytic in the sense just defined.

Obviously there are two and only two points in this theory which call for further discussion. These are the two closely connected clauses, which I have numbered (i) and (iii). I shall first comment on (iii).

Why should empirical synthetic propositions of the kind described in (iii) seem *prima facie* to be a priori in the sense defined by me, when neither they nor any other propositions

are in fact a priori in that sense? The theory will never be satisfactory unless it can offer some reasonably plausible explanation of how such a gross mistake might have arisen and become so prevalent. On this point I have the following observations to make. (a) I do not see how or why announcements by a person of his intention to use certain words and phrases in certain ways should appear to *him* to express a priori propositions in the sense defined by me. Nor can I see what should cause the hearers or readers of such announcements to mistake them for expressions of a priori propositions in the sense defined by me.

(b) I can see that a proposition which explicitly formulates a linguistic usage which one has been implicitly following (save for occasional inadvertent slips) all one's life, and which has been implicitly followed by all the writers and speakers whom one has read and heard, *would* be likely to stand out in a characteristic way from other kinds of empirical propositions. In one sense it would give you new information, whilst in another sense it would tell you only what you already knew. And this does seem to be a mark of ostensibly a priori propositions. Therefore the theory that all ostensibly a priori propositions are analytic in this sense has enough plausibility to be worth serious consideration.

(c) It is important to notice, however, that we know by experience that *not all* propositions which are analytic in this sense are ostensibly a priori. For the propositions of ordinary grammar, *e.g.*, the rules about the current use of "shall" and "will," "should" and "would," in English are perfect examples of propositions which are analytic in this sense. Yet they do not appear to Englishmen, who have been implicitly following these rules all their lives, as a priori propositions, in the sense in which: "All equilateral triangles are equiangular" does appear to be a priori. It is therefore vitally important that upholders of this theory should tell us quite plainly what it is that distinguishes those rules about linguistic usage which *do* get mistaken for a priori propositions from those which

do not. Enthusiastic talk about "philosophical grammar," as if that were an explanation, is useless. For the phrase is clearly metaphorical. "Philosophical grammar" is *not* grammar in the ordinary sense of the word ; what we want to know is, the precise point of analogy and the precise point of unlikeness between propositions which are said to belong to *philosophical* grammar, and propositions which belong to *grammar* in the straightforward non-metaphorical sense of the word.

(d) I am inclined to think that the following analogy with geometry may be helpful, and I give it for what it is worth. There are certain *intrinsically* different kinds of surfaces, *e.g.*, developable surfaces (*i.e.*, planes, and surfaces that can be unfolded into planes without stretching or tearing) ; surfaces of uniform finite curvature (*e.g.*, spheres) ; and surfaces of non-uniform finite curvature (*e.g.*, ellipsoids). Now these intrinsic peculiarities can hardly be expressed and treated in detail except by introducing some system of co-ordinates for the points of the surface under consideration. A system of co-ordinates is an *extrinsic* device, and the same surface can be mapped out into a co-ordinate system in many different ways. *E.g.*, it is a matter of indifference whether the co-ordinate system for a plane is two mutually rectangular sets of parallel straight lines, as in the Cartesian method, or is a set of concentric circles and a set of radii diverging in all directions from their common centre, as in the Polar method. Yet the intrinsic nature of a surface *does* impose certain limits on the range of alternative co-ordinate systems which can be used to map it out. *E.g.*, it is obvious that Cartesian co-ordinates are an impossible method of mapping the points on a sphere. For the lines on a sphere which correspond to straight lines in a plane are great-circles ; and it is impossible to map out the surface of a sphere by two mutually rectangular sets of *parallel great-circles*. For, although two great-circles can be at right-angles to each other, no two great-circles can be parallel to each other. Thus, all the innumerable alternative sets of co-ordinates which are equally available for mapping out a *developable* surface will have something

common and peculiar to them which marks them off from the innumerable alternative sets of co-ordinates which are equally available for mapping out a surface of *uniform finite curvature*. And similar remarks apply, *mutatis mutandis*, if we substitute "surface of uniform finite curvature" for "developable surface" and "surface of non-uniform finite curvature" for "surface of finite curvature" in the last sentence.

The essential factor for us to notice in all this is the following. Although the mapping of the points on a surface by a system of co-ordinates is an *extrinsic* device, and although there are innumerable alternative systems which are equally available for the same surface, yet certain *intrinsic* properties of the surface impose certain very general conditions which any such device must obey if it is to be capable of fulfilling its purpose. And it is almost impossible to express the *intrinsic* property of a surface in a way which makes it susceptible of mathematical treatment except by the roundabout method of formulating the condition which must be obeyed by all the *extrinsic* devices that can be used for mapping the surface.

Now the analogy that I want to suggest is the following. Presumably there is a system of objective fact, with a structure of its own which is quite independent of us and our thoughts and our languages. Its structure may be compared with the intrinsic nature of a developable surface, or of a surface of finite uniform curvature, or of a surface of finite variable curvature. In our cognitive activities we are trying to think about this system of objective fact and to know as much as we can of it. But, in order to do this in any detail, we have to use language and other systems of symbolism, just as the geometer has to use systems of co-ordinates in order to discuss in detail the geometrical properties of surfaces. An immense number of alternative languages and other systems of symbolism are no doubt available, just as an immense number of alternative co-ordinate systems are available for mapping out surfaces of uniform finite curvature. But presumably the objective structure of the system of fact imposes *some*

limitation on the alternative systems of language or symbolism which are capable of representing it. (No doubt a further limitation is imposed by the fact that all these languages have to represent the objective system of fact, not to some abstract "Bewusstsein überhaupt," but to *human* minds with their actual past history and at their actual present stage of development.) Thus, if we could disentangle and formulate any features common to all systems of symbolism and languages, we should have a clue to the structure of the objective system of fact. And it is doubtful whether we could discover anything about the latter except in this rather roundabout way. Moreover, the formulation would have to be made in some particular pre-existing language or system of symbolism; or, if not, the new symbolism in which it was formulated would have to be explained by means of some pre-existing language or system of symbolism. Otherwise it would be unintelligible. Thus propositions which attempted to describe the structure of the objective system of fact would almost inevitably take the form of propositions which formulate certain very abstract and general and widespread linguistic usages.

Now, if there is anything in this suggestion, there are several obvious dangers to be noted. (α) Most of us are acquainted only with languages of one philological family, *e.g.*, the Indo-European. There is obviously a danger that we may mistake certain linguistic usages, which happen to be common to all the languages that we know, for factors which are essential to *every* system of symbolism that is capable of fitting the structure of the objective system of fact. It is therefore highly desirable that there should be some philosophers who are thoroughly acquainted with Chinese, with Hebrew, and in general with highly developed and civilized languages of different philological families, and that information on the structure of these languages should be pooled. (β) Even if this difficulty were surmounted, we could never know for certain how much in the features common to all existing languages is due to their having to fit the structure of the objective

system of fact, and how much is due to contingent circumstances in the development of human speech and writing. (γ) Lastly, we have no guarantee that any of the existing languages and systems of symbolism are such as to be capable of accurately symbolizing the structure of the objective system of fact. They may all be like attempts to map out the surface of a sphere with a Cartesian system of co-ordinates. That all natural languages are defective and distorting media is almost certain, and is what might be expected from their history. But we must remember that all artificial systems of symbolism, which have been constructed to avoid the defects of natural languages, have been constructed by people who habitually thought in terms of one or more of the natural languages. They are bound to retain many traces of their origin, and they may embalm some of the defects of the natural languages from which they sprang.

I have now said all that I have to say on the third clause of the theory which I formulated above as a possible interpretation of the doctrine that there are a priori propositions and they are all analytic in the sense defined by Mr. Ayer. It remains to say something about the first clause, viz., that there are no a priori propositions in the sense in which I defined the term. Why are many people so certain of this? And is it itself supposed to be an a priori or an empirical proposition?

It is certain that there are synthetic empirical propositions. Therefore, if there were synthetic a priori propositions, synthetic propositions would fall into two very different sub-classes. Now we do not readily accept as ultimate the sort of situation which is summed up in the sentence "Some S is P and not Q, and some S is Q and not P, and all S is either P or Q." We are not satisfied unless we can find some characteristic R, which is common and peculiar to the S's which are P (or to the S's which are Q) and explains why those S's and only those are P (or are Q, as the case may be). *E.g.*, if we were told that some matches in a certain match-box lighted properly, that some fizzled out, and that all did one or the other,

we should look for some property, such as dampness, common and peculiar to the matches which fizzled out, which explains why those which had it and only those behaved as they did.

Now, if there are synthetic propositions which can be seen to be true by mere inspection, or which can be deduced from premises all of which are of that nature, it is very hard to discover any *other* feature which is (a) possessed by *all* of them and by *no* empirical synthetic proposition, and (b) explains why those synthetic propositions which possess it, and no others, have this epistemological peculiarity. I feel pretty certain that this fact is an important cause-factor in making many people believe that there are no synthetic a priori propositions.

Now the theory which holds that all ostensibly a priori propositions are really synthetic empirical propositions of a certain special kind is not in this difficulty. It can point out that *all* those synthetic propositions which seem to be a priori are, in a certain sense, propositions about linguistic usage; and that *all* those synthetic propositions which are, in that sense, about linguistic usage, seem to be a priori. And, if only it could tell us in what precise sense such propositions are "about linguistic usage," it might be able to show, on admitted psychological principles, that a proposition which was about linguistic usage, in this sense, would be likely to be mistaken for an a priori proposition.

I strongly suspect that this is a correct account of the *psychological causes* which have given rise to a strong feeling in favour of the view that there are no a priori propositions, and that all ostensibly a priori propositions are really synthetic empirical propositions about certain kinds of linguistic usage. Is this psychological cause also a *logical ground*? About this I have one concluding remark to make.

If the principle that such facts as are expressed by "Some S is P and not Q, and some S is Q and not P, and all S is either P or Q" are always derivative and need explanation, in the sense described above, were itself a

priori, it would be an instance of a genuinely a priori synthetic proposition. Therefore it could not consistently be used as a ground for holding that there are no synthetic a priori propositions. If, on the other hand, it is merely an empirical generalization, it will be only more or less probable. In that case it can do no more than add to the probability that there are no genuinely a priori propositions and that all ostensibly a priori propositions are "analytic" in Mr. Ayer's sense.

It seems plain to me that there is only one consistent view for those who hold the theory which we have been discussing to take about the theory itself. They ought to hold that it is an *empirical generalization*, and that the evidence for it is the fact that this, that, and the other representative instance of an ostensibly a priori proposition has been shown to be really a synthetic empirical proposition about certain linguistic usages. Perhaps this is what they do hold. But there is always a tendency for empiricists to base their denial of synthetic a priori propositions on some tacitly assumed epistemological premise which is certainly synthetic and which they take to be self-evident. A notorious example is Hume's principle that every simple idea resembles and is due to a previous simple impression; a proposition which Hume, on his own principles, could not possibly know and could not have any empirical ground for believing. And I strongly suspect that some people accept the theory that there are no synthetic a priori propositions because the epistemological principle that *no* synthetic proposition *could possibly* be self-evident (which is certainly a synthetic proposition) *does in fact* seem to them self-evident.

If I am right in thinking that the theory can be held consistently only by those who hold that it is an empirical generalization, it is clear what the next step should be. What is wanted is a detailed examination of (and not vague "gas" about) logic, arithmetic, algebra, geometry, and ethics, in order to see whether representative propositions in each of these ostensibly a priori subjects can all be shown to be synthetic empirical propositions about certain

kinds of linguistic usage. There are a good many remarks which I should like to make about each of these subjects ; but it is useless to treat them at all unless one can do so thoroughly and in detail, and there is no space for this here. I hope that one of the other symposiasts may supply this omission.

II.—BY MR. A. J. D. PORTEOUS.

NOTWITHSTANDING the masterly clarity and precision with which Prof. Broad has analysed the meaning of our question, he has left it without a definite and conclusive answer. Instead of attempting to reply to it directly, he has chosen the negative path of criticizing a widely prevalent theory of the *a priori* which, if true, would at once rule out an affirmative answer. And on the issue as between this theory, carefully restated by him in a more consistent form than that given to it by a recent expositor, and the more orthodox position which he seems personally to favour, he is content to suspend judgment while awaiting the verdict of a detailed confrontation of the two theories in the relevant fields. This task of examining them at close range and in detail he bequeaths to his fellow symposiasts.

I am sorry that I cannot, for more than one reason, see fit to follow this cue. Since I am more or less in agreement with what I take to be Prof. Broad's view of logic and mathematics, and equally desirous of finding grounds for rejecting the part of Mr. Ayer's theory which deals with these, it might seem foolish of me, not to say ungracious, to quarrel with my predecessor's statement of the problem, rather than try to carry out the programme he has mapped out for us. But quite apart from my lack of appropriate training for an adequate discharge of the task he suggests, I am unfortunately unable to acquiesce in his restriction of *a priori* truths to "propositions which can be seen to be true by mere inspection, or which can be deduced from premises all of which are of that nature," or (in his terminology) to what is "intuitably or demonstrably *a priori*." For I believe that this restriction, together with the ambiguity of the phraseology which Mr. Ayer uses to express his view, have combined to prevent Prof. Broad from doing full justice to the strength and plausibility of the logical positivists' position in the amended version of it which he has substituted. I fear that Mr. Ayer, instead of thankfully

receiving the corrected edition of his thesis, might reject it as a misrepresentation of what he was trying to say, though I hasten to add that it is the only legitimate interpretation of much that Mr. Ayer *says*: and if he is misunderstood, it is largely his own fault. I should perhaps add parenthetically, to make my own position quite clear, that I should accept Prof. Broad's distinction between the "intuitably" and the "demonstrably" *a priori*, provided that it was clearly understood that it was a distinction of *degree* and not of *kind*. For no proposition can be seen to be *self-evidently* true strictly in and by itself. A full understanding of it requires consideration of the propositions which define the meaning of its terms and relations, and it is in the light of these defining propositions that it is *evident*. On the other hand, in demonstration, each step must be intuitably certain. But I think that Prof. Broad might agree to this qualification.

Now a careful reader of the opening paper will have noticed two surprising omissions. Despite the care with which Prof. Broad examines the possible meanings of the terms "analytic" and "synthetic," he does not himself offer us an explicit definition of them, and thus leaves his own usage in some doubt. More significant still, he makes throughout no mention of Kant—a singular silence when one reflects that the form taken by our question is ultimately due to Kant.

Preliminary comment on each of these points (I shall take the second first) may serve to explain, if not to justify, my plea for a redefinition of terms. Secondly, I propose to consider the extent of my disagreement with Prof. Broad's restatement of the thesis of the logical positivists, in order to make it clear where I consider that the main issue lies. Thirdly, I shall try to suggest some considerations which tell against the view of analytic *a priori* truths which Mr. Ayer expounds, and strengthen the traditional view which I think we both hold, though we may choose to express it in different terminology. Lastly, while, in my view, the truths of logic and pure mathematics are most fitly and usefully described as *analytic* and *a priori*, I shall

endeavour, in the space that remains, to vindicate a place for synthetic *a priori* propositions applying to nature and to conduct, even though the task of formulating them successfully is admittedly difficult.

I.

(1) In the first place, one can easily understand and sympathize with the omission of all reference to Kant. For Kant's mode of drawing the distinction between analytic and synthetic judgments, which apparently first served to bring the terms into use in this logical reference, was an unfortunate one, and has provoked much justifiable criticism ; and Kant's treatment of formal logic and of the mathematical sciences of arithmetic and geometry has inevitably been superseded by the progress of thought in these fields since his day. Also, it would have been unwise, I think, to run the risk of diverting the discussion to an attempt to disentangle Kant's conflicting statements and assess the value of his views. Nevertheless it seems to me that Kant's contribution cannot be entirely ignored. For I think it is true to say (*a*) that it was because of an alteration made by Kant in the meaning of the term "*a priori*" that our question was first introduced into the arena of philosophical discussion, and indeed appeared to Kant to sum up the main problem of the Critical Philosophy ; and further, (*b*) that it is in opposition to the Kantian theory that the views of the mathematical logicians and logical positivists, of whom Mr. Ayer is an able and representative spokesman, are consciously and explicitly developed.

As has been said, one effect of Kant's teaching was to give a new meaning and application to the term "*a priori*." By his predecessors, as, *e.g.*, by Leibniz, it had come to be used, in opposition to the empirical, to mean what is independent for its truth of particular experience. To the Cartesians the propositions of logic, arithmetic and geometry seemed to answer to this requirement. Their truth was either self-evident by the light of reason, or capable of rigid demonstration from self-evident propositions by

steps each of which was equally evident : no empirical verification was required. Prof. Broad's own definition is obviously framed, I think, with these sciences specially in mind. Now Leibniz regarded them also as *necessary* (his reason being that he thought they were analytic identities, provable by the law of contradiction) yet he did not proceed to equate the *a priori* with the necessary. For he believed that there were proofs which were *a priori* in the sense that they did not rely for their validity on particular experience, but which were contingent and not necessary, since they appealed to a principle of sufficient reason (*viz.*, certain proofs of "truths of fact or existence" in terms of final causes).

Kant, however, having made the discovery that the propositions of logic and mathematics were not analytic in Leibniz's sense (*i.e.*, seen to be true by the principles of identity and contradiction alone), but *synthetic*, was forced to find some other explanation of their certainty and self-evidence (which he never doubted). To this end he devised his doctrine of a pure *Anschauung*.* And he was further led to extend his *a priori* to cover truths such as the ultimate principles of Newtonian physics, which he believed to be certain and necessarily true, and which yet could not be regarded as self-evident in the Cartesian sense. Thus Kant, like his predecessors, defined *a priori* truths negatively as truths whose validity was independent of particular facts of experience ; but since he offered *universality* and *necessity* as the distinctive marks of them (the second being more important, since the first follows from it), he was, in effect, divorcing the *a priori* from its connexion with the self-evident. In its application it now covered universal and necessary principles which enter into the *de facto* structure of our knowledge, and which no future experience could ever serve to overthrow, yet which are not evident as the propositions of logic and mathematics are evident. Because of his unquestioned assumption (apparently shared by the

* Modern "finitists" or "intuitionists" of the school of Brouwer adopt a similar solution.

logical positivists) that experience can supply only particular data to knowledge, Kant was thereby forced to have recourse to his unfortunate Copernican revolution, and to trace the source of *a priori* truths to the mind's own equipment.

I think it is important to follow Kant in regarding necessity, rather than self-evidence, as the distinctive mark of the *a priori*. Mr. Ayer admits this to be a characteristic of his analytic *a priori* truths, and Prof. Broad would, I think, admit that it applies to *a priori* truths as defined by him. These seem to be *logically necessary* propositions.

(2) If we agree to reject Kant's distinction between "analytic" and "synthetic" judgments, should the terms be abandoned altogether as an unsatisfactory basis of classification? I think that Prof. Broad would probably answer this question in the affirmative, though his paper leaves room for doubt on the matter. For he rejects unhesitatingly such tautologies as "All equilateral triangles are equilateral," which are sometimes offered as specimens of analytic propositions (and here I would agree with him); and, at the end of his paper, he states the issue as if it were one as to whether, within the genus "synthetic propositions," two exclusive and exhaustive species, "empirical" and "*a priori*," could be discovered, or whether the second class be null. Yet, on the other hand, he does in one place suggest that it might be possible to define "analytic" in a wider sense, in which there could be no doubt that it did apply to a genuine class of propositions; though, it is true, he makes no attempt to do so himself, and Mr. Ayer's analytic propositions are shown to be a sub-class of synthetic empirical propositions. As I hold that it is both useful and important to retain the terms "analytic" and "synthetic" as a correct logical division of propositions, defining the one as the contradictory of the other, it is necessary for me at this point to consider how that can be done. If I am right in my interpretation of Prof. Broad's intention, this difference in choice of terminology does not involve any actual difference in point of view as regards the status of logical and mathematical truths. We should both agree, in opposition to a widespread view (which the logical positivists share

with some advocates of a Coherence Theory of Truth), that there *are a priori* truths in the sense defined by Prof. Broad, and that the propositions of logic and pure mathematics supply the most obvious examples of such truths. If Prof. Broad is using "synthetic" in the sense of "informative" or "significant," then I agree that they are examples of synthetic *a priori* truths. But I think that there is a more useful sense in which they can be called *analytic*, a sense very close to that in which Prof. Broad wishes to define "*a priori*" ; and this fact furnishes a very good reason why he should be unwilling to follow me in my proposed definition. For he would then be legislating for the conclusion that all *a priori* truths are analytic, and indulging in a mode of reasoning analogous to that of which he rightly convicts Mr. Ayer.

To make our proposed definition clear, it is necessary very briefly to consider why the one proposed by Kant in the Introduction to the *Critique of Pure Reason* is untenable. Kant there defines an "analytic" judgment as one in which the predicate is the name of an attribute already contained in the "subject-concept," the assertion of which, consequently, can be justified by the principle of contradiction. To take his own examples, "All bodies are extended," as contrasted with "All bodies are heavy," is regarded as being analytic because "body" is understood to be defined as "extended substance." It is clear that this is only saved from being the meaningless identity or tautology which Prof. Broad and I both agree to reject, if it represents the making explicit of distinctions which are only vaguely and implicitly present in the subject-term ; if it is, as Kant says, a clarification of the concept. In that case it is plainly informative, synthetic and not analytic.

We might perhaps attempt, as Mr. Joseph does in his *Introduction to Logic*, to discover a surer basis for division by adopting the Aristotelian distinction of *essential* and *accidental* attributes (the latter to include "*propria*" as well as accidents), and calling "analytic" those which assert in the predicate an element of the definition ; though even these would be synthetic in the sense of not following from the

principle of contradiction alone, since the subject is not a mere aggregate of attributes, but a unity of characters in close connexion. The objection to such a mode of distinction is the obvious difficulty of finding, at least outside mathematics, any good justification for regarding certain privileged attributes as belonging to the essence of a thing. Definition in science is useful for purposes of classification, which means that it is largely arbitrary, and serves to cloak our ignorance of hidden causes : to use Locke's terminology, all essences are nominal and not real. To cling to an Aristotelian usage which presupposes the exploded conception of the fixity of species, and to a belief in formal or substantial essences, would not, as Mr. Joseph himself recognizes,* advance our scientific aims. No allowance would be made for progress in knowledge or change in our definitions ; though it is not true to say that the view would allow a proposition which is synthetic for one person to be analytic for another with fuller knowledge, or for the same person on a future occasion, since the meanings of our words are conventionally fixed over considerable periods.†

There is, of course, a sense in which it is true, as certain modern logicians hold, that all significant propositions (or judgments) are both analytic and synthetic. They render explicit the differences latent within an underlying identical whole, the object of the judgment. But it must be recognized that the differences and the identity can be of different kinds, and this distinction obviously will not serve as a basis for the classification we desiderate. More important still, this whole way of attempting to draw a distinction implies that all propositions are ultimately of the substance-attribute type, which modern logic (apart from Idealist logicians like Bradley) very properly rejects. The distinction cannot really be applied to the relational propositions

* *Op. cit.*, p. 101 f.

† Mr. Ayer rightly notes on p. 136 f. of his book that definition cannot be used to convert an empirical generalization, such as "All men are mortal," into a necessary truth by including "mortality" in our definition of man. This juggling with the meaning of words would only create a tautology.

of pure mathematics. Kant was right in calling such propositions synthetic,* though he may not always give the right reason for saying so. He meant that they could not be proved by appeal to the principle of contradiction alone, but are informative (and here I think Prof. Broad would agree with him). When he justifies his usage by saying in effect that the subjective intension of 12 is not contained in the subjective intension of $7 + 5$, he is merely giving an irrelevant and bad reason for his view.

There is, however, one very important characteristic, unrecognized in Kant's day, which is shared by all the propositions of a logical or mathematical system, and not possessed by most other significant truths, *viz.*, the property of being certainly true† in an epistemological sense. We may call it "self-evidence" (or better, "evidence"), provided we are not understood as meaning psychological "obviousness" to a cursory glance or to a low level of intelligence; it is, I think, partly to indicate possession of this evidential character that mathematical logicians call these propositions "analytic." Now a system of logic or mathematics is derivable from an abstract system-form, where a selected set of independent postulates serve jointly to limit the scope of possible interpretations of the variables (symbolizing elements or relations) employed in their statement. Once the variables have received a suitable and consistent interpretation, there results a coherent deductive system, in which the meanings of the terms and relations are fixed, and the range of deducible theorems determined, by the nature of the initial postulates and definitions. The derived propositions of the system receive their meaning and certainty from these: relatively to them they are *self-evidently true*. They are thus *analytic of the system as a whole* in the sense that, given the system, none of them can be significantly denied without contradiction. A logical calculus of propositions, the ordinary system of arithmetic, or

* The forms of *all* propositions (analytic and synthetic alike) are, I think, set forth by Kant's general (or formal) logic. The sense in which, as contrasted with his transcendental logic, it is analytic appears to be different.

