

LOCKE'S CONCEPTION OF SUBSTANCE

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SCOPE AND CONTENTS:

It is the purpose and intent of this thesis to examine the conception of substance and other notions relevant thereto as expressed in John Locke's An Essay Concerning Human Understanding. It outlines the fundamental epistemological position upon which Locke's conception of substance is based, then critically considers Locke's account of primary and secondary qualities, the central conception of substance, and the attendant notions of essence and abstraction. The concluding chapter is a summarizing of Locke's position and a statement as to the final position of this thesis.

The primary method or technique employed is one of textual analysis. The edition of the Essay which was primarily used was that edited by Alexander Campbell Fraser and published in two volumes (paperback) by Dover Publications, Inc., of New York in 1959.

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I

INTRODUCTION

The question (or questions) of 'substance' is one which, in one form or another, has been in philosophy from the beginning. The early Greeks, Thales, Anaximenes, Anaximander, Heraclitus, and others talked of a 'primal substance' from which all things came. Russell points out that the notion of substance as something indestructible derives from Parmenides. "A substance was supposed to be the persistent subject of varying predicates. As such it became, and remained for more than two thousand years, one of the fundamental concepts of philosophy, psychology, physics, and theology."¹

Aristotle, in the Categories, develops quite fully the substance-predicate, or substance-accident, distinction; for Aristotle, this was a logical structure grounded in the ontological structure and derived therefrom. The medieval conception of substance was borrowed almost intact from Aristotle's various writings, which were interpreted and modified to agree with certain theological dogmas. All, or nearly all, of the modern philosophers, from Descartes to Kant, dealt with the problem of substance in some way.

O'Connor says that:

The philosophical problem of substance arises out of the commonsense distinction between things and their qualities. Leaves are green; diamonds are hard; ice is cold; and so on. The distinction seems obvious. Things or substances are the real and important features of the world while the qualities of things and the relations between things seem in some way derivative and therefore less real and important. A quality like green or sweet can exist only as the property of some substance. And a relation like 'to the north of' cannot exist except as relating two positions in space. And though it is also true that things cannot exist without having some properties and relations, the same thing can exist at different times with many different properties and stand in many different relations. In other words, a thing can change without ceasing to be the same thing but a quality or relation cannot change without ceasing to be the same quality or relation. All this seems clear enough, but as soon as we try to scrutinize this commonsense distinction a little more closely, difficulties begin to be seen. And the various philosophical theories of substance are attempts to explain these difficulties.²

O'Connor is somewhat off base in calling the distinction between things and their qualities a commonsense distinction. The notion of substance is a rather sophisticated philosophical conception, not an everyday conception. It is highly unlikely that the 'man in the street', if you will, has any conception of substance as something distinct from its qualities; rather he talks in terms of objects with various qualities without distinguishing the two. To say, for example, that 'ice is cold', is just to assert that coldness is one of the things we mean by ice, or an idea which we associate with it, not to say that we have any idea of a mysterious something which is cold, clearish-white in color, etc. . Indeed, in the paragraph just quoted, O'Connor includes

some of the chief philosophical conceptions of substance. Whether or not the distinction is a commonsense one is really not important here; what is important is that the distinction has been made. The separation of things and qualities (or accidents) raises the question of substance, and it is with this question that we are concerned.

Locke's theory of substance follows rather closely the outline which O'Connor has given us in the paragraph quoted above. Locke conceives of substance as something which supports qualities.

For the complex idea of an unsubstantiated aggregate of sensible qualities, ... without a centre of unity to which they may be 'attributed' is, he finds, unthinkable. An adjective without a corresponding substantive is meaningless till a substantive is assumed to be understood. To say that all adjectives necessarily presuppose substantives in their meaning, is to express in another way this obligation to substantiate our simple ideas.³

If we read 'qualities' for 'adjectives' and 'substance' or 'substratum' for 'substantive' in the above passage, we have a rather accurate, succinctly stated synopsis of Locke's conception of substance. And as we shall see, that conception is partly a consequence of linguistic structure.

To understand the notion of substance we must realize that it is a complex notion made up of several different strains or strands, some of which have been mentioned above. Substance may be seen as that thing which persists or endures, though its observable properties or qualities might change. Implicit in this view is the notion of substance as something

which is capable of independent existence, while qualities are properties which are not so, but require substance for their existence. (This view can be seen in the quotation from O'Connor.) Seen in this way, substance is much like a notion of "personal identity" or "object identity."

The notion of substance can also be seen as arising out of the subject-predicate form of language. Qualities are predicated of something. Just as a predicate is grounded in a subject, so is a quality or property grounded in a substance. Language separates or distinguishes between subjects and predicates which consequently produces a distinction between substance and qualities. The very act of calling qualities "qualities of" something, makes this distinction. Still another notion of substance is that adopted by Hume, viz. that what we mean by substance is nothing more than a collection of qualities noticed to exist together.

In examining Lock's treatment of substance, we shall find all these strands of the notion present except the last one (Hume's), to which Locke adds one important reservation. We will see substance as independent existent, substance as support (the most important view for Locke), and substance as a consequence of language. /e

As we progress, I will attempt to show how and where these strains are apparent in Locke's conception of substance, how they might have arisen, and where I believe Locke to be mistaken. In the chapters which follow I will first outline

the basic or fundamental aspects of Locke's theory of knowledge, consider his account of primary and secondary qualities, examine his account of substance itself, together with other relevant subjects, and finally offer summarizing criticisms of Locke's conception of substance and the conclusions and final position of this paper.

