## II.—PROF. HALLETT'S ÆTERNITAS (II.)

## By C. D. Broad.

(2) NATURA NATURANS.—We can now leave Natura Naturata, and consider what Prof. Hallett has to say about that other, and still more mysterious, aspect of reality which Spinoza distinguished as Natura Naturans. Here, I may as well confess at once, I am almost wholly out of my depth. Prof. Hallett thinks that Spinoza retained the essential part of the notion of "creation," and that this is a logically indispensable feature of his system.

What Prof. Hallett has to say on this subject is perhaps most clearly stated in Chapter VI. It may be summarised as follows. (a) Natura Naturans and Natura Naturata are not two separate existents, but are two different and asymmetrically related aspects of the same Reality. Natura Naturans can be conceived only as the ultimate cause of Natura Naturata, and, to that extent, cannot be conceived without all reference to Natura Naturata. But one can have an adequate idea of the former without detailed knowledge of the latter. (b) Natura Naturata is as real as Natura Naturans. The former is a necessary consequence of the latter, and, if the former were delusive, the latter could not be real. (c) Natura Naturata is a genuine individual whole with genuine individuals as parts. Its unity is of a unique kind, being neither mechanical (for that would demand an engineer) nor organic (for that would demand an external environment). Each individual part of Natura Naturata is a reproduction, in its degree, of Natura Naturata as a whole. Every such reproduction must, from the nature of the case, be imperfect; since the characteristic unity of a part, which interacts with an environment of other parts, cannot be exactly like the characteristic unity of the Whole, which has no environment and can interact with nothing of its own level. The number of parts reproducing the whole in their various degrees cannot be finite, or there would be un-(d) Now, if a whole were conceived as realised possibilities. having only the structure which has just been ascribed to Natura Naturata, the conception of it would be circular or self-contradictory. Each part is to be nothing but a reproduction of the whole; it is to be like a shadow of a stick, and not like a sheet on which a shadow of the stick is cast. And the whole is to be nothing but the totality of the reproductions of itself; it is to be, not like a stick which casts a number of different shadows on a number of different sheets, but like a collection of the shadows cast by a collection of shadows on each shadow of the collection. (The analogies are mine and not Prof. Hallett's, but I think that they fairly bring out the point that he is making.) avoid these horrors we are obliged to ascribe to the Whole another aspect in virtue of which it is also Natura Naturans. (e) In this aspect the Whole is seen to be something which "is conceived wholly through itself." It is "active," and "logically prior" to the aspect of Natura Naturata. The Whole, in its aspect of Natura Naturans, produces a reproduction of itself, in its aspect of Natura Naturata, in each of the infinitely numerous individual parts of Natura Naturata, e.g., in Prof. Hallett and in a hydrogen atom in their measure. And, in so doing, the Whole, in its aspect of Natura Naturans, constitutes both the individual parts and Natura Naturata as a whole.

Perhaps the reader will agree with me in finding it easier to see what the difficulty is than to see why we should have got into it or to understand the proposed method of getting out of it. Prof. Hallett gives a summary of his argument on pages 149 to 151, and the best that I can do is to summarise this. (a) We start with the epistemological datum that we know ourselves to be finite and incomplete embodied minds. (b) This leads us to the notion of a complete system of extended and thinking reality, conceived on the analogy of ourselves, but all-inclusive and (c) At this stage we have to account rationally for the ontological position in this system of the datum from which we started, viz., ourselves, who are and know ourselves to be incomplete and finite parts of a complete and systematic whole. (d) The ultimate cause of the existence of parts which have such knowledge of themselves and of the whole cannot be the other parts, and cannot be the whole considered simply as a system of interrelated parts. (e) It also cannot be anything outside this whole, since the latter is all-inclusive. Therefore (f) we are forced to distinguish an aspect of the whole in respect of which

it "possesses existence as a right, and does not merely enjoy it as a gift."

(2·1) The Attributes.—Spinoza, not content with ascribing to the one Substance the two Attributes of extension and thought, ascribed to it an infinite number of other Attributes, of which we know nothing. This doctrine has generally been dismissed by commentators as merely the expression of a natural desire to pay compliments to the One. Prof. Hallett, on the other hand, takes it seriously; and it is, no doubt, reasonable to suppose that Spinoza must have meant something serious by it.

One of the commonest objections to Spinoza's doctrine of the infinitely numerous attributes is that it destroys the alleged parallelism by making the attribute of thought contain infinitely more modes than any other attribute. Prof. Hallett sees clearly that any satisfactory theory must obviate this objection. I am going to state what I take to be his theory in my own way. The theory which I shall state certainly does obviate the objection, and I am pretty certain that it is the theory which Prof. Hallett has in mind.

Let us begin by considering four attributes, Thought (T), Extension (E), X, and Y. Consider that mode of extension which is my body. I shall denote it by the symbol  $m_1^{\text{ET}}$ . This is to mean a certain mode in the attribute of extension, which is the object of a certain mode in the attribute of thought. The latter mode will be denoted by  $m_1^{\text{TE}}$ , and, since it is the idea of my body, it will be my mind. So far all is plain sailing. Smith's body would be denoted by some such symbol as  $m_2^{\text{ET}}$ , and Smith's mind would be denoted by the symbol  $m_2^{\text{TE}}$ .