† In Prof. Price's terminology, "in corrigible."

an abstract geometry (Euclidean or non-Euclidean), furnish obvious examples of such systems of propositions.*

My interpretation of analytic propositions such as $2 + 2 = 4$ makes the principle of contradiction only a *negative* criterion of their truth. Perhaps those who assert that *a priori* truths are analytic, in the sense of "true by definition," wish to go further, and maintain in addition that the principle of contradiction provides a *positive* and *sufficient* ground also; for they continually call them "identities" and "tautologies." But Kant is surely right in holding that they cannot be *proved true* by the principles of contradiction and identity alone, and are therefore *synthetic* in his sense of the word.† The confusion here seems to be due to the erroneous view that entailment and other types of implication are forms of "containing," and that the derived theorems are literally "included in" the postulates and definitions, from which the processes of deduction somehow *elicit* them. This, I think, is a profound mistake. Thus, by calling such propositions "analytic," I mean only part of what I think mathematical logicians mean by calling them "tautologies," *viz.*, in the case of the second-order of propositions of logic proper, that there is no conceivable alternative to them, and in respect of the propositions of logistic and mathematical systems that, given the system, they cannot meaningfully be contradicted. What else, in addition, specialists in these fields mean by the word "tautologies" is not quite clear. My surmise is that their phrase "true by definition" is taken to imply that they are "absolutely devoid of factual content," and "yield no information about the real world." It is just here, I think, as I shall try to show presently, that their view has to be challenged. But the analytic character of logic and mathematics is important enough to be signaled by a distinctive term. By "analytic," then, I propose to mean "possessing the character of (self-) evidence and certainty (in corrigibility)." By "synthetic" will be meant "not evident in this sense." The

* cf. E. J. Nelson, *Mind*, N.S. XLII, No. 165, p. 35 f.

† As a matter of fact, the principle of contradiction appears as a derived proposition in *Principia Mathematica*.

term "*a priori*" I shall use in the extended Kantian sense of "necessary propositions whose truth cannot be established inductively, or on empirical grounds." These definitions leave open the possibility that there may be *a priori* truths which are (in my sense) *synthetic*.

II.

Bearing these distinctions in mind, I shall now try to show that Prof. Broad's re-statement of Mr. Ayer's theory fails to take account of a most important part of what he, and those whose views he is expounding, wish to assert. It is a part which they share in common with mathematical logicians like Prof. C. I. Lewis, who follow more closely along the epistemological lines of Kant. Mr. Ayer, I think, like Lewis, wishes to insist that *a priori* truths are necessary because *true by verbal definition*. We legislate for the truth of logical and mathematical truths by our initial selection of postulates and primitive notions. They contain just what we ourselves have voluntarily, and therefore *arbitrarily*, put into them. They thus represent an elaborate *petitio principii*, and are not unworthy of the designation "tautologies." This contention I must substantiate by quotations from Mr. Ayer's book. If it can be made good, then I think it will be apparent that Prof. Broad's amended version leaves out an important part of what his opponents mean to assert, and which, to specialist workers in these abstract fields, gives a certain plausibility to the whole view. We can then consider how far, when the issue is thus restated on somewhat different lines, the way is open for a decision.

Of the three passages quoted by Prof. Broad to illustrate Mr. Ayer's definition of "analytic," the last two appear directly to support his contention that what Mr. Ayer calls "analytic propositions" are in reality a species of synthetic empirical propositions, *viz.*, those dealing in some sense with linguistic usages. I think that Prof. Broad's inferences are made possible by an ambiguity latent in phrases like "linguistic usages," and to the existence of some doubt as to what a definition *asserts*. If the propositions of which

Mr. Ayer is speaking are taken as being statements of the intentions of persons to use words in a certain way, or of the conventional usages of certain languages, their truth or falsity can be verified by an appeal to introspection, or to the behaviour of the users of such languages ; then, in that case, they are certainly *empirical*, and they are certainly not *identities*. That this is not what Mr. Ayer means to say, and does not represent his real contention about *a priori* truths, I can only establish by rather lengthy quotation of the relevant passages.

Besides the first statement quoted by Prof. Broad from p. 103, that "a proposition is analytic when its validity depends solely on the definitions of the symbols it contains," repeated almost verbally on p. 109, we have a significant passage on p. 114, which I must quote in full : "We have already explained how it is that these analytic propositions are necessary and certain. We saw that the reason why they cannot be confuted in experience is that they do not make any assertion about the empirical world. They simply record our determination to use words in a certain fashion. We cannot deny them without infringing the conventions which are presupposed by our very denial, and so falling into self-contradiction. And this is the sole ground of their necessity. As Wittgenstein puts it, our justification for holding that the world could not conceivably disobey the laws of logic is simply that we could not say of an unlogical world how it would look. And just as the validity of an analytic proposition is independent of the nature of the external world, so is it independent of the nature of our minds. It is perfectly conceivable that we should have employed different linguistic conventions from those which we actually do employ. But whatever these conventions might be, the tautologies in which we recorded them would always be necessary. For any denial of them would be self-stultifying."

It is clear from these passages, and others about to be cited, and from Mr. Ayer's reiterated assertion that such *a priori* tautologies tell us nothing about facts, and imply no reference to the empirical world, that the essential point on which he wishes to lay stress is the *arbitrariness* of the defini-

tions, and not that they express a volition of the speaker, record a set of pervasive linguistic habits, or assert actual conventions of language. Yet unless we can somehow clear up the ambiguities of Mr. Ayer's phraseology, the inevitability of Prof. Broad's inferences cannot be denied.

Before considering how this can be done, I would call attention to a long passage on pp. 86-7, where Mr. Ayer suggests a method of meeting the sort of objection which Prof. Broad has raised. He is there discussing the nature of philosophy as the logical positivists conceive it: "It is misleading, also, to say, as some do, that philosophy tells us how certain symbols are actually used. For this suggests that the propositions of philosophy are factual propositions concerning the behaviour of a certain group of people; and *this is not the case*. . . . That English-speaking people should employ the verbal conventions that they do is, indeed, an empirical fact. But the deduction of relations of equivalence from the rules of entailment which characterize the English, or any other, language, is a purely logical activity; and it is in this logical activity, and *not in any empirical study of the linguistic habits of any group of people*, that philosophical analysis consists." In a footnote to this he admits that "there is a ground for saying that the philosopher is always concerned with an *artificial language*. For the conventions which we follow in our actual usage of words are not altogether systematic and precise." Then follows the significant passage: "Thus, in specifying the language to which he intends his definitions to apply, the philosopher is simply describing the conventions from which his definitions are deduced; and the validity of the definitions depends solely on their compatibility with these conventions. In most cases, indeed, the definitions are obtained from conventions which do, in fact, correspond to the conventions which are actually observed by some group of people. And it is a necessary condition of the utility of the definitions, as a means of clarification, that this should be so. *But it is a mistake to suppose that the existence of such a correspondence is ever part of what the definitions actually assert.*"*

* My italics throughout.

Now Mr. Ayer would not, of course, assert that the propositions of philosophy are devoid of any factual content, in the sense in which he would assert it of the propositions of a pure logical calculus, or of a mathematical system. But even here, it is on the aspect of definition which we can without misunderstanding call *normative* that he would lay stress. And he would, I take it, say that, when it comes to the definitions of the logical constants which appear in an artificially-created symbolic system of logic or pure mathematics (*i.e.*, the sort of *a priori* analytic propositions he is talking of), then this normative aspect has entirely eclipsed the reference to actual usages and conventions.

Now it would seem to be true that most, if not all, definitions have this normative or prescriptive aspect (as witnessed by the tacit allusion to *correct* usage), as well as the reference, implicit or explicit, to the conventional or established meanings of words, and to the will of him who enunciates the definition. A definition is primarily a *rule* for guidance in the use of words or other symbols (though I should maintain that, ultimately, it presupposes a reference to the nature or properties of the *things meant* by the words which constitute the definition). It is freely admitted that in most cases the definition, by assuming conformity with current usage, contains, in addition, factual elements, which make it therefore true or false. This is the case with the definitions of the words in a dictionary, which are not arbitrary except to the extent to which the conventional meanings attached to words are arbitrary. But in so far as they enunciate the *correct* usage, and so erect a *norm* or standard of usage, they are not contravened by the unfortunate fact, which Mr. A. P. Herbert has recently demonstrated at length, that many people misuse language.

The determination or intention of the framer of the definition need not be, and as a rule is not, explicitly formulated in the statement of the definition. It is, in Mr. Ryle's terminology,* *evinced* by the asserting of it, but not *stated* in the content of what is asserted, *i.e.*, the implied intention of

* *Proc. Arist. Soc.*, Vol. XXX, 1929-30, p. 95.

the speaker is inferred from the utterance of the sign (the spoken or written sentence). The assertion of the proposition is *evidence for* the state of mind of the assertor. If this distinction be accepted, it removes this factual element from what is asserted in a definition. That Mr. Ayer at least would accept the distinction seems clear from his use of it in his analysis of ethical propositions, and his distinction between emotive and assertive language (p. 160).^{*} Now, in the case of an *artificially constructed* system of symbolism, such as that of *Principia Mathematica*, where the definitions are simply statements of the formal equivalence of two symbolic expressions (though implying that the *definiens* can be substituted for the *definiendum* where convenient), there is no direct *assertion* of an intention,[†] or any reference to current usage.

This distinction, it seems to me, will absolve Mr. Ayer from the charge of including factual assertions in his analytic *a priori* propositions of logic and mathematics (if they can still be called propositions), when it is taken in conjunction with his view of the nature of such systems. But, as I shall presently suggest, there are grave reasons for doubting whether that view is not a mistaken one.

III.

I have now, I hope, made it clear why I cannot accept Prof. Broad's restatement of Mr. Ayer's theory as a complete account of what such a view wishes to maintain. Not

^{*} cf. pp. 158-9, where he uses "evince" and "express" indifferently with reference to the moral feelings for which ethical propositions are evidence. This use of the ambiguous word "express" helps to create confusion and misunderstanding.

[†] *Princ. Math.*, Vol. I, Edit. 2, p. 11. The distinction between stating or asserting and evincing will, it seems to me, dispose of Mr. Jackson's difficulty, expressed in his comment on the passage (*Proc. Arist. Soc.*, Vol. XXXIII, 1932-3, p. 225n.): "I cannot see why a definition should not be allowed to be the expression of a proposition about a volition. If I say I shall use a symbol in one way, and then use it in a different way, I say what is false."

having the space here to offer a fresh restatement of the logical positivist position, let me instead merely explain what I take to be the main issue which separates such a theory from the orthodox view which, if I am right, Prof. Broad is seeking to defend. Is the logical necessity which is a characteristic of the deductive systems of logic and pure mathematics one *of our own making*, 'and in a real sense *arbitrary*, or is it dictated by the inexpugnable nature of the objective world? Prof. Broad, I think, wishes to argue for the second view, since, by the self-evidence and entailment which characterize the *a priori* as defined by him, he seems to mean what I mean by the logically or mathematically necessary; though he appears to be sceptical, and perhaps needlessly so, of how far the abstract logical structure of the real evades any or all of our languages, or systems of symbolism, in which we try to express it. This is the moral of his elaborate geometrical analogy, which I for one find most illuminating, and which goes to the heart of the matter.

In my restatement of the issue the emphasis falls neither on "analytic" nor on "*a priori*," but on "truths." The consistent logical positivist will have to deny that his analytic *a priori* propositions are propositions, or *truths* in any sense in which empirical propositions are truths. They are rather of the nature of rules or prescriptions, just as "All trespassers will be prosecuted" (albeit it contains a factual assertion of future intention) is a law, and not an empirical generalization, much less a scientific law or statement of necessary connexion. Perhaps we might call them "quasi propositions" or "ostensible truths." The advantage of thus shifting the issue is that it frees us from the psychological difficulty (involved in Prof. Broad's statement of the problem) of explaining how propositions about general linguistic usages could ever be mistaken for self-evident *a priori* propositions.*

The three comments which I feel competent to make on the new situation I have outlined are strictly limited in value

* *v.* note at the end of this paper.

by my lack of expertness in the abstract fields of symbolic logic and pure mathematics. I shall make them in the two-fold conviction that an outsider may sometimes see more of the game than a specialist immersed in the details of the subject, and that philosophy must never allow itself, in its ultimate findings, to be completely under dictation by specialists.

(i) Mr. Ayer's theory appears to involve an erroneous view of the nature of definition. All definition (even if "definition" be defined as pertaining to words, not things) involves a reference, at longer or shorter remove, to some aspect of the world of fact. This would seem to be true even in defining the rules of the most arbitrarily devised game. A limit is always imposed upon our definitions by the nature of the real world, and to this extent they are not arbitrary. But in the case of the definitions employed in a system of logic or of pure mathematics I would go further: serious logicians do not normally—any more, I fancy, than do mathematicians—invent arbitrary notions, and develop systems from them which have no conceivable field of fruitful application. The system embodied in *Principia Mathematica* was developed with the object of exhibiting the logical foundations of mathematics, and designed to provide an analysis of its most fundamental concepts. It is, as Prof. Stebbing has remarked, a *directional* system. If the extensional relation of material implication be insufficient, as I think Russell has admitted, to enable actual inferences to be made without involving either contradiction or circularity, this simply shows it to be inadequate as a system of general logic, and to need supplementation by an intensional system; hence the search for a logistic system of the latter type, which will define and use implication in accordance with our ordinary sense of "implies." Prof. Lewis himself, who, as we shall see presently, insists most on the arbitrariness of logical systems, has developed an intensional logic of "strict" implication; though, apparently, both this system, because it retains the "paradoxes" of Russell's system in altered form, and Prof. E. J. Nelson's more limited system, which avoids the "paradoxes" but

only at too great a cost, fall short of the ideal aimed at.* I would, in short, suggest that the notions assumed, and the definitions given in terms of them, in the case of such relational words as "and," "if," "then," "not," "or," etc., are not arbitrary at all, but intended to state intuitible relations in the real world, or relations derivable from these. Witness the fact that primitive propositions are tested by application to concrete examples, when their "obviousness" becomes apparent, even though the purpose of this procedure be to enable us to realize their significance and utility, not to prove or "justify" them.

It is clear that such dogmatic statements do not refute Mr. Ayer's theory, any more than does Prof. Broad's assumption of a "structure of objective fact." To do that would involve consideration of his definition of significance in terms of the Principle of Verifiability, and his view of the aim and function of philosophy.

(ii) The strength of Mr. Ayer's position, however, appears to rest on the view, which he accepts from Profs. Lewis and Weiss (*v. p.* 108) that there are many possible *alternative logics*, some good and others bad, employing diverse principles of inference, which are obtained by varying the meaning of "implication." I suspect that this view relies for its plausibility on the plurality of so-called geometries, *n*-dimensional and non-Euclidean, which offer themselves as alternatives, but I think the analogy is fallacious. There can be only one single complete logic, in the sense of a formal system of the principles of deductive inference, though there may be diverse symbolic or logistic systems, obtained, either by selecting differently which are to be primitive notions or postulates and which derived theorems in the system, or else by omitting concepts or propositions which a more comprehensive system would include, and so producing partial systems. I accept Nelson's refutation of the conception of "alternative logics," good, bad or pseudo-; and will content myself with citing from him a passage, which expresses better than I could do the

* cf. D. J. Bronstein, *Mind* N.S., Vol. XLV, No. 178, April, 1936, p. 157 f.

essential point : " All I can see that Weiss is pointing out is that we may, for aught anyone can stop us, give to the word 'implies' different meanings—now it is to mean one thing, now another. A mere misuse of words appears to be the magic wand for bringing forth alternative logics, the notion of which is, Weiss tells us, 'one of the most interesting suggestions made in connection with modern symbolic logic.' Indisputably true it is that if I decide to use the word 'women' now for females, and at another time for males, then, if I keep my mind sufficiently muddled, I may be able to delude myself into thinking that there are alternative systems of sex. But what we are interested in is logical structure—not words, but their meanings. Any-one can write a fake dictionary ; but not even God himself can make men into women by shifting words, or make what we call 'implies' symmetric by changing names."*

If we admit the conception of " alternative logics " into logic, we are implying that we need not all employ the same principles of reasoning, and there is an end to argument. There is no basis even for disagreement, and logic in effect commits suicide. That Mr. Ayer does not really regard the principles of inference as arbitrary is shown by his reference to the " formal consequences " of our definitions and his allusion to the " rules of entailment which characterize the English, or any other, language." (p. 86).

It has been pointed out by a recent writer in *Mind* that Russell and Whitehead themselves, in the proofs of *Principia Mathematica*, use their horse-shoe symbol for material implication in front of the asserted conclusions of their theorems (the whole expression corresponding to "Q.E.D."), where it can only mean "is a consequence of" or "follows from" in a sense equivalent to entailment. It is thus an undefined primitive notion which should have been explicitly stated.†

(iii) Since logic, then, is one, in spite of the diversity of logistic systems, it is simpler for us to show for it, than for

* *Mind* N.S., Vol. XLII, No. 165, Jan., 1933, pp. 33-4.

† D. J. Bronstein : *Mind* N.S., Vol. XLV, No. 178, April, 1936, p. 161, referring to *Princ. Math.*, Vol. 1, Edit. 2, p. 103, note to proof of *2.16.

mathematics, an essential dependence on the objective structure of the real world. The second-order propositions which compose it are necessary because "they state the formal conditions which anything which we call a fact must satisfy."* As Dr. Bronstein says in a passage just below (though perhaps implying a different epistemological theory from mine), they "implicitly define 'propositions' by stating the properties of anything that is a proposition. They are not pictures of reality, but the canvas upon which all pictures of reality are drawn."

Thus the Principle of Excluded Middle, which asserts that "any proposition is either true or false" (or "either a proposition or its contradictory must be true") formulates a necessary condition of our thought, if it is to think properly. It is a law of *thought*, because it is first a law of *being*. Analogously, the statement that "nothing can be coloured in different ways at the same time with respect to the same part of itself" does not depend on the conventional meanings of words for its truth, as Mr. Ayer alleges, but formulates a characteristic of the world as we find it, and have to accept it. Meanings of words and laws of language derive ultimately from the experienced character of fact.

It is admitted that when we come to the alternative systems of metageometry we have receded further from the real world along the road of abstractness, and the problem of their application to physical space becomes a vexed one. If we cannot assume the solution, which Prof. Stout has suggested to be a possible one, that real space *is* Euclidean, and that the postulates and theorems of Euclidean Geometry are evidently true by "intuitive induction"—and this involves invoking the physical properties of an all-pervasive æther to explain the phenomena of relativity physics—; if, that is, we have to accept all geometrical systems as abstract, and only possibly applicable, even so we are not compelled to call them arbitrary. They are *hypothetically* true in the sense that they select their postulates and primitive notions from spatial characteristics, conceivable, if not always

* *Ibid.*, p. 170.

imaginable, and that, granted these starting-points, *they are correctly developed by the recognized rules to which our thought has to conform*. They are thus still *indirectly* revelatory of latent and controlling characters of the objective world.*

IV.

Leaving such debatable matters I must briefly, in conclusion, indicate my answer to our question. Using "*a priori*" in the Kantian sense of "what is necessarily true in advance of particular experience" with its contradictory "empirical," and "analytic" in the sense of "evident" with its contradictory "synthetic," I should maintain that the propositions of pure logic and pure mathematics are analytic and *a priori*. Into this class would also fall evident propositions which bear a resemblance to logical and mathematical truths like the *Dictum de Omni* or "shape entails size." An example would be "Being red entails being coloured," which states an evident connexion of universals, of a species with its genus.† A place might be found in my scheme for a class of analytic *empirical* propositions which analyse the abstract presented features of some sensory field, *e.g.*, "this patch is larger than that one"; though Prof. Price is perhaps right in saying that such propositions could not be expressed without saying more than is absolutely certain. No one disputes that there are synthetic empirical propositions: most statements of fact fall into this class. Are there, then, to complete the symmetry of the picture, *synthetic, a priori, true* propositions?

I regret that I could not have started the discussion at this point, but perhaps my successor may be more fortunate than I. Must we assume that the class is empty—that, in my sense of the words, there are no propositions which state necessary truths but are yet not analytic (evident)? I do not think so. I would suggest that the ultimate prin-

* *v.* concluding note.

† Perhaps the blending of Plato's "greatest kinds" in the *Sophist* might provide examples, especially if Existence be regarded as a universal predicate.

ciples of a Philosophy of Nature and of a Rational Ethics are of this character, though it is admittedly difficult to formulate them in the unexceptionable form which would render them acceptable to most philosophers as at least *probably true*. An obvious candidate for this class is the Principle of Causality, formulated in some such form as "Every occurrence must have a cause," or "All events are causally determined." Another would be Kant's practical postulate of freedom, "Ought implies Can," where it is hard to see in what sense freedom is demanded by the fact of moral obligation, just as, in the case of Nature, it is difficult to see exactly what necessary principle or principles are demanded by the assumption of the validity of our particular inductive inferences. Yet, clearly, principles of *some* sort seem to be demanded in the one field as in the other, if we are to rationalize our procedure in science, or our attitude to conduct. Yet no one would admit that they are evident as logical or mathematical propositions are evident. Prof. Stout, I think, would hold that they are *indeterminately* evident, but the qualification admits a distinction. Moral philosophers like Sidgwick believe that there are certain intuitively grasped propositions, such as the abstract principles of Justice, or of Rational Benevolence, and that there is an intuitively perceived connexion between pleasure and goodness. It is hard to regard these as evident, since few philosophers are willing to admit them to be such. If true, they would be synthetic in my sense and certainly *a priori*. So with the connexion between intrinsic value and obligation to promote it asserted by some philosophers.

Our question asks : Are there synthetic *a priori* truths ? I answer : Probably yes. But, if asked to provide examples, I can only admit that I am unable to find any the truth of which is more than probable. To state these propositions in such a form as to make the assertion of their truth plausible would require a far longer argument than the present.

NOTE.—Since my paper was completed, I accidentally stumbled upon an article in *Analysis* (Vol. II, No. 3, Dec.,

1934, pp. 37-42 : *Empirical Foundation for Logic*, by Karl Britton) which provided me with exactly the confirmation for which I was looking that believers in "analytic *a priori* truths, necessarily true by definition" would really regard them as *rules* or *regulations* ("commands") for the use of language, to be kept or broken, and not properly true or false like empirical propositions (cf. pp. 37, 40). The author actually cites my example of the Law of Excluded Middle (with the Law of Contradiction added), *viz.*, "Every proposition is either true or false, not both" (p. 39). But he proceeds to push the matter further back and to ask whether, as is the case with empirical definitions, such *a priori* propositions are founded upon empirical generalizations about matters of fact : if not, have they, he asks, any other "foundation" ? (as *e.g.*, to take an example, the definition of man as "featherless biped" is based on the empirical generalization that all observed instances of men are two-legged and are devoid of feathers). After admitting that we can at least say something about the *purpose* of the rules and definitions of logic (*viz.*, that they "aim primarily at producing an instrument for the 'informative' use of language"—and this I should maintain is not part of their factual content, but *evinced* by them—) he further (p. 41) makes the following significant reply : "For the conveyance of information, we use : (1) signs denoting particulars ; (2) signs denoting abstractions. It might be said that it is a true empirical proposition about *all abstractions*, that they may be realized in the concrete particulars, or may be excluded. Upon this empirical proposition, is founded the rule : *p* or not-*p*. If it were objected that the alleged empirical proposition must surely be part of the definition of Abstraction, it might be replied : Then it is an empirical proposition, expressing a (contingent) fact, that there is any abstraction at all. Abstraction is a psychological peculiarity of certain organisms. The fact is contingent in just the same way that it is contingent that there are mammals or men or meteorites. On the other hand, metaphysicians have claimed that Abstraction is much more than this."

And so we see, as Mr. Britton implies by his references to Plato and Whitehead, that the issue between the logical positivists and traditional philosophers is one as to the "ontological status" of universals. It is on the old issue of nominalism *vs.* realism that the real battle has to be fought. Are the laws of logic statements about real abstract possibilities or are they convenient tools of our own contrivance?

III.—By REGINALD JACKSON.

WHAT is Professor Broad's attitude toward the prescribed question ?