II

LOCKE'S FUNDAMENTAL EPISTEMOLOGY

Before we can adequately understand and consider Locke's conception and treatment of substance, it is necessary to examine the basic epistemological position of his Essay Concerning Human Understanding, for much of the material which I propose to cover in this examination is implicit in the primary considerations of this paper. Thus some examination and explanation of Locke's theory of knowledge is required as a basis for the portion of the thesis that follows, just as a foundation is necessary if one wishes to erect a building--one could not start by erecting the second floor.

To put this matter in clearer (sharper) perspective, before dealing with Locke's idea of substance and other closely related ideas, e.g. ideas of primary and secondary qualities, ideas of real and nominal essences, we should first note Locke's starting point and his intentions, see what he means by 'idea,' how ideas originate or arise, the types of ideas which we have, and so forth. Once these things have been done, we will be better prepared for our principal undertaking.

I do not propose to deal with his theory of knowledge in toto, but only with those aspects of it which are important in relation to his doctrine of substance. I will

not be entering into many specific or detailed criticisms of Locke's basic epistemology; rather I will, for the most part present it before examining Locke's conception of substance within his own framework. Some criticisms made by various writers are included, but only insofar as they are conducive to making Locke's position clearer and more explicit. In a later chapter, I will discuss the problems connected with reconciling Locke's conception of substance with his account of knowledge.

Locke tells us that his intent in writing the Essay is to "examine our own abilities, and see what objects our understandings were, or were not, fitted to deal with,"¹ or "take a survey of our own understandings, examine our own powers, and see to what things they were adapted."² In other words, he wishes to restrict our inquiries, or set a limit to the things which are proper considerations for the human understanding.

Till that was done I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of Being; as if all that boundless extent were the natural and undoubted possession of our understandings, wherein there was nothing exempt from its decisions, or that escaped its comprehension. Thus men, extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understandings well considered, the extent of our knowledge once discovered, and the horizon found which

sets the bounds between the enlightened and dark parts of things; between what is and what is not comprehensible by us, men would perhaps with less scruple acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other.³

We later see Kant, reacting against the same dogmatism which Locke was, as well as against scepticism, making a similar statement of intent in the Preface to the first edition of the Critique of Pure Reason, wherein he says he must undertake the most difficult task of reason, namely, that of self-knowledge so as to ascertain its proper role and limits.

Locke, then, like Kant after him, sees it as his task to discover this horizon or boundary, "to search out the bounds between Opinion and Knowledge, and examine by what measures, in things whereof we have no certain knowledge, we ought to regulate our assent, and moderate our persuasions."⁴ Locke's method for accomplishing this will be three-fold.

First, I shall inquire into the original of those ideas, notions, or whatever else you please to call them, which a man observes, and is conscious to himself he has in his mind; and the ways whereby the understanding comes to be furnished with them.

Secondly, I shall endeavour to show what knowledge the understanding hath by those ideas; and the certainty, evidence, and extent of it.

Thirdly, I shall make some inquiry into the nature and grounds of faith or opinion: whereby I mean that assent which we give to any proposition as true, of whose truth yet we have no certain knowledge. And here we shall have occasion to examine the reasons and degrees of assent.⁵

Copleston remarks that Locke's formulation of his intention, viz.

. . . to inquire with what objects are our understandings fitted to deal, with what objects are they not

fitted to deal, . . . is unfortunate. For how, it may be asked, can we distinguish between the objects with which the mind is capable of dealing and those with which it is incapable of dealing without passing beyond the scope of the mind? . . . If we can mention any object with which the human mind is incapable of dealing, have we not implicitly stated that the mind is capable of saying something about it and so 'dealing' with it to a certain extent?⁶

Copleston's objection, however, overlooks the fact that the objects with which the mind is not fitted to deal need not be specified or mentioned, and thus, in fact, are not being 'dealt' with "to a certain extent." That is, if we indicate the sort of objects that the mind is fitted to deal with, any other sort of object is necessarily excluded. This is exactly what Kant is doing in the Critique when he says that both sensibility and understanding are necessary conditions for experience or knowledge; the understanding synthesizes the raw material of sensible impressions, i.e. orders it, while sensibility provides the material with which the understanding works. "Without sensibility no object would be given, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind."⁷ What is important to notice here is that for anything to be a part or object of knowledge, it must be given, or be capable of being given, in sense experience. Thus any object which cannot be so given cannot be a part of knowledge, i.e., such objects are necessarily excluded, it matters not what they might be.

Locke, like Kant, is going to lay out conditions within which we can 'deal with' objects; objects which do not conform to these conditions are excluded, but this is not to say that they are 'dealt with' in any sense or to any extent, other than, perhaps, a negative one.

It is quite possible that Copleston is either playing on, or misunderstanding Locke's use of the words "deal with." Though Locke well realized that "errors and obscurity, . . . mistakes and confusion, . . . are spread . . . by an ill use of words",⁸ his own 'looseness' with language is perhaps the most criticized aspect of the Essay. However, part of those criticisms, as well as other criticisms, in this case Copleston's that are levelled against Locke and the Essay, are due, I feel, to misunderstanding.