We must now consider the other two attributes X and Y. In order to preserve the parallelism of the attributes, and to reconcile it with Spinoza's statement that there is in the attribute of thought an idea of every mode in every attribute, we must make the following supposition. In the attribute of extension there must be, in addition to my body  $m_1^{\text{ET}}$ , three other modes intimately associated with it. These may be symbolised by  $m_1^{\text{EX}}$  and  $m_1^{\text{EY}}$  and  $m_1^{\text{EE}}$  respectively. In the attribute of thought there must be three other modes, associated with  $m_1^{\text{TE}}$ , viz.,  $m_1^{\text{TT}}$ ,  $m_1^{\text{TX}}$ , and  $m_1^{\text{TY}}$ . Similarly in the attribute X there must be four associated modes, viz.,  $m_1^{\text{XE}}$ ,  $m_1^{\text{XT}}$ ,  $m_1^{\text{XX}}$ , and  $m_1^{\text{XY}}$ ; and, in the attribute Y, there must be the four associated modes  $m_1^{\text{YE}}$ ,  $m_1^{\text{YT}}$ ,  $m_1^{\text{YX}}$ , and  $m_1^{\text{YY}}$ . Exactly similar remarks apply, mutatis mutandis, to the mode which is Smith's body and the mode which is Smith's mind.

	E	T	X	Y
E	$m_1^{ m EE}$	$m_1^{ m ET}$	$m_1$ EX	$m_1$ EY
T	$m_1^{ m TE}$	$m_1$ TT	$m_1$ TX	$m_1$ TY
X	$m_1^{ m XE}$	$m_1$ XT	$m_1$ XX	$m_1$ XY
Y	$m_1{ m YE}$	$m_1$ YT	$m_1$ YX	$m_1$ YY

Let us now illustrate these suppositions in a table :-

It is obvious that the scheme outlined above can be extended to any number of attributes. In order to make the statement of the theory perfectly clear it will, I think, be convenient to distinguish between a "total mode" of a given attribute, and the "mode-factors" which together constitute this mode. Thus I should call  $m_1^{\rm EE}$ ,  $m_1^{\rm ET}$ ,  $m_1^{\rm EX}$ , and  $m_1^{\rm EY}$ , in my example, "mode-factors" which together make up a single "total mode" of extension, which might be symbolised by  $m_1^{\rm E}$ . In general we shall have

$$\begin{array}{l} m_{1}^{\rm E} = \phi(m_{1}^{\rm EE}, m_{1}^{\rm ET}, m_{1}^{\rm EX}, \ldots) \\ m_{1}^{\rm T} = \phi(m_{1}^{\rm TE}, m_{1}^{\rm TT}, m_{1}^{\rm TX}, \ldots) \\ m_{1}^{\rm X} = \phi(m_{1}^{\rm XE}, m_{1}^{\rm XT}, m_{1}^{\rm XX}, \ldots) \end{array}$$

Here  $m_1^E$  represents a certain total mode in the attribute of extension,  $m_1^T$  represents the corresponding total mode in the attribute of thought,  $m_1^X$  represents the corresponding total mode in the X-attribute, and so on. The expression on the right-hand side of each equation represents the inner structure of each total mode considered as a unique kind of unity "composed of" mode-factors.

Two points must be carefully noted. (i) On this theory what would commonly be called "my body" is not a total mode of extension, such as  $m_1^E$ , but is a certain mode-factor in this, viz.,  $m_1^{ET}$ . Similarly, what would commonly be called "my mind" is not the total mode of thought, such as  $m_1^T$ , which corresponds to a certain total mode of extension, such as  $m_1^E$ . What is commonly called "my mind" will be a certain mode-factor

in  $m_1^{\rm T}$ , viz.,  $m_1^{\rm TE}$ , which corresponds to the mode-factor  $m_1^{\rm ET}$  in  $m_1^{\rm E}$ . (ii) Since it is an essential part of Spinoza's theory that there are ideas of ideas, as well as ideas of modes in other attributes than thought, it is necessary to assume that there is a similar duplication in every attribute. This has been represented

by introducing such mode factors as  $m_1^{\text{EE}}$ ,  $m_1^{\text{XX}}$ , etc.

There is no doubt that the scheme which I have just developed does formally solve the problem of reconciling Spinoza's four doctrines that there is complete parallelism between the attributes, that the number of attributes is infinite, that there is in the attribute of thought an idea of every mode in every attribute, and that there is an idea of every idea. If, as I believe, this scheme is, in essentials, the theory which Prof. Hallett has excogitated and stated in his book, he is to be congratulated on having found the answer to a difficulty which goes back to Tschirnhausen and has been a common-place of all Spinoza's critics since.

Two questions remain. (i) Can we attach any concrete interpretation to this abstract scheme, or is it a mere formal curiosity? (ii) Is there any reason to suppose that *Natura Naturans* has

the very complex structure implied in this scheme?