" I take it that we are not expected to discuss the wider question : Are there a priori propositions ?, but only the narrower question : If there were a priori propositions, would any of them be synthetic ? " But the " narrower " is not the prescribed question. And, while a negative answer to the " narrower " would require a negative answer to the prescribed question, an affirmative answer to the " narrower " would require the prescribed question to be answered in the same way as the " wider question. " And it is an affirmative answer to the " narrower question " that Prof. Broad gives. This he reaches by taking as typical an application of " analytic proposition " to something which in his opinion is not a proposition. Using " synthetic " as a synonym of " non-analytic, " he concludes that " *either* there are no a priori truths at all, *or* there are such truths and they are all synthetic. " This he offers as an answer to " our question. " But it is not an answer to the prescribed question, and it facilitates an answer only by justifying concentration on the " wider question. "

Turning to Mr. Ayer, Prof. Broad quotes a definition of " synthetic " which he says " is also the usual definition of ' empirical ' as applied to propositions. " He objects that nobody " who entertains the possibility that there might be synthetic a priori propositions " would accept this definition of " synthetic. " But what definition does Prof. Broad accept in what follows ? He goes on to produce conclusive reasons for claiming that any proposition which satisfied either of two definitions of " analytic " would be empirical. But the conclusion he draws is " The analytic proposition is therefore quite plainly synthetic and empirical. " And of the statement, " Analytic propositions are a certain sub-class of synthetic empirical propositions, " he

says that "it is merely an immediate consequence of the definitions of 'analytic,' 'synthetic,' and 'empirical'." The definition of "analytic" is Mr. Ayer's. The definition of "empirical" is Prof. Broad's. *Whose* is the definition of "synthetic"?

The difficulty persists in Prof. Broad's formulation and examination of the theory which he puts forward for discussion. And whether "synthetic" is defined in the same way as "empirical" or in the only other way noticed by Prof. Broad, its occurrence seems to be throughout redundant. Either it adds nothing to "empirical" or it adds nothing to "proposition." If so, the theory is nothing but a negative answer to the "wider question" supplemented by the claim that what are mistaken for a priori propositions are certain propositions about actual or intended linguistic practice.

My conclusion, then, about Prof. Broad's attitude toward the prescribed question is that he has no use for the word "synthetic" and that he accordingly thinks that, though "we are not expected to discuss the wider question: Are there a priori propositions?", we are justified in doing this instead of what we are expected to do.

But, while Prof. Broad is unquestionably right in saying "It is not universally admitted that there are a priori propositions," I fancy that those who do not admit this can, without "a detailed examination of . . . logic, arithmetic, algebra, geometry, and ethics," be shown to be in error. For so unambitious a purpose even "vague 'gas'" should suffice. We need only to recognise that p cannot "logically entail" q unless $\bar{p}$ or q is "intuitably a priori," and that it is, therefore, not merely to "demonstrably a priori truths" but to validly inferrible truths in general that "intuitably a priori truths" are indispensable.

Now I cannot help thinking that those who set the question were already (and very properly) satisfied that some truths are a priori, that what they wanted us to do was to find out whether any of those that are have some further property which they were not able unmistakably to symbolise, and that they formulated the question in the hope that we should unearth a use of "synthetic" in which

"synthetic a priori" is not self-contradictory and "synthetic proposition" is not pleonastic.

Mr. Porteous has at least tried to meet these demands. Moreover he has succeeded at least in providing a definition of "synthetic" which conforms to the conditions. Therefore, compelled by limited space* to make a choice, it is with Mr. Porteous alone that I shall occupy myself.

* I should have liked to discuss Mr. Ayer's attitude toward the prescribed question. I cannot take seriously the suggestion that the theory formulated by Prof. Broad "might be what Mr. Ayer is trying to express by the sentence: 'There are a priori propositions and they are all analytic'." As plausibly might it be pretended that what a Kantian is trying to express by the sentence "There are a priori synthetic judgments and they are all about appearances" is that there only appear to be a priori synthetic judgments. But I do think that the position that "a proposition is analytic when its validity depends solely on the definitions of the symbols it contains" is untenable, and that those who set out to defend it can be forced to fall back either on the theory which Prof. Broad offers to Mr. Ayer or on the alternative which he says is "open to persons who hold that there are a priori propositions and that they are all analytic," namely, that what are called "analytic propositions" are quasi-propositional sentences.

Accordingly I cannot follow Mr. Porteous in his attempt to "absolve" Mr. Ayer by an application of the distinction between *stating* and *evincing*. For the difficulty is to see not how else the speaker's attitude can be related to a definition if not stated by it, but what can be stated by it if the speaker's attitude is not. Mr. Porteous, however, "removes this factual element from what is asserted in a definition" without telling us what element remains. Now if nothing remains Mr. Porteous ought not to say that definitions are "stated" and "asserted." And, instead of a parenthetic doubt "if they can still be called propositions," we must press for the admission that they are not propositions because, though they evince, they do not state. It does not follow that they are "unmeaning platitudes," that they are senseless and so not symbols. But it does follow that the utterance of them is aimless. It is true that commands evince and do not state, and that not all commands are aimless. But the very consideration which may drive a philosopher who rejects intuition to say that a priori propositions are commands must drive him, if he is consistent, to say that they are aimless commands. It is only because the sum of two and two is four that it is worth while to issue or to obey a command to call the sum of two and two "four." It is only because of an attitude toward the names "oculist" and "eye doctor" that it is worth while to issue or to obey a command to call an eye doctor "oculist." It is the command that, if there is one, is evinced by the utterance of the propositions "The sum of two and two is four," "'Oculist' means 'eye doctor.'" What is stated is the fact that saves the command from futility.

I have, however, to confess my inability to start at the point at which he regrets that he could not. For I, too, must first reach that point. And this part of my task is made difficult by what seems to me a failure adequately to distinguish issues which are, from issues which are not, terminological.

Mr. Porteous discusses, in interpreting the prescribed question, not only the meaning of "synthetic" but also the meaning of "a priori." About Prof. Broad's attitude toward this expression I have hitherto said nothing. What I take to be the fact that he offers no definition of it does not seem to me to be a source of difficulty. For "a priori" is commonly applied to "truth" and to "proposition" with the meaning of "knowable without appeal to experience." And even without the confirmation afforded by the remark that "the adjectives 'empirical' and 'a priori' are always understood to be opposed to each other," coupled with the claim that the objectionable definition of "synthetic" is "also the usual definition of 'empirical' as applied to propositions," I should feel confident, from the way in which "a priori" occurs throughout Prof. Broad's paper, that the meaning which he attaches to it does not relevantly differ from this.

I am dismayed at finding that Mr. Porteous reads Prof. Broad's attitude so differently. According to Mr. Porteous, Prof. Broad *does* offer a definition of "a priori." What to me appears to be a statement of two alternatively indispensable and independently sufficient conditions under which a true proposition would be a priori (and a statement which supports my view of the meaning with which Prof. Broad uses "a priori") appears to Mr. Porteous to be a declaration of the "sense" in which Prof. Broad "wishes to define '*a priori*.'" Now I think that it would be both unusual and unfruitful to attach to "a priori" the meaning of any phrase of the form "either . . . or . . ." A special symbol with such applicability is required only where the alternatives have a joint monopoly of some character, and then it is best that the special symbol should be applicable to the alternatives in virtue of their possession of this

character. It is because I think that the only character of which the alternatives formulated by Prof. Broad can easily be seen to have a joint monopoly is that of knowability without appeal to experience, that I find here support for my view of his use of "a priori." The proposal which Mr. Porteous ascribes to Prof. Broad strikes me as on the other hand so odd that, even if a philosopher *said* that he wished so to define "a priori," I should suspect that definition of "definition" must be the key to his intention. But Prof. Broad's language is so clear on the point at issue that I can find no better way of saying what I take him to be doing than the way he has chosen.

While thus unable to see how speculation about the meaning which Prof. Broad attaches to "a priori" can fairly start, I am unable to see how speculation about the meaning which Kant attaches to "a priori" can fairly stop. But I turn to what Mr. Porteous says about Kant because I seem to detect an inconstancy of a kind which makes me wonder not only whether we really disagree about Prof. Broad's use but also whether Mr. Porteous really adopts a different use.

That "it was because of an alteration made by Kant in the meaning of the term '*a priori*' that our question was first introduced into the arena of philosophical discussion, and indeed appeared to Kant to sum up the main problem of the Critical Philosophy" seems to require that Kant himself used "a priori" with a new meaning, whether or not he also led others to do so. How else could Kant hold any view "because of" the alteration? And though, referring to this passage, Mr. Porteous says, "As has been said, one effect of Kant's teaching was to give a new meaning and application to the term '*a priori*,'" I think he here intends only to add the claim that Kant's example was followed by others, not to withdraw the claim that it was by setting the example that Kant influenced them. This interpretation is confirmed by the fact that Mr. Porteous twice declares that he intends to use "a priori" "in the Kantian sense."

But Mr. Porteous also says: "Thus Kant, like his

predecessors, defined *a priori* truths negatively as truths whose validity was independent of particular facts of experience ; but since he offered *universality* and *necessity* as the distinctive marks of them . . . he was in effect divorcing the *a priori* from its connexion with the self-evident." And this seems to require that Kant, without tampering with the meaning of "a priori," rejected the view of his predecessors that all a priori truths are either intuitable or demonstrable from such. The statement, "I think it is important to follow Kant in regarding necessity, rather than self-evidence, as the distinctive mark of the *a priori*," seems similarly to require that Mr. Porteous is using "a priori" in the sense neither of "necessary" nor of "self-evident." And, taken in connexion with his earlier statement that he is "unable to acquiesce in his restriction of *a priori* truths to . . . what is 'intuitably or demonstrably *a priori*,'" it seems to formulate an epistemological and not a terminological challenge to Prof. Broad.

Now even if Kant and Mr. Porteous do in the end attach a new meaning to "a priori," it is important, if true, that they also give a new answer to the question "What truths are a priori?" where "a priori" retains its old meaning. And I should have thought that, *at least* until this non-terminological issue had been fought to a finish, it would have been better to observe the old convention than, by instituting a new one, to put a difficulty in the way of formulating the new doctrine.

But, if we adopt the pre-Kantian use of "a priori," then, whatever Kant may have done, will Mr. Porteous, who dissociates himself from Kant's "unfortunate Copernican revolution," dispute the restriction of a priori truths to truths either intuitable or demonstrable from such? Though I think that by accepting Mr. Porteous' definition of "analytic" Prof. Broad would not "be legislating for the conclusion that all *a priori* truths are analytic," it does seem to me that the acceptance of the definition would leave no room for doubt about this "conclusion." Just for this reason Prof. Broad fairly "takes" and does not argue his claim about the conditions under which alone a

truth would be a priori. For surely there are no other ways of knowing without appeal to experience?

The explanation may be that what Mr. Porteous holds to be the pre-Kantian sense is not what I hold to be that adopted by Prof. Broad. This possibility can be best explored by calling to mind a danger lurking in the use as an adjective of the originally adverbial expression "a priori." In its adjectival application to such verbal nouns as "inference," "knowledge," "judgment," its adverbial force still dominates the solecism, as does that of "fast" in "fast runner." But its adjectival application to such a noun as "truth" is, at least in origin, elliptical; and it is advisable sometimes to ask what it is that is being left out. Mr. Porteous on one occasion says that "a priori" had come to be used by Kant's predecessors "to mean what is independent for its truth of particular experience." They should then have been plentifully supplied with synthetic a priori truths. But I think that Mr. Porteous, who elsewhere uses "validity" of the independent character, would admit that what was meant was rather that, independently of "particular experience," some attitude could be adopted toward the truths called "a priori."

What attitude? We say that a man accepts a priori what he has no business so to accept. We reprove historians for accepting a priori what ought to be accepted, if at all, only a posteriori. Hume said "that to consider the matter *a priori*, any thing may produce any thing." But nobody would propose to make "a priori truth" applicable to whatever truth can be accepted (even wrongly) without appeal to experience. Nor can it be supposed that Kant's predecessors thought so highly of the human intellect as to claim that only intuitable truths and truths demonstrable from such *can* be accepted without appeal to experience.

But perhaps Mr. Porteous holds that in pre-Kantian usage "a priori" is applied to truth as a purely negative qualification, the formal contradictory of "a posteriori," truths being called "a posteriori" to show that they are knowable by appeal to experience, but "a priori" to show not that they are *knowable without appeal to experience* but that

they are *not knowable by appeal to experience*. As long as it is granted that no truth is knowable both a priori and a posteriori and that every truth is somehow, and, therefore, either a priori or a posteriori, knowable, the difference between these meanings will involve no difference in the applicability of "a priori truth." But it may be held that some truths are not in any way knowable. The difference between the meanings would be decisive if we had to say whether the Causal Principle in Hume's view or the truths of Transcendent Metaphysics in Kant's view are a priori.

Fortunately, whatever Mr. Porteous' view of pre-Kantian usage, it is part of his account of "the extended Kantian sense," which he prefers, that a priori truths "cannot be established inductively, or on empirical grounds." He clearly holds (and rightly) that what he calls "synthetic a priori truths" are not a posteriori knowable. He also clearly holds that they are not knowable either by intuition or by demonstration from intuited premises. He does not make it clear to me whether he admits what I think follows—that they are unknowable. If he does admit this, then I think he holds that they can, and without appeal to experience, become the objects of a cognition which, though inferior to knowledge, is superior to mere true belief.

What solutions does Mr. Porteous leave open when he labels these truths "synthetic"? They lack "the property of being certainly true in an epistemological sense," "the character of (self-)evidence and certainty (in corrigibility)." What is this property which truths called "analytic" possess?

Mr. Porteous seems to abandon, somewhat reluctantly, the device of distinguishing analytic propositions by their relation to the principle of contradiction. For of the truth of every proposition the principle of contradiction, by virtue merely of its truth, is "a *negative* criterion." Every proposition which conflicts either with this or with any other truth is false. The claim that to some analytic propositions "there is no conceivable alternative" and that others "cannot meaningfully be contradicted" I take to be, not that part of what Mr. Porteous thinks "mathematical

logicians mean by calling them ‘tautologies’ ” which Mr. Porteous means by calling them “analytic,” but that part which he rejects. I think that Mr. Porteous would agree that only what can be meaningfully contradicted can be meaningfully asserted and that to every proposition there must be a conceivable alternative in that sense of “conceivable” in which whatever can be denied must be conceivable. Ought he then to say that the derived propositions of a system of logic or mathematics are “*analytic of the system as a whole* in the sense that, given the system, none of them can be significantly denied without contradiction” ? If this were true, the principle of contradiction would be “*a positive and sufficient ground*,” if not of the truth of the derived propositions, at least of their indispensability to “the initial postulates and definitions.” But is not this just what Mr. Porteous thinks “a profound mistake,” the view “that entailment and other types of implication are forms of ‘containing’” ?

Unable here to grasp a clue, I turn for enlightenment to the remark that the sense in which Mr. Porteous proposes to use “analytic” is “very close to that in which Prof. Broad wishes to define ‘*a priori*.’ ” This remark does seem to me helpful if only I am right in my impression, both that the sense in which Mr. Porteous thinks that Prof. Broad wishes to define “*a priori*” is the sense of “intuitable or demonstrable from what is,” and that what alone prevents Mr. Porteous from saying that the sense in which he proposes to use “analytic” is more than “very close” to this is his view that “Prof. Broad’s distinction between the ‘intuitably’ and the ‘demonstrably’ *a priori*” is “a distinction of *degree* and not of *kind*.”

That Mr. Porteous does no more than “add parenthetically” his formulation and defence of this ambitious and questionable claim perplexes me. It perplexes me also that he thinks “that Prof. Broad might agree to this qualification.” Prof. Broad does indeed say that “it is certain that, if logic and pure mathematics consist of *a priori* truths, many of the simpler truths in these sciences are both intuitably and demonstrably *a priori*” and that it “might even be the

case that every proposition which is either is both." But these statements are anything but favourable to the claim that the distinction is "of *degree* and not of *kind*." For I take this claim to be that *being intuitably a priori* and *being demonstrably a priori* are *being the same in different degrees*.

Mr. Porteous attacks the qualitative distinction from both sides. His first argument seems intended to show that intuition is not different in kind from what demonstration is admitted to be. He is not exploiting the word "proposition" by making the point that knowledge of what words mean is indispensable. For his conclusion would then be that no proposition is either intuitably or demonstrably *a priori*. It is in some other way that we must interpret "A full understanding of it requires consideration of the propositions which define the meaning of its terms and relations." But, unless the defining propositions are related to the defined proposition as premises to conclusion, how does this support the claim that there is no distinction of kind? And, if the defining propositions *are* so related to the defined proposition, why does Mr. Porteous think that there is a distinction even of degree? It may be admitted that "it is in the light of these defining propositions that it is *evident*," and still denied that these propositions are any part of the evidence for it. In the same way it may be admitted that knowledge, by intuitive induction, of connexions between universals depends on experience of instances, and still insisted that such dependence be sharply distinguished from the dependence of knowledge of a conclusion on knowledge of premises.

The second reason seems intended to show that demonstration is not different in kind from what intuition is admitted to be. That "each step must be intuitably certain" is an important and insufficiently appreciated truth. But does it help Mr. Porteous? It requires that, if q is "demonstrably *a priori*," there must be an "intuitably *a priori*" proposition, p , such that $\bar{p}$ or q is "intuitably *a priori*." Does it follow either by definition or at all that q is "intuitably *a priori*?" I cannot see that it does. No doubt "a rational being of sufficient insight and intelligence" would upon inspecting

q "see it to be true"; but only because he would bethink himself that both p and $\bar{p}$ or q were "intuitably a priori." Even if q could not be understood without knowing p , it would not follow that the application of this knowledge to the understanding and to the knowing of q were indistinguishable.

Much depends on our attitude toward this claim. Its rejection would allow the entertainment concerning the truths which Mr. Porteous call "synthetic a priori" of a hypothesis on which he has turned his back. I am not convinced that any truth is both intuitable and a priori demonstrable. Truths which we begin by believing and end by a priori demonstrating may appear to be intuitable, partly because we accepted them before demonstrating them, partly because we may later be unable to inspect them without demonstrating them. But even if Prof. Broad is right about "the simpler truths" of logic and pure mathematics, it is, as he recognises, still questionable whether "every proposition which is either is both." Now I am inclined to concede that of the truths which are not a posteriori knowable some are not only *not seen by us to be intuitable* but also *seen by us not to be intuitable*. But I am disinclined to concede that these are further *seen by us not to be a priori demonstrable*. My hypothesis is that they are a priori demonstrable at least by God but not intuitable even by God. I hope that this suggestion will be acquitted of impiety. The notion that inference is a mode of cognition inferior to intuition seems to rest on the mistaken view that inference is a process.

But his acceptance of the claim closes this road to Mr. Porteous and compels him to hold that these truths are either unknowable (so that nobody can be omniscient except in the sense in which Jowett is said to have been) or a priori knowable without being either intuitable or a priori demonstrable. In saying that they are not "evident as logical or mathematical propositions are evident" he hints an inclination toward the latter alternative. But how, if at all, *are* they evident? The suggestion that they are "*indeterminately* evident" is no answer. It is only an infelici-

tous way of saying that they are both indeterminate and evident (*Philosophy*, Vol. IX, No. 36, p. 394). And though "the qualification admits a distinction," the distinction admitted is not between ways of being evident.

Since I reject what I take to be the presupposition of Mr. Porteous' definition of "synthetic," my own answer to the prescribed question must vary according to the way in which this word is redefined. Are there synthetic a priori truths? If "synthetic" means "not intuitable," there are. If "synthetic" means "neither intuitable nor a priori demonstrable," there are not. And "the symmetry of the picture" can perhaps be restored by casting out the "class of analytic *empirical* propositions."

Mr. Porteous may protest that in speculating about the nature of his position I have ignored the guidance of the prominent word "necessity." Let me make what amends I can by declaring my attitude. I premise: (1) that "a necessary truth" is short for "a truth necessarily true," "a truth whose truth is necessitated"; (2) that a strict use of language requires not the absence but the presence of relevant qualification to be indicated, so that to write "necessary" without qualification is tantamount to writing "necessary without qualification," "absolutely necessary."

A truth necessary *per se* is necessary. A truth necessary only relatively to another is necessary only if a further condition is fulfilled.

To claim that a truth is necessary *per se* is to claim that its truth is necessitated by its own nature. Not that the relation is strictly reflexive. But the nature (if we include its truth in its nature, we must say "the rest of the nature") of what is true necessitates its being true. This is self-evidence (whether or not accessible to human intuition).

To claim that q is necessary relatively to p is to claim not that q but that $\bar{p}$ or q is necessary. Only if p is itself necessary does this make q necessary. (In general, x may be indispensable to y , but is *therefore* indispensable only if y is. What is useful is, on the other hand, never *therefore* good.) Neither p nor $\bar{p}$ or q need be necessary *per se* for q to be necessary. But if either is not necessary *per se* it must be

necessary relatively to what is necessary *per se*. Accordingly, a truth, q , which is not necessary *per se*, is necessary only if there is another truth, p , which is both necessary *per se* and such that $\bar{p}$ or q is necessary *per se*. This is entailment* by what is self-evident.

Thus it seems to me that only truths either intuitable or a priori demonstrable are necessary.

* Against the proposal to equate p entails q and $(\bar{p} \text{ or } q) \text{ is necessary}$, it has been rightly objected that the latter is, but the former is not, required by q is necessary. The difficulty might be met by equating p entails q and $(\bar{p} \text{ or } q) \text{ is necessary and would be even if } \bar{p} \text{ were not and } q \text{ were not}$. But it is better to equate p entails q and $(\bar{p} \text{ or } q) \text{ is necessary per se}$. If $\bar{p}$ or q is necessary only relatively to q and q is necessary, this makes $\bar{p}$ or q necessary (absolutely) but not *per se*. Nothing more and nothing less than its entire nature makes a truth necessary *per se*.

SYMPOSIUM: IS EXISTENCE A PREDICATE?

By MR. W. KNEALE *and* PROF. G. E. MOORE.

I.—*By* W. KNEALE.

I PROPOSE to begin by explaining how the controversy about existential propositions has arisen. I shall then try to expound the doctrine that existential propositions are a sub-division of general propositions. In my third section I shall try to apply this doctrine in the elucidation of some rather curious existential propositions. Finally I hope to show that while rejecting the view that existence is a predicate we ought also to reject certain accounts of the nature of propositions.

(1).

No logician wishes to deny that in ordinary speech sentences such as "tame tigers exist" can be used with perfect propriety. Some of them may be false, but it is not for the logician to determine which are and which are not. If, however, we assume that grammatical form is a sure guide to logical structure, we may be tempted to say that in these sentences the word "existence" stands for a predicate, where "predicate" has a logical sense distinct from its grammatical sense. That some philosophers have taken the word "existence" to stand for a predicate in the logical sense, *i.e.*, for an attribute, may be seen from their use of the ontological argument to prove the existence of God.

Descartes' exposition of the argument is clearer than most others. He starts from the position, supposed to be already established, that we can know some propositions, *e.g.*, simple theorems of mathematics, to be necessarily true. It does not matter for our purposes whether he

thinks that his necessary propositions are analytic or synthetic, although we may remark in passing that the language in which he refers to them suggests that they are analytic. He wishes to say that the proposition that God exists can be proved in the same way as that in which a necessary proposition of mathematics is proved. He explicitly compares it with the proposition that the triangle has interior angles equal to two right angles. Thus he writes in the *Fifth Meditation* : " I clearly see that existence can no more be separated from the essence of God than can its having three angles equal to two right angles be separated from the essence of a rectilinear triangle."* And in his reply to Gassendi's objections : " You are plainly in error when you say that existence is not demonstrated of God as it is demonstrated of the triangle that its three angles are equal to two right angles : for the two propositions are proved in the same way, except that the demonstration proving existence in God is much simpler and clearer."† And again in the *Principles of Philosophy* : " Just as the mind, perceiving that it is necessarily involved in the idea of the triangle that it should have three angles equal to two right angles, is thereby absolutely persuaded that the triangle has three angles equal to two right angles ; so, from the fact that it perceives necessary and eternal existence to be comprised in the idea which it has of an absolutely perfect Being, it must obviously conclude that this absolutely perfect Being exists." ‡

This argument is based on the assumption that ' God exists ' is a proposition of the same sort as a theorem of geometry. Descartes writes as though both propositions predicated something of a subject, the one being about ' God,' the other about ' the triangle.' If he did not assume this, he would not say that they can be proved in the same fashion. Gassendi was the first, I think, to criticize the

* *The Philosophical Works of Descartes*, ed. Haldane and Ross, vol. i, p. 181. Later quotations are indicated by HR with volume number and page. I have slightly modified the translation in several places.

† HR, ii, 229.

‡ HR, i, 224.

argument on the ground that existence is not a property of God or of anything else.* His criticism drew from Descartes the interesting admission: "I do not see to what class of reality you wish to assign existence, nor do I see why it may not be said to be a property as well as omnipotence, taking the word *property* as equivalent to any attribute or anything which may be predicated of a thing."† No doubt Descartes and those who agree with him would say, if questioned, that they wished to make a distinction between existence and qualities such as redness. But refinements of the theory of existence as a predicate only introduce fresh difficulties. The theory is unacceptable.