As we have observed, Locke is pointing out the limits of human knowledge, not the mere 'dealing with' or consideration of objects or things, i.e. what he means by 'deal with' is 'deal with' as objects of knowledge, not just 'deal with' in the sense of consider or speculate about. He is seeking after "a quiet sure possession of truths".⁹ He notes that man lets his inquiries exceed his capacities and tries to 'deal with' things which lie in those depths where no sure footing is to be found, i.e. he attempts to appropriate as objects of knowledge those things which are beyond his comprehension; this attempted appropriation is exactly what Locke is arguing against. When Locke tells us that certain

things, e.g. substance in general and 'real essence', are unknowable, Copleston would say that he is 'dealing with' these things, but this is due to his taking the words 'deal with' literally. But when Locke discusses substance in general, the point that he repeatedly makes is that it is unknowable, and that we cannot 'deal with' it. It is not an object (or a part) of knowledge; it is "no more than an unknown x, to which we refer the contents of experience."¹⁰ Substance, as an unknown and unknowable something, we know not what, is not an object with which the mind is fitted to deal and, indeed, is not being 'dealt with' in Locke's sense of the terms. Substance, of course, will be discussed much more fully later; it was only introduced here to help make the point that Copleston's criticism of Locke rests on a misunderstanding. The crux of the matter is that Copleston wishes to understand 'deal with' both positively and negatively, e.g. for Copleston, to say "God is beyond human understanding or comprehension, we can know nothing about him" is to 'deal with' God; whereas Locke is using the words 'deal with' only positively, i.e. to deal with as objects of knowledge.

Concerning such a criticism as Copleston wishes to make, Aaron points out that while Locke does involve himself in difficulty in attempting to draw a boundary to human knowledge, we need to clearly understand his intent and his procedure.

Locke's statement of the problem in the Essay is somewhat condensed. It is easier to understand his position if one examines it as set out in 1677 in the long note on study which he wrote into his journal for that year. In the course of this note he remarks: 'This [to know what things are the proper objects of our inquiries and understanding], perhaps, is an inquiry of as much difficulty as any we shall find in our way of knowledge, and fit to be resolved by man when he is come to the end of his study; and properly the result to be expected after a long and diligent research to determine what is knowable and what not, and not a question to be resolved by the guesses of one who has scarce yet acquainted himself with obvious truths'. From this passage it is clear that Locke did not mean that when beginning to inquire into any particular field of knowledge we can know beforehand how far our knowledge will extend. The expert alone 'at the end of his study' is in a position to say that such-and-such problems are wholly beyond our powers of apprehension.¹¹

That is to say, when we discover the way in which we come to have knowledge, or the conditions for knowledge, we will also come to know what sort of things are knowable, and the unknowable will be those things, whatever they might be, which are not a part of our way of knowledge.

With these preliminary remarks as to Locke's intent and purpose in mind, we can now move on to a consideration of the philosophy found in the Essay. The key term of the Essay is 'idea', of which Locke says, "It being that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking; and I could not avoid frequently using it".¹²

Of Locke's usage of the term, Fraser observes that

Idea is thus, with Locke, a term of most comprehensive generality, embracing all that is in any way immediately apprehensible by the mind of man, -- whether as a datum of external or internal sense, a sensuous image, or an individualized product of generalizing thought.¹³

Having defined what he means by idea, Locke presumes it will be easily granted him that there are such ideas in men's minds, every one being conscious of them in himself, and the words and actions of men satisfying him that they are in others.¹⁴ His first inquiry will be as to how men come to have such ideas.

Locke's use of the term 'idea' is one which has drawn much criticism, the chief one being that he uses the term in an extremely ambiguous fashion.

One criticism which has rightly been directed against Locke in this connexion is that he has included far too much within the connotation of this one term. Sense-data, memories, images, concepts, abstract ideas differ from each other greatly, and to call them all by the same name is to invite confusion. Locke wanted a comprehensive term to embrace all the immediate objects of the understanding, but his use of the word idea in this exceedingly wide manner does lead to ambiguity.¹⁵

However, though Locke's use of 'idea' is very wide, it is partially defensible. "Locke thought . . . that ideas of all these diverse types had a common function, namely, to serve as signs representing to the mind objects with which we can never be directly acquainted."¹⁶ Thus, despite the fact that ideas are of many different types, since they all perform the same function, Locke's usage of idea is, to some extent, justified.

Another frequent criticism of 'idea' is that Locke sometimes uses it not as "the object of an act of knowledge but the act of knowing itself."¹⁷ This criticism possibly arises from, or in connection with, Locke's discussion of 'ideas of reflection'. But it is important to notice that when Locke speaks of such ideas he calls them objects, i.e. objects of the mind. These operations are not ideas in themselves, but because the mind takes notice of them.

In these cases [i.e. ideas of reflection] the act of perceiving something, for example, is itself supposed to be the object of a simultaneous act of introspection [reflection]. It is called an idea in virtue of being an object of this further act of knowing and not because it is in itself such an act.¹⁸

We have seen what Locke means by 'idea', or how he is going to use it, with the discussion of some of the criticisms directed against his usage serving to clarify it. We can now turn to the question of "how they come into the mind."¹⁹ We might note in passing, however, that another criticism, and a very significant one, which has been urged against Locke's use of 'idea' is the question of just what it means to say that an idea is 'in the mind', for as one writer remarks:

Of all the ambiguous phrases used by philosophers this phrase 'in the mind' is surely the most ambiguous. For the ideas are not themselves mind, nor yet are they non-mental, but they are supposed to possess, as Professor Alexander has explained, 'a twilight existence' of their own between the mind and the physical objects of the natural world.²⁰

This brings up the whole question of the 'representative theory' of perception or knowledge, a critical examination of which lies far beyond the scope of this paper. We can only remark here that despite whatever difficulties might be involved in a 'representative' theory of knowledge, it is, nonetheless, the epistemological theory which Locke adopted.

Evidence for asserting that Locke adopted this position can be found, for example, at IV. 4. 3., wherein Locke says "It is evident the mind knows not things immediately, but only by the intervention of the ideas it has of them. . . . [And] How shall the mind, when it perceives nothing but its own ideas, know that they agree with things themselves."²¹ And at IV. 21. 4., Locke remarks that ". . . since the things the mind contemplates are none of them, besides itself, present to the understanding, it is necessary that something else, as a sign or representation of the thing it considers, should be present to it: and these are ideas."²² As we shall see later, Locke's 'representationalist' position is particularly relevant to and evident in his discussion of qualities and our ideas of them.

