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PRIMITIVE THISNESS AND PRIMITIVE IDENTITY *

IS the world—and are all possible worlds—constituted by purely qualitative facts, or does thisness hold a place beside suchness as a fundamental feature of reality? Some famous philosophers—Leibniz, Russell, and Ayer, for example—have believed in a purely qualitative constitution of things; others, such as Scotus, Kant, and Peirce, have held to primitive thisness. Recent discussions of direct, nondescriptive reference to individuals have brought renewed interest in the idea of primitive, nonqualitative thisness.

I am inclined to accept primitive thisness, but for reasons that do not depend very heavily on recent semantics. In the present essay I will try to justify my position—but even more to sort out some issues that are easily and often confused. I will begin (in section I) by trying to elucidate some terms that will be important in the discussion. Leibniz will be discussed in section II as the archetypal believer in a purely qualitative universe. I will argue that his position is not inconsistent with the semantics of direct reference, and that proponents of primitive thisness must attack rather a certain doctrine of the Identity of Indiscernibles. Two types of argument against that doctrine will be analyzed and defended in sections III and IV.

Primitive thisness has been associated or even identified, in recent discussion, with primitive identity and non-identity of individuals in different possible worlds.¹ The association is appro-

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¹ See David Kaplan, "How to Russell a Frege-Church," this JOURNAL, 19 LXXII (Nov. 6, 1975): 716–729, pp. 722–727.

priate, but the main issue about primitive transworld identity is quite different from that about primitive thisness, as will be argued in section v, where I will also defend the primitiveness of transworld identity. The sixth and final section of the paper will be devoted to some problems about necessary connections between qualitative properties and primitive thisnesses.

I. THISNESS AND SUCHNESS

Three notions that we will use call for some elucidation at the outset. They are the notions of an *individual*, of a *thisness*, and of a purely qualitative property or (as I shall call it) a *suchness*.

By 'individual' here I mean particulars such as persons, physical objects, and events. It is assumed that numbers and universals are not individuals in this sense, and that particular places and times are individuals if they have an absolute being and identity independent of their relation to particular physical objects and events.

A thisness² is the property of being identical with a certain particular individual—not the property that we all share, of being identical with some individual or other, but my property of being identical with me, your property of being identical with you, etc. These properties have recently been called "essences,"³ but that is historically unfortunate; for essences have normally been understood to be constituted by qualitative properties, and we are entertaining the possibility of nonqualitative thisnesses. In defining 'thisness' as I have, I do not mean to deny that universals have analogous properties—for example, the property of being identical with the quality red. But since we are concerned here principally with the question whether the identity and distinctness of individuals is purely qualitative or not, it is useful to reserve the term 'thisness' for the identities of individuals.

It may be controversial to speak of a "property" of being identical with me. I want the word 'property' to carry as light a metaphysical load here as possible. 'Thisness' is intended to be a synonym or translation of the traditional term 'haecceity' (in Latin, '*haecceitas*'), which so far as I know was invented by Duns Scotus.

² 'Thisness' is the inevitable and historic word here. But we must not suppose that everything important that is expressed by a demonstrative is caught up in the relevant thisness. You might know many facts involving the thisness (in my sense) of Gerald Ford, for example, and yet be ignorant that *that* man (disappearing over the hill in a golf cart) is Ford. I believe this is a translation into my terminology of a point John Perry has made; see his "Frege on Demonstratives," *Philosophical Review*, LXXXVI, 4 (October 1977): 474–497, and "Indexicality and Belief" (forthcoming).

³ E.g., by Alvin Plantinga, *The Nature of Necessity* (Oxford: Clarendon Press, 1974), pp. 71 f.

Like many medieval philosophers, Scotus regarded properties as components of the things that have them. He introduced haecceities (thisnesses), accordingly, as a special sort of metaphysical component of individuals.⁴ I am not proposing to revive this aspect of his conception of a haecceity, because I am not committed to regarding properties as components of individuals. To deny that thisnesses are purely qualitative is not necessarily to postulate "bare particulars," substrata without qualities of their own, which would be what was left of the individual when all its qualitative properties were subtracted. Conversely, to hold that thisnesses are purely qualitative is not to imply that individuals are nothing but bundles of qualities, for qualities may not be components of individuals at all.

We could probably conduct our investigation, in somewhat different terms, without referring to thisnesses as properties; but the concept of a *suchness* is not so dispensable. Without the distinction between the qualitative and the nonqualitative, the subject of this paper does not exist. I believe the concept, and the distinction, can be made clear enough to work with, though not, I fear, clear enough to place them above suspicion.

We might try to capture the idea by saying that a property is purely qualitative—a suchness—if and only if it could be expressed, in a language sufficiently rich, without the aid of such referential devices as proper names, proper adjectives and verbs (such as 'Leibnizian' and 'pegasizes'), indexical expressions, and referential uses of definite descriptions. That seems substantially right, but may be suspected of circularity, on the ground that the distinction between qualitative and nonqualitative might be prior to the notions of some of those referential devices. I doubt that it really is circular, in view of the separation between semantical and metaphysical issues for which I shall argue in section II; but it would take us too far afield to pursue the issue of circularity here.

There is another and possibly more illuminating approach to the definition of 'suchness'. All the properties that are, in certain senses, general (capable of being possessed by different individuals) and nonrelational are suchnesses. More precisely, let us say that a *basic suchness* is a property that satisfies the following three conditions. (1) It is not a thisness and is not equivalent to one. (2) It

⁴ Johannes Duns Scotus, *Quaestiones in libros metaphysicorum*, VII. xii. schol. 3; cf. *Ordinatio*, II.3.1.2, 57. I am indebted to Marilyn McCord Adams for acquainting me with these texts and views of Scotus, and for much discussion of the topics of this paragraph.

is not a property of being related in one way or another to one or more particular individuals (or to their thisnesses). This is not to deny that some basic suchnesses are in a sense relational (and thus do not fall in the Aristotelian category of Quality, though they count as "purely qualitative" for present purposes). An example may help to clarify this. The property of owning the house at 1011 Rose Avenue, Ann Arbor, Michigan, is not a basic suchness, although several different individuals have had it, because it involves the thisness of that particular house. But the property of being a homeowner is a basic suchness, although relational, because having it does not depend on which particular home one owns. (3) A basic suchness is not a property of being identical with or related in one way or another to an extensionally defined set that has an individual among its members, or among its members' members, or among its members' members' members, etc. Thus, if being an American is to be analyzed as a relation to a set of actual people and places, it is not a basic suchness.

