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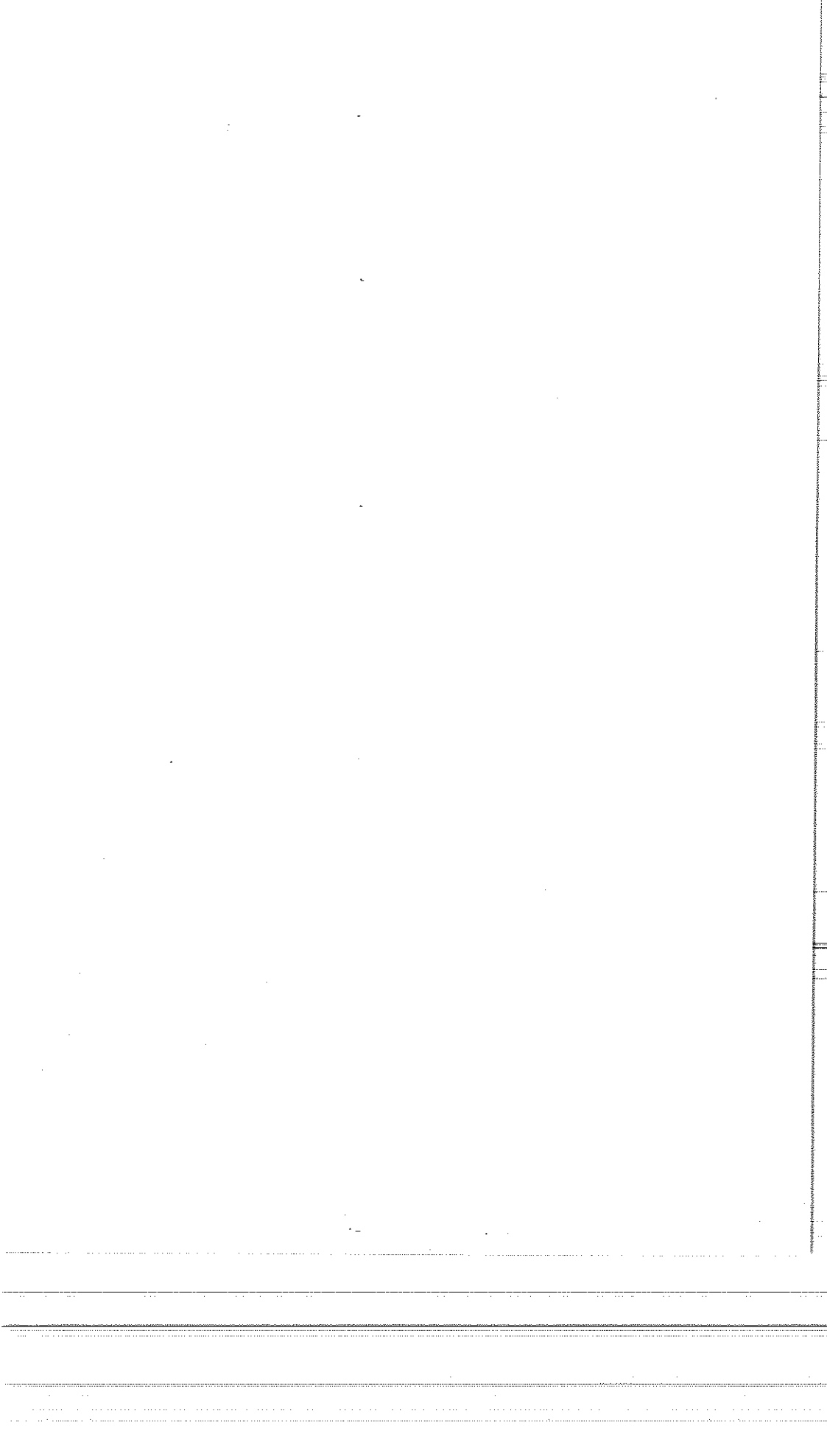
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CANADIAN JOURNAL OF PHILOSOPHY

Supplementary Volume IV



*Locke's Doctrine of Substance**

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I. Introduction

In this paper I intend to discuss a series of views about substance. I take as my starting point certain things Locke says about substance, argue that there are a number of logico-linguistic peculiarities in his view, claim that the basic intuition is correct but that Locke's final pronouncements are wrong, canvass three other possible but incorrect attempts to accommodate this correct intuition, and then sketch what I take to be the proper way to embrace the intuition. Finally I indicate what changes in Lockean doctrine would be needed if Locke wanted to hold (what I think is) the correct doctrine of substance. My conclusion is: not many.

* The present paper grew out of my comments on C.B.Martin's "Substance Substantiated", both presented at a Locke Workshop, Univ. of Alberta, in October 1975. References in the text to Martin are to this paper. I thank Martin for his remarks on my comments and for his encouragement. I also thank Jonathan Bennett, Brian Cooney, Michael Ayers, and Charles Jarrett for their comments on an earlier draft.

II. Some Preliminaries

The places where Locke is most explicit about his views on substance are the *Letters to Stillingfleet*.¹ The value of these letters as against Locke views in the *Essay* has been sometimes depreciated², but it seems clear that the views expressed in the *Letters* are merely a making explicit the views held in the *Essay*.³ One unfortunate feature of the *Letters*, however, is that they jumble together (what I would call) ontological arguments for substance with (what I would call) conceptual arguments for it. The *Essay*, for all its helter-skeltering of topics and its authorship over 20 years (plus five editions) by a man who couldn't find time to revise it all at once, pretty much at least keeps this straight. Books I,II,III are conceptual; Book IV is partly ontological (in especially its discussion of "co-existence"). It may be true, even in Books I,II,III that somewhere deep in his "faithfulness to the facts" and in his desire not to "resolve reality...into mere succession of impressions"⁴, Locke may want to insist on the "existence in the world" of the stuff substance; still, the avowed question to be answered here is: Does 'substance' indicate an idea we can have in accordance with previously-stated principles? According to Locke, it is a separate question whether there is anything in the world properly so-called.⁵ While there is the foreshadowing of Locke's answer in Book II perhaps (e.g., with his remarks on primary and secondary qualities), and while it might be true that Locke never could quite keep his "doctrine about 'what predication is'" separate from

1 References to these letters are to the pagination in Tegg's (1823) edition of *Locke: Works* vol. iv, as reprinted by Scientia Verlag Aalen (1963). The references to *Essay Concerning Human Understanding* are to Yolton's (1961) Everyman Library edition by Book, Chapter, and Section.