As regards the first question Prof. Hallett says, no doubt rightly, that our only possible clue is the relation between the only two attributes with which we are acquainted, viz., thought Here the relation between a mode-factor in and extension. one attribute and its correlate in the other attribute is the absolutely unique relation of an idea to its ideatum. The relation between the corresponding mode-factors in any two attributes, e.g., between  $m_r^{XY}$  and  $m_r^{YX}$ , will be analogous to the relation of idea to ideatum; we can therefore say of it that it will be asymmetrical, that it will be sui generis, and that it will be incompatible with the causal relation. But this is all that we can say of it. The "reflexive" mode-factors in each attribute, e.g.,  $m_r^{XX}$ , must be thought of by analogy to the ideas of ideas, such as  $m_r^{TT}$ . Unfortunately, as I have said, I have failed to understand Prof. Hallett's account of Spinoza's doctrine of the idea ideae, and therefore the symbol  $m_r^{\text{TE}}$ , e.g., is one which I cannot interpret even by analogy.

We can now pass to the second question. Why did Spinoza think that there must be an infinite number of attributes interconnected in this peculiar way? Prof. Hallett's answer may be put as follows. (a) We know empirically that there is more than one attribute, for we know that there are at least the two attributes of thought and extension. (b) Moreover, careful

reflexion on the nature of thought alone would suffice to show that there must be at least one other attribute. For the essential peculiarity of any mode of thought is to have an object. And, although apparently its object can sometimes be itself, and, even when it is not itself can be another mode of thought, vet it seems obvious that there must be ideas whose objects are not themselves ideas. The objects of such ideas must be modes of some other attribute, and so there must be at least one other attribute. (c) Now there is something radically contingent in any universal having a finite plurality of instances. If the property of being an attribute had exactly two instances, we could always raise the question: "Why two, rather than three or forty-seven?" Now such questions ought to be absurd about anything so ultimate as the attributes of the one Substance. (d) Such questions can be avoided if and only if a universal is such that either (i) it could have only a single unique instance, or (ii) it must have an infinite number of instances arranged on some systematic plan. (e) In the case of the property of being a substance, in Spinoza's sense, the first alternative applies. But it cannot apply in the case of the property of being an attribute, since we know that there is more than one attribute. So the only alternative is that it must follow from the general conception of "attribute" that there must be an infinite number of attributes forming a systematic whole.

This is probably as convincing an argument as could be produced in support of Spinoza's views on this point. The only comments which I will make are the following. Why was Spinoza so sure that thought is, in his sense, an attribute; and, if so, why was he so sure that there is complete parallelism between the modes of all the attributes? It has always seemed to me that the reasons for the first of these propositions are, in their measure, reasons against the second. If one were arguing in favour of thought being a genuine attribute, against an Emergent Materialist who insisted on the facts which suggest that mentality is an emergent property of certain very complex material processes, one would presumably insist on the utter disparity between the nature and unity of mind and the nature and unity of material things. But, in proportion as one did this, it would surely be difficult to hold that there is a complete parallelism between the modes of thought and the modes of extension. One would be forced to consider how much appearance of truth there is in Johnson's remark that the material realm is fundamentally monistic, whilst the mental realm is fundamentally pluralistic.

Prof. Hallett does not throw much light on the difficult question of what precisely Spinoza meant by an "attribute", and how precisely he supposed the infinitely many attributes to be related to the one Substance. We are told that Substance "consists of", but is not "qualified by", its attributes. It is indeed perfectly plain that Spinoza did not mean by "attributes" supreme determinable qualities, such as being extended, being cognitive, etc., though there is some intimate connexion between each of the attributes and a different one of these supreme determinable qualities. But the phrase "consists of", when used in this connexion, conveys nothing definite to me.

We are also told that each attribute is a "transcript" of the whole Substance, and that it is only because the number of attributes is infinite that Substance "is the unity of its transcripts without remainder". I do not think that this metaphor of "transcripts" helps us at all. A transcript is a copy or reflexion of something in some medium. When the notion of a medium is removed, and when that which is transcribed is identified with the sum-total of its various transcriptions in nothing, surely nothing remains but meaningless verbiage.

(3) Time, Duration, and Eternity.—I have deferred till the end this subject, which Prof. Hallett treats at the beginning. It is, of course, in a sense, the main theme of his book; but I doubt whether his treatment of it can be understood until one has grasped those parts of his theory which I have been trying to expound.

(3·1) Duration and Time—By "duration" Spinoza means temporal extent, as distinct from any particular numerical measure of it. When two processes, e.g., one swing of a certain pendulum and one revolution of the earth on its axis, are compared in respect of their durations, we get a numerical measure of the duration of the one in terms of that of the other. Such numerical measures of one duration by comparison with another are called "times" by Spinoza.

There is no natural or intrinsic measure of duration. For (a) there is no intrinsic unit, such as one complete circle would be in the measurement of angles. (b) There is no intrinsic maximum or minimum of duration. (c) Durations are not discrete series, each composed of a finite number of successive temporally unextended terms. And, lastly, (d) the duration of any particular natural process, or the time for which any finite thing lasts, is contingent on its relations to other processes and things. Prof. Hallett concludes from these facts that,

even if the Whole had duration, there would be no numerical measure of its duration, and therefore "time", in Spinoza's technical sense of the word, would not apply to it.