These three conditions may be taken as jointly sufficient for being a suchness, but it is not clear that they are also necessary for being a suchness. For it seems intuitively that any property that is constructed by certain operations out of purely qualitative properties must itself be purely qualitative. The operations I have in mind for the construction are of two sorts. (1) They may be logical, such as those expressed by 'not', 'or', and $\neg(\exists x) \phi(x)$, where the property ascribed to x by $\neg(\exists y) \phi(y, x)$ is a basic suchness or constructed by allowed operations out of basic suchnesses. Or (2) they may be epistemic, such as those expressed by \neg believes that p and \neg wishes that p , where p is a proposition constructed, by allowed operations, solely out of basic suchnesses. So if your thisness, or a property equivalent to the property of being (identical with) you, could be constructed in these ways as a complex of basic suchnesses, it would seem intuitively to be a suchness, although (by definition) it is not a *basic* suchness. Indeed, as we shall see, this is precisely the way in which Leibniz attempts to account for individuality in a purely qualitative universe.

So as not to beg the question against him, let us define a *suchness* as a property that is either a basic suchness or constructed out of basic suchnesses in such a way as I have indicated. This recursive definition of 'suchness' seems to me to capture the notion I want to discuss; but it depends on notions of property construction and of being a relation to a particular individual which may themselves be somewhat unclear or otherwise debatable. In any event,

I am prepared to accept the notion of a suchness, and related notions of qualitateness of facts, similarities, differences, etc., as primitive if they cannot be satisfactorily defined. Some philosophers may entirely reject this distinction between the qualitative and the nonqualitative, or may doubt that there are any properties that really ought to count as suchnesses under it. We shall not be concerned here with these doubts, but rather with what can be said, within the framework of the distinction, against those philosophers who think that all properties are suchnesses and all facts purely qualitative.

II. THE LEIBNIZIAN POSITION

Leibniz held, as I have suggested, that the thisness of each particular individual *is* a suchness. "Singulars," he said, "are in fact *infimae species*," the lowest or final species, the most specific members of the system of kinds. In this, as he sometimes remarked, he was extending to all individuals the doctrine of Thomas Aquinas about angels, that each one constitutes a separate species.⁵

The idea behind this claim is fairly simple, though the structure it postulates for thisnesses is infinitely complex. According to Leibniz, the terms of all propositions, at least as they are apprehended by the omniscience of God, are analyzable into simple, purely qualitative concepts. The construction of complex concepts out of simple ones is by logical operations; Leibniz thinks principally of conjunction and negation. The concept of an individual, which as we may put it expresses the property of being that individual, differs from more general concepts in being *complete*.⁶ What makes a thing an individual, in other words, is that, in the logical construction of its concept, differentia is added to differentia until a concept is reached so specific that no new content can consistently be added to it.

Leibniz expresses this notion of completeness by saying that the concept of an individual implies every predicate of the individual. He inferred, notoriously, that alternative careers cannot be possible for the same individual. If a man never marries, for example, the concept of him must contain the predicate of never marrying, and

⁵ Gottfried Wilhelm Leibniz, *Fragmente zur Logik*, Franz Schmidt, ed. (Berlin: Akademie-Verlag, 1960), p. 476; cf. Leibniz, *Discourse on Metaphysics*, sec. 9. This is not the place to debate points of interpretation, and I will sometimes speak of "properties" where Leibniz usually restricts himself to 'concept' and 'predicate'; but I think I do not substantially misrepresent him on the points that concern us.

⁶ *Discourse on Metaphysics*, sec. 8.

so it would have been contradictory for *him* to have married.⁷ I see no need to incorporate this implausible thesis in the theory of purely qualitative thisnesses. For if God can form complete concepts in the way that Leibniz supposes, He can also form the concept of a being that satisfies *either one or another or another . . . of them*.⁸ If individuals are defined by disjunctive concepts of the latter sort, there are alternative careers, in different possible worlds, that they could have had. And if Leibnizian complete concepts are purely qualitative, so are disjunctions of them. The completeness of individual concepts, at least in the form actually maintained by Leibniz, is therefore not to be regarded as an integral part of the "Leibnizian position" under discussion here.

If we want an up-to-date argument for primitive, *nonqualitative* thisnesses, we may be tempted to seek it in the semantics of direct reference. Several philosophers have made a persuasive case for the view that we often succeed in referring to a particular individual without knowing any clearly qualitative property, or even any disjunction of such properties, that a thing must possess in order to be that individual. Such direct reference is commonly effected by the use of proper names and indexical expressions, and sometimes by what has been called the "referential" use of descriptions.⁹ If these claims are correct (as I believe they are), doesn't it follow that thisnesses are primitive and nonqualitative?

Yes and no. It follows that thisnesses are *semantically* primitive—that is, that we can express them (and know that we express them) without understanding each thisness (the property of being this or that individual) in terms of some other property or properties, better known to us, into which it can be analyzed or with which it is equivalent. But it does not follow that thisnesses are not analyzable into, equivalent with, or even identical with, purely qualitative properties or suchnesses, as claimed by Leibniz. Thus it does not follow that we are entitled to say that thisnesses are *meta-*

⁷ See Leibniz's letter of July 4/14, 1686, to Antoine Arnauld [*The Leibniz-Arnauld Correspondence*, H. T. Mason, trans. (Manchester: University Press, 1967), pp. 53–66].

