PROF. TAYLOR'S TREATMENT OF SPACE AND TIME.

IN proposing the following objections to Prof. Taylor's treatment of *space* and *time* in his *Elements of Metaphysics*, I am more interested in method than in subject-matter. I have long been impressed with the ineptness and futility of a method which solves problems by turning them over to an Absolute appointed for the purpose. Besides thus relegating to the Absolute, the author makes constant use of a distinction between "perceptual" and "conceptual," which I find inaccurate and confusing. In the chapter on "Space and Time" (chap. iv.) I find both of these methods to obscure the analysis of experiences which stand in the full view of all thinkers, and will lend themselves readily to our joint inspection.

In the following notes I propose to consider (1) Prof. Taylor's distinction between perceptual and conceptual space and time, and (2) his proof of the unreality of space and time.

(1) From the fact that the author refers in the analysis of § 2 to a "space and time of perception," I judge that he uses the term "perceptual" to signify a more or less segregated and homogeneous realm of objects, whose properties and categories are known in perception, and which are distinct from and in contrast to another realm of objects known in conception. But does Prof. Taylor deny that conception has already begun whenever perception is cognitive? If perception be taken to mean experience in which there is a nucleus of sensation (sensation to be defined by the psychologist), it must be admitted that all perception contains a residue which is non-sensational. Now I am unable to find any difference between this non-sensational residue of perception, and what the author means by "conception". Synthesis, analysis and abstraction are already present, and it is always possible by dropping out the sensational nucleus to mark a residuum of thought, memory, imagination, etc. Such distinctions are psychological and quite irrelevant to the cognitive intent of experience. Though in my knowledge, sensation is supplemented by thought, these constituents are indivisibly united in the object known. So far as the object is concerned such a difference is quite extrinsic. I do not know such a difference as a part of any object.

But perhaps Prof. Taylor means to base his distinction upon another circumstance. In any object known I may single out some constituent elements, and neglect the rest. In such analysis I do not pass to another world or realm, but only to more abstract and accordingly more universal elements which I find in the object

originally known. Such conception is not an arbitrary or even a free and independent operation, but only the closer intensive understanding of my initial experience. I abstract and liberate certain constituents of my experience, which do not on that account cease to be its constituents; although, since they may be identified with constituents of other experiences, they are no longer exclusively its constituents. There is no contradiction whatsoever between their generality and particularity. Applying these considerations to space and time we observe that certain spatial and temporal properties may be liberated from the particular location in which they were first discovered. Thus, a mile is a mile whatever the particular positions of its terminal points, and an hour an hour whatever the particular times of its terminal instants. These and other units of distance, interval, form, proportion, etc., may be examined independently of particular locations in the context of experience. Whether that particularity can be provided for without reference to the self, is not essential to our present inquiry. Suffice it to say that particular spaces and times have properties in common, which are both constituents of these various particulars, and also independent of each of them.

Let us now turn to the author's account of perceptual space and time. Perceptual space and time are "limited," "sensibly continuous," and peculiar to the "individual subject". Prof. Taylor's proposition to the effect that perceptual space and time are "sensibly continuous," is questionable and ambiguous. Continuity would seem to depend on analysis, which belongs in the author's scheme to the conceptual rather than to the perceptual division of experiences. Indeed I can see no real difference between the "sensible" continuity which the author attributes to perceptual space, and the "indefinite divisibility" which he attributes to conceptual space. Again, it seems clear to me that the properties of limitedness and uniqueness belong not to the space perceived, but to the psychosis of the percipient. We do not perceive space *to be limited*, nor do we perceive our several spaces *to be unique*. The question as to the limitedness of space does not ordinarily arise, because practical interest terminates in some object which is not taken to be the extreme limit of space, but which happens to be the remotest object to which we turn our attention. And is it not perfectly clear that we perceive our spaces to be *common*, and not unique? No construction is required to overcome our perceptual isolation, for there is no such thing. The common space is rudimentary, original, natural, practical, anything you please but constructed. I can only believe that the properties of the psychological self, common to all of its content, are here mistakenly attributed to a certain group of objects within the field of perceptual experience. These psychological properties, furthermore, are highly abstract, and much more eligible for a place in the conceptual world—if such there be—than the contrary properties.