It seems to me quite certain that this conclusion does not follow from these premises alone. For the premises do not entail that the duration of the universe, if it had duration, would be endless, either a parte post or a parte ante; and it is only on this supposition that the duration of the universe would have no numerical measure. If it were possible that the universe should have a beginning and an end, then all that would follow from the premises is that its duration would have many different numerical measures, e.g., M years, N pendulum beats, and so on, and that it would be meaningless to single out one of these and call it "the time for which the universe lasts". Plainly there is nothing of the slightest metaphysical interest in this perfectly trivial fact.

The next point that Prof. Hallett makes is this. There is an essential difference between duration and spatial extension. If the universe has duration, then it is, in this respect, intrinsically divided into a past stretch, a present momentary state, and a future stretch, though at every different moment the division is at a different point. There is no such intrinsic division in an extended universe. Now it is alleged by Prof. Hallett that the Whole could not be divided in this way, and that this is one reason why Spinoza denied duration to the Whole although he ascribed extension to it. Another peculiarity of duration is that there can be no duration without succession, and no succession without change. It is alleged that "change cannot be predicated of the Real, which can lack nothing and surrender nothing". So Prof. Hallett concludes that the universe, taken as a collective whole, cannot have duration.

Before passing on I will make the following comments. (i) I agree that there is a fundamental distinction between duration and extension, and that it is bound up with the distinction of past, present, and future, which is essential to the former and has no analogue in the latter. (ii) The statement that succession involves change is ambiguous. If it means qualitative change, it seems to me doubtful. If it means change in respect of temporal characteristics, I agree; but it then adds nothing to the first contention, viz., that duration is divided at every different moment in a different place. (iii) I do not understand in detail Prof. Hallett's grounds for holding that the universe as a collective whole cannot be divided and cannot change in the particular way in which it would have to be divided and to

change if it had duration. But I suppose that the prima facie difficulties could be put fairly plausibly as follows.

- (a) If the universe had duration, it could have neither beginning nor end, and yet could not be cyclic. Now it is difficult to see how any existent whole could have the structure of an endless open series, for this seems the very negation of wholeness. (b) At any moment the past is non-existent, the future is non-existent, and the present is instantaneous. And what is instantaneous seems plainly to be an ideal limit, and not a possible existent. So the ascription of duration to the whole seems to be suicidal.
- (iv) Undoubtedly these *prima facie* objections are the signs of very great and real difficulties. But is it not possible that the difficulty arises in part from the unexamined notion of the universe as a single individual whole? Spinoza and Prof. Hallett start from this and work throughout with it. It seems to me quite conceivable that this notion is illegitimate, and I am sure that it ought to be most carefully criticised before being used.

In Chapter II. Prof. Hallett criticises certain suggestions which have been put forward to obviate these difficulties. These are the doctrines of an All-inclusive Specious Present, of an Eternal Now, and of a Neutral Time-series.

The theory of an All-inclusive Specious Present breaks down for two reasons. In the first place, it seems impossible that. if the universe had duration, it should form a whole terminated at two ends with respect to duration. Secondly, the only specious presents that we know anything about must be regarded as moving through the course of events. For, within any specious present, the perceived past is continually slipping out at one end into the merely remembered past, and the merely anticipated future is continually slipping in at the other end into the perceived future. This kind of change would be impossible in a specious present which occupied the whole of duration, even if that were possible, and yet it is an essential factor in the notion of temporal order. It seems to me that another objection can be made also. It is part of the notion of a specious present that a certain characteristic, which we will call "presentedness" has a maximum value at a certain point in it, and tails off to nothing in two opposite directions within it, viz., towards the point where the perceived past merges into the remembered past, and towards the point where the anticipated future merges into the perceived future. If we conceive the whole history of the universe as the content of a single all-inclusive specious present, where is this point of maximum presentedness to be placed? It seems perfectly arbitrary to assign it to one momentary cross-section of the world's history rather than to another.

If an "Eternal Now" is something different from an allinclusive specious present, the theory of an Eternal Now reduces to the absurd suggestion of everything being contained in a single

durationless instant. This is not worth discussing.

The theory of a Neutral Time-series is the theory that there is an objective B-series (to use McTaggart's term) of events related by the relation of before-and-after, and that the distinction of past, present, and future (McTaggart's "A-series") is essentially relative to a percipient or agent. This theory is, or was, held by Bertrand Russell and by Mr. Braithwaite. Prof. Hallett agrees with McTaggart that the relation of beforeand-after is inseparably bound up with the distinction of past, present, and future. His reason seems to be the following, if I may put it in my own way. In a series of successive events there is an intrinsic distinction of sense, viz., the distinction between earlier-to-later and later-to-earlier. In a series of points on a straight line there is no such intrinsic distinction. The only intrinsic relation is the triadic relation of "being between". If we profess to analyse "b is between a and c" into "a is to the right of b and b is to the right of c", the distinction of sense which we have introduced, viz., right-to-left and left-to-right, is not intrinsic to the straight line but refers to an external body with a right hand and a left hand. Now, according to Prof. Hallett, in the absence of the distinction of past, present, and future, nothing would be left but an intrinsically neutral order, like that of the points on a straight line, where the only intrinsic relation is an unanalysable symmetric triadic relation of betweenness.

The distinction between temporal and spatial order, which Prof. Hallett makes the premise of his argument, is valid and important. I am also inclined to think that his conclusion that the distinction of past, present, and future is an essential factor in temporal order is true. But I do not think that this conclusion follows from this premise alone.