⁸ This point could also be put in terms of constructing complete concepts from predicates that are indexed to possible worlds. This possible amendment of Leibniz's position, and its analogy with Leibniz's commitment to the indexing of predicates to times, were noted by Benson Mates, "Individuals and Modality in the Philosophy of Leibniz," *Studia Leibnitiana*, iv (1972): 109.

⁹ Cf. Keith S. Donnellan, "Reference and Definite Descriptions," *Philosophical Review*, LXXV, 3 (July 1966): 281–304, and "Proper Names and Identifying Descriptions," in D. Davidson and G. Harman, eds., *The Semantics of Natural Languages*, 2d ed. (Boston: Reidel, 1972), pp. 356–379; Saul Kripke, "Naming and Necessity," in Davidson and Harman, *op. cit.*, pp. 253–355.

physically primitive in the sense that interests us here, or (more precisely) that they are nonqualitative.

For Leibniz could certainly accept direct reference without giving up his conception of thisnesses as qualitative properties. All he must say is that we can refer to individuals, and thus express their thisnesses, without understanding the analyses that show the thisnesses to be qualitative. And that he believed in any case. On his view the complete, definitive concept of an individual is infinitely complex and, therefore, cannot be distinctly apprehended by any finite mind, but only by God. Hence *we* must refer to the concept of the individual by reference to the individual (as "the individual notion or haecceity of Alexander,"¹⁰ for example), rather than referring to the individual as the one who satisfies the concept.

We may rely intuitively on direct reference in arguing for non-qualitative thisnesses, but the issue of direct reference is not the center of our metaphysical inquiry. The purely qualitative conception of individuality stands or falls, rather, with a certain doctrine of the Identity of Indiscernibles.

The Identity of Indiscernibles might be defined, in versions of increasing strength, as the doctrine that no two distinct individuals can share (1) all their properties, or (2) all their suchnesses, or (3) all their nonrelational suchnesses. Leibniz takes no pains to distinguish these three doctrines, because he holds all of them; but it is only the second that concerns us here. The first is utterly trivial. If thisnesses are properties, of course two distinct individuals, Castor and Pollux, cannot have all their properties in common. For Castor must have the properties of being identical with Castor and not being identical with Pollux, which Pollux cannot share.¹¹ The third doctrine, rejecting the possibility of individuals differing in relational suchnesses alone, is a most interesting thesis, but much more than needs to be claimed in holding that reality must be purely qualitative. Let us therefore here reserve the title 'Identity of Indiscernibles' for the doctrine that any two distinct individuals must differ in some suchness, *either* relational *or* nonrelational.

I say, the doctrine that they *must* so differ. Leibniz commonly

¹⁰ *Discourse on Metaphysics*, sec. 8.

¹¹ This way of establishing a trivial version of the Identity of Indiscernibles was noticed by Whitehead and Russell, *Principia Mathematica*, vol. I, second ed. (Cambridge: University Press, 1957), p. 57. It is the initial topic in Max Black's "The Identity of Indiscernibles," *Mind*, Lxi, 242 (April 1952): 153-164, and I think that Black does not quite distinguish it from any interesting version of the doctrine, because he does not explicitly distinguish relational properties that are suchnesses from those which are not.

states this principle, and the stronger principle about relations, in the language of necessity. And well he might; for he derives them from his theory of the nature of an individual substance, and ultimately from his conception of the nature of truth, which he surely regarded as absolutely necessary.¹² He was not perfectly consistent about this. He seemed to admit to Clarke that there could have been two perfectly indiscernible things. But, as Clarke remarked, some of Leibniz's arguments require the claim of necessity.¹³ And it is only if necessity is claimed, that philosophically interesting objections can be raised to the Identity of Indiscernibles. For surely we have no reason to believe that there actually are distinct individuals that share all their qualitative properties, relational as well as nonrelational.

Here we are concerned with the necessary connection between the Identity of Indiscernibles, in the sense I have picked out, and Leibniz's conception of thisnesses as suchnesses. If individuals are *infimae species*, then "the principle of individuation is always some specific difference";¹⁴ individuals must be distinguished by their suchnesses. Conversely, the clearest way of proving the distinctness of two properties is usually to find a possible case in which one would be exemplified without the other. In order to establish the distinctness of thisnesses from all suchnesses, therefore, one might try to exhibit possible cases in which two things would possess all the same suchnesses, but with different thisnesses. That is, one might seek counterexamples to refute the Identity of Indiscernibles.

Indeed a refutation of that doctrine is precisely what is required for the defense of nonqualitative thisnesses. For suppose the Identity of Indiscernibles is true. And suppose further, as Leibniz did and as believers in the doctrine may be expected to suppose, that it is true of possible worlds as well as of individuals, so that no two possible worlds are exactly alike in all qualitative respects. Then for each possible individual there will be a suchness of the disjunctive form:

having suchnesses S_{i1} in a world that has suchnesses S_{w1} , or
having suchnesses S_{i2} in a world that has suchnesses S_{w2} , or . . .

¹² See especially his famous paper, "First Truths," and his *Discourse on Metaphysics*, secs. 8, 9.

¹³ *The Leibniz-Clark Correspondence*, H. G. Alexander, ed. (Manchester: University Press, 1956), Leibniz's fifth letter, secs. 25, 26, and Clarke's fifth reply, secs. 21-25 and 26-32. Clark could not have seen the papers in which Leibniz most clearly implied the claim of necessity.

¹⁴ *Fragmente zur Logik*, p. 476.

which that individual will possess in every world in which it occurs, and which no other individual will possess in any possible world.¹⁵ This suchness will, therefore, be necessarily equivalent to the property of being that individual, and, since there will be such a suchness for every individual, it follows that every individual's thisness will be equivalent to a suchness.