Unless all true existential propositions are analytic, which no one (except perhaps Leibniz) ever maintained, some subjects of which existence is to be predicated must be conceivable apart from existence. Even of God, whose essence is said to involve existence, we establish that He may exist before we prove that He does exist.‡ That is to say, there must be some sense of "being" which is logically prior to existence and applicable to the possible as well as to the actual. The subject considered as having being in this sense is apparently a certain complex of universals. It is the addition of existence which makes it into an actual individual in the time series. For existence (with the exception of God's) is temporal, whereas the being which is logically prior to existence is timeless. If we deny these principles, it is said that we abandon the great tradition of philosophy. Perhaps we do, but not without good cause. From the notion of a subject of predicates as a certain *nature* we should find ourselves led to the very strange conclusion that all propositions other than existential propositions must be analytic. For the nature of a thing is taken to include all its qualities. We should therefore be using a self-contradictory expression if we said of something which was red "suppose this were green." We ought rather to say "suppose there were something like this in all other respects but green instead

* HR, ii, 185.

† HR, ii, 228.

‡ HR, i, 224 and ii, 13

of red." Worse consequences follow from the notion of existence as a temporal predicate. It is true, of course, that the verb "to exist" takes tenses, but in saying this we admit that if the verb symbolizes a predicate the subject of the predicate must be capable of change. It has been asserted, however, that the subject of the predicate existence is a timelessly possible somewhat, and, however little we may know about time, we know that the timeless cannot have different predicates at different times.

We must try to find a satisfactory place for existential propositions in a revised logic. But here Gassendi and Kant, who repeated Gassendi's criticism of the ontological argument, offer us no help. Indeed Kant by lending his authority to a corrupt Aristotelianism probably did something to delay the necessary revision. For example, in his definitions of analytic and synthetic propositions he assumed that every proposition must have a subject and a predicate. It was not until the end of last century that any serious attempt was made to explain the nature of existential propositions. In order to understand what modern logic can add to Gassendi's criticism we must consider the notion of logical form, the clarification of which has been the chief development of logic in the past forty years. I shall not attempt to give a definition of logical form. I am not sure that a definition is possible. But I can indicate what is meant by saying that 'this is red' has the same logical form as 'that is green' and a different logical form from either 'this is near that' or 'if Hannibal had marched on Rome, he would have taken it.'* Some distinctions of logical form are so obvious that they could not be entirely ignored by the older logicians. Most manuals of logic contain disconnected references to hypothetical and disjunctive propositions. What is peculiar to modern discussions is the attempt to work out a systematic account of the various possible logical forms, that is to say, the

* In order to mark a distinction between a sentence and the proposition which it expresses, I use double quotation marks when I refer to the sentence and single quotation marks when I refer to the proposition.

attempt to present them in a single scheme in which they are arranged according to their similarities and in which it is easy to detect the internal logical relations (*i.e.*, entailment, etc.) which hold between them.

(2).

We must begin with a distinction between simple and complex propositions. We may say somewhat loosely that complex propositions are about other propositions, and that simple propositions are those which are not complex, but the phrase "about other propositions" is too ambiguous to be suitable for a definition. It has been maintained that every complex proposition is a truth-function, *i.e.*, a proposition which is about other propositions, called its arguments, in the sense that for any array of truth-values (truth or falsity) of those other propositions its own truth-value is determined. I cannot argue that question here, but I wish to assert that no complex propositions are of the subject-predicate form. Reflection will show that, although we may use sentences of the grammatical form "p is true," words which appear to stand for attributes of propositions do not in fact stand for any attributes. It is not even correct to say that all simple propositions are of the subject-predicate form, unless we extend the meaning of the word "predicate" to cover relations. For, if we refuse to admit relational propositions, we shall be driven to the monadism of Leibniz. In order to avoid the various misleading associations of the word "predicate" we may speak of the elements of simple propositions as constituents and components. We can indicate the meaning of the word "component" by saying that the component of 'this is red' is what it has in common with 'that is red' and the component of 'a is near b' what it has in common with 'c is near d.'

Let us now consider a range of propositions which differ among themselves only in respect of one element in each, *e.g.*, 'this is red,' 'that is red,' etc. We cannot enumerate all the propositions of the range one by one, but we can

indicate what range we are considering by the use of an expression such as " x is red" which stands for what is common to them all. This symbol is not the expression of a proposition, *i.e.*, of something which can be true or false. The letter " x " is not the name of anything in particular, and it does not stand indifferently for all things which can occur in propositions of the range ' x is red,' as a real variable would. It is merely a sign to mark a place which is filled by different elements in the various propositions of the range. From consideration of such a range we can derive two general propositions, the one existential and the other universal.* The existential proposition, 'for some x , x is red,' is an adjunction of the propositions of the range, that is to say, its form can be exhibited in a sentence such as " a is red or b is red or c is red, etc.," where "or" has its non-adversative sense. The universal proposition, 'for all x , x is red,' is a conjunction of the same propositions.

In the example which I have selected the propositions of the range are attributive simple propositions and the elements in which they differ are constituents. But the theory of general propositions is not restricted to ranges of this kind. We must recognize that such propositions as the following are also general in the sense defined: 'for some x , x is not red,' 'for all x , x is not red or x is extended,' 'for some x , x is near this,' 'for some ϕ , this is ϕ and that is ϕ .' The ordinary expression of the last of these would be "this and that have some quality in common." It is based on a range of propositions each of which is itself a conjunction of two simple propositions with the same component and which differ among themselves only in respect of that component. The propositions in the range for generalization may even be themselves general propositions. Thus from the propositions 'for all x , x loves Jones,' 'for all x , x loves Smith,' etc., we

* It should scarcely be necessary to point out that "general" is not used here as a synonym for "universal," but some critics persist in assuming that it is.

can pass to the range 'for all x , x loves y ,' and from that to the doubly-general proposition 'for some y , for all x , x loves y ,' of which the ordinary expression would be "there is somebody whom everybody loves." In the technical expression of multiply-general propositions the order of the prefixes is of the utmost importance if the prefixes are of different kinds, *i.e.*, not all existential or all universal. We must be prepared, for example, to distinguish the proposition to which we have just referred from the quite different proposition 'for all x , for some y , x loves y ,' of which the ordinary expression would be "everybody has somebody whom he loves." The one is an adjunction of conjunctions, the other a conjunction of adjunctions.

In respect of their logical relations to other propositions general propositions resemble other adjunctive and conjunctive truth-functions. Just as 'p' entails 'p or q,' so ' $\phi(a)$ ' entails 'for some x , $\phi(x)$.' And just as 'p and q' entails 'p,' so 'for all x , $\phi(x)$ ' entails ' $\phi(a)$.'* Adjunction and conjunction can each be defined in terms of the other and negation. So too 'for some x , $\phi(x)$ ' is strictly equivalent to 'it is not the case that for all x , not- $\phi(x)$ ' and 'for all x , $\phi(x)$ ' strictly equivalent to 'it is not the case that for some x , not- $\phi(x)$.'

In order to safeguard ourselves from misunderstanding we must make clear that this account of general propositions is not intended to explain away the peculiarity in virtue of which they have been called general. It is true that "for all x , x is red" is equivalent to " a is red and b is red

* Professor Moore has asserted that ' $\phi(a)$ ' is not entailed by 'for all x , $\phi(x)$,' but only by the conjunction of that and ' a exists' (*Arist. Soc. Sup. Vol. vii*, p. 204). Is " a " supposed to be a logically proper name? Then what does he mean by " a exists"? Is " a " a description of the form "the ψ thing"? Then " $\phi(a)$ " is equivalent to "for some x , $\phi(x)$, and $\psi(x)$ "; but no one wishes to maintain that 'for all x , $\phi(x)$ ' by itself entails 'for some x , $\phi(x)$ and $\psi(x)$.' Of course, I cannot deduce ' $\phi(a)$ ' from any other proposition unless I can entertain ' $\phi(a)$.' Perhaps this is the point which Professor Moore wishes to make. But is it necessarily absurd to say that a proposition which I entertain may entail a proposition which I cannot entertain?

and c is red, etc.," but no expression in the conjunctive form without "etcetera" would be an exhaustive analysis of the meaning of the original expression, because, as everyone agrees, there is some sense of the word "about" in which a general proposition may be about things of which we have never heard and for which we have no names. Since "etcetera" means the same as "and so on for all the propositions of the range," its use here is an admission that we are not able to resolve a general proposition into one which is complex but not general. If, then, we say that general propositions are adjunctive and conjunctive truth-functions and occasionally use an expression ending with "etcetera" in order to make the point clearer, we are only explaining in what sense general propositions may rightly be said to be complex. For a proposition to be a truth-function of a certain kind it is not essential that it should be expressible in a sentence consisting of a finite number of sentences linked by "and" or "or," but rather that its truth-conditions should be of a certain kind. An existential proposition is about the propositions of its range in the sense that it is entailed by each of them and cannot be true unless one of them is true, and a universal proposition is about the propositions of its range in the sense that it entails each of them and cannot be false unless one of them is false. The words "each" and "one" which occur in these definitions are marks of generality, and their presence shows that we have not explained away the peculiarity of general propositions. But it is important to realize that general propositions are complex in the sense defined, since it is only by considering them as truth-functions that we can understand their place in the logical scheme of forms, the nature of the distinctions between multiply-general propositions which are expressed by the ordering of prefixes, and the logical relations of general propositions to the propositions of their ranges.

What distinguishes general propositions from other truth-functions of the same types is the fact that by means of them, or rather, by means of the sentences which express them, we are able to talk about propositions which we are

unable to entertain, although only in the sense of "about" which I have tried to define. General propositions are complex but not completely explicable.* I admit that this is a difficult notion, but I do not think that we can give up the claim to be able to talk about all the propositions of a range. Such attempts as I have seen to explain away the need for the claim seem to me obviously unsatisfactory. It has been suggested, for example, that the structure of the proposition 'for some x , x is red' is shown most clearly in the expression "redness has application." But we ought surely to deny that the proposition is of the subject-predicate form, especially when we find that we are required to talk of a predicate called "having-application," supposed to be itself applicable to universals. In order to make sense of the phrase "has application" we must add "to something," but then we have only a wordy paraphrase of "something is red." And in any case the suggestion takes no account of such general propositions as 'this and that have some quality in common.' It may perhaps be argued with some plausibility that it is impossible to entertain a proposition without knowing what would make it true or false, and that therefore a general proposition cannot be a truth-function of unentertained propositions. But the argument assumes too much. Anyone who entertains a general proposition has at least a criterion by which to determine whether any proposition which he may come to entertain does or does not belong to the range of his generalization and, possessing this criterion, he is in a position to verify or falsify the general proposition when suitable evidence offers itself. I cannot see that more than this is required for the entertainment of a proposition. I may add that it is obviously possible for a man to verify or falsify a general proposition in some situation which he could not envisage at the time of first entertaining the proposition, and that any acceptable theory of general propositions must allow for this possibility.

Of all the variety of general propositions which can be

* I owe the suggestion of this convenient mediæval word to Mr. Ryle.

and have been entertained traditional logic recognizes only four forms, distinguished as *A*, *E*, *I* and *O*. The *A* form (with existential import) is 'for all x , if $\phi(x)$ then $\psi(x)$, and for some x , $\phi(x)$.' The *I* form is 'for some x , $\phi(x)$ and $\psi(x)$.' No doubt these forms have been recognized because they are of special interest in science. The *A* and *E* forms are the forms of easily stated laws, and the *O* and *I* forms are the contradictories of the *A* and *E* forms. Propositions of the form 'for some x , $\phi(x)$,' where ϕ is an unanalysable characteristic, may have been ignored because we rarely trouble to assert them in ordinary discourse. We know that all such propositions are true. But it is interesting to notice that the reason why they must be true belongs to epistemology rather than to logic. We could not entertain any proposition about ϕ if we had not been able at some time to assert a proposition of the form ' $\phi(a)$,' but any such proposition would entail 'for some x , $\phi(x)$.' Unfortunately, the traditional logicians while recognizing certain general propositions have tried to assimilate them in form to simple propositions such as 'this is red,' calling them all categorical. It is their obsession with the subject-predicate form which makes them reject out of hand all attempts to reduce mathematics to logic. I do not wish to assert here that any of the attempts is successful, but I do wish to maintain that no one who thinks that Aristotle exhausted formal logic can possibly hope to understand any of the attempts which have been made. As a preliminary to understanding we must first be prepared to recognize general propositions of such forms as 'for all x, y and z , if x is ρ to y , and y is ρ to z , then x is ρ to z ,' which cannot be fitted into the traditional scheme of propositions. It is the same obsession which produces the fallacious ontological argument.

If the logical theories which I have summarized are correct, we can now answer the question implicit in Descartes' remark: "I do not see to what class of reality you wish to assign existence." Our answer must be that, if when Descartes talks of a class of reality he means substances or attributes or relations, existence belongs to no

class of reality. The word "existence" is not a symbol for anything which can be either a constituent or a component of a simple proposition. It is only a logical auxiliary symbol. The sentence "tame tigers exist" is just one way of expressing the proposition 'for some x , x is tame and x is a tiger.' Other ways of expressing the same proposition are "there are tame tigers," "some tigers are tame," "something is a tame tiger." The sentence "tame tigers exist" may mislead philosophers into thinking that existence is a predicate, because it is grammatically similar to such sentences as "tame tigers growl" and "Rajah growls." Descartes fell into this confusion when he assumed that the proposition 'God exists' has the same form as a theorem of geometry. It is true that according to the usages of our language each of the propositions can be expressed in a sentence of the same grammatical form as those used to express attributive simple propositions, and that for most purposes such expression would be unobjectionable. But the logical forms of the two propositions are exhibited more clearly in the sentences "something is divine" and "if anything is a triangle, it has interior angles equal to two right angles." And no one who started with the new sentences would ever dream of an ontological argument. In short, the argument is merely a play on grammatical form.

(3).

I wish now to consider certain rather curious existential statements which are rarely if ever uttered by plain men.

(a) "*This exists.*" After an account of existential propositions from which my own is in large part derived, Mr. Russell tells us that the words " a exists" can have no meaning if " a " is not a description but a logically proper name.* He allows that " a exists" may have meaning when " a " is a grammatically proper name. If I say "Mr. Russell exists" I may mean 'there is one and

* *Introduction to Mathematical Philosophy*, p. 178.

only one man who wrote *An Introduction to Mathematical Philosophy*, etc., and is called Mr. Russell.' "Mr. Russell" is then, as used by me, a unique description, *i.e.*, a phrase connoting a complex of characters which belong all together to nothing but Mr. Russell. It would only be a logically proper name if I could use it without connotation to refer directly to something with which I was acquainted. The fundamental distinction here is between direct and indirect reference. When we think that we are making an indirect reference we may in fact be referring to nothing at all. That, I suppose, was the situation of Greeks who, believing their own mythology, said "the goddess of wisdom befriended Ulysses." But what of the sentence "this exists"? Common sense insists that the words have a meaning, and yet "this" does not look like a description.

It is true that if "*a*" were a logically proper name the words "*a* exists" could have no meaning such as we discover in the sentence "the President of the United States exists." If there were any meaning it could only be 'for some *x*, *x* is identical with *a*.' But in ordinary language there are no logically proper names. Symbols have sense because they are used according to habitual rules, and it is impossible that any symbol should be habitually associated with a particular which is a fleeting event. That we are able nevertheless to indicate to each other the particulars to which we wish to refer is due to the peculiarity of our habitual rules for the use of certain words such as "this," "here," "now" and "I." Each token of a demonstrative type may denote a different thing, but each token denotes whatever it does denote by locating that thing as in a certain relation to itself which anything denoted by token of that type must have to the token denoting it. If anyone else understands my use of a demonstrative word, he does so by apprehending the particular sound which I utter and considering what thing can be in a certain relation to that particular sound. The rules for the use of tenses in verbs must be explained in a similar fashion. From these considerations it follows that even according to Mr. Russell's account of existential propositions the

sentence "this exists" may have a perfectly good meaning, namely, 'there is something to which my token "this" has the deictic relation.'

(b) "*There are universals.*" In view of the criticisms which are sometimes brought against recent developments of logic, it is important to show that we can find a sense in which this statement is undoubtedly true.

A universal is either a quality or a relation. Let us begin by considering the statement "redness is a quality" We may be tempted to think that it ascribes a predicate, namely, being-a-quality, to a thing. If, however, we try to take it in that sense, we shall certainly end in confusion, puzzling ourselves about unreal questions, such as how the things called qualities are related to the things called particulars. We must recognize that 'redness is a quality' is not a simple proposition. It seems rather to be about the rôle of redness as a component in simple propositions. I suggest that the least misleading expression of it is "for some x , x is red." If this analysis is correct, 'redness is a quality' is a general proposition. The proposition 'there are qualities' must in consequence be doubly-general. It can be expressed in the form "for some ϕ , for some x , $\phi(x)$." By a similar argument we can show that 'there are relations' can be expressed in the form "for some ρ , for some x , for some y , $\rho(x, y)$." "There are universals" is therefore equivalent to "for some ϕ , for some x , $\phi(x)$, or for some ρ , for some x , for some y , $\rho(x, y)$."

If we try to clarify the meaning of the statement "there are particulars," we find ourselves led to adopt an expression which differs from that just given in nothing but the order of the prefixes. But the order of the prefixes makes no difference to the sense of the whole expression when the prefixes are of the same kind. It follows that the two sentences, "there are universals" and "there are particulars," have the same meaning. At first sight this is a very startling conclusion, for it seems to suggest that the words "universal" and "particular" have the same meaning, which we cannot admit. But the false suggestion is the product of our own confusion. We have forgotten

for the moment that the proposition which the two sentences express is multiply-general. The moral (and surely a very respectable moral) is that we cannot talk of universals without also talking of particulars and *vice versa*. Universals are components for constituents, and particulars are constituents for components. To say either "there are universals" or "there are particulars" is only to assert that something is somewhat or somehow to something, *i.e.*, that there are simple facts. Universals and particulars are distinguished by their different rôles in simple facts. A universal or component is that element in a fact which determines its internal multiplicity. This we show by the way in which we use the symbols for components. We do not say "this is red that" or "this is greater than."

(c) "*There may be three-termed relations.*" It has been suggested that jealousy, owing and betweenness are three-termed relations. I agree that the words occur in sentences containing three nouns, but I do not think that those sentences ever express simple propositions. That I owe twenty pounds to my bookseller is certainly not a simple proposition. Betweenness is the most plausible of the suggested examples, but examination shows that sentences containing the word "between" are about the logical properties of two-termed relations. If I say that *b* is between *a* and *c*, I mean that there is some aliorelative transitive relation by which *a* is related to *b* and *b* to *c*. For my own part I cannot discover any genuine three-termed relation. This is the situation in which some logicians say "there may be three-termed relations." They wish to vindicate for pure logic the right to consider three-termed relationship as a possible form for simple propositions. Any logician who is not prepared to confine himself to consideration of propositional forms of which he can give examples must sooner or later defend himself in this fashion. For who can instance a simple fact of which the component is a thirty-seven-termed relation?

Now the sentence "there may be three-termed relations" seems to mean that it is not self-contradictory to say that there are three-termed relations. I am therefore required

to understand the meaning of the statement "there are three-termed relations" while admitting that I cannot give an example and do not know whether the statement is true. It is easy, of course, to write out a set of marks analogous to that used in considering two-termed relations. It will be "for some ρ , x , y and z , $\rho(x, y, z)$." But when I wrote "for some ρ , x and y , $\rho(x, y)$ " I knew the logical form which I symbolized by writing " $\rho(x, y)$." If my new set of marks is really the expression of a quadruply-general proposition, it is about a four-fold array of propositions all sharing the same form. In order to refer to those propositions I must at least know their form. And the whole difficulty in the present case is that I do not know any example of a form for which " $\rho(x, y, z)$ " would by analogy be an appropriate symbol. I suggest that when logicians say "there may be three-termed relations" they are thinking only of the possibility of an extension of the rules according to which they manipulate marks like ρ and x . The only relational *symbols* to which the extended rules can be applied are incomplete symbols in Mr. Russell's sense, *i.e.*, such words as "owing," which do not stand for elements of simple propositions.

(d) "*There is a natural number which . . .*" It may be difficult to explain the meaning of such statements as " $7 + 5 = 12$." I have nothing to say about that problem except that numerals are neither proper names nor symbols for qualities. If, however, we can explain such statements, we should find no special difficulty in existential statements of the form "*there is a natural number which . . .*" The fact that mathematicians sometimes make repeated trials in order to establish an existential proposition of this kind shows that the proposition is of the form 'one satisfies the conditions or two satisfies the conditions or three satisfies the conditions, etc.' But it has been suggested recently that such existential propositions are very mysterious and even that the principle of excluded middle does not apply to them. I think that the difficulty may perhaps have arisen from a failure to distinguish propositions which are contraries from propositions which are contradictories.

Let us consider a universal proposition to the effect that no number satisfies certain conditions. We may symbolize it by the letter N. The contradictory of this is the existential proposition that some number satisfies the conditions, which we may symbolize by the letter S. Now S might perhaps be established by repeated trial, *i.e.*, we might find a number satisfying the conditions after a finite number of trials. But N can never be established in that way, since we cannot make trial of all numbers. When mathematicians establish a universal proposition they do so by demonstrating for what they call the general case or by mathematical induction (which is quite different from complete enumeration). They establish not simply N but the proposition that N is necessarily true, which we may symbolize by !N. N and !N must be distinguished, for the contradictory of !N is not S, but the proposition that S is possible, which we may symbolize by *S. The logical relations between the four propositions can be seen most clearly if they are arranged in a square of opposition as follows :

!N	S
N	*S

Each higher proposition entails that below it. Those at the opposite ends of a diagonal cannot both be true and cannot both be false. Those in the upper row cannot both be true but may both be false. Those in the lower row cannot both be false but may both be true. Since S is sufficient to refute !N, mathematicians, who are interested especially in !N, may sometimes assume that S is the contradictory of !N. If they do so, they will later find themselves led to the strange conclusion that the principle of excluded middle does not hold in mathematics. For !N and S, being contraries, admit a *tertium*, namely, the conjunction of N and *S. The conjunction of N and *S seems to be a very queer proposition, but I would rather recognize it as a genuine *tertium* between contraries than deny the principles of logic. What consequences would

follow in the philosophy of mathematics from its recognition I do not know.

(4).

The fundamental thesis of those who believe existence to be a predicate is that there is a sense of "being" logically prior to existence and applicable to the possible as well as to the actual. When we have rejected the theory that existence is a predicate we must be prepared to meet the doctrine of prior possibility in another form. Some logicians who accept the analysis of existential propositions which I have outlined argue as follows: "Logic is concerned with the forms of propositions. Propositions must be distinguished both from sentences and from facts. For different sentences may express the same proposition, as any one admits who says, for example, that the speakers at an international conference are all discussing the same proposition although they speak in different languages. And not all our thinking is the knowing of facts: we often suppose that a were ϕ when we know that a is not ϕ . Now we must find a place somewhere for propositions, and it seems most reasonable to say that they are possibilities. For all facts are possibilities, but not all possibilities are facts." This theory can be stated without the use of the word "existence," but it is in effect a modern version of the doctrine which underlay the treatment of existence as a predicate by older philosophers. Here instead of existence as a predicate of possible things we have factuality as a predicate of possible states of affairs. Sometimes, indeed, the word "existence" is used in the statement of the theory. Mr. Wittgenstein, for example, seems to have held some such view when he wrote: "The existence of atomic facts [*Sachverhalten*, i.e., states of affairs] we also call a positive fact [*Tatsache*], their non-existence a negative fact."

We must admit that in its application to simple propositions this theory is free from the defects which we discovered in the doctrine of subsistent possible things. It need

not involve us in any strange heresies about particulars and universals or about time. For it allows us to suppose that some particular were otherwise than in fact it is, and it does not require us to say that factuality or existence belongs to timeless possibles at certain times. We can go further and admit that whatever we think must in some sense be a possibility. But I think that we ought nevertheless to reject this form of the doctrine of prior possibility if it is offered as a finally satisfactory account of the nature of propositions.

What can we mean by the phrase "contemplating a possibility?" Some philosophers prefer to speak of knowing an analytic fact of the form 'p is possible.*' If this language is intended to provide an explanation of the nature of propositions, it assumes what it should explain, for the p of 'p is possible' is presumably a proposition which we must entertain in order to know that it is possible. Other philosophers who use the word "possibility" in their account of propositions apparently treat it as a synonym for "what is possible." According to them we are acquainted with a host of *possibilia* as objectives in their own right. But the word "possible" cannot stand alone as a description of anything. In order to give it a sense we must say that it is short for "possible fact." I suspect, however, that we sometimes talk of possible facts as though they were facts of some peculiar kind, which is obviously absurd. Let us then substitute for "possible fact" the less dangerous phrase "what might be the case." There is no doubt that at times we can use this phrase intelligibly, but I refuse to admit that the words ever describe an objective with which I am acquainted. To admit that they do would be to say that I know something which has the remarkable status of being ready to be a fact. Insistence that the objective is logically prior to what is the case and conceivable apart from all actuality only adds to the absurdity.