Locke's polemic against innate ideas is not essential, nor even particularly relevant to the theme of this paper, and, therefore, will not be considered herein. We need only note that Locke's attack on innate knowledge acts as a propaedeutic to his own empirical account of knowledge which is presented in Book II of the Essay. The attack is, of course,

based on Locke's empiricism, and in this attack the theory of innate ideas or knowledge is primarily intended to serve as a foil for Locke's philosophy of experience. That is to say, that since Locke sees experience as the source of all our knowledge, it is necessary that he do away with any theory which holds knowledge which does not come from experience. Thus he attacks innate knowledge, and in doing so points out the way which his account of knowledge is going to take.

At I. 1. 15., we see Locke clearly indicating what his epistemological position is going to be.

The senses at first let in particular ideas, and furnish the yet empty cabinet, and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards, the mind proceeding further, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the materials about which to exercise its discursive faculty.²³

Thus we have no innate ideas; the mind is 'empty' until experience 'furnishes' it. Knowledge is first about those particular ideas "which are imprinted by external things, with which infants have the earliest to do, which make the most frequent impressions on their senses."²⁴

At the beginning of Book II, Locke says of the ideas which man has, ". . . it is in the first place . . . to be inquired, How he comes by them?"²⁵ His answer is, of course, from experience.

Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas: -- How comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from EXPERIENCE. In that all our knowledge is founded; and from that it ultimately derives itself. Our observation employed either, about external sensible objects, or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.²⁶

Ideas then come from two sources, 'SENSATION' and 'REFLECTION'. Ideas of sensation are those of all sensible qualities such as hard, heat, yellow, etc., which come into the mind through the senses; that is, the senses, "conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them. And thus we come by . . . all those [ideas] which we call sensible qualities".²⁷ In other words, external objects affect our senses in various ways, and in turn the senses 'relay' to the mind this information, i.e. the way(s) in which they are being affected, which produces in the mind perceptions. All our ideas of sensible qualities come about in this way, so that we cannot have any ideas of sensible qualities which have not come through our senses, e.g. a man born blind would have no idea of red or yellow, or of any color, and a man born deaf would have no idea of sound. A possible objection to this

account might be taken from Hume's Treatise, wherein he says that if we arranged all shades of a color except one in order from lightest to darkest, that a man who had been acquainted with all those shades except the one omitted would "perceive a blank, where that shade is wanting," and would be able, "from his own imagination, to supply this deficiency."²⁸ Hume admits though, that this "instance is so particular and singular, that 'tis scarce worth our observing, and does not merit that for it alone we should alter our general maxim,"²⁹ viz., that all ideas are a result of previous impressions; in this case, a sense impression.

It is open to question whether Locke would admit Hume's conclusion that the man could 'supply' the missing shade, for he says that "the understanding seems to me not to have the least glimmering of any ideas which it doth not receive from"³⁰ either sensation or reflection, and ideas of colors come from sensation. However, it is possible that we, or Locke, could say that one would be able to form an idea of the missing shade from the ideas provided us by the numerous shades presented. Such a position seems entirely consistent with Locke's position.

Reflection, the second of the two sources from which the 'empty cabinet' is furnished, is "the perception of the operations of our own mind within us, as it is employed about the ideas it has got; -- which operations, when the soul comes

to reflect on and consider, do furnish the understanding with another set of ideas, which could not be had from things without."³¹ Ideas of reflection, then, are only those which the mind gets by noticing its own activities, and might be termed "internal sense."³² Examples of ideas which we receive through reflection are "perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds."³³

Reflection, it will be noticed, is dependent upon sensation and occurs only in conction with it; if there were never any 'sensory input', reflection would never occur. Thus, though reflection is one of the sources of ideas, it is a secondary, or subordinate one.

"These two, . . . , viz. external material things, as the objects of SENSATION, and the operations of our own minds within, as the objects of REFLECTION, are . . . the only originals from whence all our ideas take their beginning."³⁴ "External objects furnish the mind with the ideas of sensible qualities, which are all those different perceptions they produce in us; and the mind furnishes the understanding with ideas of its own operations."³⁵

It is important to notice that Locke speaks of ideas of sensation and reflection as the 'materials' of knowledge. All knowledge depends upon ideas that ultimately derive from one of these two 'fountains', viz. sensation or reflection. "All the ideas that we have and can have about existences

must have been experienced in one or other of these ways, as far as their elementary constituents are concerned; otherwise the words supposed to have meanings are only empty sounds."³⁶ That is to say, all knowledge originates in ideas of either sensation or reflection.

In Locke's words,

All those sublime thoughts which tower above the clouds and reach as high as heaven itself, take their rise and footing here; in all that great extent wherein the mind wanders, in those remote speculations it may seem to be elevated with, it stirs not one jot beyond those ideas which sense or reflection have offered for its contemplation.³⁷

And when he is speaking of simple ideas, Locke again emphasizes this point, saying that

[The understanding] has the power to repeat, compare and unite them, even to an almost infinite variety, and so can make at pleasure new complex ideas. But it is not in the power of the most exalted wit or enlarged understanding by any quickness or variety of thought to invent or frame one new simple idea in the mind not taken in by the ways beforementioned.³⁸

That is to say, simple ideas form the basis for all complex ideas, and complex ideas resolve themselves ultimately into simple ones, but the mind cannot make, or form, any simple idea, for they come only through sensation or reflection. Perhaps the most often voiced derogatory comment about the Essay is in regard to its tedious, trying, repetitiveness, but Locke is well justified in his repetition of this particular point, for it is the basis upon which most, if not all, of the Essay rests.