Perhaps it does not follow immediately that every possible individual's thisness will *be* a suchness. If being an even prime and being the successor of 1 may be distinct though necessarily equivalent properties, some thisness and some suchness might also be distinct though necessarily equivalent. But if *every* thisness must be necessarily equivalent to a suchness, it will be hard to show that thisnesses distinct from suchnesses cannot be dispensed with, or that possible worlds cannot all be constituted purely qualitatively.

On the other hand, if it is possible for there to be distinct but qualitatively indiscernible individuals, it is possible for there to be individuals whose thisnesses are both distinct from all suchnesses and necessarily equivalent to no suchness. And in that case there is some point to distinguishing the thisnesses of individuals systematically from their suchnesses. For it is plausible to suppose that the structure of individuality is sufficiently similar in all cases that, if in some possible cases thisnesses would be distinct from all suchnesses, then thisnesses are universally distinct from suchnesses—even if some thisnesses (including, for all we know, those of all actual individuals) are necessarily equivalent to some suchnesses.

III. THE DISPERSAL ARGUMENTS AGAINST THE IDENTITY OF INDISCERNIBLES

The standard argument against the Identity of Indiscernibles, going back at least to Kant,¹⁶ is from spatial dispersal. Max Black's version (*op. cit.*, 156 ff) is fairly well known. We are to imagine a universe consisting solely of two large, solid globes of iron. They always have been, are, and always will be exactly similar in shape (perfectly spherical), size, chemical composition, color—in short, in every qualitative respect. They even share all their relational suchnesses; for example, each of them has the property of being two diameters from another iron globe similar to itself. Such a universe seems to be logically possible; hence it is concluded that there could be two qualitatively indiscernible things and that the Identity of Indiscernibles is false.

¹⁵ Of course the suchness will be constituted by a single disjunct if, as Leibniz held, each individual exists in only one possible world.

¹⁶ *Critique of Pure Reason*, A263 f. = B319 f.

Similar arguments may be devised using much more complicated imaginary universes, which may have language users in them. Such universes may be perfectly symmetrical about a central point, line, or plane, throughout their history. Or they may always repeat themselves to infinity in every direction, like a monstrous three-dimensional wallpaper pattern.

The reason that is assumed to show that the indiscernibles in these imaginary universes are not identical is not that they have different properties, but that they are spatially dispersed, spatially distant from one another. The axiom about identity that is used here is not that the same thing cannot both have and lack the same property, but that the same thing cannot be in two places at once—that is, cannot be spatially distant from itself.¹⁷

An argument for the possibility of non-identical indiscernibles, very similar to the argument from spatial dispersal, and as good, can also be given from *temporal* dispersal. For it seems that there could be a perfectly cyclical universe in which each event was preceded and followed by infinitely many other events qualitatively indiscernible from itself. Thus there would be distinct but indiscernible *events*, separated by temporal rather than spatial distances. And depending on our criteria of transtemporal identity, it might also be argued that there would be indiscernible persons and physical objects, similarly separated by temporal distances.

In a recent interesting article¹⁸ Ian Hacking argues that “it is vain to contemplate possible spatiotemporal worlds to refute or establish the identity of indiscernibles” (249). He holds that

Whatever God might create, we are clever enough to describe it in such a way that the identity of indiscernibles is preserved. This is a fact not about God but about description, space, time, and the laws that we ascribe to nature (255/6).

The dichotomy between what God might create and our descriptions is important here. Hacking allows that there are consistent descriptions of non-identical indiscernibles and that there are possible states of affairs in which those descriptions would not exactly be false. On the other hand, he thinks that those same possible states of affairs could just as truly (not more truly, but just as truly) be described as containing only one thing in place of each

¹⁷ This axiom might be doubted, but I simply assume it here. Ockham denied that it is a necessary truth [*Reportatio*, IV, q. 4N and q. 5J, in *Opera Plurima* (Lyon, 1494–1496)]; I am indebted to Marilyn Adams for this information].

¹⁸ “The Identity of Indiscernibles,” this JOURNAL, LXXII, 9 (May 8, 1975): 249–256.

of the sets of indiscernibles. The two descriptions are very different, but there is no difference at all in the possible reality that they represent. Thus Hacking is not exactly asserting the Identity of Indiscernibles. But his rejection of primitive, nonqualitative thisness runs at least as deep as Leibniz's. He thinks that there cannot be any objective fact of the matter about how many individuals are present in the cases that seem to be counterexamples to the Identity of Indiscernibles. And on his view the constitution of reality, of what "God might create," as distinct from our descriptions of it, is purely qualitative.

Hacking's criticisms are directed against both the spatial- and the temporal-dispersal arguments for the possibility of non-identical indiscernibles. The most telling point he makes against them is that they overlook the possibility of alternative geometries and chronometries. If we have a space or time that is curved, then an individual can be spatially or temporally distant from itself, and distance does not prove distinctness. Hacking makes this point most explicitly about time¹⁹ but he could also use it to criticize the spatial argument, as follows: "The most that God could create of the world imagined by Black is a globe of iron, having internal qualities *Q*, which can be reached by traveling two diameters in a straight line from a globe of iron having qualities *Q*. This possible reality can be described as two globes in Euclidean space, or as a single globe in a non-Euclidean space so tightly curved that the globe can be reached by traveling two diameters in a straight line from itself. But the difference between these descriptions represents no difference in the way things could really be."