These considerations need not lead us to give up speaking of propositions, or even of possibilities, but they do suggest

* Lewis and Langford, *Symbolic Logic*, ch. xiii.

that we must treat propositions as logical constructions, *i.e.*, that we must be prepared to translate sentences about propositions into sentences in which the word "proposition" and its synonyms do not occur. There is a common view (once defended by Mr. Russell in his polyadic relation theory of supposal) according to which thinking is doing something with elements abstracted from facts. But it seems clear that the elements of facts cannot be separated in such a way that a man may be acquainted with a constituent or a component when he is not knowing a fact in which it is constituent or component. That the elements of facts cannot be separated is the truth of the theory of *universale in re*. Nor is it enough to say that entertaining a proposition is imagining a as ϕ . For in its looser usage "imagining" is merely a synonym for "supposing," and in its stricter usage it means apparently having an image which is numerically distinct from a and only characterized by ϕ in some Pickwickian sense. Images may play some rôle in the situation which we call entertaining a proposition, but I think that the puzzle is to be solved only by consideration of the way in which we use symbols. The doctrine of subsistent propositions, or prior possibilities, arises from the assumption that when sentences are not used to state facts they have meaning in precisely the same sense as when they are. In each case, it is supposed, symbols are used only to express something of which we think without the help of symbols. I doubt whether there is any thinking, as distinct from knowing, without the use of symbols. I wish to suggest, on the contrary, that thinking in the restricted sense is a certain use of symbols, and that propositions are logical constructions out of sentences. The detailed development of this theory would take too much time. I can only draw attention to some points of the development which are especially important.

We must begin by considering the habitual use of symbols in sentences which state facts. For it is only by reference in the last resort to this situation that any symbolism can be explained. We must then give definitions of entailment and equivalence for primary sentences, *i.e.*, for

sentences which are used to state facts. In this connexion we shall find that primary sentences do not all state facts in the same sense of "state." We have next to define the equivalence of secondary sentences, *i.e.*, of sentences which have been constructed out of old symbols according to the rules of combination which those symbols obeyed when previously used to state facts. Here we shall require the notion of analogous substitution. With these definitions we must go on to explain how various statements about propositions can be transformed into statements about sentences which are equivalent in either the primary or the secondary sense. In particular we must explain what we mean when we say that a sentence expresses a proposition, that a proposition has elements, that one proposition entails another. We shall find that for a proposition to be complex it is not necessary that the sentences which are said to express it should contain other sentences as parts of themselves. Finally we must explain in what sense it is true to say that a man always understands a secondary sentence with which he thinks although he is not aware of anything which it represents. I think it will appear that the understanding of a secondary sentence is for the most part not knowing anything, but rather freedom from bewilderment, ability to detect its relations of entailment to other sentences, and readiness to determine in suitable circumstances whether the sentence does or does not state a fact according to the old rules of usage.

It will be realized that if this account of propositions is correct the fundamental problem in all logical analysis is the determination of the way in which symbols are used in sentences which state facts. I have remarked that not all true sentences state facts in the same sense of "state." This can be illustrated by consideration of existential sentences, with which we are especially concerned. We may say, if we like, that the sentence "something is red" states an existential fact, but it is obvious that what we call an existential fact is not a fact of the same level as other facts. For I cannot know that something is red without knowing that a nameable particular is red. And, since

the knowledge which justifies my assertion that something is red would also justify my assertion that the nameable particular is red, it seems better to say that the existential sentence states incompletely the same fact which the other sentence would state completely.* Obviously, the existential sentence states the fact incompletely because it is adapted to state any one of many different facts for the complete statement of which many different definite sentences would be required. And yet it is impossible to give a list of all the definite sentences for which the existential sentence might incompletely deputize. We can see why it is impossible, if we remember that the meaning of any symbol is determined by its rules of usage. The adjective "red" means what it does because it is habitually used in the statement of facts which have redness for their component. The word "some" does not stand for any element of facts, but its employment is governed by an habitual rule, namely, that a sentence containing the word "some" may be used to state a fact incompletely whenever a sentence of a certain sort (determined by the other words of the "some" sentence) can be used to state a fact more completely. Since we are not omniscient, we cannot hope to foresee all the cases which may be brought under such a rule. This is the explanation and justification of the doctrine that an existential proposition is an inexponible adjunctive truth-function of the propositions of a range.

* Cf. J. Wisdom in *Mind*, vol. xlii, p. 192.

II.—By G. E. MOORE.

I AM not at all clear as to the meaning of this question. Mr. Kneale says that existence is not a predicate. But what does he mean by the words "Existence is not a predicate"?

In his second paragraph, he says that the word "predicate" has two different senses, a logical sense and a grammatical one. If so, it would follow that the words "Existence is not a predicate" may have two different meanings, according as the person who uses them is using "predicate" in the logical or the grammatical sense. And I think it is clear that he means us to understand that when *he* says "Existence is not a predicate," he is using "predicate" in the logical sense, and not in the grammatical one. I think his view is that if anyone were to say "Existence is a predicate," using "predicate" in the grammatical sense, such a person would be perfectly right: I think he holds that existence really is a predicate in the grammatical sense. But, whether he holds this or not, I think it is clear that he does not wish to discuss the question whether it is or is not a predicate in the grammatical sense, but solely the question whether it is so in the logical one.

Now I think it is worth noticing that if we assert "Existence is a predicate," using "predicate" in the grammatical sense, our proposition is a proposition about certain *words*, to the effect that they are often used in a certain way; but not, curiously enough, about the word "existence" itself. It is a proposition to the effect that the word "exists" and other finite parts of the verb "to exist," such as "existed," "will exist" or "exist" (in the plural) are often the predicates (in some grammatical sense) of sentences in which they occur; but nobody means to say that the word "existence" itself is often the predicate of sentences in which it occurs. And I think Mr. Kneale implies that, similarly, the proposition which anyone would express, if he asserted "Existence is a predicate," using

“predicate” in the logical sense, is again equivalent to a proposition, *not* about the word “existence” itself, but about the word “exists,” and other finite parts of the verb “to exist.” He implies that “Existence is a predicate,” with this use of “predicate,” is equivalent to the proposition that the word “exists,” and other finite parts of the verb, often do “*stand for* a predicate in the logical sense.” It would appear, therefore, that one difference between the two different meanings of “Existence is a predicate” is as follows : namely that, if a person who says these words is using “predicate” in the grammatical sense, he is *not* saying that the words, “exists,” etc., ever “*stand for* a predicate in the logical sense” ; whereas, if he is using “predicate” in the logical sense, he is saying that they do (often, at least) “*stand for* a predicate in the logical sense.” What Mr. Kneale himself means by “Existence is not a predicate” is apparently some proposition which he would express by saying : “The words, ‘exists,’ etc., never *stand for* a predicate in the logical sense.”

What I am not clear about is as to what is meant by saying of a particular word (or particular phrase) in a particular sentence that it “stands for a predicate in the logical sense” ; nor, therefore, as to what is meant by saying of another particular word in another particular sentence that it does *not* “stand for a predicate in the logical sense.” Mr. Kneale does, indeed, tell us that a “predicate in the logical sense” is the same as “an attribute” ; but, though I think that the meaning of the word “attribute” is perhaps a little clearer than that of the phrase “predicate in the logical sense,” it still seems to me far from clear : I do not clearly understand what he would mean by saying that “exists,” etc., do not “stand for attributes.” But, from examples which he gives, it is, I think, clear that he would say that in the sentence “This is red” the word “red,” or the phrase “is red” (I am not clear which), does “stand for an attribute” ; and also that in the sentence “Tame tigers growl,” “growl” so stands, and in the sentence “Rajah growls,” “growls” does. It is, therefore, presumably some difference between the way in which

"exists," etc., are used in sentences in which they occur, and the way in which "is red" (or "red") and "growl" and "growls" are used in these sentences, that he wishes to express by saying that, whereas "exists," etc., do *not* "stand for attributes," these words in these sentences do. And if we can find what differences there are between the use of finite parts of the verb "to exist," and the use of "is red," "growl" and "growls," we may perhaps find what the difference is which he expresses in this way.

I.—It will, I think, be best to begin with one particular use of "exist"—the one, namely, which Mr. Kneale illustrates by the example "Tame tigers exist." He clearly thinks that there is some very important difference between the way in which "exist" is used here, and the way in which "growl" is used in "Tame tigers growl"; and that it is a difference which does not hold, *e.g.*, between the use of "scratch" in "Tame tigers scratch" and the use of "growl" in "Tame tigers growl." He would say that "scratch" and "growl" both "stand for attributes," whereas "exist" does not; and he would also say that "Tame tigers exist" is a proposition of a different *form* from "Tame tigers growl," whereas I think he would say that "Tame tigers growl" and "Tame tigers scratch" are *of the same form*. What difference between "Tame tigers exist" and "Tame tigers growl" can be the one he has in mind?

(1) That there is a difference between the way in which we use "exist" in the former sentence and "growl" in the latter, of a different kind from the difference between our usages of "scratch" and "growl" in the two sentences "Tame tigers scratch" and "Tame tigers growl," can, I think, be brought out in the following way.

The sentence "Tame tigers growl" seems to me to be ambiguous. So far as I can see, it might mean "All tame tigers growl," or it might mean merely "Most tame tigers growl," or it might mean merely "Some tame tigers growl." Each of these three sentences has a clear meaning, and the meaning of each is clearly different from that of either of the two others. Of each of them, however, it is true that

the proposition which it expresses is one which cannot possibly be true, unless some tame tigers do growl. And hence I think we can say of "Tame tigers growl" that, whichever sense it is used in, it means something which cannot possibly be true unless some tame tigers do growl. Similarly I think it is clear that "Tame tigers exist" means something which cannot possibly be true unless some tame tigers do exist. But I do not think that there is any ambiguity in "Tame tigers exist" corresponding to that which I have pointed out in "Tame tigers growl." So far as I can see "Tame tigers exist" and "Some tame tigers exist" are merely two different ways of expressing exactly the same proposition. That is to say, it is not true that "Tame tigers exist" might mean "All tame tigers exist," or "Most tame tigers exist," instead of merely "Some tame tigers exist." It always means just "Some tame tigers exist," and nothing else whatever. I have said it is never used to mean "All tame tigers exist," or "Most tame tigers exist"; but I hope it will strike everyone that there is something queer about this proposition. It seems to imply that "All tame tigers exist" and "Most tame tigers exist" have a clear meaning, just as have "All tame tigers growl" and "Most tame tigers growl"; and that it is just an accident that we do not happen ever to use "Tame tigers exist" to express either of those two meanings instead of the meaning "Some tame tigers exist," whereas we do sometimes use "Tame tigers growl" to mean "All tame tigers growl" or "Most tame tigers growl," instead of merely "Some tame tigers growl." But is this in fact the case? Have "All tame tigers exist" and "Most tame tigers exist" any meaning at all? Certainly they have not a clear meaning, as have "All tame tigers growl" and "Most tame tigers growl." They are puzzling expressions, which certainly do not carry their meaning, if they have any, on the face of them. That this is so indicates, I think, that there is some important difference between the usage of "exist" with which we are concerned, and the usage of such words as "growl" or "scratch"; but it does not make clear just what the difference is.

I think this can be made clear by comparing the expressions "Some tame tigers don't growl" and "Some tame tigers don't exist." The former, whether true or false, has a perfectly clear meaning—a meaning just as clear as that of "Some tame tigers do growl"; and it is perfectly clear that both propositions might be true together. But with "Some tame tigers don't exist" the case is different. "Some tame tigers exist" has a perfectly clear meaning: it just means "There are some tame tigers." But the meaning of "Some tame tigers don't exist," if any, is certainly not equally clear. It is another queer and puzzling expression. Has it any meaning at all? and, if so, what meaning? If it has any, it would appear that it must mean the same as: "There are some tame tigers, which don't exist." But has *this* any meaning? And if so, what? Is it possible that there should be any tame tigers which don't exist? I think the answer is that, if in the sentence "Some tame tigers don't exist" you are using "exist" with the same meaning as in "Some tame tigers exist," then the former sentence as a whole has no meaning at all—it is pure nonsense. A meaning can, of course, be given to "Some tame tigers don't exist"; but this can only be done if "exist" is used in a different way from that in which it is used in "Some tame tigers exist." And, if this is so, it will follow that "All tame tigers exist" and "Most tame tigers exist," also have no meaning at all, if you are using "exist" in the sense with which we are concerned. For "All tame tigers growl" is equivalent to the conjunction "Some tame tigers growl, and there is no tame tiger which does not growl"; and this has a meaning, because "There is at least one tame tiger which does not growl" has one. If, therefore, "There is at least one tame tiger which does not exist" has no meaning, it will follow that "All tame tigers exist" also has none; because "There is no tame tiger which does not exist" will have none, if "There is a tame tiger which does not exist" has none. Similarly "Most tame tigers growl" is equivalent to the conjunction "Some tame tigers growl, and the number of those (if any) which do not growl is smaller than that of

those which do"—a statement which has a meaning only because "There are tame tigers which do not growl" has one. If, therefore, "There are tame tigers which don't exist" has no meaning, it will follow that "Most tame tigers exist" will also have none. I think, therefore, we can say that one important difference between the use of "growl" in "Some tame tigers growl" and the use of "exist" in "Some tame tigers exist," is that if in the former case we insert "do not" before "growl," without changing the meaning of "growl," we get a sentence which is significant, whereas if, in the latter, we insert "do not" before "exist" without changing the meaning of "exist," we get a sentence which has no meaning whatever; and I think we can also say that this fact explains why, with the given meaning of "growl," "All tame tigers growl" and "Most tame tigers growl" are both significant, whereas, with the given meaning of "exist," "All tame tigers exist" and "Most tame tigers exist" are utterly meaningless. And if by the statement that "growl," in this usage, "stands for an attribute," whereas "exist," in this usage, does not, part of what is meant is that there is this difference between them, then I should agree that "exist," in this usage, does not "stand for an attribute."

But is it really true that if, in the sentence "Some tame tigers exist," we insert "do not" before "exist," without changing the meaning of "exist," we get a sentence which has no meaning whatever? I have admitted that a meaning *can* be given to "Some tame tigers do not exist"; and it may, perhaps, be contended by some people that the meaning which "exist" has in this sentence, where it is significant, *is* precisely the same as that which it has in "Some tame tigers exist." I cannot show the contrary as clearly as I should like to be able to do; but I will do my best.

The meaning which such an expression as "Some tame tigers do not exist" sometimes does have, is that which it has when it is used to mean the same as "Some tame tigers are imaginary" or "Some tame tigers are not real tigers." That "Some tame tigers are imaginary" may really express

a proposition, whether true or false, cannot I think be denied. If, for instance, two different stories have been written, each of which is about a different imaginary tame tiger, it will follow that there are at least two imaginary tame tigers ; and it cannot be denied that the sentence " Two different tame tigers occur in fiction " is significant, though I have not the least idea whether it is true or false. I know that at least one unicorn occurs in fiction, because one occurs in " Alice Through the Looking Glass " ; and it follows that there is at least one imaginary unicorn, and therefore (in a sense) at least one unicorn which does not exist. Again, if it should happen that at the present moment two different people are each having an hallucination of a different tame tiger, it will follow that there are at the present moment two different imaginary tame tigers ; and the statement that two such hallucinations are occurring now is certainly significant, though it may very likely be false. The sentence " There are some tame tigers which do not exist " is, therefore, certainly significant, if it means only that there are some imaginary tigers, in either of the two senses which I have tried to point out. But what it means is that either some real people have written stories about imaginary tigers, or are having or have recently had hallucinations of tame tigers, or, perhaps, are dreaming or have dreamed of particular tame tigers. If nothing of this sort has happened or is happening to anybody, then there are no imaginary tame tigers. But if " Some tame tigers do not exist " means all this, is it not clear that " exist " has not, in this sentence, the same comparatively simple meaning as it has in " Some tame tigers exist " or in " No tame tigers exist " ? Is it not clear that " Some tame tigers do not exist," if it means all this, is not related to " Some tame tigers exist," in the same simple way in which " Some tame tigers do not growl " is related to " Some tame tigers growl " ?

(2) There is, I think, also another important difference between this use of " exist " and the use of " growl," which may be brought out as follows.

Mr. Russell has said* "When we say 'some men are Greeks,' that means that the propositional function ' x is a man and a Greek' is sometimes true"; and has explained just previously that by "sometimes true" he means "true in at least one instance." With this explanation of what he means by "sometimes true," I do not think that his statement as to the meaning of "Some men are Greeks" is strictly correct; since I think that the use of the plural implies that " x is a man and a Greek" is true in *more* than one instance, that is to say, in at least two instances. Let us suppose that he would accept this correction and say that what "Some men are Greeks" means is not, strictly, that " x is a man and a Greek" is true in at least one instance, but that it is true in at least two. He has further implied (p. 158) that to say of a propositional function that it is true in at least two instances is the same thing as to say that at least two "values" of it are true; and he has told us (p. 156) that the "values" of propositional functions are propositions. With these explanations, his view would appear to be that what "Some men are Greeks" means is that at least two propositions, related to the propositional function " x is a man and a Greek" in some way which he expresses by saying that they are "values" of that function, are true. Now I cannot imagine what sort of propositions would be "values" of " x is a man and a Greek," except propositions of the following sort. There are propositions which we express by pointing at (or indicating in some other way), an object which we are seeing (or perceiving in some other way) and uttering the words "This is a so and so" (or equivalent words in some other language). Let us suppose that the kind of propositions which would be "values" of " x is a man and a Greek" would be propositions of this sort, where the words used were "This is a man and a Greek." Mr. Russell's doctrine would then be that "Some men are Greeks" means that at least two different true propositions of this sort could be made: that there must have been at least two different objects at which

* *Introduction to Mathematical Philosophy*, p. 159.

a man might have pointed and said truly "This is a man and a Greek." And, if this is his doctrine, it seems to me to be true. Surely "Some men are Greeks" cannot possibly be true, unless there are at least two different objects, in the case of each of which a man might have seen it, pointed at it, and said with truth "This is a man and a Greek" ?

On this view "Some tame tigers growl" means that at least two values of " x is a tame tiger and growls" are true ; and this means that there are at least two objects, in the case of each of which a man might have seen it, pointed at it, and said with truth "This is a tame tiger and growls." Now in this sentence "This is a tame tiger and growls" it is clear that, except for the difference consisting in the fact that "growls" is in the singular and "growl" in the plural, the word "growls" has the same meaning as has the word "growl" in "Some tame tigers growl." We can say, then, that one feature about our use of "growl" is that, if we consider a "value" of the propositional function which is such that "Some tame tigers growl" means that at least two values of it are true, then the singular of "growl" can be used, with the same meaning, in the expression of such a value. And perhaps this may be part of what is meant by saying that "growl" "stands for an attribute." It may perhaps be meant that to point at an object which you are seeing, and utter the words "This object growls," is significant—that the words and gesture together do really express a proposition, true or false.

But now consider "Some tame tigers exist" : is the same true of "exist" in this sentence ? Mr. Russell says* : "We say that 'men exist' or 'a man exists' if the propositional function ' x is human' is sometimes true." And he goes on to protest that though the proposition "Socrates is a man" is "*equivalent*" to "Socrates is human," it "is not the very same proposition." For my part I doubt whether we ever do use "is human" in such a way that "Socrates is human" is equivalent to "Socrates

* *Introduction to Mathematical Philosophy*, pp. 171-2.

is a man." I think Mr. Russell is using "is human" in a very special sense, in which nobody but he has ever used it, and that the only way of explaining how he is using it is to say that he is using it to mean precisely that which we ordinarily express by "is a human being." If this is so, and if we are allowed to distinguish, as I think we ought, between "men exist" and "a man exists," and to say that "men exist" means, *not* "' x is a human being' is true in at least one instance," but "' x is a human being' is true in at least two instances," then I think his doctrine is true; provided, again, that we are allowed to regard the sort of propositions which we express, *e.g.*, by pointing at an object which we are seeing and saying the words "This is a human being," as being those which are values of " x is a human being." Surely "Human beings exist" can be true if, and only if, there are at least two objects, such that, if a man were to see and point to one of them and utter the words "This is a human being," he would be expressing a true proposition by what he did?

Now, if this is right, we see at once that the use of "growl" in "Some tame tigers growl" differs from that of "exist" in "Some tame tigers exist," in the respect that, while the first asserts that more than one value of " x is a tame tiger *and grows*" is true, the second asserts, *not* that more than one value of " x is a tame tiger *and exists*" is true, but merely that more than one value of " x is a tame tiger" is true. Owing to this view of his that "Some tame tigers exist" means the same as "Some values of the propositional function ' x is a tame tiger' are true," Mr. Russell has been led to say* "Existence is essentially a property of a propositional function" and (p. 196) "It is of propositional functions that you can assert or deny existence" and (p. 197) that it is a fallacy to transfer "to the individual that satisfies a propositional function a predicate which only applies to a propositional function"; so that, according to him, existence is, after all, in this usage, a "property" or "predicate," though not a property of individuals, but only of propositional functions! I think

* *Monist*, April, 1919, p. 195.

this is a mistake on his part. Even if it is true that "Some tame tigers exist" means the same as "Some values of ' x is a tame tiger' are true" it does not follow, I think, that we can say that "exist" means the same as "is sometimes true," and "some tame tigers" the same as " x is a tame tiger": indeed, I think it is clear that we can not say this; for certainly " x is a tame tiger' exists" would not mean the same as "Some tame tigers exist." But what I think does follow from this interpretation of "Some tame tigers exist" is another thing which Mr. Russell himself holds, namely, that if a proposition which you express by pointing at something which you see and saying "This is a tame tiger," is a "value" of " x is a tame tiger," then if, pointing at the same thing, you were to say the words "This exists," and, if you were using "exists" merely as the singular of "exist" in the sense in which it is used in "Some tame tigers exist," what you did would not express a proposition at all, but would be absolutely meaningless. That is to say, there is between "Some tame tigers growl" and "Some tame tigers exist," not only the difference that, whereas the first asserts that some values of " x is a tame tiger *and growls*" are true, the second asserts only that some values of " x is a tame tiger" are true; there is also the further and more important difference that, why the second asserts only that some values of " x is a tame tiger" are true, is not because we happen to use "This is a tame tiger" to mean the same as "This is a tame tiger *and exists*," but because by pointing and saying "This *exists*" we should express *no proposition at all*, so long as we were using "exists" as the singular of the use of "exist" with which we are concerned, whereas by pointing and saying "This growls" we certainly should be expressing a proposition, even though we were using "growls" merely as the singular of "growl" with the meaning it has in "Some tame tigers growl." "This is a tame tiger, *and exists*" would be not tautologous, but meaningless.

This, I think, gives us a second true thing, which may perhaps be sometimes part of what is meant by saying that "exist," in this usage, "does not stand for an attribute."

II.—So far I have been solely concerned with the use of “exist” in such sentences as “Some tame tigers exist,” and have tried to point out two differences between its use here and the use of “growl” in “Some tame tigers growl,” which may perhaps be part of what is meant by saying that “exist,” in this usage, does not “stand for an attribute,” whereas “growl” does. But I cannot help thinking that there are other significant uses of “exists”; and I want, in particular, to try to point out two such, and to consider what, if anything, true can be meant by saying that in these usages also “exists” does not “stand for an attribute.”

(1) I have just said that to point at a thing which you see and say “This exists” seems to me to be meaningless, if “exists” is the singular of “exist” in the sense in which it is used in “Tame tigers exist”; but I cannot help thinking that in the case of anything to point at which and say “This is a tame tiger” is significant, it is also significant to point at it and say “This exists,” *in some sense or other*. My reason for thinking this is that it seems to me that you can clearly say *with truth* of any such object “This *might* not have existed,” “It is *logically possible* that this should not have existed”; and I do not see how it is possible that “This might not have existed” should be true, unless “This does in fact exist” is true, and therefore also significant. The statement “It is logically possible that this should not have existed” seems to *mean* “The sentence ‘This does not exist’ is significant”; and if “This does not exist” is significant, “This does exist” must be significant too. Now I cannot help thinking that in every case in which I point at an object which I am perceiving and say significantly “This is a tame tiger,” “This is a book,” my proposition is in fact a proposition about some sense-datum, or some set of sense-data, which I am perceiving; and that part of what I am saying is that this sense-datum (or these sense-data) is “of” a physical object. That is to say, I am saying of some sense-datum that it is “of” a physical object in the sense in which it is true to say of an after-image which I see with my eyes shut that

it is *not* "of" a physical object. And I think that part, at least, of what we mean by "This exists," where we are using "this" in the same way as when we point and say "This is a book," is "This sense-datum is *of* a physical object," which seems to me to be certainly significant. If "of" here stood for a relation, we might say that "This is a book" was short for "The thing which this sense-datum is 'of' is a book," and therefore "This exists" short for "The thing which this sense-datum is 'of' exists"; in which case the use of "exists" in question would be that which in *Principia Mathematica* is symbolized by $E!$, and there would be the same sort of reason for saying that it does not "stand for an attribute" as in the case of the "exist" which occurs in "Some tame tigers exist." I do not believe, however, that "of" here does stand for a relation, nor therefore that "This" in "This is a book" can be said to be short for the sort of phrase which Russell has called "a definite description"; and, this being so, I am not at all clear as to what that is true could be meant by saying that "exists," in this usage, "does not stand for an attribute." The only suggestion I can make is this. It seems to me that "This exists" (in this usage) always forms part of what is asserted by "This is a book," "This is red," etc., etc., where "this" is used in the manner with which we are now concerned; and possibly part of what is meant by saying that "is a book," "is red," etc., "stand for attributes," is that *part but not the whole* of what is asserted by any "value" of " x is a book," " x is red," etc., is "This exists." In that case "exists" in "This exists" would not "stand for an attribute," solely because the whole of what it asserts, and not merely a part, is "This exists."