(3.2) Eternity.—Spinoza defined "eternity" as the kind of existence which belongs to those entities whose existence follows necessarily from their essence or definition alone. He contrasts such things with others which only "enjoy" or "are endowed with" existence. The kind of existence which belongs to the

latter is duration.

In the Cogitata Metaphysica the only existent which Spinoza allows to be eternal is God. In the case of God "essence" and "existence" are distinguishable only as shape and size are in a figure, and so God is eternal. In all other cases the essence might have lacked existence, and has to be "endowed with" existence, and so all other things have duration. In the Ethics Spinoza had definitely come to the conclusion that not only God but a certain part of each one of us (and indeed a certain part of any finite mode) is eternal. Before considering this peculiarly difficult extension of his doctrine we will make some comments on his definition.

- (i) Prof. Hallett points out two negative facts, about which there can be no doubt. (a) Spinoza did not mean by "eternity" either endless future duration or endless past and future duration ("sempiternity"). (b) Although he sometimes illustrates eternal existence by reference to the being of necessary truths, this is intended only as an analogy.
- (ii) It seems clear to me that Spinoza's "definition" of "eternity" is rather a description than a definition. It does not give us any analysis of the notion of eternity; it is more like "defining" the word "red" by saying that red is that kind of colour which characterises English pillar-boxes. I think that Prof. Hallett would admit this. For he points out that, in the *Ethics*, Spinoza alleges that each one of us perceives himself as eternal. And he says that, unless this were so, we could have no positive conception of eternity.
- (iii) I am willing to admit the hypothetical proposition that, if there were any existent whose existence was a necessary consequence of its nature or definition alone, there could be no question of its beginning, ending, or enduring. Its existence would be of an utterly different kind from that of any existent whose existence is not a necessary consequence of its nature or definition alone. We might recognise this hypothetical fact, and give the name "eternity" to the peculiar mode of being of such things, if such there be, even though we had no positive conception of such a mode of being. But, unfortunately, in the only sense in which I understand the words "nature", "essence", or "definition", the word "existence", and the phrase "necessarily follows", the sentence "the existence of X follows necessarily from its nature, essence, or definition alone" either conveys nothing to me or conveys something which I can see to be false for all possible values of X. Presumably Spinoza and Prof. Hallett attach such meanings to these words and phrases that this sentence is for them not nonsensical and is not the

expression of a proposition which is plainly false for all values of X. If so, it does seem to me that Prof. Hallett should have given his readers some help in understanding these ancient technical terms, which were so important for Spinoza, and whose meaning has been lost since his time. Unless some explanation is offered to modern readers the best thing that could happen to "essences" is to be corked up for good in their bottles and relegated to the shelves of the Scholastic storecupboard.

(iv) It seems to me that I can collect from Spinoza's own writings and from Prof. Hallett's book some idea of the sources of their distinction between the mode of existence of God and the mode of existence of other things. I suspect that the course of their thought is somewhat as follows. (a) In the case of any ordinary structural universal, such as the characteristic internal unity of a man or of a cat, you can say that it "enjoys" or "is endowed with " existence at any place and throughout any duration in which a portion of matter is organised in the form of a living man or a living cat. Such universals can have indefinitely many manifestations, and the occurrence of each particular manifestation is conditioned in date, position, and duration, by previous or simultaneous manifestations of other universals. (b) Now none of these notions has any application to the characteristic of being a universe. It is nonsensical to suppose that there might be several universes, or to talk of the characteristic of being a universe as manifested in a certain place between certain limits of time through the operation of external causes. (c) Spinoza and Prof. Hallett assume without question that the universe is an individual unity of the most highly organised kind, and that its characteristic internal structure is such that it could not be exactly reproduced in anything else. call this unique type of structure "the nature or essence of the Whole ", we can transfer to it all the negative statements which we have just made about the characteristic of being a universe. We can say that the existence of the Whole is not, like the existence of this man or that cat, a manifestation of its nature in a certain place for a certain duration determined by external causes. We can say that the nature of the Whole does not derive its embodiment in its unique instance from anything other than (d) Finally, I think that Spinoza and Prof. Hallett pass from the negative statement made in the last sentence to the positive statement that the nature of the Whole does derive its embodiment in its unique instance wholly from itself. (It seems to me that Axiom I of Book I of the Ethics is equivalent to the

assumption that any manifested nature which does not derive its manifestation from something else does derive it wholly from itself.)

Now, of the four propositions which I have just stated, the first two are true and important; the third is intelligible, though I cannot see that Spinoza or Prof. Hallett has produced any reason for believing it; but the fourth is to me completely unintelligible. Of course I recognise that we must distinguish the following two propositions: (i) "I know, with regard to the Whole, that its nature must be such as to involve its existence", and (ii) "The existence of the Whole can be seen by me to follow from its nature as known to me". I cannot suppose that anyone in his senses would assert the second of these propositions. But, provided that the first were intelligible, it might be true even though the second were false. My trouble is that I find even the first and milder of the two completely unintelligible, and that I can derive no help from Prof. Hallett's book towards understanding it.

(3·21) The Eternity of Finite Modes.—Having said what little I can about the meaning of "eternity" and the alleged eternity of the Whole, I will pass to the still harder subject of the alleged eternity of finite modes. I will begin with the following general observation.