There are at least two possible replies to Hacking. (1) He acknowledges that if "absolute space-time" is accepted, the spatial and temporal dispersal arguments are quite successful in refuting the Identity of Indiscernibles. But to hold, as he seems to (251 f, 254 f), that no weaker assumption would vindicate the arguments is to demand more than is needed. The dispersal arguments hold up very well even if places and times are defined in terms of relations of objects, provided that certain spatiotemporal relational properties of objects are accepted as primitive. For example, if it is a primitive feature of a possible reality that an iron globe such as Black describes can be reached by traveling some distance in one direction on a *Euclidean* straight line from an exactly similar

¹⁹ *Ibid.*, p. 255. The point was also suggested, about space, in Black, *op. cit.*, p. 161.

globe, then non-identical indiscernibles are possible in reality and not just in description.

In order to reply to Hacking in this way, one must assume that a difference in geometries makes, in its own right, a difference in possible worlds, so the same paths in the same universe could not be described, without error, both as Euclidean straight paths and as non-Euclidean straight paths. One must assume that facts about what geometry the universe has are not reducible to facts about what laws of nature best explain other, more primitive facts about objects in space; in particular, one must assume that what geometry the universe has does not depend on a determination of the number of objects in space. Some philosophers may accept these assumptions, and I do not have any better than intuitive grounds for rejecting them. Like Hacking, nonetheless, I am inclined to reject them.

(2) The most obvious and fundamental difference between Black's imaginary Euclidean (or gently Riemannian) two-globe universe and its tightly curved one-globe counterpart seems to be that in one of them there are two iron globes, and in the other only one. Why can't that be a difference between possible realities in its own right? Indeed I think it is extremely plausible to regard it so.²⁰

To give this answer, of course, is to hold that the thinesses of the two globes are metaphysically primitive. The function of the imaginary spatiotemporal world here is not to show how individual distinctness can be explained by spatiotemporal relations; no such explanation is needed if thinesses are metaphysically primitive. The imaginary world simply provides an example in which it seems intuitively that two individuals would be distinct although it is clear that they would have all the same suchnesses.

The intuition involved here is akin to those which support belief in direct reference. This will be clearer if we imagine that we are on one of the two globes, with indiscernible twins on the other, so that the use of demonstratives will be possible. Then we can appeal to the intuition that it means something, which we understand quite well and which if true expresses a metaphysical reality, to say that this globe is not identical with that one, even in a

²⁰ Strictly speaking, I think it is highly plausible to regard it so *if* physical objects are accepted as primitive features of reality. Like Leibniz, I am inclined to take a phenomenalistic view of physical objects, and hence doubt the primitiveness of *their* thinesses. Unlike Leibniz, I think there could be distinct but indiscernible sentient beings and mental events; cases that help to show the plausibility of this view may be provided by temporal dispersal arguments, or by another type of argument to be discussed in section iv, below.

situation in which we are not able to distinguish them qualitatively. But the argument goes beyond direct reference in one important respect: it incorporates a judgment that the assertion of individual distinctness is not only intelligible independently of qualitative difference, but also consistent with the assumption that there is no qualitative difference.

IV. ARGUMENTS FROM THE POSSIBILITY OF ALMOST INDISCERNIBLE TWINS

We may just have an intuition that there could be distinct, though indiscernible, globes in these circumstances. But there may also be an argument for this view—which will depend in turn on other intuitions, like all arguments in these matters. The argument might rest on an intuition that the possibility of there being two objects in a given spatiotemporal relation to each other is not affected by any slight changes in such features as the color or chemical composition of one or both objects.²¹ If we accept that intuition, we can infer the possibility of indiscernible twins from the uncontroversial possibility of *almost* indiscernible twins. No one doubts that there could be a universe like the universe of our example in other respects, if one of the two globes had a small chemical impurity that the other lacked. Surely, we may think, the absence of the impurity would not make such a universe impossible.

Spatiotemporal dispersal still plays a part in this argument. But one can argue against the Identity of Indiscernibles from the possibility of almost indiscernible twins in quite a different way, using an example that has to do primarily with minds rather than with bodies. Suppose I have an almost indiscernible twin. The only qualitative difference between him and me, and hence between his part of the universe and mine, is that on one night of our lives (when we are 27 years old) the fire-breathing dragon that pursues me in my nightmare has ten horns, whereas the monster in his dream has only seven. I assume that the number of horns is little noted nor long remembered, and that any other, causally associated differences between his and my lives and parts of the world are slight and quite local. No doubt there is a possible world (call it *w*) in which there are almost indiscernible twins of this sort; it is only an expository convenience to assume that I am one of them and that *w* is actual. But if such a world is even possible, it seems to follow that a world with perfectly indiscernible twins is also

²¹ If we assume that differences in color or chemical composition necessarily involve microscopic differences in spatiotemporal configuration, the intuition would have to be that slight differences of that sort do not affect the logical or metaphysical possibility of a given macroscopic configuration of objects.

possible. For surely I could have existed, and so could my twin, if my monster had had only seven horns, like his. And that could have been even if there were no other difference from the lives we live in *w*, except in the details causally connected with the number of horns in my dream. In that case we would have been distinct but qualitatively indiscernible—a relation which seems therefore to be logically possible.

Several points in this argument call for further mention or explanation. (1) The non-identity obtaining between me and my twin in *w* is proved by a qualitative difference between us there. (2) The argument depends on an intuition of transworld identity—that in a possible world (call it *w'*), otherwise like *w*, but in which my dragon has only seven horns, there could exist an individual identical with me and an individual identical with my twin, even though we would not be qualitatively different in that case. (3) The transitivity of identity is relied on in arguing that since my twin and I are not identical in *w* (as shown by the difference in our suchnesses there), it follows that we are not identical in any possible world, and therefore are distinct in *w'*, if we both exist in it.

(4) Because differences in modal properties can be purely qualitative, the conclusion that my twin and I would be qualitatively indiscernible in *w'* depends, additionally, on the assumption that in *w'* he as well as I would be a person who could have dreamed of a ten-horned monster in the circumstances in which I did in *w*. In other words, it is assumed that if *w* and *w'* are possible, so is a world *w''* just like *w* except that in *w''* it is my twin's beast that has ten horns and mine that has seven. (More precisely, it is assumed that *w* and *w''* would be equally possible if *w'* were actual.) The implications of the supposition that there are possible worlds that differ, as *w* and *w''* do, only by a transposition of individuals will be studied further in section v, below.