2 As by Jonathan Bennett *Locke, Berkeley, Hume* p.61: "...is Locke likely to have been less clear and candid in his magnum opus than in his letters to a touchy and not very intelligent bishop?"

3 Martin's paper is especially clear and convincing on this point. Mabbott *John Locke* (London: 1973) Chapt. 3 takes the position that the *Essay* left a number of things unclear, most of which concerning substance were queried by Stillingfleet, thereby forcing a decision on Locke's part that he may not have explicitly made before.

4 Both remarks are contained in Fraser's comment on the end of II xxiii 2 in his edition of the *Essay*.

5 However, many moderns would make this caveat: if one decides that there is no idea (meaning) to be ascribed to 'substance', then one cannot go on to suppose that there is (or isn't) any of the stuff in the world. *vide* Bennett *op.cit.* p. 62.

his "doctrine about 'the veil of perception' " (to use Bennett's terminology⁶), still and in the main, the existence of objects and stuff in the world is a topic deferred to Book IV. Arguments about substance, at least the ones I am interested in, have to be about the "concept" or "idea" of substance, or about the meaning of 'substance'; they cannot be about "unifying reality" or about something that (real) qualities inhere in or the like. These remarks of mine are borne out by Locke's own scheme of argumentation in the *Essay*, as these few quotations show.

...my purpose, to inquire into the original, certainty, and extent of human knowledge, together with the grounds and degrees of belief, opinion, and assent: I shall not at present meddle with the physical consideration of the mind; ...or by what motions of our spirits or alterations of our bodies we come to have any sensation by our organs, or any *ideas* in our understandings; and whether those *ideas* do in their formation, any or all of them, depend on matter or no....It shall suffice to my present purpose to consider the discerning faculties of a man, as they are employed about the objects which they have to do with. And I shall imagine I have not wholly misemployed myself in the thoughts I shall have on this occasion, if, in this historical, plain method, I can give any account of the ways whereby our understandings come to attain those notions of things we have,...or the grounds of these persuasions...

(I i 2)

...I suppose what I have said in the foregoing book will be much more easily admitted when I have shown whence the understanding may get all the *ideas* it has, and by what ways and degrees they may come into the mind...

(II i 1)

And finally on this point, in the first of the *Letters* Locke is at pains to assure Stillingfleet that the difficulties he found with substance in Book II were only with respect to the idea of substance, not to the actual stuff with which he claimed to have no troubles.⁷ So, in this paper I am only interested with the conceptual issues. I am *not* interested in whether objects can *really* be bundles of properties, nor with what real essences are, nor with whether substance "unifies reality". I am interested in how we come to have a concept (or idea, as Locke would say⁸) of substance; and I *am* interested in why/whether

6 *loc.cit.*

7 Letter 1 pp. 5-8 and *passim*; see also Letter 3 p.448f and various letters to Molyneux (*Works* vol. ix) in which Locke and Molyneux are anxious to distinguish "logic" (conceptual analysis) from "metaphysics".

8 I do not wish to be taken here or elsewhere as saying that Locke's ideas are always what we would call concepts. In fact they are not. But some clearly are; and, as I hope to show, ideas of substance are.

the rest of our "conceptual scheme" requires it. This means that I shall be looking at whether, from antecedently given principles, we could ever arrive at an idea of substance (and if so, whether it would be like Locke's); it means that I shall be looking at "linguistic arguments" to see what concepts our language requires.

There is one further preliminary which must be discussed: the mass/count distinction. Some noun phrases in our language, the count ones, admit of pluralization, of numerical prefixes, of the indefinite article, and of the quantifier phrases 'a few', 'few', 'several', 'a number of', 'many', 'each', 'every'; other noun phrases, the mass ones, do not admit these constructions but do admit 'much', 'a little', 'little', 'an amount of', and so on, which constructions are not allowed by the counts. Every mass term also has a systematically related count sense also, a sense which means (roughly) "kind of ____". Thus we have count terms like 'metals' which means, roughly, "kind of metal" (wherein 'metal' has a mass sense). This last would explain a Lockean use of the plural, and hence count, 'substances' when wondering how many kinds of substratum there are. Some words are ambiguous between count and mass — e.g., the word 'chicken' (as in "Pass the chicken" when said to someone holding a platter of meat vs. when said to someone holding a clucking animal). The relationship between the two senses of such mass/count words is normally that of a naturally constituted object and the stuff of which it is made, although the relationship can be otherwise. (E.g., an object can be "constituted" according to cultural, biological, geological, etc., norms⁹).

It has often been pointed out that many philosophers who use the term 'substance', use it ambiguously. In the literature on Locke, for example, one of the first warnings we are given is that we must distinguish between a use of 'substance' which means (roughly) "self-subsistent object" and a use which means (roughly) "substratum"; in this latter use it is interchangeable with the phrase 'substance in general'. I would like to cash this out along the lines of the 'chicken' example given above: one use (the "object" use) is count, the other use (the "substratum" use) is mass. The count use should be taken in

9 This distinction and these relationships are discussed more fully in my "Non-Singular Reference: Some Preliminaries" *Philosophia* 1975. In both that paper and in R.X.Ware "Some Bits and Pieces" *Synthese* 1975, it is argued that the kinds of relationships possible are innumerable. Ware's conclusion, but not mine, is that therefore the mass/count distinction yields nothing of any real interest. One might have further queries on why 'metal' should be considered "basically mass with a related 'kinds of' count sense", while 'chicken' is considered ambiguous. I skip lightly over these problems, acceding here to common (linguistic) usage; I argue in the *Philosophia* paper that there is no theoretical distinction to be made.

such a way that it amounts to being a naturally-constituted object having as one ingredient the (mass) stuff substance. As we shall see below, Locke is not so clear on how to keep these uses separate as most modern commentators would have us believe. But it is not only Locke who fails in this way; other theories I shall consider also have this shortcoming, and with disastrous results.