Prof. Hallett praises Spinoza's definition of "eternity" for "its ingenuity and real potency for its work" (p. 70). I cannot, however, see how it could possibly be a satisfactory definition of "eternity" if this is to be predicable of anything but the Whole. Surely Spinoza did not think that the existence even of any infinite mode, still less the existence of any finite mode, "follows necessarily from its essence or definition alone". I should have thought that, when Spinoza came to the conclusion that finite modes are eternal, he ought to have widened his definition in somewhat the following way. He might have said that "eternity" is the kind of existence which belongs to any entity whose existence follows necessarily either (a) from its nature alone, or (b) from its nature together with that of something which answers to clause (a), or (c) from its nature together with that of something which answers to clause (b), or (d) so on. . . .

I will now collect certain statements of Prof. Hallett's about Spinoza's doctrine which seem to me to be certainly true. (i) Spinoza talks almost exclusively about the eternity of the human mind. But he must have held that the human body is eternal in precisely the same sense, whatever that may be, in which he held the human mind to be eternal. (ii) Again, he cannot have

meant to confine the eternity of finite modes to those particular finite modes which are human individuals. (iii) By the "eternity of the human mind" he did not mean the eternity of some supposed "general mind" or of "humanity" or of "science", or any such nonsense. He meant the eternity of this and that man. (iv) He held quite definitely that only a part of a human individual is eternal. In the case of the human mind, one's intellect and its objects are eternal, but one's imagination and its objects begin, endure for a period, and cease. Any satisfactory interpretation of Spinoza's doctrine must fit in with these four propositions.

Prof. Hallett's theory, if I understand it aright, is as follows: Homogeneous finite modes, such as  $P_{nn}$ ,  $P_{nn}$ ,  $n_n$ , and so on, are all of them eternal. Heterogeneous finite modes, such as  $P_{nm}$ ,  $P_{nm}$ ,  $n_s$ , etc., are all temporal. They begin, persist for a time, and cease. I am not perfectly clear whether he thinks that those modes which are Primary Parts, such as  $P_n$ , are eternal or not: for, of course, the distinction of homogeneous and heterogeneous does not apply to them. It is certain that  $P_n$  will have an eternal first-order Secondary Part, viz.,  $P_{nn}$ , and also infinitely numerous temporal first-order Secondary Parts, such as  $P_{nm}$ . If, as I am inclined to think, Prof. Hallett regards human beings as Primary Parts, the question is settled. For we are definitely told that human beings are not, as wholes, eternal, but only have an eternal part.

It must be noted that, on Prof. Hallett's theory, every part of the universe which is eternal has a set of parts of the next order which are all temporal except one which is eternal. Consider, e.g., the homogeneous first-grade secondary part  $P_{nn}$ . this is homogeneous it is eternal. It has a set of second-grade secondary parts, of which one and one only, viz., Pnn, nn, is homogeneous and therefore eternal. All the rest, viz., parts like  $P_{nn,nm}$ are heterogeneous and therefore temporal. We might call  $P_{nn, nn}$  "the eternal second-grade part of  $P_{nn}$ ", and we might lump together the heterogeneous second-grade parts of  $\check{P}_{nn}$ under the name of "the temporal second-grade residue of  $P_{nn}$ ". Now exactly similar remarks will apply to every stage of the hierarchy. Thus P<sub>nn, nn</sub> will consist of an eternal third-grade part and a temporal third-grade residue. It follows that  $P_{nn}$ itself can be analysed into this eternal third-grade part together with the temporal third-grade residue and the temporal secondgrade residue. And this process can be continued without end, since the hierarchy of descending grades of secondary parts is endless. It would seem to follow that, although every eternal part of the universe has an eternal part as well as a temporal residue, yet it can be analysed in such a way that its eternal part is as small as we please and its temporal residue is as near as we please to exhausting the whole eternal part with which we started. I do not know whether Prof. Hallett has recognised this consequence of his theory, or whether, if he admitted it, he would regard it as an objection.

On Prof. Hallett's theory, whilst every eternal part is composed of a smaller eternal part and a temporal residue, the converse does not hold. No temporal part of the universe has an eternal part. For any part of the universe which is temporal will be either a single heterogeneous secondary part or a group whose members are all heterogeneous secondary parts. Now no heterogeneous part can have homogeneous parts lower down in the hierarchy, and only homogeneous secondary parts are eternal.

I believe the above to be one interpretation which can plausibly be put upon some of Prof. Hallett's statements. Whether it is an internally consistent theory, and whether it accords with the facts. I find it impossible to conjecture for the following (a) As I have already said, I have no clear idea as to what sort of things are supposed to answer to the description of "homogeneous secondary parts" of various orders. At the most I have a vague picture of various fundamental "rhythms" interfering with each other, and thus superimposing upon each other "perturbations" of the first, second, and higher orders. (b) I have no positive idea of "eternity", even as applied to the Whole, and still less as applied to parts of the Whole. I therefore am not clear what sort of things are supposed to be eternal, or what is being asserted of them when they are said to be "eternal". (c) Whatever a homogeneous Secondary Part may be, it seems difficult to believe that it could have a set of parts, one of which is homogeneous and the rest of which are heterogeneous. In the particular case of ideas, this would imply that a clear idea has a set of parts, one of which is a clear idea and the rest of which are confused ideas. I do not say that this is impossible; but it is certainly not very plausible, and I think that we have the right to ask Spinoza and Prof. Hallett to provide some examples or analogies in order to illustrate what they have in mind, and some reasons for believing that their suggestions are at least possible. If they would go further, and tell us why they think their theory to be not only possible but true, we should be under even greater obligations to them. For I suppose that we can reasonably ask more of our constructive metaphysicians than