(2) Another reason why "This exists," where "this" is used as it is in "This is a book" seems to me to be significant, is because it seems to me not only significant to say of a given sense-datum "This *is* of a physical object" or "This is *not* of a physical object," but also to say of the sense-datum itself "This exists." If this is so, we have to do with a new sense of "exists," since certainly no part of

the meaning of such an assertion with regard to a sense-datum is that it, or any other sense-datum, is "of" a physical object. But my reason for holding that it is significant for me to say, for instance, of an after-image which I am seeing with my eyes shut, "This exists," is similar to that which I gave in the last case : namely that it seems to me that in the case of every sense-datum which any one ever perceives, the person in question could always say with truth of the sense-datum in question "This might not have existed" ; and I cannot see how this could be true, unless "This does in fact exist" is also true, and therefore significant. That "this exists" has any meaning in such cases, where, as Mr. Russell would say, we are using "this" as a "proper name" for something with which we are "acquainted," is, I know, disputed ; my view that it has, involves, I am bound to admit, the curious consequence that "this exists," when used in this way, is always true, and "this does not exist" always false ; and I have little to say in its favour except that it seems to me so plainly true that, in the case of every sense-datum I have, it is logically possible that the sense-datum in question should not have existed—that there should simply have been no such thing. If, for instance, I am seeing a bright after-image with my eyes shut, it seems to me quite plainly conceivable that I should have had instead, at that moment, a uniform black field, such as I often have with my eyes shut ; and, if I had had such a field, then that particular bright after-image simply would not have existed.

But, supposing "This exists," in this usage, has a meaning, why should we not say that "exists" here "stands for an attribute" ? I can suggest no reason why we should not, except the same which I suggested in the last case.

SYMPOSIUM: "CAN PHILOSOPHY DETERMINE WHAT IS ETHICALLY OR SOCIALLY VALU- ABLE?"

By PROF. J. L. STOCKS, MR. A. K. STOUT *and*
MR. W. D. LAMONT.

I.—*By* J. L. STOCKS.

THE problem raised by this question is to my mind fundamentally the problem how far and in what sense the philosopher is in a position to give assistance to the practical man in his action; in particular, whether he is rightly expected to prescribe the end or goal or principle of action for men as moral individuals, or for societies as responsible for organizing and directing the lives of their members. I answer the question with a qualified negative, i.e., I think that the philosopher can be of assistance to the practical man, but not in the way suggested. Perhaps a further personal explanation may be in order, since it will show how the question in fact arose and why I am asked to open the discussion though my answer is to this extent negative.

At the beginning of this session I wrote a paper for the Aristotelian Society under the title 'The Need for a Social Philosophy,' concerned largely with this very point. In the course of that paper I called attention to the fact that large portions of the books written by philosophers on ethics and politics are not strictly philosophical in character: to a large extent they are descriptive, occupied in recording relevant experiences, and in much of the rest they are apt to be hortatory, occupied in recommending this or that reform or line of action. From a strictly philosophical point of view there is a high degree of impurity in such works, which may be generally desirable and justifiable and certainly makes them more attractive to the non-philosophic reader, but is apt to cause confusion in the reader's mind as to the

task of philosophy and the contribution to be expected from it. I went on as follows : ‘ by reason of this impurity the moral philosopher does in fact assert ethical values, recommend lines of action, advocate reforms of existing institutions—all things which as a practical man he has a perfect right to do, but none of them in themselves activities pertaining to a philosopher. The philosopher, I should say, in virtue of his philosophy cannot prove anything to be good or bad. If men really think that vice is better than virtue, that justice is a dream or a triviality, that all significant relations between states can be expressed in power equations, philosophy can only register these facts and explore their implications. By cross-examination of those who say these things the philosopher may in fact be able to show that they do not mean what they say. That will no doubt be a useful service, but it is not itself philosophy. It is a preliminary rectification of something offered as a starting-point for philosophical reflection. The refutations of such moral nihilism to be found in philosophical works, as in the *Republic* of Plato, for instance, are largely exercises of this order, i.e., demonstrations that the thesis in question is meaningless. So far as they are not that and really claim to prove, for instance, that virtue is better than vice, they are either question-begging, in the sense that they are substantially only the assertion of a divergent valuation, or what they prove is not what they pretend to prove.’ (pp. 11–12).

My task in opening this discussion is to re-state and explain these contentions, and explanation is clearly desirable on two main points—(1) as to the conception of philosophy presupposed, (2) as to the relation of philosophical reflection to the grounds of practical judgment and decision.

(I. *Philosophy and its task.* I agree substantially with the conception of the philosopher’s task, which Bertrand Russell adopted some twenty-five years ago when he wrote his *Problems of Philosophy*. “Philosophy,” he said, “should show us the hierarchy of our instinctive beliefs . . . It should take care to show that, in the form in which they are

finally set forth, our instinctive beliefs do not clash, but form a harmonious system. There can never be any reason for rejecting one instinctive belief except that it clashes with others ; thus, if they are found to harmonize, the whole system becomes worthy of acceptance." ¶ Russell had in mind chiefly, when he wrote those words, fundamental common-sense assumptions, such as that material bodies exist. Whether he would have attached any special value to the word 'instinctive,' which I do not much like, I do not know ; nor do I know what else, if anything, he would have asked the philosopher to do besides exploring and exhibiting the system of these beliefs. When he says that no such belief can legitimately be rejected except on the ground of its inconsistency with others, he seems to imply that the philosopher's constructive task is exhausted in this. However that may be, I see no reason why the conception should not be generalized so as to include not merely the practical presuppositions of common sense, to which the word 'instinct' is not inappropriate, but also e.g. the principles of induction, which he goes on later in the same book to investigate, and the complex assumptions which underlie the scientific interpretation of nature, in regard to which the word 'instinct' seems to be rather out of place. And with that extension, if it is an extension, and with a request for a better word than 'instinctive,' I am prepared to accept the description as fitting the philosophic task.

Philosophy, as I understand it, is essentially a reflective activity of thought, in contact with reality, so far as reality is other than mind, not directly but through primary and pre-existing mental reactions to it. These primary activities are of various kinds, but all alike come into existence without the philosopher's assistance and go their way independently of him. He has no power or title to regulate or control them. Each of them has its own actuating principles and its own fundamental constitutive beliefs. These last are not a set of clearly formulated principles, which can be set out once for all, like the axioms of Euclid, before the activity begins, but rather principles and beliefs developed experimentally as the activity develops, and justified for the

experimenter by the success of the experiments in which they are operative. (The task of the philosopher is (1) to determine the precise character of the principles, (2) to pursue their implications, (3) to consider all questions arising from the inter-relation of the pre-suppositions of human thought, theoretical and practical, in its different fields of exercise. The first of these three tasks calls for special familiarity with a particular field, and thus accounts for a certain degree of specialization on the part of philosophers. The specialization may be lasting or it may be, so to speak, periodical. One philosopher is specially at home in the field of science (or the philosopher at one period devotes himself to this side of thought); another philosopher (or the philosopher at another time) concentrates on art or religion or history or on the problems of the practical life in ethics and politics; and in this way are produced philosophical treatments of these departments. But, if the treatment is to be philosophical, the specialization cannot be absolute. In executing the first of his three tasks the philosopher must have in mind the second and the third; for it is his business, as a philosopher, not merely to understand the procedure of the artist or the scientist, but to procure an insight into the nature of reality in its universality. This differentiates his work from that of the specialist proper. An artist will sometimes discuss the principles of his art, an experienced politician will attempt to expound the lessons of his experience and the principles which have guided him in his work: either of them may in fact have something of the philosopher in his composition, and if so that will complicate the formula; but primarily, and so far as they are true to their own specialities, each will have in mind his own successes and what made them possible: each will be making a contribution to his own speciality with a view to improving its practice. The philosopher is facing in the opposite direction. What interests him is not the consequences of these principles in operation, but their pre-suppositions: his question is, What must the world be to make this possible? To say this is, of course, only to generalize the theorem concerning the opposite movements of philosophic and scientific thought

which Plato formulated in his *Republic*. In terms of the triple task formulated above it means that while both the specialist proper in his reflective moments and the philosopher will appear to face the second of the questions enumerated, viz. that of the implications of the principles, they will be concerned, so far as each is true to his nature, with a different set of implications. The considerations which specially concern the philosopher may be called the meta-physical implications, and these do not concern the practitioner as such.

I would only add, with no emphasis, because it is not very relevant here, that it seems to me to be clear that the main philosophical controversies are incidental to the third of the tasks set out above. The successes of science, for example, are represented as requiring or implying a materialistic interpretation of nature ; action, on the other hand, and the principles of moral judgment upon it, are represented as demanding a conception of the material as malleable by a will which is not material. Thus there is a conflict, real or apparent, between the implications of two different kinds of human experience, out of which prolonged disputes connected with terms like materialism, the freedom of the will, etc., are born. To accept such a conflict as inevitable and irreconcilable would be to surrender the faith on which knowledge depends, and therefore in attempting to re-interpret the rival theses so as to remove their apparent conflict the philosopher is undertaking a necessary task, which has to be performed if the several activities which are in apparent conflict are not to be paralysed by fundamental doubts.

II. *The Practical Field.* If the foregoing definition of the philosophic task is correct, it follows at once that the first duty of the philosopher in any field which he may enter, and therefore specifically in the practical field which is here in question, is to determine a question of fact. If a normative science is one that sets out to formulate ideals which are in no determinable relation to current practice, his is not a normative science. With ideals and principles of action he

is certainly concerned, and equally certainly these ideals and principles of action are not always and everywhere effective in action, but if they are nowhere effective it is difficult to see what right they have to their name. (His first task is to determine by the appropriate evidence what the operative principles of conduct actually are and what are the limits of their operation. It is his business to find out what is thought obligatory, not what ought to be thought obligatory ; what is considered good, not what it is good to consider good. It is no more his business to put himself in the place of the agent or politician, and think out his problem for him afresh, than it is his place to go into the scientific laboratory and attempt a new solution of the scientist's problem. He is concerned only with the reflective interpretation of a given activity, and such interpretation must start, like any interpretation, from determination of fact.) It merely happens that in this case the relevant facts are essentially valuations ; and this creates a confusion in some people's minds, who cannot conceive a valuation as a fact requiring accurate definition and analysis.

Another source of confusion here arises from a tendency, which seems to be natural to the unsophisticated human mind, to a utilitarian interpretation of conduct. If all differences of practical valuation are reducible in the last resort to differences in acceptability between the probable results of action, then the obvious conception of ethical and political theory is the conception of it as directed to determining the general considerations on which such acceptability depends or should depend. Men will thus go to ethics and politics (to borrow Aristotle's metaphor) like archers in search of a mark. Nearer objectives they have no doubt in plenty, based on blind instinct, example, tribal custom, and other questionable foundations ; (but to bring order into their lives and achieve the full freedom of a planned life they want an ultimate objective in reference to which these others may be systematized and regulated. On this view the philosophical theorist is conceived as thinking on precisely the same lines as the man of action, but as carrying the thought further and deeper than the

man of action is willing or able to carry it. He will be telling the practical man, who has no leisure to complete the answer to his own perpetual question, what in the long run is really worth having. But even if the utilitarian view is correct, this conception of ethics and politics does not necessarily follow. It may still be the case that the philosopher has no authority from his philosophy for pronouncing that this is better than that, and that when he propounds a definition of the human good, the evidence for the truth and adequacy of this conception is to be found in the more limited judgments of the man of action, of which it is the continuation and justification. In this case the philosopher will after all be occupied in substance in deciding a question of fact: he will be telling the practical man what he really is aiming at all the time. Aristotle's own final conclusion was really that this is what the ethical and political philosopher actually does.)

But, it will be said, even if the first step is the determination of fact, which may well be true, the philosopher cannot surely stop at that. (Surely it is his obvious duty to criticize these judgments of value, to correct errors and misapprehensions, to recommend the right principles of action and so contribute to the making of a better and happier world.)

This is the type of objection which in one form or another is always brought against anyone who puts forward such a conception of practical philosophy as I am now advancing. I have come to the conclusion that its real root is the failure to realize what a difficult task in the practical field this initial task (as I have called it) of determining the facts is, and how little therefore relatively remains to be done when it is satisfactorily accomplished. The idea that the commands and principles of morality are as plain as a pikestaff may be a convenience to rulers and teachers and other lovers of docility, but it is a long way from the truth and a serious obstacle to anyone who wishes to establish a sound practical philosophy. The material which must form the empirical basis of any theory is rich and various. It consists of acts and judgments—acts of our own and of other persons,

judgments upon acts and projects of action of our own and of other persons. Each of these acts and judgments is essentially atomic and isolated, as the judgments of aesthetic appreciation are also atomic and isolated. Each has reference to a particular performance and situation, and no other. Consequently there may be any degree of inconsequence and inconsistency between them. How many people judge themselves and other persons by the same measures, or hold consistently to one standard of judgment over a period? Further, the specifically moral factor in action and in judgment is so inextricably mixed up with other factors that its separate operation is not in fact conceivable and its theoretical isolation is a matter of extreme difficulty. The moral diagnosis of any act involves necessarily the ascription of motives to the agent, and how can we, who find by experience that we cannot pronounce confidently as to our own motives, identify with any confidence the motives of someone else? There is obviously an enormous gap between this chaotic material and the tidy ethical systems which philosophers offer us as the result of their reflection upon it. The philosopher does not trouble much to show the steps by which from that starting point he arrived at this result. It often seems as though he had been content to generalize from his own limited practical experience, assuming that it was typical or authoritative. But whether the field from which the material is drawn is wide or narrow, it seems clear that the determination of the facts, which is the first step, is no simple straightforward matter, but a difficult and complicated undertaking.

My first answer then is that the question of fact, the question what are the ideals and principles actually operative in the field of practice, is by itself a question of sufficient magnitude to occupy justifiably the main part of an investigator's attention. My second answer is that such correction and criticism of current practice and belief as is logically justifiable will be given implicitly in the attempt at a systematic exposition of the facts. Everything turns here on the question how the valuations on which the decisions of the agent or statesman depend are established

or confirmed. If they are capable of systematic *a priori* exposition and proof, then I suppose the philosopher might undertake this and so formulate a body of doctrine, like Locke's Law of Nature, which would be "an eternal rule to all men, legislators as well as others." By it as standard he could judge the actual practice of legislators and others, and show wherein it fell short. But I see no reason to suppose that any such body of *a priori* law is attainable. A more laborious empirical method has therefore to be devised. This means that the would-be theorist of conduct has to face the mass of material above described and attempt to reduce it to some degree of order. He has to show that this multiplicity is at bottom a unity, that this unorganized sequence of decisions and judgments has none the less its own inner organization and can be plausibly regarded as the expression of a single principle or of a few fundamental ideas which are in intelligible relation to one another. Now the fundamental principle of any empirical method, as John Stuart Mill rightly pointed out, is this : "we have no ulterior test to which we subject experience in general ; but we make experience its own test." Mill was thinking of the scientific exploration of nature. The principle is no doubt sound there, but it is far more directly and obviously applicable when the object to be tested or judged is an expression of human effort and reason. Every such manifestation of mind must necessarily be an attempt to achieve something which is not in fact fully achieved. To state its aim and motive is to state a fact : this is what the agent, the painter, the poet, was actually aiming at. To describe the achievement is also to state a fact : this is what he actually achieved. The perceived interval between the first and the second of these two parts is a main ground of favourable and unfavourable judgment upon actions and upon the products of art.

The only way we have of *persuading* other people (as distinct from inducing them by threats, bribery, bullying, etc.) to desist from some course of action is to show them that its continuation will obstruct certain things which they also desire, or that it implies the acceptance of principles and beliefs

irreconcilable with those implied by other actions to which they are also committed. The practical man generally; and the politician in particular, is very sensitive to charges of inconsistency, and will resort to the most transparent devices to prove the straightness of a most obviously tortuous course of action. If it were not for this ‘instinctive belief’ in practical consistency, if practical decisions were really as independent of one another as they often seem to be, the reflective analysis of the philosopher, however interesting and necessary as theory, would be of no importance for practice. But given this demand and belief, his possible influence is very great, and arises directly from the exposition of fact in the sense already explained. (Let me illustrate this by an example from political theory. Locke in his *Civil Government* says that “the great and chief end of men uniting into commonwealths” is the preservation of their property, i.e., “life, liberty, and estate.” With this principle in his hand he proceeds to condemn this constitutional or other provision and approve that. He thinks that his starting point is in human reason, i.e., in that which is evident *a priori*, and would probably demur to the suggestion that it is taken from the facts themselves. Yet surely in truth what he did was to reflect on the principles and practice of government in England—and no doubt in other countries—as known to him, and in the course of that reflection convinced himself that the more permanent and constructive features of that government implied fundamentally the observance of some such principle, while disorder, disaster, and weakness entered in so often as public action was taken which implied its suspension or rejection. And having thus obtained his principle from the facts he uses it to judge the facts. What is accepted is accepted as necessary and helpful, what is rejected is rejected as harmful and obstructive to this ‘great and chief end.’ For a long time after it was written, Locke’s work was very influential in the political field. The extent of Locke’s influence was due, not to theoretical conceptions, already half obsolete, like the law of nature and the social contract, but to the superb judgment with which he discerned and expounded for his contem-

poraries the central currents in the turbulent stream of events through which he lived. It was this that gave him his hold on future practice, and enabled his teaching to work for its strengthening and purification.)

Conclusion. The practical values, in my view, are created, sustained, and developed by practitioners who are in direct contact with the external world at the requisite point. Theirs is the only authoritative and responsible judgment as to what is valuable, and all generalization upon the nature of value and the valuable has to recognize its dependence upon them. New and unforeseen developments at these points of direct contact are always possible, and in such cases it will always be difficult to tell wilful caprice from fruitful innovation. Rules of a kind may be formulated to govern practice, but they have no theoretical foundation : they are essentially generalizations from practice, without power to bind future practice, and without value except for beginners. Reflective analysis by the practitioner of his own practice is no doubt in some degree a persistent element in the practice and contributes to its efficiency, especially by increasing its coherence and consistency. More elaborate attempts at such analysis are undertaken occasionally by the practitioners themselves and persistently by philosophers in treatises devoted to the subject. In their nature these efforts are identical with those of the self-conscious practitioner, and their possible service to practice is of the same order as that of his reflections. But when they are philosophical they have a further aim. They are not directed essentially to the improvement of practice, but to the definition of the principles of practice with a view to clearing up the nature of the world and man's place in it. In any case these reflective efforts are not directly creative : they do not open up new spheres of value : that function is reserved for the practitioner. They are not legislative, producing principles binding on the practitioner : the practice is autonomous. The only sense in which philosophy can be said to determine what is ethically or politically valuable is this, that in its critical examination of the practice and in its

exposition of its principles it is attempting to make explicit and evident assumptions as to the nature of good which are for the practitioner largely concealed within the concrete detail of his judgments and decisions. It is only so far as the man of action is reflective that the philosophical analysis links up directly with his thought : towards the answer to his primary question, What shall I do ?, philosophy contributes directly nothing.

II.—By A. K. STOUT.

I.—*The general nature of the Philosopher's task.*

PROFESSOR STOCKS' answer to his question follows directly from his view of the function of philosophy in general, which he sets out in the first part of his paper, before proceeding to its special development in Ethics and Political Theory. I agree with him in holding that there is nothing peculiar about the practical field to make the philosopher's task in it different in principle from his task in any other field. I need make no apology, therefore, for following his lead and devoting the first (and greater) part of my paper to considering the general nature of the philosopher's function.

The concept of philosophy which Professor Stocks accepts from Russell is that it is concerned with "instinctive beliefs" and tries to show "that in the form in which they are finally set forth they do not clash, but form a harmonious system." Whatever may precisely be meant here by "instinctive beliefs," it is taken for granted that "there can never be any reason for rejecting one instinctive belief except that it clashes with others." We are justified in accepting it as true unless it so clashes. The final appeal, then, is to the "instinctive" character of the beliefs. There is no higher standing-ground from which we are entitled to pass judgment on their truth or falsity. But it is also assumed that they may be inconsistent with each other. When they are so, how is the philosopher supposed to deal with the situation? The final appeal being to instinct, it would seem that when instinctive beliefs clash he has no way of deciding between them. He can only register the fact that they clash and leave it there. Russell does, however, indicate a way out of this impasse. According to him, the philosopher has to show the harmony of instinctive beliefs not necessarily just as he finds them, but in the form in which he finally sets them forth. If we ask how he is to determine whether a belief

is in its final form * or not, there seems to be only one answer. The final form is that in which the beliefs completely harmonize with each other so as to make a coherent system.

Here we are faced with a question which is a crucial test of the Russell-Stocks position. What is the nature of the difference between the instinctive beliefs as they originally appear and may conflict, and the “final form” in which they harmonize? Is what is believed in the final form of the belief really different from what is believed in the relatively primitive form, or is the difference merely between what the believer really believes and what someone mistakenly supposes him to believe, so that the final form is no more than an accurate and unambiguous re-statement of what he really believes? In the second case, there would be no real but only an apparent conflict between instinctive beliefs (for identically the same beliefs, in whatever different “forms” they may be clothed, cannot both really clash and really harmonize); this apparent conflict would be due to misunderstanding and would be removed by the re-statement of the beliefs (or, at least, of one of them). It would in this respect be like the apparent conflict between the belief in the infallibility of the Pope and the belief that like other men he is liable to make mistakes. The Roman Catholic may remove this seeming contradiction by explaining accurately in what sense he believes the Pope to be infallible. Such beliefs, however, differ in one relevant respect from instinctive beliefs. Those who hold them have accredited representatives to whom we can appeal for an authorised account of them. There are no such accredited representatives for instinctive beliefs. These, so long as they remain merely instinctive, are as a rule not expressly formulated and defined, but obscurely taken for granted. We can discover what they really are only by observing how they determine thought and conduct. This is often a difficult undertaking, in which mistakes are easy, and it belongs rather to the psychologist or philosopher than to the

* Or relatively final; for presumably neither Russell nor Professor Stocks means to assert that the philosopher completes his task.

plain man. If we ask the plain man to explain accurately such instinctive beliefs as that in free will or personal identity, his answer is sure to be unsatisfactory. Where the instinctive belief is vague and indeterminate he will make it determinate and so alter it. In doing so he will probably be guided by views which are not instinctive but are derived from current philosophy, science or theology. A true account of an instinctive belief, on the contrary, would recognize its indefiniteness where it is indefinite and not try to substitute something more definite for it.

I admit both that this work of pure interpretation is part of the philosopher's task and that it is difficult and important and should only be undertaken by an expert. So far I agree with Professor Stocks. But he maintains that mere interpretation of instinctive beliefs, without reference to their truth or falsity, is by itself the primary and distinctive function of the philosopher. And here I cannot follow him. I shall urge rather that the philosopher's primary and distinctive function in dealing with instinctive beliefs is to determine how far they are true and how far false, and in doing so to remove not merely apparent but real conflict between them. He is only concerned with the question of bare interpretation in order to guard himself against mistaking a merely apparent discrepancy for a real one. On my view, the philosopher must correct; and to correct is to alter and therefore not simply to interpret. If I am right, therefore, the answer to the question raised at the beginning of the previous paragraph is that the beliefs, in the final or relatively final form into which the philosopher puts them, must in content be different from and incompatible with some at least of the instinctive beliefs from which he starts. They will differ in so far as the instinctive beliefs are found really to conflict on account of the partial falsity of at least some of them, and so to need correction. This is not to deny that interpretation may often or always be needed to decide whether or not they really conflict and how far they are true or false; nor yet that the conflict may sometimes prove merely apparent and the beliefs need only interpretation to bring out their truth,

not correction to make them true. But the work of interpreting is always subordinate to the main philosophic interest in rejecting false and establishing true beliefs.

If we turn for confirmation to the philosopher's actual problems, and the methods he has to use in dealing with them, we shall find that his concern with “instinctive beliefs” does go beyond that of the psychologist or sociologist. He has not merely to clear up ambiguities, but to establish true beliefs and correct false ones. Take, as one instance, the conflict with which Descartes starts, between the primitive, uncritical faith in the evidence of the senses and the admitted fact that the senses often deceive us. To remove this contradiction, Descartes has to explain how far and under what conditions sense-perception may safely be trusted, and how far and under what conditions it is liable to lead us into error. But he has to find this explanation for himself. He does not and cannot find it merely by considering the primitive belief in the trustworthiness of the senses. He has to correct this belief, and in so doing he transforms it. None the less, he does not wholly reject the primitive belief that the senses are to be trusted. He ultimately affirms that they are to be trusted, though only within the limits and under the conditions which he assigns. But so far as these limits and conditions are not recognised in the primitive belief, that belief is false and is rejected by the philosopher because it is false.