Ideas are also the materials of knowledge in another very important sense. There can be no knowledge without ideas, but ideas are not knowledge per se; they are elements of knowledge.

A mere idea . . . can be neither true nor false, certain or uncertain, self-evident nor demonstrable. 'Nothing is truer,' he [Locke] tells Stillingfleet, 'than that it is not the idea that makes us certain, without reason, or without the understanding'; although 'it is as true, that it is not reason, it is not the understanding, that makes us certain without ideas. Nor is it one idea by itself that in any case makes us certain.'³⁹

There is no knowledge until an idea is perceived in its relation to another idea. Only when the mind refers its ideas to things 'outside' themselves are they capable, as elements of knowledge, of being termed either true or false, "because the mind, in such a reference, makes a tacit supposition of their conformity to that thing".⁴⁰ Knowledge is mental assertion or denial, which presupposes a relationship of 'connexion and agreement, or disagreement or repugnancy', which is the basis of assertion or denial.

We may make several references to portions of the Essay which are relevant here; for example, at II. 32. 1., Locke says that ". . . truth and falsehood belong, in propriety of speech, only to propositions For our ideas, being nothing but bare appearances, or perceptions in our minds, cannot properly and simply in themselves be said to be true or false, no more than a single name of anything can be said to be true or false."⁴¹ And in another

spot, he says that "whenever the mind refers any of its ideas to anything extraneous to them, they are then capable to be called true or false."⁴²

Locke's discussion of knowledge, is found in Book IV. Here, after having been occupied in Books I-III with a discussion of the origins of knowledge, or more properly, we might say, with the origins of the materials of knowledge, Locke undertakes the main problem or project to which he set himself in the Introduction to the Essay, viz., "to inquire into the original, certainty, and extent of human knowledge, together with the grounds and degrees of belief, opinion, and assent."⁴³ Again unfortunately, we cannot undertake to discuss this subject due to the limitations of space and time, as well as the limitation imposed by the original intent of this paper. We will have occasion, however, to mention or refer to the third of the four sorts of agreement or disagreement between ideas which Locke discusses in Book IV, viz., "Co-existence, or necessary connexion",⁴⁴ for this "sort of agreement or disagreement . . . belongs particularly to substances."⁴⁵

Having observed that 'ideas' are 'the objects of the understanding whenever a man thinks', and that none of them are innate, but all come from 'sensation' or 'reflection', and that they are the materials of knowledge, we will now take a brief look at the sorts of ideas which men have, before turning more directly toward the question of substance.

Locke distinguishes or classifies the ideas which we come to have by sensation or reflection into two types, simple and complex. A simple idea is one which is uncompounded and "contains in it nothing but one uniform appearance, or conception in the mind, and is not distinguishable into different ideas".⁴⁶ And as O'Connor points out, Locke also refers to simple ideas as those in which "the understanding is merely passive; and whether or no it will have these beginnings, and as it were materials of knowledge, is not in its own power".⁴⁷ Simple ideas, then, are those which (1) are unanalysable, i.e. cannot be 'broken down' into constitutive elements or parts, and (2) are passively received, and not constructed by the mind. Complex ideas, Locke maintains, are both analysable and constructed, as we shall see.

Simple ideas of sensation are those such as colors, tastes, smells, sounds, heat, cold, solidity, and all those others which come to us uncompounded. Simple ideas of reflection are ideas which the mind has of its own operations or activities about other ideas. We have two ideas of this type, viz., "Perception, or Thinking; and Volition, or Willing".⁴⁸

Locke's account of complex ideas is confusing, for he classifies them in two distinct ways. The first classification was given in the first edition of the Essay, while the second was included in the fourth edition in addition to the original one. "The original classification set out in the first edition of the Essay is made in terms of the var-

ious types of object for which the idea stands."⁴⁹ This sort of idea is 'compounded' out of simple ideas and is divided by Locke into three types: modes, substances, and relations. By modes Locke means "such complex ideas, which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependences on, or affections of substances; -- such as are the ideas signified by the words triangle, gratitude, murder, & c."⁵⁰ The ideas of substances do carry with them the supposition of independent existence or self-subsistence, being "such combinations of simple ideas as are taken to represent distinct particular things subsisting by themselves",⁵¹ a point which we will have occasion to consider more fully later. Finally, the complex idea(s) of relation(s) "consists in the consideration and comparing of one idea with another".⁵²

In the fourth edition of the Essay, however, Locke adopts a classification of 'non-simple' ideas which is based on "the acts of the mind, wherein it exerts its power over its simple ideas",⁵³ and here he separates ideas of relations from complex ideas, and adds a third class of 'non-simple' ideas as well. The three acts of the mind and the ideas which result from them are:

(1) Combining several simple ideas into one compound one; and thus all complex ideas are made. (2) The second is bringing two ideas, whether simple or complex, together, and setting them one by another, so as to take a view of them at once, without uniting them into one; by which way it gets all its ideas of relations. (3) The

third is separating them from all other ideas that accompany them in their real existence; this third is called abstraction; and thus all its general ideas are made.⁵⁴

Locke's two classifications with regard to complex ideas can best be seen as Aaron presents them in a tabulated form:

| <u>First Edition</u> | <u>Fourth Edition</u> |
|----------------------|-------------------------|
| I. Simple Ideas. | I. Simple Ideas. |
| II. Complex Ideas: | II. Complex Ideas. |
| (a) modes, | III. Ideas of Relation. |
| (b) substances, | IV. General Ideas. |
| (c) relations. | |

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We might note that it is the classification given in the first edition upon which the remainder of the Essay is primarily, i.e. for the most part, developed.