to spin us ingenious, intelligible, and self-consistent fairy-tales about the universe. (d) Whatever "eternal" may mean, it seems difficult to believe that anything that was eternal as a whole could have a set of parts, one of which is eternal and the rest of which are temporal. Once more I do not say that this is impossible, since I do not understand the meaning of the term "eternal". But I do think that we ought to be given some chance of understanding what the statement means, some analogies or illustrations to enable us to see that it is possible, or some reasons for thinking it to be true.

The above account of Prof. Hallett's theory is based mainly on his statements on pages 209 to 215, and especially page 213. I am very doubtful, however, whether it is either the whole truth or wholly true about Prof. Hallett's view. It is certainly difficult to reconcile it with the obviously important, but extremely obscure, remarks which Prof. Hallett makes on pages 120 to 127, where he is considering how a whole would appear to itself, to one of its own parts, and to a more inclusive whole which contained it and more besides. The question, to my mind, is whether Prof. Hallett means to assert that the heterogeneous secondary parts really are temporal or not. In my interpretation I have assumed that he does mean to assert this. But many of his statements seem to imply a different view, which might perhaps be summed up in the following propositions.

(i) Natura as a whole, and all its parts, whether primary or secondary, homogeneous or heterogeneous, are in fact eternal. (ii) Natura as a whole, and any of its parts, will, under certain conditions, inevitably be misperceived as temporal. (iii) When either Natura as a whole or any homogeneous part of it is misperceived as temporal it will be misperceived as sempiternal, and not as having finite duration. (iv) When any heterogeneous secondary part is misperceived as temporal it will be misperceived as of *finite* duration, and not as sempiternal. Thus, heterogeneity in an object is the real foundation of its appearing to be of finite duration, and homogeneity in an object is the real foundation of its appearing to be sempiternal. But the question remains: "What is the condition under which an object, which is in fact eternal, will be misperceived as temporal?" Presumably this condition must be in the nature of the percipient, or in the relation of the percipient to the object, and not simply in the nature of the object.

The answer to this question is to be found, if anywhere, in the discussion on pages 120 to 127. Here Prof. Hallett considers a number of individuals A, B, C, and D, of which B is a "real

part" of A, C is a "real part" of B, and D is a "real part" of C. We are told that A is to stand for the Facies Totius Universi. and that B might be a human body as it really is, whilst C might be the "little worm living in the blood" which Spinoza gives as an example in Epistle xxxii. And then we are told various things about how each would appear to itself, to the whole which contains it, and to the part which it contains. Unfortunately I find it impossible to discover what is the relation of these A's, B's, C's, and D's to the P's which are so elaborately symbolised and discussed on pages 209 to 215. Presumably B, at any rate, is meant to be a primary part, and therefore to be the sort of thing which is symbolised by P<sub>m</sub>. But what are we to say of C and D? Are they also primary parts, in descending order of dignity? Or are they secondary parts of different grades? And, if they are secondary parts, must they be homogeneous, or may they be heterogeneous; i.e., must C be of the form  $P_{mm}$  or may it be of the form  $P_{mn}$ ? No information whatever is supplied on any of these points, and I have failed to elicit from Prof. Hallett's statements any answer which satisfies me. If we take C, D, etc., to be primary parts, we shall have to assume that one primary part can be completely contained in another. Prof. Hallett has certainly said things which imply that primary parts may overlap; but he has said nothing to suggest that one may be wholly included in another, though I do not think that he has ever explicitly denied this. Again, it is plainly assumed that the relation of C to B and of D to C is analogous to the relation of B to A. Now A is the Facies Totius Universi, and B is, so far as I can make out, a primary part. It would seem to me that the only parts of a primary part which stand to it in an analogous relation to that in which it stands to the Facies Totius Universi are its homogeneous first-grade secondary parts. On this view C would be  $P_{mm}$ , D would be  $P_{mm, mm}$ , But it is extremely difficult to see that the "little worm in the blood "could answer to the description of a homogeneous secondary part of a human organism; and I have found it impossible to interpret Prof. Hallett's statements on pages 120 to 127 on the present hypothesis as to the nature of C and D.

As I have failed to discover, or to construct for myself, any coherent synthesis of Prof. Hallett's various statements about the relation of time to eternity, I can do but little to help the reader at this point. Let us confine our attention to A and B; for we know that A is the *Facies Totius Universi* and we have strong reason to believe that B is a primary part,  $P_m$ . I will

now state what I conjecture to be Prof. Hallett's view about B's cognition as regards time and eternity.