Another illustration is furnished by Berkeley's theory of matter. Berkeley starts from two beliefs ordinarily taken for granted by the man in the street. The first is that the material world consists of bodies existing, persisting and changing independently of sense-perception. The second is that matter is directly perceived in sense-experience and that otherwise we could not know it at all. These two beliefs, he maintained, clash with each other.* For what we immediately perceive in sense-experience can be

* He was perhaps too hasty in interpreting the belief that we directly perceive matter in such a way as to make it incompatible with the belief that bodies exist independently of our perceiving them. But this illustrates a further point.

nothing but our own *sensa* or, as he says, our own ideas ; it cannot be anything existing apart from and independent of sensation. One of the two beliefs must be corrected. Now, it seemed to him that unless we perceived matter directly, we could not know it at all. It is therefore the other belief—the belief in material substance—that has to be rectified. But this belief he finds to be taken for granted by mankind in general as the essential basis not only of thought and action in daily life, but also of physical science. If this were really so, then it would be impossible to reject the belief, for if the philosopher is driven to deny the indispensable presuppositions of common-sense and science, he thereby confesses, as Hume did, the bankruptcy of philosophy. What, then, was Berkeley to do ? Only one way was open to him. He must try to show that though the instinctive belief is erroneous, it contains truth, masked and disguised by error. Further, he must show that it is this truth, and not the error, which is indispensable for the purposes of ordinary life and science. Arsenic and incantations will kill a flock of sheep ; Berkeley seemed to himself to be showing that arsenic by itself is at least equally effective. The essential truth that Berkeley took to be hidden in the ordinary belief in material substance is his own theory of matter as consisting in a regular and systematic order of *sensa*, actual and possible—an order determined for us and not by us, and in this sense independent of us.

An instinctive belief may be, and usually is, indefinite in the sense that in it alternative and incompatible meanings are not distinguished. Even if the philosopher's proper work were confined to clearing up the ambiguity by distinguishing the alternative meanings and deciding which is really intended, he would still in fact be concerned with truth and falsity. For an assertion is false if it bears *without distinction* two meanings, in one of which it is true and in the other false. It is asserted in both—the one is as much really meant as the other. In clearing up the ambiguity, therefore, the philosopher is so far removing the falsity. But in practice the philosopher is unlikely to confine himself to barely distinguishing the alternative meanings.

He is more likely to define one of them and fix on it as true, either rejecting or ignoring the others. In doing so, he is transforming the belief and not merely interpreting it. This point also is illustrated by Berkeley, who seems too hasty in accepting as undeniable that matter is what is immediately perceived by the senses in his own sense of “immediate” and no other. Our knowledge of the physical world is no doubt immediate, if we mean by immediate “non-inferential.” But it does not follow, as Berkeley assumed, that it is immediate in the way in which we can know immediately a feeling while we are actually feeling it, or a sensum while we are actually sensing it. (The immediacy may, rather, be like the immediacy of our memory-knowledge that we have had certain past feelings and past *sensa*). Here, then, the instinctive belief has at least two alternative meanings. Berkeley fixes on one of them and ignores the other. He does so not on the ground that this is what is instinctively believed but because (he holds) only in this sense can the instinctive belief be true. He is clearly interested in the question of truth and falsity and not merely in that of interpretation.

Except that he reaches a sceptical conclusion, Hume’s treatment of the problem of perception is very like Berkeley’s. There is, however, a difference which is worth noticing here because it illustrates how mere interpretation of instinctive belief may be an important part of the philosopher’s business, though still subordinate to his main task. Berkeley does not deny that the bodies we instinctively believe in are believed by us to be distinct from the “ideas” (*sensa*) we directly experience in perceiving them. His point is only that this belief clashes with the belief, which he accepts as certainly true, that the bodies are immediately perceived by the senses. Hume, on the contrary, insists that what we instinctively believe to exist unperceived is our own sense-impressions, and goes on to argue that this cannot possibly be true. But we can accept his argument only if we first accept his account of what it is that is instinctively believed. The question of interpretation must be settled before the distinctively philosophical question of truth and falsity is

raised. Hume's interpretation is, to say the least of it, very doubtful, since the distinction between things and their variable sensible appearances is familiar to common-sense.

We must now determine more definitely the nature of those beliefs which for the purpose of this discussion are to be called "instinctive." Two points may be made at once. (1) One characteristic is implied in the ordinary use of the term. An "instinctive" belief is one that is held without assigning reasons for it, and without recognising any need for reasons. Its truth is simply taken for granted. (2) Instinctive beliefs, at least so far as the philosopher is interested in them, operate as general principles in the ordering of experience and in the guidance of conduct. We can now clear up certain ambiguities. Does a belief continue to be instinctive after it has been criticised and transformed by the philosopher? Russell, for instance, seems to suggest that it does when he speaks of the philosopher as formulating in a new way the same instinctive beliefs with which he starts. But the belief as formulated by the philosopher is the result of critical reflection and reasoning. It cannot, therefore, properly be called instinctive. This contrast between instinct and philosophy is brought out in Bradley's saying that "metaphysics is the finding of bad reasons for what we believe upon instinct." None the less, the aim of the philosopher is not to destroy the instinctive belief, but only to correct it. His assumption is that the instinctive belief contains some truth which is essential for the ordering of experience or the guidance of conduct, and his aim is to elicit this truth in a definite form, freed from vagueness and error. We may ask in turn whether this truth, which is common both to the original belief and to the philosopher's reconstruction of it, can be said to be instinctively believed. I can see no objection in principle to saying this, but there is the practical difficulty that it might be confusing to include under the same description—"instinctive belief"—both the primitive belief as a whole and the element of truth which the philosopher recognises in it. I propose therefore to call the primitive belief as a whole "instinctive" and the element

of truth in it which the philosopher tries to retain and develop “fundamental,”—a term which Professor Stocks sometimes substitutes for “instinctive.” What is thus fundamental is not fundamental merely because it is, so far as we can see, true, but also because it is what gives to the primitive or instinctive belief its efficiency as a principle by which experience is organised or conduct guided.

This distinction may help to clear up a difficulty in Professor Stocks’ account of the philosopher’s task. If I understand him rightly, the philosopher is concerned only with the interpretation (and implications) of the beliefs he is examining, not with their truth or falsity. For his first and main business (before proceeding to explore their implications) is “to determine the facts”—*i.e.*, to discover what the primitive or instinctive beliefs really are (*e.g.*, “what is thought obligatory, not what ought to be thought obligatory”). But there are at least three different undertakings covered by this formula.

- (1) Reformulating a belief to avoid possible or actual misunderstanding. There is no question here of altering or correcting the belief.
- (2) Clearing up ambiguities in the belief, by distinguishing alternative and incompatible meanings asserted in it without distinction.

I have argued* that here, even if the philosopher is content simply to distinguish, he corrects what was a partially false belief, and so does more than interpret; just as, clearly, if he asserts one of them to be true, he goes beyond interpretation. But if he goes further and fastens on one of the beliefs as “what is really meant,” his procedure comes under my third head

- (3) Distinguishing between what those who hold the belief really mean and what they only think they mean.†

* Above, p. 205.

† This procedure is not to be confused with the first stage of the Socratic method, which is designed to show the holder of the belief that what he meant is not true, not to show him what he does mean.

It is clear from his general argument that this is part of what Professor Stocks means by "interpreting" or "determining the facts"*. It is here that the difficulty lies, and its solution, if I am right, helps on my case. What can be meant by this distinction? What must Professor Stocks "really mean" in making it? When a man in fact asserts or tacitly assumes something (and is in no doubt about what it is that he is asserting or assuming), what sense can there be in saying that what he asserts is not what he "really means" to assert—that he "really means" something different? I agree that we *do* talk like this, and it seems to me that we can mean only one thing. We mean that he must mean to assert what is true, and the "real" meaning that we substitute for his "face-value" meaning is what we take to be true. We are accepting and applying the Socratic dictum that no one means or intends to fall into error. When he does so, he does not "really mean" to do so. But it cannot be denied that it is straining language thus to identify what is really meant with what is true. This way of speaking is legitimate, if at all, only when there is a sense in which the true meaning is really contained within the face-value meaning. It is natural and useful only when belief contains important (in my terminology "fundamental") truth blended with error in such a way that what seems important is the whole belief including indiscriminately (or, as Descartes would say, "confusedly") what is false in it and what is true. Tell the believer simply that he is mistaken and he will rebel, because he thinks that you are asking him to reject "fundamental" truth of which he is completely convinced. But if you succeed in explaining to him that what he is called on to reject is not the important truth in which he is really interested, but only the error that is mixed with it, he will recognise that you have advanced

* He does not make the distinction in the words I have used, but in this paper he speaks of the philosopher as "telling the practical man what he really is aiming at all the time"; and in his Presidential Address (on the same topic) he says that the philosopher may show the advocates of certain doctrines "that they do not really mean what they say." *Proc. Arist. Soc.* Vol. XXXVI, p. 12.

him further in the direction in which he “really means” to go. In this sense, and only in this sense, you will have brought him to see that what he really meant was different from what he thought he meant. Take, as a simple example, a primitive common-sense belief whose correction is found not in philosophy, but in science—the belief that the sun rises in the East, travels across the sky and sets in the West. Before it was corrected by astronomy this belief was of fundamental importance in anticipating the course of events and regulating the conduct of life. If in denying it the astronomer had denied what gives it this importance, his arguments, even if they had admitted of no answer, would have carried no conviction. But he is able to show that what is thus fundamental in the belief is not that the earth is at rest relatively to the sun, but only that the sun and earth are moving in a certain way relatively to each other. The belief that the earth is at rest is an error which may be given up without in this respect making any difference.

On my view, then, the philosopher is interested in primitive or “instinctive” beliefs because as a rule he finds that even when, as almost always, they are partially erroneous, they contain fundamental truth blended with the error. He tries to disentangle what is true in the belief from what is false. So far as he succeeds in correcting the instinctive beliefs he will have succeeded in harmonizing them where at first they were incompatible. It follows that the philosopher is never concerned merely with what men actually believe. His interest in what they actually believe is inseparable from the question how far the belief is true and how far it is important in ordering the particular data of experience or determining the practical conduct of life. If we are to say that the philosopher’s proper task is to discover what is really meant, then the question what is really meant must for him be identical with the question what is really true and important.

II.—*Application to the special field of practice.*

Professor Stocks “instinctively” takes it for granted that the work of the philosopher is essentially the same

whether he is dealing with the sphere of practice or the sphere of theory. I agree ; and it follows that, if what I have so far urged is true in principle, the philosopher's concern in the sphere of practice also is not merely with what men actually believe, but with the truth of what they believe—not merely with what is or has been held to be good or bad, better or worse, right or wrong, but with what really is so. The philosopher in "telling the practical man what he is really aiming at all the time" is telling him what is really worth aiming at in distinction from what he supposes to be worth aiming at. I cannot, therefore, accept as it stands Professor Stocks' statement that "such correction and criticism of current practice and belief as is logically justifiable will be given implicitly in the attempt at a systematic exposition of the facts," if by "the facts" is meant what is or has been actually believed, or what actually operates or has operated as a guiding principle of conduct. "Everything," continues Professor Stocks, "turns here on the question how the valuations on which the decisions of the agent or statesman depend are established or confirmed." I agree. But the question whether they really are established or confirmed, or only seem to be so, cannot be left to the agent or statesman himself. The philosopher from his own point of view, in his attempt to bring different valuations within a coherent system, must judge for himself what valuations have been ultimately established and confirmed, and what have not. Of course I do not for a moment mean that the philosopher can ignore the values revealed in the practical experience of mankind past and present. This forms the material with which he has to deal, and so far as he neglects it he is beating the air. But I do maintain that in dealing with this material his aim is to distinguish what is really of value from what is not, so as to make different valuations harmonize in a coherent system.

Is it then the business of the philosopher "to put himself in the place of the agent or politician, and think out his problems for him afresh?" I agree with Professor Stocks that it certainly is not. Abstract and general principles

can never be substituted, without risk of fatal error, for concrete experience. The practical man has to face the practical situation directly, and if he deals with it simply by following cut and dried formulæ, the result will probably be disastrous. What the philosopher can do is to direct the attention of the practical man to those features of the situation which are most relevant and important, and so help him to think for himself. He cannot make up his mind for him ; he can only influence, not dictate. It is also true, from the other side, that the development of practical experience may and does reveal new values and disvalues, and that the philosopher in taking account of them may have to modify or re-cast his philosophical scheme ; for this is not fixed, but grows with the growth of experience. As a matter of historical fact, systems of Ethics and Political Philosophy have in the past exercised an important influence on practice* ; and I agree that we urgently need such a system to-day to give at least comparative unity and harmony to our practical attitude.

It remains for me to support my view by an illustration

* This is notably true of Locke's *Second Treatise on Civil Government*—the only illustration given by Professor Stocks in support of his thesis that when a philosopher influences practice he does so only through his skill in discerning the most important principles actually governing the practice of his day, and giving an account of them that will satisfy the popular demand for practical consistency. But the *Treatise* did not influence only Locke's contemporaries and immediate successors, as should follow from Professor Stocks' argument. Eighty-six years after its publication it was, through Jefferson, the inspiration of the Declaration of Independence, which even echoes its words ; and the Declaration in its turn exercised a profound influence on American constitutional and legal development. None the less, it must be admitted that Professor Stocks was wise in choosing Locke. Plato or Rousseau would have offered him obvious difficulties. But even if we grant that Locke's political philosophy is in fact mainly a systematic statement of the principles followed by those who brought about the Revolution of 1688, it does not follow, nor can I admit, that his aim was only to formulate principles actually operative in conduct. Locke did not simply adopt certain principles because they were those of a successful Revolution ; he expounded and defended them because he himself thought them right and good. It was part of his aim to show that the opponents of the Revolution were wrong, and in particular to provide a political theory to replace the doctrine of the Divine Right of Kings which he had exploded in his *First Treatise*.

taken from the field of practice. I shall take as a typical example of the part that the philosopher can play in this field the problem of free will in its bearing on ethical and political theory. It is possible to approach the question of free will without reference to ethical considerations. There is an instinctive belief that in some sense and under some conditions human conduct is free. But if we ask just in what sense and under what conditions, the belief does not give any ready-made answer. It may, perhaps, be safe to interpret it as meaning that in free action the agent himself chooses what he shall do and is not determined to one course rather than another by something other than himself. But how far and under what conditions this is so is a question the philosopher must try to answer on his own account. The belief does not, for instance, decide the issue between freedom of indifference and self-determination; it does not decide whether determination by motive is incompatible with freedom, or how far some kinds of motive may differ in this respect from others. It is the philosopher's task to make it definite where it is thus indefinite by distinguishing the alternative views that are not discriminated within it, and fixing on one of them as true. But supposing he has done this to his satisfaction, he still has to work out the application of his conception of freedom to the practical guidance of life. Here at once he finds himself faced with another instinctive belief, with which his interpretation of the belief in freedom has to be reconciled. It is the belief that an individual is a moral agent and therefore morally responsible, and that he is responsible so far and only so far as his will is free. The practical significance of the problem of free will lies in its relation to moral responsibility, and to legal so far as this presupposes moral responsibility. It follows that any view of free will that he may have reached independently of ethical considerations must be modified if it fails to take account of the belief in moral responsibility and to give consistent guidance in determining whether an agent is responsible for his actions and in what degree he is responsible. No theory of freedom is acceptable unless it can pass this test. From this ethical

point of view, we must indeed start from the belief that moral responsibility depends on free will. But we must not start from any special theory of free will. Rather, we must begin by asking under what conditions an agent is morally responsible and on this basis determine under what conditions he is free. But when, independently of any preconceived theory of freedom, we ask under what conditions an agent is morally responsible, we shall find, I think, that what we are really trying to determine is the conditions under which it is right and good that he should be treated and treat himself as morally responsible. If it is right and good for himself and for the community of which he is a member that he should be held morally responsible, then he is so in the only sense which is ethically relevant and important. If, in following this line of enquiry, we find, for instance, that there are degrees of responsibility, we must recognise corresponding degrees of free will ; if we find that moral responsibility depends on motive, we must reject any view that makes free will independent of motives.

I am not offering here a solution of this problem ; I am only trying to show that the kind of questions that arise in dealing with it cannot be answered merely by discovering the principles actually operative in conduct. What I have just said about free will, for instance, may well be false, but no mere pointing to beliefs actually held or principles actually followed will prove it so. On the contrary, if any satisfactory answer to these questions is to be reached, the beliefs and principles must be corrected and transformed by eliciting and developing what is fundamentally true in them and in this way reaching a coherent system. This contention is illustrated by a practical problem very much alive to-day. There has arisen in recent times a tendency to deny freedom, and with it moral responsibility, so far as conduct is determined by hereditary dispositions and by social and material environment. This view has been carried so far by “advanced” thinkers, under the influence of modern psychology and mental pathology, as to lead to the doctrine that crime should be treated as a mental disease. From this it follows that it cannot be a fit object

of moral indignation and of punishment as expressing moral indignation. Both the man in the street, on the other hand, and the judge on the bench strenuously resist this theory, which they regard as a fad of the experts. Yet even they are generally ready to admit that heredity and environment are to be taken into account in estimating degrees of guilt. Here plainly is a problem for Ethics which, it seems to me, needs for its solution a relatively new conception of freedom as a condition of moral responsibility, differing from that of either party to the dispute, but embodying what is valid in the view of each. It is only by thus correcting and so far altering the opposing views that the philosopher can harmonize them. For this purpose he has, of course, to find out first what the opposing principles, as shown by their practical working, really are ; but this is only to state his problem, not to try to solve it. I suggest that one way, and perhaps the most promising way, in which he might set about solving it would be to ask what view of crime and responsibility is best in the interest, and especially in the moral interest, of the individual and of the society of which he is a member. He might, for instance, assume provisionally that crime, even when the plain man is morally indignant about it, is really a kind of mental disease. But the question still remains, how this disease can best be treated. It may be that the only satisfactory treatment is, or at any rate includes, moral indignation and punishment as expressing moral indignation. In deciding whether this is so he would have to consider carefully whether it can be compatible with the moral welfare of the agent himself that he should regard his own voluntary acts as determined for him and not by him, so that he is no more morally responsible for them than he is for catching a cold. He would have to ask, further, whether one attitude can be right for the individual to take towards his own conduct, and another fundamentally incompatible attitude be right for those who have to judge his conduct, officially or unofficially. Questions such as these certainly need to be faced ; and who is to face them, if not the moral and political philosopher ? My point against Professor Stocks is that they cannot be disposed

of merely by formulating principles actually operative in practical life, at any rate where these clash with each other. To deal with them, the philosopher must try to find out not only “what is thought obligatory” but “what ought to be thought obligatory”; not only “what is considered good” but “what it is good to consider good.”

In maintaining that the philosopher is concerned with the question of truth and falsity, good and evil, I am *not* asserting or implying that he can draw on any source of knowledge or insight peculiar to himself, *quâ* philosopher. He appreciates values and disvalues in the same way as the practical man. The difference is that he exercises this power of appreciation on a problem with which the practical man, as such, is not occupied—that of working out a coherent system of values. What I assert and what Professor Stocks seems to deny is that in this undertaking he must himself *quâ* philosopher judge what is good and bad, and not merely find out what the practical man thinks good or bad. In this task he has one relative advantage. He must indeed start from established common-sense opinions and principles of conduct, and in doing his proper work of criticising and so harmonizing these he can use only the intuition or insight which he shares with the rest of mankind; but just because his special problem is to work out a coherent system, he can supplement this moral intuition by a wider and more consistent use of coherence as a negative test than is ordinarily available to the practical man or the politician. This brings me to my last point.

According to Professor Stocks, the philosopher, after telling the practical man on what principles he is actually working, has a further though comparatively easy function in the practical field. By showing what consequences logically follow from a given principle he may enable the practical man, and in particular the statesman, to avoid inconsistency. Here I think it is important to distinguish between inconsistency of detail in applying the same principle and inconsistency arising from a real conflict of opposing principles. Where the inconsistency is only one of detail, there seems to be no need to call in the philosopher to help

the statesman. Criticism from other practical men in parliament, for instance, or in the press, will do what is needed more effectively. But where there is a real conflict of principles as, for example, in the confused combination of socialism and liberal individualism,* there is work for the philosopher. There is work for him just because in such a case consistency cannot be reached while keeping what is good in each of the conflicting doctrines without recasting one or both of them. Or if, as may happen, one of them has to be accepted and the other simply rejected, it is for the philosopher to do his part in determining when this is so and which is to be sacrificed to the other.

Conclusion.

In my endeavour to do my duty as a symposiast and bring out a clear issue for discussion, I have emphasized my disagreement with Professor Stocks. But I am strongly inclined to suspect that the disagreement is not so serious as might appear. I do feel compelled to reject as they stand certain precise and emphatic statements in his paper, some of which I have quoted. It is these that dictate the interpretation I have felt bound to put on his paper as a whole ; were they absent, or modified in a way that I shall indicate, I should naturally interpret the rest of the paper as saying in principle what I should have tried to say myself, had not Professor Stocks already said it better than I could hope to do. It is therefore worth while to end by considering what precisely is the difference between us and how it might be removed. We agree that the philosopher must start from principles actually operative in practical life, and that it is his distinctive function to harmonize these principles, so far as he can, in a coherent system. I go on to say that he cannot fulfil this function if he confines himself to ascertaining what the principles in fact are, as they actually work in determining conduct. This is only a first step. He must go on to criticise them ; he must distinguish what gives them their value as organizing principles of practical

* Cf. Dicey, *Law and Opinion in England*, Introd. to 2nd Ed., pp. xc ff.

experience from what is in this respect superfluous or harmful. He has to distinguish what is "fundamental" in the instinctive beliefs from what is not. Does Professor Stocks really disagree with me on this point? Judging from the general trend of his paper as a whole and from special passages in which he himself speaks of criticising instinctive beliefs, I gather that he does not. If this is so, then there is only one serious divergence between us. Professor Stocks seems to hold that the philosopher can carry out this work of criticism without himself, *qua* philosopher, judging what is good and bad, better and worse, true and false. I have shown why I cannot possibly accept this position. But there is a simple way of getting rid even of this difference between us. It vanishes if Professor Stocks will allow me to take his relevant statements with a certain reservation, and not absolutely, as he appears to make them. May I take him to mean that the philosopher is debarred, not from all judgments asserting value and disvalue, but only from those which pretend to be drawn from some source independent of practical experience itself? He has not, and must not claim to have any independent and superior position from which, as it were *ex cathedra*, he is entitled to approve or condemn a practical principle. But this is no reason for depriving him of the right, which belongs to the practical man who is not also a philosopher, of forming value-judgments; and it is no reason why he should not exercise this right as a necessary means to carrying out his own special task, that of criticising instinctive principles of conduct in order to reach a coherent system of values. If Professor Stocks is otherwise ready to admit this, as I venture to hope he may be, he need not be deterred by the suspicion that I am inviting him to join me in giving the philosopher a right to dictate to the practical man. On the contrary, I agree with him that the practical man has his own problems with which he must grapple himself; no one else can do it for him. He is not bound to accept what the philosopher tells him except in so far as he himself finds it convincing.

III.—By W. D. LAMONT.

I.—*The Issue as between Professor Stocks and Mr. Stout.*

THE first two papers share, to a great extent, a common view ; and the essential difference seems to be as Mr. Stout states it :—Professor Stock denies, while Mr. Stout asserts that it is the office of the philosopher, *qua* philosopher, to judge what is true or false, good or bad.

I have, I confess, some doubt as to whether Professor Stocks does actually think that it is not the business of the philosopher to determine what is *true* or *false*. He is specially concerned with the relation of philosophy to ethical and social *values*, and in his conclusion he refers to this relation only. At the same time, he does not explicitly distinguish between the attitude of philosophy to truth and its attitude to practical values ; and, throughout the first part of his paper, he seems to regard theoretical beliefs and practical values—in his references, *e.g.*, to “instinctive beliefs,” “principles and beliefs developed experimentally,” “art,” “religion” and “the problems of practical life in ethics and politics”—as though the philosopher had practically the same relation to them all. On the whole, and considering what Professor Stocks actually *says*, it seems most reasonable to accept Mr. Stout’s reading when he expresses himself as in agreement with Professor Stocks in “taking it for granted that the work of the philosopher is essentially the same whether he is dealing with the sphere of practice or the sphere of theory.”