III. Locke's Views Concerning Substance

Something not widely appreciated is that, according to Locke, there is exactly one substance, not two (material and spiritual) or three (divine).¹⁰

...the general idea of substance being the same every where, the modification of thinking, or the power of thinking joined to it, makes it a spirit, without considering what other modifications it has, as whether it has the modification of solidity or no....as on the other side substance that has the modification of solidity is matter. (*Letter 1*, p. 33).

The idea of matter is an extended solid substance; wherever there is such a substance, there is matter, and the essence of matter, whatever other qualities, not contained in that essence, it shall please God to superadd to it. (*Letter 3*, p.460)

We have the *ideas of matter and thinking*, but possibly shall never be able to know whether any mere material being thinks or no; it being impossible for us, by the contemplation of our own *ideas*, without revelation, to discover whether Omnipotency has not given to some systems of matter, fitly disposed, a power to perceive and think, or else joined and fixed to matter so disposed, a thinking immaterial substance: it being, in respect to our notions, not much more remote from our comprehension to conceive that God can, if he pleases, superadd to matter a faculty of thinking, than that he should superadd to it another substance with a faculty of thinking... (IV iii 6)

Extension and solidity, we have the ideas of; and see, that cogitation has no necessary connexion with them, nor has any consequential result from them; and

10 The use of 'one' here is perhaps peculiar — after all, the use of 'substance' is mass and equivalent to 'substratum in general'. I use it here for emphasis, although I should add that it has the sanction of modern writers who would claim that the mass term 'water' denotes "one scattered object", "one mereological whole", or "one fusion". (By respectively, W.V. Quine *Word and Object* (MIT: 1960) p. 92; J.M.E. Moravcsik "The Problem of Mass Terms in English" in Jaakko Hintikka, J.M.E. Moravcsik, and Patrick Suppes *Approaches to Natural Language* (Reidel: 1973); and Tyler Burge "Truth and Mass Terms" *Jour. Phil.* 1972). The apparent peculiarity is resolved when it is realized that, in addition to its role in the counting-series, 'one' has also the use wherein it *denies* the very applicability of counting.

therefore is not a proper affection of extension and solidity, nor doth naturally belong to them; but how doth it follow from hence, that it may not be made an affection of, or be annexed to that substance, which is vested with solidity and extension?

(Letter to Collins, 21 Mar. 1703/4; *Works* vol. x, p.284)

On Locke's view, then, there is one substance, unknowable and with no property other than being the bearer of properties. Some of these properties are solidity and extension, in which case there is matter; another property is thinking (or ability to think) and in that place there is spirit; at another place will be the property of divinity and at that place will be God. But nonetheless, as Locke says, "the general idea of substance [is] the same every where" — there is but one substance. If one detects something of Spinoza in this doctrine, he is not alone. Carroll says in 1705 and 1706¹¹

This *Atheistical shopkeeper* is the First that ever reduced *Atheism* to a *System*, and Mr. *Locke* is the Second; with this Difference, that the latter has only copied the former as to the main....I need not to quote more out of him, for by far the greatest part of his three last Books are employed in depriving us of the means to difference, or distinguish, or prove, that there is more than One real Substance;...

If it be in the same *Sense* or *Signification* that the *Work Substance*, is taken, and stands for the same *Idea*, when 'tis said, that *God* is a *Substance*, that a *finite Spirit* is a *Substance* and that *Body* is so; it will thence follow, that *God*, *finite Spirits*, and *Body*, agreeing in the same common *Nature* of *Substance*, differ not any otherwise, than in a bare different *Modification* of that *Substance*;...

None of this, of course, says that Locke won't recognize three (kinds of) substances (+ count) and innumerable (individual) substances (+ count); in fact he did, as the previous quotes show. However, he did only recognize one substance (+ mass). And while this fact may go against received history of philosophy — the kind in which we hear "Locke there were both material and spiritual substance, Berkeley denied material substance but embraced spiritual substance, Hume denied both" — the view actually embraced by Locke is exactly what one should expect him to say, given his other views (as both Martin

11 William Carroll (1705) "Remarks upon Mr. Clarke's Sermons, Preached at St. Paul's against *Hobbs*, *Spinoza*, and other *Atheists*" and (1706) "A Dissertation upon the Tenth Chapter of the Fourth Book of Mr. Locke's Essay...Wherein the Author's Endeavours to Establish *Spinoza's* *Atheistical Hypothesis*, more especially in that Tenth Chapter, are Discover'd and Confuted". Both are quoted in John Yolton *John Locke and the Way of Ideas* (Oxford: 1956) pp.144-145.

and Mabbott *loc.cit.* have pointed out). For the idea of substance is, after all, a general idea making use of the "leading characteristic" features of individual substances. In the words of Martin

a substratum *qua* substratum is that *about* an object that is the bearer of properties. It is a partial general idea making use of only the "leading characteristic" feature of bearing properties without regard to what properties they are. Therefore, substrata *qua* substrata do not and cannot divide into kinds at all.