It will be remembered that  $P_m$  contains a set of clear reproductions,  $p_{m1}$ ,  $p_{m2}$ , ...,  $p_{mm}$ , ... of all the primary parts of the Facies Totius Universi.  $P_m$  also contains a set of confused reproductions  $\pi_{m1}$ ,  $\pi_{m2}$ , ...,  $\pi_{mm}$ ... of all the primary parts of the Facies Totius Universi. Corresponding to the first set there is a clear intuition in  $P_m$ 's mind of the Facies Totius Universi as an eternal system of eternal extended parts, and of his own body as one of these eternal primary parts. Corresponding to the second set there is a confused perception in  $P_m$ 's mind of the Facies Totius Universi as a sempiternal historical process, consisting of transactions between parts, including his own body, which are all of finite duration.

Supposing that the above is, so far as it goes, a correct interpretation of Prof. Hallett's theory, the following criticism must be made. Consider those three primary parts of Natura Naturata Extensa which are the bodies of my grandfather, of my father, and of myself. When clearly perceived, these would be seen to be, as they in fact are, eternal. Viewed sub specie temporis. the first appears to begin before the second and the second to begin before the third, and the first appears to end before the second and the second to end before the third. Now the three eternal primary parts must stand in some important non-temporal relation to each other, corresponding to this temporal relation in which they seem to stand to each other when they are misperceived as bodies of finite duration. What is this nontemporal relation? No theory of time and eternity which cannot give a plausible answer, at least in outline, to such questions is worth serious consideration. I have failed to discover in Prof. Hallett's book any intelligible answer to such questions, or any clear recognition of their fundamental importance.

It is probably futile for me to attempt to interpret Prof. Hallett's theory about C and D, the less inclusive parts in the descending hierarchy; for, as I have said, I have no clear idea as to whether C and D are supposed to be primary parts, or to be secondary parts of the first and second grade respectively. The most plausible interpretation is that C is the homogeneous first-grade secondary part of  $P_m$ , viz.,  $P_{mm}$ . This will contain a set of clear reproductions  $p_{mm, m1}$ ,  $p_{mm, m2}$ , . . . of all the first-grade secondary parts of  $P_m$ . It will also contain a set of confused reproductions,  $\pi_{mm, m1}$ ,  $\pi_{mm, m2}$ , . . ., of all the first-grade secondary parts of  $P_m$ . At this stage there enters a compilcation which was not present in the case of B and its relations to

B was a primary part, and the other parts of A were primary parts: so the distinction between homogeneity and heterogeneity did not enter. But, on the present supposition, C is a homogeneous secondary part and the other parts of B are heterogeneous secondary parts. Now, as I have said, it is not clear to me whether Prof. Hallett holds that heterogeneous secondary parts really are temporal, or whether he holds that they are really eternal and are misperceived as being of finite duration when they are misperceived as being temporal.

Suppose we take the second interpretation. Then, corresponding to the set  $p_{mm, m1}$ ,  $p_{mm, m2}$ , . . ., there would be in  $P_{mm}$ 's mind a clear intuition of  $P_m$  as an eternal system of eternal first-grade secondary parts, and of himself as the only homogeneous one of these parts of  $P_m$ . Corresponding to the set  $\pi_{mm, m1}$ ,  $\pi_{mm, m2, \dots}$ , there would be in  $P_{mm}$ 's mind a confused perception of  $P_m$  as a sempiternal whole consisting of one sempiternal part, viz., P<sub>mm</sub> himself, and a residue of parts each of which is of finite

duration.

It is idle for me to pursue further these speculations about Prof. Hallett's possible meaning. I have, I think, made it abundantly clear either that Prof. Hallett has no coherent theory of time and eternity; or that, if he has, he has lamentably failed to state it intelligibly; or that I am quite exceptionally stupid. Once more a comparison with McTaggart is almost inevitable. In the second volume of the Nature of Existence he treated the same extremely difficult and absolutely fundamental problem as Spinoza and Prof. Hallett are treating. made many very paradoxical statements, and it is unlikely that his theory is either well-founded or true. But he did at least see clearly what are the appearances that have to be "saved", and he did try to show in detail what are the real features of the eternal which correspond to the most characteristic apparent features of the temporal. And, whenever he put forward a paradoxical suggestion, he did insist on our facing the fact that it was paradoxical, he did try by means of analogies and illustrations to enable us to grasp it and to see that it is not impossible, and he did state exactly why he thought that it must be accepted in spite of its paradoxical character. Surely this is the only sound method of procedure.

I have no wish to end with odious comparisons or on a note of ungracious criticism. Prof. Hallett's book is a very important contribution to philosophy in general and to the study of Spinoza in particular, and I am aware of having learned a great deal from it and of being greatly stimulated in trying to think out his theories for myself. The defects which I have indicated are, I think, partly the consequences of that continual converse with Spinoza's system which has enabled Prof. Hallett to write about it with an authority which perhaps no other Englishman except Prof. Joachim could claim. When the rest of us read Prof. Hallett's book we are rather in the position of comparative strangers staving with a family who try to explain to us some complicated bit of family history, and constantly forget that we have no idea who "Uncle Stephen" was, that we do not know that "Aunt Susan" lived all her married life in Liverpool, and that we are uncertain whether "Seggie" was a country-house or a family-butler or a Scotch terrier. If we visit the house again and again, we shall probably be able to piece together most of the story; and, perhaps, if we return again and again to Spinoza's works after reading Prof. Hallett's book, much that is now obscure and seemingly arbitrary will become plain to us.