The position, then, I take it, is : (1) Both agree that the philosopher’s task is essentially the same whether he is dealing with theoretical beliefs or with practical values ; (2) Professor Stocks holds that the philosopher, *qua* philosopher, has no title to pronounce on truth and falsity or to determine what is good or bad ; and (3) Mr. Stout maintains that the philosopher, *qua* philosopher, does possess this title.

II.—*The View of this Paper.*—With regard to these three points, the view I shall develop in this paper is as follows : I agree with Professor Stocks, on the whole, in his view of the relation of the philosopher to practical values ; I agree, on the whole, with Mr. Stout in his view of the relation of the philosopher to truth ; and (as may easily be inferred from my thus having a foot in each camp) I disagree with both in their common assumption that philosophy has the same relation to theoretical beliefs as it has to practical values.

In explaining the position I have adopted, I shall deal first with the relation of philosophy to belief, and secondly with its relation to practical values. Thirdly, I shall discuss some possible causes of the assumption that philosophy is related to truth as it is to values, and, finally, I shall describe what I take to be the actual influence of philosophy on ethical and social values.

III.—*Relation of Philosophy to Theoretical Beliefs.*—There are at least two different ways in which we may regard any belief, statement or judgement. On the one hand, we may consider it as a *fact* ; and in this case *we* endeavour to interpret and explain *it*. On the other hand, we may consider it as a *theory* ; and in this case we consider it in relation to the fact or facts which *it* professes to interpret and explain. In the first case we are not concerned with its truth but with its *cause*. In the second case we are concerned with its *truth* and not with its cause.

Consider, for instance, psychological investigation. Suppose a psychologist to be studying our “location” of sounds and our manner of estimating their intensity. He has, let us say, an apparatus for producing flashes of light at various distances from his “patient,” and a bell (which never alters its position or the character of its note) which rings each time a flash is produced. The psychologist will note—amongst other things—whether his patient judges the sound of the bell to be “louder” when it rings simultaneously with the appearance of a distant flash, and “sorter” when its ring synchronizes with the appearance of a nearer flash of light. The true and false judgements

of the patient will all be of equal interest to the psychologist. He is not primarily concerned that the patient should judge truly each time. He is experimenting in order to discover how the patient will judge of the sounds, and why, *i.e.*, he is treating these judgements as *facts* which have "happened," and is primarily concerned to understand and explain them. He wants to know "how the mind works."

Suppose, however, that the patient, in discussing the judgements he has made, offers an opinion in explanation of their cause. The psychologist will treat any such judgement, not as a fact, but as a theory; and he may very well dispute its truth with some vigour, simply because he is concerned to discover the truth about those earlier sound-location judgements.

The general point I am after, here, is that the psychologist, *qua* psychologist, is aiming at truth, and his business is to discover and pronounce on truth and falsity. He is concerned, however, only with the truth about a certain limited range of phenomena; and many of those phenomena are themselves judgements purporting to describe and interpret facts. So long as judgements are within the range of phenomena he is investigating, he is concerned, not with their truth, but with their causes. He is, however, very much concerned about the truth of any judgement which purports to describe and interpret *them*.

In the light of the foregoing discussion, I venture to make the following important general affirmations: First, any theoretical enquiry is, as such, concerned to discover and pronounce on truth. Secondly, whether we treat any given judgement as fact or as theory will depend on the character and limits of our particular enquiry—on what, precisely, we aim at understanding. Thirdly, no matter how many judgements we may treat as facts, there is always *some* class of judgements and beliefs which a particular theoretical enquiry will, as such, treat as theories (to be proved true or false), and not as facts. Statements about the mind will be thus treated by psychology. Geology will adopt the same attitude to statements about the age and structure of the earth—and so on.

Now philosophy seems to me to be, in its very essence, theoretical. Professor Stocks would, I take it, agree with this ; for he regards it as the business of philosophy “to procure an insight into the nature of reality in its universality.” I emphasize, in this connexion, his use of the word “insight.” The philosopher, *qua* philosopher, must, therefore, be concerned with at least some beliefs and judgements, not as facts, but as theories. He is concerned to know the reality which they profess to describe and explain, and is, therefore, concerned to pronounce on their truth and falsity. It is perhaps sufficient for my purpose that I should maintain the philosopher’s right to pronounce on at least some theoretical beliefs and judgements ; but it is difficult to see how his province can be circumscribed, if it is the business of philosophy “to procure an insight into the nature of *reality in its universality*.”

So far, then, and on this question of the relation of the philosopher, *qua* philosopher, to theoretical beliefs, I agree with Mr. Stout as against Professor Stocks.

IV.—*Relation of Philosophy to Practical Values*.—But the very ground of my agreement with Mr. Stout on this first issue is also the ground of my agreement with Professor Stocks on the second. That “ground” is that I regard Philosophy as essentially a theoretical pursuit directed to the discovery of truth. The philosopher, *qua* philosopher, wants to know what *is*, not to “declare and pronounce to his people being penitent” what is good, and what ought, therefore, to be valued.

As this is the main subject of our symposium, I wish to open my discussion of it by trying to clarify to myself the precise import of the title : “Can Philosophy Determine what is Ethically or Socially Valuable ?” We, all three, are taking it for granted, I think, that the words “ethically or socially valuable” are not meant to be interpreted as implying a clear distinction between “ethical” and “social.” We all assume, I suppose, that the discussion is about a class or group of values called “ethical and social,” and that we are to have primarily in mind what may be assumed to be common to all in this group.

What, then, are ethical and social values? As an inclusive and non-controversial description of all that could be called "ethically and socially good," the following will, perhaps, serve: "Everything that promotes the continued existence and well-being of society and of the individuals composing it, together with all duties and rights (if there be such) which have no relation to our preservation and well-being."

But immediately we try to present a description of ethical and social good which avoids controversial issues, at once we see that the question of philosophy's relation to these values cannot be answered without taking one side or other in some of the disputes which have raged round the notions of value in general and moral value in particular. The "subjectivist" view* of value seems to involve a view of philosophy's practical significance such as Professor Stocks and I hold. The "objectivist" view—that values are "just there," independent of our likes and dislikes, to be apprehended by a cognitive act—seems to involve such a view as Mr. Stout's. Again, what we take to be the significance and the criterion of rights and duties will also have some influence on the function we assign to philosophy.

The view which I hold is briefly this: If we attend to the various moral and social codes around or within which the moral, social and political duties and rights of mankind have developed, we shall find that these codes are founded on the acceptance (a) of the principle that the individual should be free to pursue those interests which appeal to him personally, or (b) of the principle that the continuance and well-being of the group or "whole" are to be secured, or (c) of a compromise which makes a limited application of both principles. Moral and social rights and duties, therefore, draw their significance from individual "interests"

* To avoid occupying time over the well-known controversy on the nature of value, I may be permitted to refer to one of the most recent treatments of the subject—Professor Campbell's article in *Mind*, vol. XLIV, N.S., No. 175. I am in fundamental agreement with Professor Campbell's view, though I am not sure that we should agree on the nature of moral value.

and social well-being. These interests and this well-being are directed to, and secured by, the attainment of certain “objects”—food, shelter, the exercise of our creative faculties in the arts and crafts, the increase of knowledge, companionship, etc. To speak of anything as having “value” is, in my view, to consider it as an object of desire or “liking” on the part of some conscious or living creature—or, in the case of “moral value,” to consider it as contributing in a particular way to the satisfaction of interests and well-being.

Now, suppose we accept this as a true account of the nature of values in general and of moral value in particular, what implications does it have with regard to the question of the relation of philosophy to values? For the sake of clarity let us confine our attention to moral value, and try to define our criterion of moral value more precisely. An action is morally right, or has moral value, let us say, so far as it conduces to the greatest well-being of all mankind. It does not matter, for our present purposes, whether this is, or is not, a satisfactory account of the moral criterion. Let us *assume* its accuracy, and then see what follows.

It is, I presume, always a question of fact whether an action will, or will not, conduce to the greatest well-being of all mankind. To decide this question of fact may be extraordinarily difficult. Indeed, a common objection to the notion of a hedonic calculus is that an accurate calculation is practically impossible. Still, whatever the difficulties, we are concerned here with a question of fact—with the question “Will this action conduce, etc.?”; and not with the question “*Ought* it to conduce, or would it be *good* that it should conduce, etc.?” And the answer to any question of fact is either true or false. The action proposed either will, or will not, conduce to well-being.

Now, it is theoretical enquiry which decides on matters of truth and falsity; and, taking “philosophy” in a broad sense as equivalent to theoretical enquiry generally, we may conclude that there is a sense in which philosophy can determine what is ethically and socially valuable. Assuming a definite, acknowledged criterion of ethical and

social value, theoretical enquiry can, by the careful scrutiny of a proposed action, decide whether it does, or does not, conform to this criterion. Assuming "conduciveness to the well-being of all mankind" as our criterion, *e.g.*, theoretical study of the present context and future consequences of an action can decide whether or no it will conduce to well-being.

Now, if this were the only claim Mr. Stout were advancing on behalf of philosophy, I should, of course, agree with him. But I think he means more than this. He holds, I take it, that philosophy can correct the "valuations of practical men without necessarily accepting their criterion of value. The philosopher, *qua* philosopher, can tell them what is *really* good, as distinguished from what they may take to be good. The philosopher, on this view, can determine ethical and social values, in the sense of prescribing ideals.

On my view of the nature of value, such a claim on behalf of philosophy is quite inadmissible, for it implies the competence of a theoretical investigation to pronounce, not merely on the truth of our beliefs and judgements, but also on the appropriateness of our valuations, to say what "ought to be" as well as what "is."

But why, it may be asked, should not philosophy proclaim what "ought to be" as well as pronounce on what "is"? Because, I reply, valuations are very different from theoretical judgements or beliefs. While the latter are essentially cognitive, the former are essentially conative, and express desires, likings, preferences. This difference is, of course, obscured by our habit of speaking about valuations as "value judgements," as though a valuation were essentially an assertion professing to state a "truth." I do not deny that many of our so-called "value judgements" (such as "Democracy is the best form of government for all men") express a mixture of theoretical beliefs and practical valuations; but valuations, in themselves, while they may be expressed in propositional form, do not claim to reveal truth. The verbal expressions of valuations are essentially exclamatory indications of volitional attitudes.

The words “This is good!” need not be regarded as professing to state a truth, any more than the words “God strike me pink!” are necessarily to be interpreted as a petition.

It will now, I think, be obvious why I share Professor Stocks’ view that the philosopher, *qua* philosopher, has no title to determine what is ethically and socially valuable—except in the very limited sense of pronouncing on the question of fact, whether a proposed action is, or is not, in accordance with a given criterion. I share his view because I regard philosophy as a theoretical enquiry in pursuit of truth. Valuations are not theoretical assertions claiming to express truth. The question whether a thing has value is not to be determined by any criterion quite independent of our actual valuations. Whether an object has value depends, in the last analysis, on whether it is desired or liked by some conscious or living being or beings.

V.—*Criticism of Assumption that Philosophy related to Value as it is to Truth.*—When philosophers differ on matters such as the subject of this symposium, they are naturally interested to know, not only what the different opinions are, but also why these differences exist.

First, with regard to Mr. Stout. We are in agreement about the relation of philosophy to truth. Why, it is interesting to speculate, does Mr. Stout adopt the position he does on the question of philosophy’s relation to value? Two possible explanations occur to me.

(a) Mr. Stout’s view would accord very well, I imagine, with the “objectivist” theory of value—the theory that values are “just out there” and independent of our likes and dislikes. On such a view, values will be perceived or apprehended by a cognitive act; and “valuations” are really theoretical judgements. The function of the philosopher, on this view of value, is the same in principle as the function of the true philosopher in Plato’s *Republic*. The philosopher, *qua* philosopher, apprehends the “Form of the Good”—though Mr. Stout would, I take it, make the philosopher its prophet merely, and would not assign to

him the kingly office of actually moulding men and societies in the light of the ideal.

I am, I confess, somewhat puzzled as to how such an explanation of Mr. Stout's position stands in relation to his statements that the philosopher "must not claim to have any independent and superior position from which, as it were *ex cathedra*, he is entitled to approve or condemn a practical principle"; and that he (Mr. Stout) is "*not* asserting or implying that the philosopher can draw on any source of knowledge or insight peculiar to himself, *qua* philosopher."

(b) The second possible explanation which occurs to me is a somewhat bolder one—namely that Mr. Stout does *not* always carefully distinguish between the philosopher, *qua* "total man," and the philosopher, *qua* "philosopher." The distinction I have in mind is the one drawn by Socrates, in the first book of the *Republic*, between the man, *qua* shepherd, and the same man, *qua* (say) wage-earner.

I do not say, of course, that because a man is a philosopher he must refrain from offering practical guidance. He may be qualified to do this. I do not (nor, I imagine, does Professor Stocks) wish to deny to the philosopher "the right which belongs to the practical man who is not also a philosopher of forming practical judgements." The philosopher is, after all, a human being with human interests. What I say is that the philosopher, *qua* philosopher, does not make "value judgements" in the sense of "valuations." Much less is he concerned to present his fellows with practical ideals. A statesman like the late Lord Haldane may have been very competent to pronounce a legal judgement on the merits of the Scottish Free Church case, or a philosophical judgement on the merits of Hegel's philosophy. He would offer these opinions, however, *qua* lawyer and *qua* philosopher, and not *qua* statesman. I should have thought that, in the same way, we must distinguish the function of the philosopher, *qua* philosopher, from what he is entitled to do *qua* human being with practical human interests. Unless Mr. Stout really accepts the "objectivist" theory of value, the only explanation of his view which occurs to me

is that he does not always take sufficient account of this distinction.

Secondly—and passing now to Professor Stocks' tendency to accept the assumption that philosophy bears the same relation to truth as it does to value, what we have to try to understand is the suggestion that philosophy is not concerned to pronounce on what is really true, as distinguished from what men may believe. Here, again, I seem to find the influence of an ambiguity at work; but in Professor Stocks' case, the ambiguity is of a different kind. He appears, in his paper, to be using the term “philosophy” in two different senses. (a) Sometimes he speaks of philosophy as though it were equivalent to “dialectic,” implying a distinction between philosophy and science; and (b) at other times he speaks as though philosophy were the same as (or as though it included) science. The former use of the term is most prominent in the first part of his paper, and the latter use in the second part.

(a) In an early description of philosophy he says “Philosophy, as I understand it, is essentially a reflective activity of thought, in contact with reality, so far as reality is other than mind, not directly but through primary and pre-existing mental reactions to it.” He then goes on to say that these mental reactions (or “primary activities”) are of various kinds. He speaks of their having presuppositions, and beliefs and principles developed experimentally as the activity develops, and justified by the success of the experiments. To philosophy he assigns a three-fold task: (1) to determine the precise character of these principles, (2) to pursue their implications, (3) to consider the inter-relation of all these principles and presuppositions. He would lay special emphasis on (3).

Am I mistaken in supposing that, amongst the above-mentioned “primary activities,” he includes the various sciences? If I am not mistaken in this supposition, then the fact that he includes science amongst the activities whose presuppositions and principles it is philosophy's business to consider, taken together with the fact that he emphasizes the third of philosophy's three main functions,

certainly suggests that, by "philosophy," Professor Stocks means "dialectic" or the "criticism of hypotheses." Philosophy's main work will not be (as it is in any special science) in observing and experimenting with *fact*, and "inducing" hypotheses and laws respecting their behaviour. (Rather, philosophy's function will be to consider *theories*—to take the hypotheses and presuppositions of the various special departments of investigation, to consider what would follow if they were true, and to see how far those of one special investigation are capable of harmonizing with those of another. In the event of there being a conflict between the hypotheses of two different departments, the philosopher will not, I presume, claim the power to correct the hypotheses. His function is to show harmony or conflict, and, in cases of the latter, to say that one or both of the conflicting theories must be defective, referring them back to the appropriate specialists for further consideration. The philosopher's share in the discovery of truth is thus "negative" or "critical" rather than "positive" and "constructive"; for he deals directly, not with particular facts, not even with theories considered as facts, but with theories considered as theories. All the facts of experience, including valuations, are parcelled out into a number of relatively independent spheres, and a particular science deals with each particular sphere. Each science constructs its hypotheses from its particular field of facts, and it tests those hypotheses by a further appeal to those facts. Philosophy then takes the various hypotheses from the different sciences, and tests them, not by an appeal to fact, but by the principle of non-contradiction. Philosophy and science are thus co-partners in the task of discovering truth.)

We may state the difference between the relation of philosophy (in this sense of "dialectic") to truth and its relation to values as follows:—Though its junction in the discovery of truth is only "negative" or "critical," still philosophy does share with science the task of pronouncing on the truth or falsity of theoretical beliefs. The philosopher, *qua* philosopher, is directly concerned with those beliefs, not as facts, but as theories. But as valuations belong to

the world of fact, philosophy is not directly concerned with them, but only with the truth of the theories constructed by some science (or sciences) of our valuations.

(b) But Professor Stocks seems to present a somewhat different conception of philosophy in the second part of his paper. Here he speaks as though philosophy were not “dialectic,” but the “science of valuations.” In the practical realm, we are told, it is the philosopher’s task to determine what actually are the operative principles of conduct, what people actually think obligatory, what they actually consider to be good. The philosopher has to take these valuations as facts, analysing, defining and interpreting them. It is implied, here, that philosophy takes a direct cognizance of the facts, and will test its hypotheses by the appeal to fact rather than by the simple principle of non-contradiction. Philosophy is not, of course, on this interpretation of its function, concerned to make us alter our valuations. It is concerned to understand and explain them. It is concerned with the truth *about* them. But its methods are obviously those of science, not those of “dialectic.”

Now, one or other of these two conceptions of philosophy may be the correct one, but I should have thought that they are two different conceptions ; and to use them both tends to confusion. I suggest that this double meaning in Professor Stocks’ conception of “philosophy” is responsible for his not clearly distinguishing between philosophy’s relation to truth and its relation to values. Using the term “philosophy” in this ambiguous way, one’s thinking might very well take the following course :—“A theoretical enquiry is not concerned to alter the facts investigated, but to understand them. It is clear, therefore, that philosophy (as a science of valuation) is not concerned to say how we ought to value, but to understand how and why we value as we do. Now ‘valuing’ is not the only kind of ‘mental reaction’ which we make to reality. We also ‘theorize’ and ‘believe’ ; and philosophy (as dialectic) is concerned with these latter ‘mental reactions’ too. It will be its business, therefore, not to ask whether these

theories and beliefs are true, but rather to ask what they mean and imply. Hence philosophy is not concerned to pronounce on what is really true or on what is really good." When "philosophy" is used in this ambiguous way we do not notice that, while "philosophy" (as a science of valuation) does treat valuations as facts to be understood, "philosophy" (as dialectic) does not treat theories and beliefs as facts, but as theories to be tested by the principle of non-contradiction.

When we steer clear of this ambiguity, and use the term "philosophy" consistently in *either* sense, it becomes obvious that the relation of philosophy to values is quite different from its relation to truth. (1) If philosophy is simply dialectic, it is concerned to know what is really true, and it co-operates with the special sciences in the discovery of truth. The sciences deal directly with facts, and philosophy deals with the theories which the sciences have evolved. Philosophy is therefore not directly concerned with facts (valuations being included amongst facts). (2) If, however, we think of philosophy as combining the dialectical and the scientific methods, then "philosophy" seems to embrace the total theoretical approach to reality. It will pronounce on questions of truth, but not on questions of value.

It is, perhaps, a matter for dispute which of these conceptions of philosophy is the better one. My own preference, on the whole, is for the first interpretation; and I should like to have the various studies of value (*e.g.*, ethics) regarded as sciences. In my view the "moral philosopher" or student of ethics should approach his subject in the spirit and with the methods characteristic of the physical and biological sciences. The material he has to investigate is "moral experience" (to use a nice vague term). He has to investigate a certain field of fact—say the moral reactions of practical men in practical situations. He observes how men judge, and infers from their judgements what criterion (or criteria) they employ as the standard of right and wrong. He then tests his hypotheses by conducting experiments—by preparing "situations" and getting individuals to react to them, by

cross-questioning and discussion, and so on—by the kind of experimentation, indeed, which has actually been carried out by Professor F. C. Sharp of Wisconsin.

This is hardly the appropriate occasion for developing this idea of the proper “methods of ethics,” though I think a great deal could be said about it. My main point is that, if we can conceive of a science of ethics, we can easily conceive of philosophy (as “dialectic”) being related to this science as it is to any other science. I shall only add that I conceive the “science of ethics” as a genuinely theoretical activity—as directed to the discovery of what is really true, rather than as attempting to determine what is really good.

✓VI.—*Influence of Theory on Practice.*—Before concluding, I should like to say a word about what I take to be the real relation of philosophy, or theoretical activity generally, to our ethical and social values. If one asks whether the philosopher or moral scientist, *qua* philosopher or scientist, can *determine* what is ethically or socially valuable, I say “No.” But if one asks whether, *qua* philosopher or scientist, he *influences* our ethical and social valuations, I say “Most certainly, yes.” To understand how philosophy influences ethical and social values, let us consider, first of all, the relation between a man’s own philosophizing and his valuations. So far as I can tell, my own philosophical speculations and conclusions have influenced, to a considerable extent, what I believe to be right and good in morals and politics. When the theoretical consideration of anything, or of any act, alters my beliefs about its relations to surrounding reality, then my sense of its value, or of its rightness, very often undergoes modification. The conviction that A exists may very well cause me to set a value on B, if A is a relation between B and C (which I already value). When, *qua* philosopher or scientist, I have got what I believe to be profounder insight into reality, my system of values tends to readjust itself. When, *qua* philosopher, I alter my belief in respect to what *is*, then, *qua* man of practical interests, in the light of this new conviction I re-orientate my detailed valuations. It does not appear to me that *any*

valuation is wholly immune from the influence of new knowledge. I do not believe, that is, that the normal person cherishes anything as of absolute, unconditional worth. It is most likely that, in the long development from childhood to age, no single valuation of ours is precisely the same at the end as it was at the beginning of the process. The readjustment of our valuations in the light of fresh knowledge does not, however, take place out of relation to the scheme of values we had before that new knowledge was acquired. The readjustment is brought about by the impact of new knowledge on the already existing scheme of values, and different individuals will make different readjustments to the *same* piece of knowledge if their existing valuations are different, *e.g.*, the knowledge of Germany's re-occupation of the Rhineland would naturally produce different reactions in Signor Mussolini, on the one hand, and in Mr. Eden, on the other.

Again, like the changes in the contents of the human body, the process of trans-valuation is slow, and is effected by a continuous series of small detailed revaluations. At any given moment, our revaluations in the light of new knowledge will presuppose, as relatively permanent, a central core of values.

Taking all these facts into consideration, therefore, it is a sufficiently accurate description of the influence of theoretical study on practical life to say that, in the individual, fresh acquisitions of knowledge, operating in conjunction with a relatively permanent system of values, will cause a readjustment of some of his detailed valuations.

Now the relation of philosophers to men engaged in the affairs of practical life is, I think, made intelligible in the light of the foregoing discussion. The speculations and discoveries of philosophers and scientists, so far as they produce conviction in the minds of practical men, will cause those men to readjust their valuations. I need not labour this general point; but there are several particular points to which I would draw attention.

✓(1) Since practical men modify their valuations when *they* have found new beliefs and convictions, philosophers

will have the more influence on practical life the more they are successful in carrying out their own proper work of discovering what is true, and of *convincing practical men* that it is true.

(2) If a philosopher wishes to be also a practical social reformer, he will be wise to recognize that the practical ideals and policies he recommends are the product of his reflections and discoveries operating on his own earlier likes and dislikes. His only sure way of influencing others, therefore—apart from the possession of dictatorial powers—will still be by altering their convictions as to what *is*. There is no guarantee, moreover, that, supposing him to have succeeded in convincing them of the truth of what he believes, they will necessarily make the same value readjustment as he has made. That will depend on whether their relatively permanent valuations are the same as his. We can be optimistic on his behalf only if we suppose (as we may well be justified in supposing) that in human beings, in virtue of their common nature, there is a bed-rock of common needs and likings.

(3) It does not seem to me that the power to influence ethical and social valuations belongs in any exclusive way to philosophy (if philosophy is distinguished from other theoretical pursuits) or to a special science of ethics. This influence is exerted also by the physical and biological sciences. Our ethical and social valuations are so intimately bound up with all our other values that theoretical enquiry as a whole will exercise an influence. There may, of course, be particular directions in which particular theoretical investigations will be specially effective.

(4) When I deny to the philosopher, *qua* philosopher, the function of pronouncing on what is really good as distinguished from what men take to be good, I do not suggest that this function belongs to some other profession or class of men. I do not, for instance, think that it belongs to the statesman, as such. All who have knowledge to dispense or practical organizing skill to exercise, will, no doubt, help to mould our ethical and social valuations ;

but they help to mould our valuations by affecting our convictions as to what is, and by manipulating the conditions under which we have to live. Valuations are personal reactions ; and we, as individuals, will make our own revaluations in response to these convictions and environing conditions.