(5) But we may notice here a consideration about time that seems to me to support assumptions (2) and (4). The mutual distinctness of two individual persons already existing cannot depend on something that has not yet happened. The identity and non-identity of most individuals, and surely of persons, are conceived of as determined, at any time of their existence, by their past and present. This is doubtless connected with the importance that origins seem to have in questions of transworld identity. Consider the state of *w* when my twin and I are 22, five years before the distinctive dreams. We are already distinct from each other, though nothing has yet happened to distinguish us qualitatively. I think

it follows that our mutual distinctness is independent of the qualitative difference arising from our later dreams. We would be distinct, therefore, even if our dreams did not differ at age 27—that is, even if we were perfectly indiscernible qualitatively, as we would be in *w'*. Moreover, since my twin and I have our identities already established by age 22, which of us is which cannot depend on which has which dream five years later; it is possible that the seven-horned monster trouble my sleep, and the ten-horned his, when we are 27, as in *w''*. This argument depends, of course, on the assumption that in *w* my twin and I have histories that differ qualitatively during a certain period after we are 22, but not before then. It follows that *w* is not completely deterministic, but that does not keep *w* from being at least logically possible.²²

V. PRIMITIVE TRANSWORLD IDENTITY

Issues of modality *de re* turn on identity questions. To say that a certain individual is only contingently a parent, but necessarily an animal, for example, is to say that there could have been a non-parent, but not a non-animal, that would have been the same individual as that one. It has become customary, and has been at least heuristically helpful, to represent such identities as identities of individuals in different possible worlds—"transworld identities" for short—although (as we have just seen) modal claims *de re* can be understood as identity claims even without the imagery of possible worlds. Whether modality *de re* really adds anything important to the stock of modal facts depends, I think, on whether there are transworld identities or non-identities, and if so, whether they are primitive or are rather to be analyzed in terms of some more fundamental relation(s) among possible worlds. I will try to show here that, if we are prepared to accept nonqualitative thisnesses, we have a very plausible argument for primitive transworld identities and non-identities.

It might be thought, indeed, that we would have a more than plausible argument—that if, by refuting the Identity of Indiscernibles, we can show that thisnesses are metaphysically primitive, it will follow trivially that transworld identity of individuals is also primitive. For the property of being identical with (for example) Aristotle is the same property in every possible world in which it occurs. Hence it cannot be distinct from all suchnesses when possessed by a famous philosopher in the actual world if it is identical with a suchness when possessed by one of Alexander the Great's tax collectors in some other possible world.

²² I do not claim that Leibniz would accept this judgment of possibility.

This argument is correct insofar as it makes the point that the thisness or identity of a particular individual is nonqualitative either at all places, times, and possible worlds at which it occurs, or at none of them. By the same token, however, there is nothing special about transworld identity in this connection. But the issue on which I wish to focus here is specifically about the primitiveness of *transworld* identities. It therefore cannot be the issue of whether they are purely qualitative.

When we ask about the primitiveness of a kind of identity, we typically want to know, about a certain range of cases, whether the belonging of two properties to a single subject can be explained as consisting in other, more basic relations obtaining between distinct subjects of the same or related properties.²³ Thus Aristotle is the subject of the diverse properties expressed by 'is a philosopher' and 'could have been a tax collector'. In asking whether the identity of the actual philosopher with the possible tax collector is primitive, we want to know whether it consists in some more fundamental relation between Aristotle's actual career and a career in which he would have been a tax collector. This issue is quite distinct from that of the qualitative or nonqualitative character of Aristotle's identity, in the same or in different worlds, as may be seen by reflecting on some other sorts of identity.

The claim that there are nonqualitative thisnesses does not clearly entail that *transtemporal* identity, for example, is primitive. For suppose there are two persisting individuals, Indi and Scerni, acknowledged to be qualitatively indiscernible, and therefore to possess nonqualitative thisnesses. It is not obvious that the identity of Indi at time t_1 with Indi at time t_2 (or the belonging of Indi's t_1 -states and t_2 -states to a single individual) cannot be explained as consisting in other, more basic relations among successive events or states or stages of Indi, without presupposing the transtemporal identity of any individual. Perhaps this can be done in terms of spatiotemporal continuity or memory links or causal connections or some other relation. The property of being Indi at any given time would still not be equivalent to any suchness. It could be analyzed in terms of the more basic relations among Indi's temporal stages. But the distinctness of those stages from the corresponding stages of Scerni would still be irreducibly nonqualitative, and this nonqualitative character would be passed on to the property of being Indi (at any time). The transtemporal aspect of Indi's

²³ Cf. John Perry, "Can the Self Divide?" this JOURNAL, LXIX, 6 (Sept. 7, 1972): 463-488, pp. 466-468.

identity, however, would not be indispensably primitive. In the present state of philosophical research it is probably unclear whether any transtemporal identity is indeed primitive; my point here is just that the thesis of the nonqualitativeness of thisnesses can be separated from that of the primitiveness of transtemporal identity.

If, to complete the separation of issues, we seek an example of a philosopher who is committed, with apparent consistency, both to the purely qualitative character of all thisnesses and to the primitiveness of some sort of individual identity, we can find it in Leibniz. He regards thisnesses as conjunctions of simpler, logically independent suchnesses. That the combination of properties is effected by the logical operation of conjunction is an essential part of his conceptual atomism. He assumes that there are some cases in which the instantiation of a conjunction of properties cannot be analyzed as consisting in any more fundamental fact. But if it is a primitive fact that the property *F and G* is instantiated, the identity of some possessor of *F* with a possessor of *G* must also be primitive, rather than analyzable as consisting in some more basic relation obtaining between distinct possessors of *F* and of *G* or related properties. The primitiveness of identity in such cases is in no way inconsistent with Leibniz's opinion that thisnesses are suchnesses; it is indeed required by the way in which he thinks thisnesses are constructed out of simpler suchnesses.