Part of the difficulty which led to this double classification can be found in Locke's treatment of simple ideas. Simple ideas, we will remember, were (1) uncompounded, or not distinguishable into different ideas, and (2) passively received; any ideas which did not meet these criteria were to be called complex. Locke's first definition of a simple idea, or his first criterion for asserting that an idea is a simple one, is, it will be noticed, essentially a negative one, i.e. in effect, Locke says that a simple idea is one which is not complex. And by this definition, complex ideas are going to have to be compounded. What Locke should have said is that any idea which is compounded is non-simple.

The second criterion is much more promising for making the distinction between simple and complex ideas. For if

simple ideas are those which we receive passively, the only basis which Locke needs for terming an idea complex is that it is not passively received, but constructed by the mind. Had Locke called complex ideas those which the mind made, without introducing the notion of compounding as the basis for distinguishing them from simple ones, he would not have needed the dual classification, for then relations and general ideas would have fallen under the heading of complex ideas, and we could represent them in this fashion:

| | | | |
|--------------------|----|---------------|---|
| | I. | Simple ideas. | |
| Made by Mind | { | II. | Complex ideas: |
| | | (a) | modes: } from combining: 'non-simple,' i.e. compounded |
| | | (b) | substances: } |
| | | (c) | relations: } from comparing: } not compounded |
| | | (d) | general ideas: } from abstracting: } but still complex |

According to Aaron, Locke introduced the second classification, i.e., the one in the fourth edition of the Essay, because he came to see that "ideas of relation and general ideas are not composite"⁵⁶ in the sense of being compounded from simple ideas, as are other 'complex' ideas. For ideas of relations result from "an overt act of comparison,"⁵⁷ not composition, while general ideas are a result of of separation or abstraction rather than composition. But if Locke had adopted the definition of complex ideas which I maintain that he should have, the single classification

which I suggest would be sufficient.

The above, then, is a brief, and for the most part non-critical presentation of what I have elsewhere termed Locke's basic epistemology. It is a selective condensation of the fundamental aspects of his historical, plain, "account of the ways whereby our understandings come to attain those notions [I take 'notions' here to mean 'ideas'] of things we have."⁵⁸ Certainly much of the material covered herein is open to criticism, for if we can believe many of Locke's critics, it is riddled with ambiguities, inconsistencies, and perhaps even outright contradictions. However, my purpose in presenting this material, viz., as a necessary propaedeutic to the examination of Locke's treatment of substance, precluded any attempt at completeness or at a critical analysis of the material; admittedly this failure is a shortcoming, but it is, unfortunately, an unavoidable one.

III

PRIMARY AND SECONDARY QUALITIES

Perhaps the most confusing, misunderstood, and misinterpreted portion of the Essay is that wherein Locke discusses 'primary' and 'secondary' qualities and draws his distinction between the two. Gregory Walcott, in a paper published in the "Philosophical Review", cites passages from several texts, primarily introductions to philosophy, in which Locke is credited with maintaining that primary qualities are objective properties of bodies, while secondary qualities are subjective, or 'in the mind'. And those only vaguely acquainted with Locke usually believe that such is indeed what Locke maintained. Such a position is not, of course, the one which Locke in fact held; the misunderstanding stems primarily from two sources: (a) Locke's own carelessness with language, which he acknowledges; and (b) Berkeley's misinterpretation of Locke.

Locke's distinction between primary and secondary qualities arises from another very important distinction which he makes, viz., the distinction between ideas and qualities. He tells us that in order "to discover the nature of our ideas the better, and to discourse of them intelligibly, it will be convenient to distinguish them as they are ideas or perceptions in our minds; and as they are modifications

of matter in the bodies that cause such perceptions in us."¹

By the former Locke means ideas per se, i.e. just ideas as he has previously defined them; by the latter he means qualities. It is important to note here that ideas are in the mind, and qualities are in objects. This distinction between ideas and qualities is important so that

we may not think (as perhaps usually is done) that they [i.e. ideas] are exactly the images and resemblances of something inherent in the subject [i.e. object]; most of those of sensation being in the mind no more the likeness of something existing without us, than the names that stand for them are the likeness of our ideas, which yet upon hearing they are apt to excite in us.²

This passage is important to Locke's treatment of secondary qualities, our ideas of which, as we shall see, neither resemble nor are likenesses of anything in the subject. It is quite possible that it is also partially responsible for the numerous misinterpretations of Locke's position on secondary qualities. As we shall later observe, Locke holds that our ideas of primary qualities do resemble something in the subject, or 'something existing without us', which they represent, and since ideas of secondary qualities do not do so, one could, perhaps, assume that they do not represent anything outside us and are, therefore, subjective. Such an assumption, however, overlooks the fact that representation need not be resemblance, as Locke's comment about names, or words, clearly indicates. Such an assumption also confuses what Locke means by secondary qualities with our ideas of them. We must always keep in mind that for Locke,

qualities were in objects, ideas were in the mind.

We will return to this confusion of secondary qualities with ideas of them later, but first, let us see just what Locke means by 'idea' and by 'quality'.

Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call idea; and the power to produce any idea in our mind, I call quality of the subject wherein that power is. Thus a snowball having the power to produce in us the ideas of white, cold, and round, -- the power to produce those ideas in us, as they are in the snowball, I call qualities; and as they are sensations or perceptions in our understandings, I call them ideas; which ideas, if I speak of sometimes as in the things themselves, I would be understood to mean those qualities in the objects which produce them in us.³

There are several things which should be noted in this passage. First, as we have already emphasized, ideas are in the mind; qualities are in objects. Qualities are powers to produce ideas in us, and as such are different from (i.e. not the same as) the ideas; that is to say, we might say that qualities are the cause, ideas are the effect, and as such are different, i.e. not identical. Qualities are powers; ideas are "sensations or perceptions in our understandings," or 'mental contents' resulting from these powers. We also see Locke admitting that he sometimes speaks of ideas as if they were qualities, but when he does so, what he actually means is the qualities which produce the ideas in us. Further, we need to point out that the converse of Locke's statement is also true, i.e. if he should say, or should speak in such a way as to suggest that qualities are

'in the mind', what he means is the ideas which qualities produce.