Nonetheless, I think that the position which is here attributed to Locke has difficulties, both of a general philosophical character and of a Locke-internal character. First, while the topic of how we come to have complex abstract or general ideas is beyond the intended scope of this paper, it is nevertheless strange that Locke calls the idea of substance "complex and confused" since he gives exactly the same account of how we come to have the idea of substance as he did for the idea of power, and that idea is "simple."¹² The second difficulty we

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- 12 The mind—being every day informed by the senses of the alteration of those simple *ideas* it observes in things without; and taking notice how one comes to an end, and ceases to be, and another begins to exist which was not before; reflecting also on what passes within itself, and observing a constant change of its *ideas*, sometimes by the impression of outward objects on the senses, and sometimes by the determination of its own choice; and concluding from what it has so constantly observed to have been, that the like changes will for the future be made in the same things, by like agents, and by the like ways—considers in one thing the possibility of having any of its simple *ideas* changed, and in another the possibility of making that change; and so comes by that *idea* which we call *power*....[T]he *power* we consider is in reference to the change of perceivable *ideas*. For we cannot observe any alteration to be made in, or operation upon anything, but by the observable change of its sensible *ideas*, nor conceive any alteration to be made but by conceiving a change of some of its *ideas*. (II xxi 1)

Our *idea* therefore of *power*, I think, may well have a place amongst other simple *ideas* and be considered as one of them,... (II xxi 3)

The mind being, as I have declared, furnished with a great number of the simple *ideas* conveyed in by the *senses*, as they are found in exterior things, or by *reflection* on its own operations, takes notice also that a certain number of these simple *ideas* go constantly together; which, being presumed to belong to one thing, and words being suited to common apprehensions and made use of for quick dispatch, are called, so united in one subject, by one name; which, by inadvertency, we are apt afterward to talk of and consider as one simple *idea*, which indeed is a complication of many *ideas* together: because, as I have said, not imagining how these simple *ideas* can subsist by themselves, we accustom ourselves to suppose some *substratum* wherein they do subsist, and from which they do result; which therefore we call *substance*. (II xxiii 1)

note is that in Martin's statement quoted above, 'substratum' is used in a count sense ('a substratum', 'substrata'). Now, every term which is count admits of the *possibility* of counting instances (this is, trivially, the definition of 'count term'), even if in fact there be only one. So Martin should delete 'and cannot' from the conclusion. Or perhaps he would want to replace the count occurrences with mass ones (to say 'substratum *qua* substratum'). But it does not seem that this will do. We can agree with Martin that mass terms do not "individuate" their instances,¹³ so that it's true that (e.g.) water *qua* water does not and cannot "divide into instances". Nevertheless, as remarked before, to every mass term there corresponds a count term meaning, roughly, "kind of ____". I see no reason that it should be otherwise here. And so we would have the idea of substratum alongside the idea of kind of substratum. Surely if the first is intelligible so is the second; and the second has instances, namely, kinds of substratum. And finally here, let us look at a third peculiarity given by the Lockean account of ideas of substratum. Locke is, of course, free to call whatever idea he wishes 'the idea of substance'; and if he does it right it might turn out that this definite description is proper. Locke apparently chooses to call the idea of being the bearer of properties by the name 'the idea of substance'. And there is some feeling we all have that the very concept embraced by this name somehow guarantees there be at most one stuff falling under that concept. But surely we can find ideas or concepts which come as close as you like to that idea, and I see no reason why they should not, together with the idea of substance, form a class which is more "natural" and useful than this original idea of substance. Locke claims that we have an idea of being a bearer of properties, regardless of the properties involved; if so, don't we also have an idea of being the bearer of the property solidity, regardless of what other properties are involved? (More briefly: the idea of material substance). Note here that I do not mean the idea of matter. That idea is one of substratum bearing the property of solidity; this idea I am indicating is the idea of being a support for the property of solidity in exactly the same sense that the original idea of substance is a support for all properties. The present idea is that of being the kind of stuff

An obscure and relative *idea* of substance in general being thus made, we come to have the *ideas* of *particular sorts of substances*.... (II xxiii 3)

I do not see any differences in the first sections of each of these chapters which would justify the drastic differences between the third sections.

- 13 I take it this is the primary function of '*qua*' in these formulae: water *qua* lake does, it seems, "divide into instances" as would substance *qua* man. But water *qua* water or substance *qua* substance seems not to.

which can underlie matter, or of the stuff in which solidity inheres (to use the Lockean metaphors). We similarly have the idea of being a bearer of the property of thinking — or more briefly, the idea of spiritual substance; we would have the idea of being the bearer of infinite power and goodness — or more briefly, the idea of divine substance; etc. And following this line of reasoning down the slippery slope, we would have the idea of being the bearer of the property of life, regardless of the other properties involved — i.e., the idea of living substance; the idea of being the bearer of doghood, regardless of the other properties involved — i.e., the idea of canine substance; ...etc... At the bottom of this slippery slope we have ideas of W.V. Quine substance, of David Kaplan substance, and so on. That is, ideas of various haecceities, the ultimate countables.¹⁴ Let me reemphasize that these ideas are *not* ideas of matter, spirit, God, life, dog, Quine, or Kaplan; these ideas are ideas of being the bearer of whatever properties are called for, regardless of what other properties are involved (of course, with the ideas of the haecceities no other properties are involved). That is, these are genuine ideas of various kinds of substance or substratum. I think Leibniz was on to something like this in *New Essays* II xii 6 and II xxiii 2, and will explain what it might come to shortly.

First though, let us go back and try to find out what has gone wrong here, for *something* has gone wrong. From the rather plausible Lockean account of ideas of substance in terms of “leading characteristic” features of other ideas (*viz.*, perceptions) we have reached the intolerable conclusion that there is no univocal account of substance at all, i.e., that ‘substance’ does not indicate one idea or concept at all. In some way or other, Locke recognized that doctrines of substance easily led to this unhappy state of affairs:

And I desire those who lay so much stress on the sound of these two syllables, *substance*, to consider whether applying it as they do to the infinite incomprehensible GOD, to finite spirit, and to body, it be in the same sense; and whether it stands for the same *idea*, when each of those three so different beings are called *substances*? If so, whether it will not thence follow that God, spirits, and body, agreeing in the same common nature of *substance*, differ not at all otherwise than in a bare different modification of that *substance*: as a tree and a pebble, being in the same sense body and agreeing in the common nature of body, differ only in a bare modification of that common matter; which will be a very harsh doctrine. If they say that they apply it to God, finite spirits, and matter in three different significations, and that it stands for one *idea* when GOD is said to be a *substance*, for another when the soul is called *substance*, and for a third when a body is called so: if the name *substance* stands for three several distinct ideas, they would do well

14 Haecceity: The status of being an individual of a particular nature. Specifically, what makes something to be an ultimate reality different from any other.

to make known those distinct *ideas*, or at least to give three distinct names to them, to prevent in so important a notion the confusion and errors that will naturally follow from the promiscuous use of so doubtful a term; which is so far from being suspected to have three distinct, that in ordinary use it has scarce one clear distinct signification. And if they can thus make three distinct *ideas of substance*, what hinders why another may not make a fourth?(II xiii 18)

However, Locke wrongly seems to think his own account of substance avoids this difficulty.