The primitive identities for Leibniz would probably not be transtemporal, and would certainly not be transworld. But no distance in space, time, or "logical space" is needed for questions of identity. Suppose one of Aristotle's momentary perceptual states includes both tasting an olive and hearing a bird sing. In this supposition it is implied, and not yet explained by any more basic relation, that some individual that is tasting an olive is *identical* with one that is hearing a bird sing. And it seems that this sort of identity (identity of the individual subject of simultaneous qualities) could be primitive in a purely qualitative construction of reality.

So questions of the primitiveness of identity relations are in general distinct from the question of the qualitativeness or nonqualitativeness of thisnesses. But, in the case of transworld identity in particular, I think that primitive identities are much more plausible if nonqualitative thisnesses are accepted than if they are rejected. Suppose, on the one hand, that all thisnesses are purely qualitative. Then the thisness of any individual can be constructed as a disjunction of suchnesses, each suchness representing one pos-

sible career of the individual (as explained in section II, above). It seems quite possible that in every case the grouping of disjuncts as alternative careers of a single individual could be explained by general principles about transworld identity of one or another kind of individuals, and the transworld identity of the particular individual could be analyzed as consisting in the satisfaction of the general principles by the relevant disjuncts. And if there should be borderline cases, in which the issue of transworld identity is not settled by general principles, one might well conclude that transworld identity or non-identity is undefined, rather than primitive, in those cases.

If, on the other hand, we reject the Identity of Indiscernibles in favor of nonqualitative thisnesses, it will not be hard to find examples that will provide support of great intuitive plausibility for primitive transworld identities and non-identities. Consider, again, a possible world w_1 , in which there are two qualitatively indiscernible globes; call them Castor and Pollux.²⁴ Being indiscernible, they have of course the same duration; in w_1 both of them have always existed and always will exist. But it seems perfectly possible, logically and metaphysically, that either or both of them cease to exist. Let w_2 , then, be a possible world just like w_1 up to a certain time t at which in w_2 Castor ceases to exist while Pollux goes on forever; and let w_3 be a possible world just like w_2 except that in w_3 it is Pollux that ceases to exist at t while Castor goes on forever. That the difference between w_2 and w_3 is real, and could be important, becomes vividly clear if we consider that, from the point of view of a person living on Castor before t in w_1 and having (of course) an indiscernible twin on Pollux, it can be seen as the difference between being annihilated and somebody else being annihilated instead. But there is no qualitative difference between w_2 and w_3 . And there are no qualitative necessary and sufficient conditions for the transworld identity or non-identity of Castor

²⁴ The question may be raised whether giving names to the globes is consistent with their qualitative indiscernibility (cf. Black, *op. cit.*, p. 156 f). Two answers may be given. The imaginative answer is that we may suppose that the globes have (indiscernible) societies of language users on them and we are speaking the language of the Castor-dwellers; in the language of the Pollux-dwellers, of course, 'Castor' names Pollux and 'Pollux' Castor, but that does not keep Castor from *being* Castor and Pollux Pollux. The sober answer is that 'Castor' and 'Pollux' are informal equivalents of variables bound by the existential quantifiers that would be used to introduce the example in a formal way.

and Pollux; for every qualitative condition satisfied by Castor in w_2 is satisfied by Pollux in w_1 , and vice versa.²⁵

A similar example can be constructed for transworld identity of *events*. Suppose all that happens in w_1 is that Castor and Pollux approach and recede from each other in an infinite series of indiscernible pulsations of the universe. In w_1 their pulsations go on forever, but they might not have. For every pair of them there is surely a possible world in which one member of the pair is the last pulsation, and a different possible world in which the other is the last pulsation. But there is no qualitative difference between these possible worlds; each contains the same number (\aleph_0 , the first infinite number) of exactly similar pulsations. There are therefore no qualitative necessary and sufficient conditions for the transworld identities and non-identities of the events in these possible worlds.

Any case of this sort, in which two possible worlds differ in the transworld identities of their individuals but not in their suchnesses, provides us at once with a clearer proof of a primitive transworld identity than has yet been found for a primitive trans-temporal identity.²⁶ For the geometrical, topological, psychological, and causal relations out of which philosophers have hoped to construct transtemporal identity do not obtain among the alternative possible careers of an individual. "Logical space" is not a space to which the concepts of physical space apply literally. There is no causal interaction between different possible worlds. One cannot remember events in another possible world in the same sense in which one's memory of events in the actual past might be important to personal identity. The most important transworld rela-

²⁵ We rely here on an intuition that the Castor-dweller can refer directly to the same individual (namely herself) in different possible worlds, despite the absence of qualitative necessary and sufficient conditions for the identity. This is related, in ways that should by now be familiar to us, to intuitions that have been used to support the semantics of direct reference—as, for example, that when we say, "Nixon might have lost the 1968 election," we refer to the actual individual, Nixon, in a non-actual situation even if we do not know any clearly qualitative property that the possible loser must have in order to be identical with the actual President. (The example is Kripke's; see his "Naming and Necessity," *op. cit.*, pp. 264 ff.)

²⁶ It is not essential to the argument to start from a world in which (as in w_1) there are non-identical indiscernibles. An essentially similar argument can be based on the case presented in section iv, above, in which I have an *almost* indiscernible twin. But, since the crux of the argument will be that every qualitative condition satisfied by me in w is satisfied by him in w , and vice versa, we must still be prepared to accept nonqualitative thisnesses. And, as we saw in section iv, the case can also be used to argue for the possibility of a world containing perfectly indiscernible twins.

tions of individuals, which seem to be the foundation of all their other transworld relations, are qualitative similarity—which cannot explain different transworld identities in worlds that are qualitatively indiscernible—and identity itself. One might try to analyze the transworld identity of an individual in terms of qualitative similarities plus having the same parts, or the same parents; but then the transworld identity of some individuals (the parts or the parents) is presupposed. If the Identity of Indiscernibles is rejected, there seems to be no plausible way of analyzing transworld identity and non-identity in general in terms of other, more basic relations.