Locke's statement as to what he means by ideas and what by qualities is quite clear, although he admits that he sometimes uses 'ideas' when he should use 'qualities', and we have pointed out that he may use 'qualities' when he means 'ideas'. Locke's critics, particularly Berkeley, and his numerous 'mis-interpreters', including Berkeley, fail to understand, or merely overlook these points. Locke's treatment of primary and secondary qualities certainly raises problems, but it is only fair that the criticisms brought against Locke be criticisms based on his position, not a misinterpretation of it. Accordingly, I shall attempt to present Locke's position in the Essay, dealing with the primary misconception regarding it, one which Berkeley is largely responsible for, viz., that 'secondary qualities' are subjective. I shall then raise some problems in connection with Locke's position, particularly as it bears upon his doctrine of substance.

In considering qualities, Locke first cites those

such as are utterly inseparable from the body, in what state soever it be; and such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as sense constantly finds in every particle of matter which has bulk enough to be perceived; and the mind finds inseparable from every particle of matter, though less than to make itself singly be perceived by our senses.⁴

Locke demonstrates what he takes these qualities which are "utterly inseparable" from body to be, by using a grain of wheat as an example. If we divide the grain into two parts, or into numerous parts until the parts are no longer sensible, each part still possesses certain qualities, viz., "solidity, extension, figure, and mobility",⁵ for these qualities cannot be removed from any body by a process of division, as division only separates the body into more bodies, even if they are insensible. Thus of these qualities Locke says, "These I call original or primary qualities of body, which I think we may observe to produce simple ideas in us, viz., solidity, extension, figure, motion or rest, and number."⁶

Locke also asserts "that the ideas of primary qualities of bodies are resemblances of them, and their patterns do really exist in the bodies themselves."⁷ That is to say, our ideas of primary qualities are 'copies', in a sense, of the qualities themselves; we perceive a body as shaped, moving, or stationary, because it really is so. Although I would not want to assert that Locke thought of ideas as pictures, we might say that ideas of primary qualities are 'mirror-images' of them. Indeed, Locke suggests this when he says "a circle or square are the same, whether in idea or existence, in the mind or in the manna."⁸ Now this statement is not quite accurate, for a circle or square in existence, or in manna, is a quality, in the mind it is an idea,

but Locke's meaning and intent are evident: our ideas of primary qualities resemble, or are likenesses of, qualities that are in the body. The sentence quoted, however, does give us an example of Locke's looseness with language.

Locke also tells us that primary qualities really exist in bodies. "The particular bulk, number, figure, and motion of the parts of fire or snow are really in them, -- whether any one's senses perceive them or no: and therefore they may be called real qualities, because they really exist in those bodies."⁹ We will have cause to mention this passage again, when we deal with the confusion of secondary qualities with the ideas of them.

We now know what the primary qualities are, that they are "utterly inseparable" from body, that they really exist in bodies, and that our ideas of them are resemblances or likenesses of them. Before commenting further on Locke's account of primary qualities, let us see what he says regarding secondary ones.

Bodies also possess "such qualities which in truth are nothing in the objects themselves but powers to produce various sensations in us by their primary qualities, i.e. by the bulk, figure, texture, and motion of their insensible parts, as colours, sounds, tastes, &c."¹⁰ The first thing to notice here is the different way in which Locke refers to primary qualities. I think, however, that we can see his meaning.

Qualities, it is to be remembered, are powers of or in objects to produce ideas in us. The ideas which we have of primary qualities, viz., solidity, extension, figure, mobility, and number derive from the powers of a body which is perceptible, but these powers derive from 'insensible parts'; more precisely, they derive from the "bulk, figure, texture, and motion" of such parts. Now our ideas of primary qualities are supposed to resemble the qualities in some sense. We have already said that a body has the power to produce ideas of solidity and the other primary qualities by virtue of its being solid and so forth. We are going one step farther, to see how the perceptible body comes to be so; it does this through its insensible parts. The insensible parts demonstrate, i.e. possess the same characteristics, or qualities as do the sensible parts.

Locke's wording is somewhat different when he speaks of the qualities of the insensible parts than when he speaks of those of the sensible ones, but he means, I think, the same thing. The sensible parts, he says, have solidity, extension, figure, and mobility, while the insensible ones have bulk, figure, texture, and motion; I think that we can equate extension and bulk, figure and figure, of course, mobility and motion, leaving texture and solidity; it might be taking too much liberty with language to equate these two, but either they must be equated, or bulk must be taken to correspond to both solidity and extension.

By thus grouping these terms together as equals, or as meaning the same thing, we can see the sensible object as a macroscopic manifestation of the insensible parts, both of which have the same 'primary qualities'. That is to say, that sensible (perceptible) bodies demonstrate primary qualities, as well as secondary ones, by virtue of the primary qualities of insensible parts. Locke is speaking of primary qualities on two levels, ultimate primary qualities, and sensible primary qualities, i.e. qualities to produce ideas of sensation in us. Our ideas of primary qualities are the result of a macroscopic manifestation, in sensible bodies, of the primary qualities of insensible parts. The notion of 'insensible parts' is very important in Locke's account of 'real essence', as we shall see in the next chapter.