Given these difficulties and Locke's apparent recognition of them, it might strike one as strange that Locke was so insistent on the need for this concept (as he is continually in the *Letters*). Bennett (*op.cit.*) traces Locke's conceptual needs (for the idea of substance) to "a certain doctrine of predication".

What concepts are involved in the subject of the statement that *The pen in my hand is valuable*? Certainly, the concepts of being a pen and of being in my hand; but these are not all, for the statement is about a *thing which* falls under these two concepts. What thing is this? It is the purple thing I now see; but when I say that the purple thing which I now see is a pen and is in my hand, I speak of a *thing which* is purple, etc., and so I have still failed to capture the whole concept of the subject in my original statement. Any further expansion along these lines can only be a delaying action, for it must omit an essential element from the concept of the pen in my hand. What will be missing from any list of descriptive concepts is the concept of a 'thing which...' this is an *ingredient* in the concept of a 'thing which is F' for each value of F, and so it cannot be *identical* with the concept of a 'thing which is F' for any value of F. This constituent of every subject-concept is the concept of a property-bearer, or of a possible subject of predication — let us call it the concept of *substance*. (pp. 59-60)

This reasoning is very similar to Locke's, both in the *Letter 1* and here:

...we must take notice that our complex *ideas* of substances, besides all these simple *ideas* they are made up of, have always the confused *idea* of *something* to which they belong, and in which they subsist; and therefore when we speak of any sort of substance, we say it is a *thing* having such or such qualities: as body is a *thing* that is extended, figured, and capable of motion; a spirit, a *thing* capable of thinking;... These and the like fashions of speaking intimate that the substance is supposed always *something* besides the extension, solidity, motion, thinking or other observable *ideas*, though we know not what it is. (II xxiii 3)

So where Bennett has 'a thing which is__', Locke sometimes uses 'a thing having__'. Woolhouse¹⁵ credits Locke with this view also, but

15 Woolhouse, R. *Locke's Philosophy of Science and Knowledge* (Oxford: 1971). P.67.

instead uses the phrase 'a thing supporting___'; Mabbott¹⁶ puts the argument as 'something which is___'; Martin apparently would opt for 'a bearer which is___'; and let us not leave out the possibility 'a something having___'. We shall, for the remainder of the paper, refer to this argument invoking "a certain doctrine of predication" as 'the Bennett argument'.¹⁷

I think it of the utmost importance to notice that the Bennett argument, no matter which of the phrases used above to indicate "the subject", will not give the appropriate meaning to "the subject" (= will not assign the appropriate kind of idea to 'substance'). All these terms are count, and if it is from this sort of reasoning that we arrive at some idea¹⁸, whatever idea we arrive at will be a countable — that is, will have to admit instances. But the idea of substance is an idea of a mass — it is supposed to have no instances; and while it might (*vide supra*) "divide into kinds", or there might be many related ideas of kinds of substance, the notion of an instance of substance in general (*simpliciter*) has to be on the same conceptual footing as the notion of a water (where this is neither a kind of water nor some

16 *op.cit.* p.29.

17 Let me reemphasize the difference between this argument and the ontological one. The latter argument goes like this: "In reality, there are qualities such as redness, roundness, sweetness, solidity, etc. It is impossible that the mere occurrence of these qualities should constitute any object. Indeed, the mere occurrence of but one property demands a something in which it is grounded or inheres." This metaphysical argument can be found at various places in the *Letters*, e.g., p. 133; as can the conceptual version. An unfortunate blending of the two can also be found in *Letter 3*, p.447:

...as long as there is any simple idea, or sensible quality left, according to my way of arguing, substance cannot be discarded: because all simple ideas, all sensible qualities carry with them a supposition of a substratum to exist in, and a substance wherein they inhere...

18 Sometimes in the *Essay* (especially at II xxiii 1,2) Locke would like us to take our idea of substratum as a "supposition", but it is apparently his final position that the idea is derived from "reason". See especially the *Letters*; note 'imply', 'proof', 'necessary connection', and 'inconsistent' in the following:

...by 'carrying with them a supposition', I mean, according to the ordinary import of the phrase, that sensible qualities imply a substratum to exist in. (447)

We experiment in ourselves thinking. The idea of this action or mode of thinking is inconsistent with the idea of self-subsistence and therefore has a necessary connection with a support or subject of inhesion: the idea of that support is what we call substance; and so from thinking experimented in us, we have a proof of a thinking substance in us,... (p.33)

antecedently determined bundle of water, like a lake or glassful). This difficulty is not merely one of commentators attributing to Locke a line of reasoning which will not give him the desired conclusion, for we have seen already that Locke explicitly uses this reasoning. Rather, the problem is within Locke himself: this line of reasoning will always give countables (particular substances) first. Yet Locke claims (earlier in II xxiii 3) that we get the idea of substance (the mass) first and then pass on (by “constituting” it up into an object) to particular sorts of substances: “An obscure and relative *idea* of substance in general being thus made, we come to have the *ideas of particular sorts of substances...*” However, the Bennett argument works by a kind of “decomposition” of particular sorts of substances into the idea of mass substance. So the Bennett argument can never, even if it be a generally valid argument form, give us “an idea of substance in general”. In their belief that it can, Locke, Bennett, Mabbott, Woolhouse, and Martin are mistaken.¹⁹

IV. Three other Incorrect Views

So what does this argument based on a “certain doctrine of predication” really prove? It proves (granting the premisses) that there must be “a thing which—” or “something having—”. That is to say, this doctrine of predication presupposes that there is at least one (and possibly all kinds of) concept(s) which can be picked out totally apart from the values of ‘—’ (the “attributes”). Now let me make it clear that I think every rational doctrine of predication must say this. The difference between the correct rational doctrine and the various incorrect (but still rational) doctrines is in what they think the concept(s) are which are independent of the “attributes”.