VI. THISNESS AND NECESSITY

I have argued that there are possible cases in which no purely qualitative conditions would be both necessary and sufficient for possessing a given thisness. It may be thought that this is too cautious a conclusion—that if thisnesses are nonqualitative, there cannot be any qualitative necessary conditions at all for possessing them. The following argument could be given for this view.

Let *T* be a thisness, and let *S* be a suchness. Many philosophers have believed that all necessary truths are *analytic*, in the sense that they are either truths of formal logic or derivable by valid logical rules from correct analyses of concepts or properties. This may be regarded as a broadly Leibnizian conception of necessity. Suppose it is right; and suppose that thisnesses are irreducibly nonqualitative. We may well wonder, then, how it could be a necessary truth that whatever has *T* has *S*. For it is surely not a truth of formal logic. And suchnesses are not analyzable in terms of thisnesses; so if thisnesses are not analyzable in terms of suchnesses, how can any connection between *T* and *S* fail to be synthetic?

The conclusion, that there cannot be any purely qualitative necessary condition for the possession of any given thisness, is absurd, however. It implies that you and I, for example, could have been individuals of any sort whatever—plutonium atoms, noises, football games, places, or times, if those are all individuals.²⁷ If we cannot trust our intuition that we could not have been any of those things, then it is probably a waste of time to study *de re* modalities at all.

²⁷ In his *Examination of McTaggart's Philosophy*, vol. I (Cambridge: University Press, 1933), p. 177, C. D. Broad pointed out that rejection of the Identity of Indiscernibles does not imply "that it is logically possible that [a particular] *P*, which in fact has the nature *N*, should instead have had some other nature *N'*; e.g., that I might have been born in Rome in 55 B.C., or that the Albert Memorial might have been a volcano in South America."

If there are any transworld identities and non-identities, there are necessary connections between thisnesses and some suchnesses.

But it is difficult to understand what makes these connections necessary; and that difficulty has doubtless motivated some philosophical doubts about *de re* modality.²⁸ Those who accept non-qualitative thisnesses but cling to the dogma that all necessary truths are analytic in the sense explained above may suppose that every nonqualitative thisness that is necessarily connected with suchnesses is analyzable as a conjunction of some or all of the suchnesses it implies, plus a relation to one or more particular individuals of some more fundamental sort. Either the latter individuals (or others still more basic to which one would come by recursive applications of the view) would have no qualitative necessary conditions of their identity at all, or there would be an infinite regress (perhaps virtuous) of thisnesses analyzable in terms of more fundamental thisnesses. Neither alternative seems particularly plausible.

It is better to abandon the identification of necessity with analyticity and suppose that necessities *de re* are commonly synthetic. Perhaps the best answer that can be given to the question, What makes it necessary that Jimmy Carter (for example) is not a musical performance? is this: It is a fact, which we understand very well to be true, though not analytic, that Jimmy Carter is a person. And there are necessary conditions of intra- and transworld identity which follow (analytically, indeed) from the concept or property of being a person and which entail that no individual that is in fact a person could under any circumstances be a musical performance.

There are many notoriously perplexing questions about what suchnesses belong necessarily to which individuals. "Could Cleopatra have been male?" "Could I (who am blue-eyed) have been brown-eyed?" And so forth. It may be that some of these questions call for conceptual legislation rather than metaphysical discovery, for some of our concepts of kinds of individual may be somewhat vague with respect to necessary conditions of transworld identity. The acceptance of nonqualitative thisnesses does not oblige us to settle doubtful cases in favor of contingency. Indeed I am inclined to decide a very large proportion of them in favor of necessity (or impossibility, as the case may be).

If a name is desired for the position I have defended here, according to which thisnesses and transworld identities are primitive

²⁸ Cf. W. V. Quine, *From a Logical Point of View*, second ed. (New York: Harper Torchbooks, 1963), p. 155.

but logically connected with suchnesses, we may call it *Moderate Haecceitism*.²⁹

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THE STATUS OF BECOMING: WHAT IS HAPPENING NOW? *

WHAT is the ontological status of temporal becoming, of the present, or the now? We shall consider in turn four answers to this question: (I) the objective-property doctrine, (II) the thought-reflexive analysis, (III) the tensed-exemplification view, and (IV) the form-of-thought account.

1. THE OBJECTIVE-PROPERTY DOCTRINE (OPD)

Eternal temporal properties or relations are to be distinguished from transitory ones. If a particular (concrete) event e_1 is ever earlier than another such event e_2 , then it would seem that e_1 must be eternally earlier than e_2 . But an event may be present (now) without being eternally present. If so, then the relation of being-earlier-than is eternal, but the property of being present is transitory.

Def. 1: A property (or relation) is *transitory* iff it may be exemplified by some entity without being eternally exemplified by that entity.

Def. 2: A property (or relation) is *eternal* iff it is not transitory.

A. *The Doctrine Explained.*

OPD: There are transitory temporal properties; among these are McTaggart's A-characteristics: being present, being past, and being future; and these are basic (objective) properties (of events, moments, and perhaps other entities) irreducible

²⁹ Extreme Haecceitism would involve the rejection of all logical connections between suchnesses and the thinsnesses of such beings as persons. Anti-Haecceitism is the rejection of the primitiveness of thinsnesses or the primitiveness of trans-world identities. I think this agrees roughly with Kaplan's use of 'Anti-Haecceitism' in "How to Russell a Frege-Church."

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