Let us now consider the transition to the conceptual realm, confining ourselves to the case of space, which is here one, "unlimited," "indefinitely divisible," and constituted of positions which are distinguishable only through their relations. I am wholly at a loss to understand why the author maintains that "as we learn, through intercommunication with our fellows, of the existence for their perception of perceptual extension never directly presented to our own senses, the process of synthesis is extended further, so as to comprise in a single spatial system all the presentation-spaces of the individual percipients in an order once again determined by the direction of the movements of transition from each to the others".¹ I am sure nothing of the kind ever happened to me. It never occurred to me that such synthesis was necessary until I had exercised myself in philosophy sufficiently to be liable to its technical errors. Whatever idea I had of the privacy of the individual time and space, I referred to a perspective which seemed to me to be a corollary of the general spatial world within which I had dealings with nature and with my fellowmen. Whatever synthesis was required to give me a clearer and more definite idea of the general unity of space was only a more careful and persistent thinking about experiences with which I was already familiar, and which had never been invalidated. It is clear, furthermore, that my idea of the indefinite divisibility of space is arrived at only after an inspection of experience somewhat closer than that required for the ordinary exigencies of life. Such analysis, however, does not give me a new space, but only a clearer and more thorough idea of the old space. The property of indefinite divisibility had always been practically assumed; analysis establishes it as an explicit and theoretical proposition.

Similarly, when I geometrize I only carry my analysis and abstraction a bit further than I do in perception. Here again I do not come upon a new space, but only more properties of my original space. There is no conflict between geometry and perception; on the contrary geometry supplements perception precisely as all thought supplements any nucleus of experience to which it may apply itself. The step which is taken in geometry, and to which Prof. Taylor attaches so much importance, is the discovery of certain spatial properties which are independent of particular spatial positions. These constitute the subject-matter of a special science. The elements of the science of geometry are not positions, but distances, proportions, forms, etc. Certain theories may be demonstrated without reference to absolute positions, which will therefore hold of any positions. The positions appear in the demonstration as arbitrarily fixed, because they are intended to represent *any* position. Such individuality as they have is given them by the individuality of the distance, form or proportion in which they figure. In order to apply such demonstrations to individual posi-

¹ *Elements of Metaphysics*, pp. 246-247.

tions it is only necessary to supply absolute values for the points thus arbitrarily designated. Geometry, in short, is the exploitation of such spatial truths as hold independently of position. One may devote one's self exclusively to this task, but the truths which result define the same space as that which contains positions, and only extend our knowledge of that space. It follows as a matter of course that positions, in so far as they are used in geometry, are indistinguishable apart from the special order in which they are put; because, for purposes of demonstration, they are defined as any points whatsoever taken in respect of their relation to that special order. Similarly, if I let *A* represent any father and *B* the son of *A*, *A* and *B* can be distinguished from one another, and from other human beings, only in respect of the paternal and filial relationship. This means only that I can study the paternal and filial relationship in general, in which case it becomes the element or individual within my field of study. On the other hand, the paternal and filial relationship has a perfectly intelligible place within the larger field of an empirical study of mankind. Would it not be misleading to distinguish a conceptual mankind in which persons are indistinguishable, from a perceptual mankind in which persons are distinguishable? It seems to me much more important to insist that we have here to do only with different constituents of the one mankind. And I cannot see that the situation is essentially different in the case of space.

(2) But let us turn to the general metaphysical conclusions which Prof. Taylor bases upon the foregoing study. We are told that the Absolute cannot view the world spatially and temporally, because his absoluteness cannot admit of any peculiar spatial or temporal perspective, while his individuality requires that his experience shall be made up of particularity. The Absolute, in short, can experience neither perceptual nor conceptual space and time. This is certainly a very serious disparagement of the Absolute; nor do I see how the imputation can be avoided. But there is no difficulty in attributing both absoluteness and particularity to *space* and *time*. The so-called conceptual space and time provide for our relativities within the self-consistent and objective system of truth. Professor Taylor says that "the conceptual space and time of our scientific construction represent the mere abstract possibility of a finite point of view" (p. 255). Well and good; the so-called perceptual space and time *supply* these finite points of view, and make the whole concrete. If an Absolute must be provided for somehow, he can think these abstract possibilities since they constitute a coherent and intelligible system of truth. It is only the attempt to make him both abstractly finite and abstractly absolute that threatens to disqualify him altogether.

Let me add a word in connexion with the unity of space and time. I quite disagree with the author's version of this matter. Such dreams as are veridical, such imagination as refers to objects whose existence, past, present or future is believed, belong of

course to that one space whose individuality is given it by the inter-related *here's* and *there's* of experience. Both dreams and imagination, on the other hand, deal freely with all sorts of spatial and temporal relations that are independent of position. When dreams are known to be dreams, and it is then that they take their true places in experience, they are provided for in either one or the other of these two groups, or in that limbo of error which no philosophy can escape and which is not inhabited exclusively by spatial and temporal judgments. It is as impossible to *find* any space but the one, or any time but the one, as it is to find any number that does not belong to the number-system. Prof. Taylor's objection to the unity of space and time reduces, therefore, to the proposition that we can never be sure that there is not something which we do not know about. I will leave it to the reader to draw his own conclusions as to the virtue of such an observation.

My difference of opinion is so marked and so detailed that I have great hopes of arriving at a better understanding. I cannot conceive that two persons can find such utterly different things in experience as Prof. Taylor and myself appear to find. I shall therefore welcome any rejoinder which he may be inclined to make.

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