19 It must be admitted though in the text that Locke does not always stick to his official doctrine as quoted in the text here. For example, later in II xxiii 3 he gives the Bennett argument; the ontological version of the argument occurs throughout the *Letters*; and this might indicate some confusion on his part as to whether he is operating with the “decomposition” picture or the “constitution” picture. The only place I know where he addresses himself to the question is in a letter to Bold (May 16, 1699)

...I agree with you, that the ideas of the modes and actions of substances are usually in our minds before the idea of substance itself; but in this I differ from you, that I do not think the ideas of the operations of things are antecedent to the ideas of their existence, for they must exist before they can any way affect us, or make us sensible of their operations, and we must suppose them to be before they operate. (*Works*, vol. x, p. 320)

I wish here to give three of these rational but incorrect doctrines of predication. None of these, of course, will have the concept of "substance in general" — an all-pervasive substratum behind each predication. And for good reason, as I think I've shown above; for such a doctrine can never be got from the Bennett argument. These incorrect doctrines will instead have some count term as a replacement for 'the thing which'.

First, we look at an extremely popular doctrine of earlier this century, which continues (perhaps unconsciously) to be advocated by certain philosophers who are fond of using ordinary quantification theory as their model of predication. According to this view, the final values of 'a thing' or 'something' are *bare particulars*: full-fledged entities in their own right, but ones which *differ from one another only numerically* and which, *qua* bare particular, have no properties other than being the bearer of properties. Attributes are predicated of these bare particulars, in the words of Lord Russell, rather as clothes are draped on a peg.²⁰ This "coat hanger" theory of predication is, I think, what one would most naturally expect to be the conclusion of the Bennett argument, and I am constantly surprised that Locke, Mabbott, Woolhouse, Martin, *et al*, did not advocate it. In fact, all the presentations of the Bennett argument (including Locke's) go precisely to bare particulars and then make a leap from this individual "ultimate bearer of the properties of being a pen, of being in my hand, of being purple..." to "the idea of substance in general". The "coat hanger" theory does not make this last inference; it stops with the ideas of the individual ultimate bearers: the bare particulars.

I think this doctrine is nearly unintelligible, both for the metaphysical reasons Leibniz thought it to be and for various epistemological reasons. Leibniz, for many diverse reasons we shall not go into, found the doctrine that two objects should differ "in number only"

20 I think it's clear that the variables of ordinary quantification theory are to be taken to range over such entities: (a) Syntactically, monadic claims are made by concatenating a predicate to an entirely unspecified subject, x ; (b) when we quantify over such an open formula, the variables range over all that is, totally apart from how they are characterized; (c) the theory of identity forces us to admit formulae such as ' $x = y$ ' as meaningful, and sentences such as ' $(x)(Ey)x = y$ ' as either true or false; (d) the semantics of first order theories takes satisfaction to be a relation between a formula and model that has a domain of individuals which are completely unspecified except to say that they are distinct from one another and could have any formula truly characterize any of them. The only outlook on such claims I can see which will do all four things with equanimity is one which treats the variables as taking bare particulars as values and "draping" properties on them.

incomprehensible.²¹ And while we may not agree with Leibniz's metaphysic, surely it is outrageous to consider the world as consisting of a (infinite?) number of qualitatively identical objects and nothing else (except for properties, which "do not exist primarily"). There is also the related metaphysical difficulty of determining just how many bare particulars go into making up a complex entity like a man or a molecule. But it is the epistemological problems which should be of interest to us here, since the purpose of the Bennett argument about predication is to give us insight into our ideas/concepts. Epistemologically, it is difficult to see how we could have the appropriate idea/concepts for many of the ordinary areas of our conceptual life. The doctrine makes a shambles out of the business of individuating and counting; and it makes the notion of change ridiculous. (There is another reason to reject this answer, a more "linguistic" reason, to which I shall return below, after examining the two other incorrect responses to the Bennett argument, since I think those responses are susceptible to this objection also.)

The second incorrect answer to the Bennett argument is that the ultimate bearer of properties is a haecceit: an "individual concept" or (to use the terminology developed above) an idea of being the bearer of exactly the properties it bears. This is the doctrine commonly attributed to Leibniz and correctly so, I think, at least in the *New Essays* especially II xii 6 and II xxiii 1,²²

The idea of substance is not so obscure as you think. You can know what it ought to be, and what it knows of itself in other things; and indeed the knowledge of the concrete always precedes that of the abstract; the hot (thing) rather than the heat.

...at first, we conceive several predicates in one and the same subject, and these metaphorical words, *support* (*soutien*) or *substratum* mean only this; so that I do not see why it should cause any difficulty. On the contrary, it is rather the *concretum* as wise, warm, shining, which arises in our mind, that the *abstractions* or qualities (for these and not the ideas are in the substantial object), as knowledge, heat, light, etc., which are much more difficult to comprehend.

In distinguishing two things in substance, the attributes or predicates, and the common subject of these predicates, it is no wonder that we can conceive nothing

21 Locke also found the notion of bare particular difficult for these reasons (although perhaps he shouldn't have, given that he is forced by his own arguments to embrace them). See *Letter 2*, p.174.

Let us understand, if we can, what is the difference between things, barely as several individuals in the same common nature, all other differences laid aside. Truly, said I, this I cannot conceive.

22 I use here the translation of the *New Essays* by A.G. Langley (Open Court: 1949).

particular in this subject. It must be so, indeed, since we have already separated from it all the attributes in which we could conceive any detail.

The doctrine does, as Leibniz notes, avoid the outrageous metaphysics of bare particulars, and it does make it plausible that we should have "ideas" or concepts of the ultimate objects which confront us: those elusive 'things which...', for they are precisely the concepts of being a bearer of whatever properties do in fact confront us. On the other hand, the notion of change becomes difficult, as does the explanation of how we might have *general* ideas — in particular, Locke's sorts. Finally here, to bring in what philosophers have always found distressing about this doctrine of Leibniz's: every (non-existential) statement seems to become logically necessary. Consider 'Locke is English': the haecceitism of Locke must include being English, otherwise it is not Locke's haecceitism. And while we might be able to make *some* metaphysical sense of Leibniz's "hypothetical vs. absolute necessity" given his conception of God, surely whether a statement about (say) C.B.Martin's beard should not depend for its necessity or contingency on whether we believe Leibniz's God exists. Such linguistic matters as whether it is necessary or contingent should depend only on certain concepts we have — and, in the case of C.B.Martin's beard, concepts gotten from experience.

The third and final incorrect response I consider is the Russell/Hume doctrine that the answer to "What is 'the thing which has...?'" is 'a bundle'.²³ I think this answer has a lot to recommend it: it hasn't the metaphysical problems of bare particulars nor those of presupposing a certain God. Individuation and change might present problems, though; at least I don't immediately see how they are to be handled. I skip lightly over these difficulties because I want to point to what seems to me to be a fatal shortcoming in all these attempts to account for our "ideas" or "conceptual scheme": They give us the wrong sorts of concepts when extended beyond such simple examples as 'pen', 'hot thing', 'wise, warm shining, extended thing', or even 'man'.

At the beginning of this paper I drew the mass/count distinction. I think this is a philosophically important distinction especially in its implications for theories of change and individuation. But regardless of one's feelings on that matter, it is undeniable that we *do* have both kinds of concepts and can tell the difference between these "ideas". None of the three theories so far considered can account for this.

23 B.Russell *Inquiry into Meaning and Truth* pp.120ff; Hume *passim*.

Water is not an individual; our concept of water does not include any such sub-concept as part. Therefore there can be no bare particular “underlying” water, nor can there be a concept of such an individual somehow included in our “idea” of water, as would be demanded by a theory of “bare particulars.” The other two theories, the haecceitus and the bundle theories, can, I believe, allow us to have our ideas/concepts of masses (stuffs), but cannot account for how we can distinguish them from our ideas/concepts of countables. I would suppose that, under both these theories, we are initially presented with ideas of glasses, drops, lakes, etc., of water; these ideas being fully determinate (haecceities or “filled bundles”). From these we somehow form abstract or general ideas. In Leibniz’s theory these general ideas are no longer haecceities, they are rather like Locke’s general ideas. (It is difficult to see how he can account for this fact and yet not also be forced to admit bare particulars too, as Locke would have to if he were consistent). In the Russell/Hume theory the general ideas remain bundles, presumably smaller, “unfilled” ones. But note that exactly this same account would hold for countables in both theories also — there is no way, nor can there be any in these kinds of theories, to distinguish the two types of general concepts. The idea of gold is the bundle containing fixedness, ductility, malleability, solubility in aqua regia, etc. The idea of man is the bundle containing rationality, two-footedness, non-malleability, solubility in aqua regia, etc. Yet our language and “conceptual scheme” is clear and quite insistent on this distinction. Thus neither of these last two theories can be a correct account of our “ideas”.

V. Substance Made Substantial

Let us once again consider the Bennett argument. It demands that, for every purported “subject of predication”, we distinguish between certain properties (the “attributes”) and a true subject — the underlying thing which has those attributes. As I said before, every rational doctrine of predication must do this. But the way we have been making the Bennett argument go up to this point, we are not allowed to put (say) ‘the pen’ as a value for ‘the thing’; instead, we are forced to treat ‘the pen’ as if it were yet another attribute of a still “deeper subject”. It is here that the proper treatment of substance will draw the line. It will claim that certain terms, by themselves, constitute the appropriate subject and indicate “the things which...” That is, the appropriate theory of language will divide predicates into two classes: one which can indicate subjects and one which can only indicate further attributes of a subject. Now, just what predicates are to be

subject—indicators is a question which has been answered in many different ways. It seems to be accepted by a certain group of contemporary philosophers (namely, Anscombe, Frege, Geach, Strawson, to mention a few) that the appropriate predicates are the class of count terms minus words such as 'thing', 'object' 'entity'. This class of words they call 'sortal predicates'.²⁴ Unfortunately, the attempt to characterize sortal terms in any independent way has led to failure — there is no agreement on what is and what isn't a sortal term,²⁵ except for certain central cases like 'man'. The Anscombe, Frege, Geach, Strawson view seems to take "intelligibility of counting" as the hallmark of sortals, so that only grammatically count terms stand a chance of being sortal, but not all of them since some of them don't make counting "intelligible". Pens can be counted, they say; so 'pen' provides a criterion of individuation and identity. 'Thing' does not. And Geach, at least, thinks proper names are sortal.²⁶ According to this usage of 'sortal', 'pen' will be a proper subject and a stopping point for the Bennett argument's quest for 'a thing which...'

Other philosophers, including Aristotle, Furth, Wiggins, and myself, would restrict the class of sortal terms yet further: to terms which not only individuate and provide a criterion for counting, but which in addition play a central role in natural laws and explanations of change. Central examples here would be biological species; most, if not all, artificial objects (or rather, objects recognized as being artificial) would be ruled out. Under this conception, a sentence like 'The sow is large' does not have 'the sow' as a true subject. This subject term is still liable to the Bennett argument: "What is the thing which is a sow?" We might think of various intermediate answers, but one final answer would be 'the pig'. And the theory insists that there is no further question "What is the thing which is a pig?" (Or at least, there will be no answer other than one which means the same as 'a pig'). Let me make it quite clear here that I am in no way talking about "real essences" (to revert to Lockean terminology), but rather consider this

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- 24 Some philosophers seem to think this comes from Locke's doctrine of sorts. It clearly does not; Locke included, in his sorts, the designata of mass terms such as 'gold'.
- 25 For a summary of the difficulties and differences, see Fred Feldman "Sortal Predicates" *Nous* 1974.
- 26 One wonders whether they would say 'crown' was sortal, in light of the fact that what Pope Paul puts on his head consists of many smaller crowns which consist of still smaller ones. Or whether they would call 'house' non-sortal in light of the birdhouses which are composed of many smaller birdhouses. Or whether they would deny 'animal' is a sortal because of amoebas which divide or maybe because of symbiosis.

classification of true subjects vs. attributes to be on the level of “nominal essence”. After all, we are trying to explicate our conceptual scheme, and unknown real essences are worthless for this, as Locke clearly saw. Due to this fact then, I suppose that different people could draw the subject/attribute line differently. But there is at least this check on them: in the majority of cases they will have to agree with one another, or else they will fail to understand each other’s remarks about identification, reidentification, confirmation, identity, and change.

This view of substance takes us some way along the correct road, I think, but it is clearly not enough, for there are ever so many subject-type concepts we have which are neither sortal in nature nor contain sortals implicitly (as ‘sow’ does). These are names of certain natural stuffs — e.g., ‘earth’, ‘air’, ‘fire’, ‘water’ (for some ancient Greeks perhaps) or ‘gold’, ‘silver’, ‘phlogiston’, etc., (for Locke perhaps).²⁷ It is in this way that we, who do not allow ‘pen’ to be a proper sortal, account for the pen in Bennett’s original example: We might say ‘a mixture of plastic and metal and ink which is shaped such-and-so...(etc.)’. But we can now also see why the argument was misguided and misused even in the beginning by Locke: The request should have always been “What is the thing or stuff which...” If this had been the original question Locke asked himself, surely he would have come up with ‘matter’ (and perhaps also ‘spirit’, ‘divine substance’). I think it would not be at all tempting for him to go on to ask “But what is the stuff which is matter?”

As in the case of the count terms vs. sortals, not all mass terms indicate true quiddities (for lack of a better term²⁸). Obvious counterexamples are: ‘stuff’, ‘substance’, ‘mush’, ‘glop’, etc. Further, I would like to see us consider only a restricted subset of the remaining ones: ones that figure in our talk about change and composition. If we had access to the real essences, we might consider these to be the

27 When sortal predicates were first “discovered” 20 years ago, there was a lot of renewed interest in Aristotle by those who thought he used the notion in his doctrine of substance. Even among those who have outgrown their youthful belief that Aristotle’s substance involved what they called ‘sortals’ (of the type that Geach, Frege, Anscombe, Strawson endorse, where every countable is a sortal), there still remains the false belief that Aristotle didn’t allow any mass terms to be substance indicators. And there are still some who mistakenly think that Aristotle would allow artificial things to be substances— e.g., a watch under the description ‘a watch’. See Ray Elugardo and my “Sortal Terms and Aristotle’s Conception of Substance” (in preparation).

28 Quiddity: the essential nature or ultimate form of some stuff; what makes something to be the type of stuff that it is.

chemical elements and their compounds. In our actual conceptual scheme, consisting as it does of nominal essences, we will of course have to admit mixtures like air, bronze, etc., in addition to explicit mention of mixtures like we did with 'pen'.

An adequate logic for such a conceptual scheme has yet to be worked out.²⁹ The theory should, I think, try to stick close to ordinary predicate logic, but with these changes: Syntactically, we want to separate a distinguished class of predicates from all others. Within the distinguished class, we separate sortal predicates from quiddity predicates. A sentence is well-formed only if its subject (which will need to be defined syntactically, and not "functionally") contains one of the distinguished predicates. Some axioms about change and "constitution" are needed to relate sortals to the stuff out of which they are made. In other syntactical respects we allow ordinary quantification theory to determine how this new theory will work. Semantically, we have to ensure that the syntactical innovations aren't mere window-dressing. I think something along the lines of many-sorted theories is correct, except that the subject-term of each sentence should determine the appropriate sort, instead of the orthographic style of the variables.³⁰

VI. Locke Reconsidered

Let me close by saying that I think this is not an impossible view for Locke to have taken. Of course, he would have to give up his doctrine of substratum, but that's one (?) idea/concept about which he was

29 For anyone who wants to give it a try, start with John Wallace *Philosophical Grammar* (diss. Stanford 1964), a portion of which is summarized in "Sortal Quantification Theory" *Jour.Phil.* 1965. My dissertation (UCLA 1971), *Some Problems of Non-Singular Reference* Sect. IV carries this (inadequate) analysis over to mass terms. Further hints can be obtained from Richmond Thomason "A Theory of Sortal Incorrectness" *Jour.Phil.Logic* 1974, Smiley "Syllogism and Many-Sorted Quantification" *JSL* 1962, Laycock "Theories of Matter", Bealer "Predication and Matter", Burge "Count Terms, Mass Terms, and Change" (the last three are in *Synthese* 1975). Objections to the logic of various other attempts can be found in my "Some Proposals for the Semantics of Mass Terms" *Jour.Phil.Logic* 1973.

30 For this semantic mirroring of the syntax so as to make the logic genuinely innovative, see Smiley *op.cit.* and Wallace *op.cit.*. As nice as it looks, the attempt in my dissertation Sect.IV is incorrect. The semantical versions of the axioms for change can be dug out of Burge *op.cit.*

uneasy anyway. He would have to pick out his distinguished set of concepts; but I think his sorts are a major step towards this (certainly much closer than Geach or Strawson). He would need to separate sortals from quiddities within his sorts, an easy enough task. Finally, and perhaps most difficult to accommodate within his theory, there would have to be a well-developed theory of change and (physical) identity. His doctrine (II xxvii 4) according to which it is identity of the particles that gives a mass its identity seems too strong, at least for the sense of mass we are here discussing. Much better is his discussion of organisms (II xxvii 5) in which it is not the identity of the particles, but identity or organization which gives an organism its identity (but perhaps that is too weak?). Physical objects, e.g., a watch, are correctly seen (II xxvii 6) as having identity conditions like organisms. But while this may account for the *identity* conditions of these things, it does not account for the *identification* conditions, nor for change.³¹

So, some changes and some additions need be made to Locke's account to bring it into accord with the theory proposed above, but I see no deeply embedded reasons it couldn't be thus altered and still be Locke. At least only falsehoods would be removed and only truths added!

31 A particularly clear and illuminating discussion of this distinction can be found in Laycock *op.cit.*