To primary and secondary qualities, Locke says,

might be added a third sort, which are allowed to be barely powers; though they are as much real qualities in the subject as those which I, to comply with the common way of speaking, call qualities, but for distinction, secondary qualities. For the power in fire to produce a new colour, or consistence, in wax or clay, -- by its primary qualities, is as much a quality in fire, as the power it has to produce in me a new idea or sensation of warmth or burning, which I felt not before, -- by the same primary qualities, viz. the bulk, texture, and motion of its insensible parts.¹¹

Powers, taken as distinct from primary and secondary qualities, inasmuch as they are important in Locke's treatment of substance, will be discussed in the next chapter in that connection.

A very good, but rather lengthy, statement as to the way in which Locke saw these three types of qualities is found in Walcott's discussion in the "Philosophical Review."

Walcott writes:

What Locke meant by these three sets of qualities can be illustrated, somewhat suggestively, as follows: A molecule of water, provided we could perceive it, would arouse such sensations in us as water usually does. The power of that molecule to affect us in its characteristic way would be like secondary qualities. When Locke used this expression, he did not mean that there was no object affecting the senses, but that what ever any one experienced was due to the complex interplay of the primary qualities with one another. If, now, the two atoms of hydrogen and the one of oxygen could also affect us directly, each in its characteristic way, that would be more nearly like what Locke meant by primary qualities, although not strictly the same. If, further, that molecule should be placed upon a piece of iron and so produce rust, which should then affect us as rust usually does, that would illustrate fairly well what Locke meant by the third set of qualities or powers. In other words, the way that an object affects us, so that we perceive solidity, extension, figure, etc., is due to the primary qualities: any cooperation of those primary qualities, affecting us directly, would be what he meant by secondary qualities; and any way the primary qualities should affect another body, which in turn should affect us differently from what that object by itself would, would represent the third set of qualities or powers. Qualities for Locke, were in the things; ideas, in the mind.¹²

It will be noted that implicit in this statement is the distinction which I was making above, viz., that between primary qualities at the sensible level and those at the insensible level. We can see this distinction in the Essay as well, for Locke, near the end of his account of qualities says,

I hope I shall be pardoned this little excursion into natural philosophy; it being necessary in our present inquiry to distinguish the primary and real qualities of bodies, which are always in them (viz. solidity, extension, figure, number and motion, or rest, and are sometimes perceived by us [i.e. they sometimes produce ideas of them in us], viz. when the bodies they are in are big enough singly to be discerned), from those secondary and imputed qualities, which are but the powers of several combinations of those primary ones, when they operate without being distinctly discerned; -- whereby we may also come to know what ideas are, and what are not, resemblances of something really existing in the bodies we denominate from them.¹³

Now let us return to the subject of secondary qualities and Locke's statements regarding the non-resemblance of our ideas of them to the qualities. Remember that Locke sought to distinguish ideas and qualities so that we should not think that our ideas of qualities were exact images or resemblances of the qualities, because most ideas of sensation are no more like the qualities which produce them than names are like the ideas for which they stand. The ideas of primary qualities, we found Locke to maintain, are resemblances of these qualities of bodies. We also found that secondary qualities are "nothing in the objects themselves but powers to produce various sensations [ideas] in us"¹⁴ by virtue of their primary qualities. Thus it is not surprising to find Locke saying that

the ideas produced in us by these secondary qualities have no resemblance of them at all. There is nothing like our ideas existing in the bodies themselves. They are, in the bodies we denominate from them, only a power to produce those sensations in us; and what is sweet, blue, or warm in idea, is but the certain bulk, figure, and motion of the insensible parts, in the bodies themselves, which we call so.¹⁵

All qualities, we saw, are powers to produce ideas, but ideas of primary qualities have a pattern or prototype in bodies: ideas of secondary qualities do not.

Locke offers several examples to prove his point. The same fire which gives us the sensation of warmth at a distance, produces the sensation of pain at close range; what reason might we have, he asks, to say that the former is actually in the fire, and the latter not, when it produces both ideas in us? A piece of steel cutting our flesh produces the sensation of pain, but no one would want to say that pain is in the steel. Manna has the power to produce sensations of sickness and pain in us, but everyone agrees that sickness and pain are not in the manna, but results of its operations on us. Locke's example of porphyry to show that colors are not really in objects is well known. Prevent light from striking the porphyry, and its red and white colors vanish; "it no longer produces any such ideas in us,"¹⁶ but let light strike it again, and it once again produces ideas of red and white in us. Locke asks:

Can any one think any real alterations are made in the porphyry by the presence or absence of light; and that those ideas of whiteness and redness are really in porphyry in the light, when it is plain it has no colour in the dark? It has, indeed, such a configuration of particles, both night and day, as are apt, by the rays of light rebounding from some parts of that hard stone, to produce in us the idea of redness, and from others the idea of whiteness; but whiteness or redness are not in it at any time, but such a texture that hath the power to produce such a sensation in us.¹⁷

Locke applies this line of argument to all the ideas of secondary qualities. "Take away the sensation of them; let not the eyes see light or colours, nor the ears hear sounds; let the palate not taste, nor the nose smell; and all colours, tastes, odours, and sounds, as they are such particular ideas vanish and cease, and are reduced to their causes, i.e. bulk, figure, and motion of parts."¹⁸

Statements such as this one, together with Locke's contention that the ideas of secondary qualities are produced in us "by the operation of insensible particles on our senses"¹⁹ caused Whitehead to remark facetiously,

Thus the bodies are perceived as with qualities which in reality do not belong to them, qualities which in fact are purely the offspring of the mind. Thus nature gets credit which should in truth be reserved for our selves, the rose for its scent: the nightingale for his song: and the sun for his radiance. The poets are entirely mistaken. They should address their lyrics to themselves, and should turn them into odes of self-congratulation on the excellency of the human mind. Nature is a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly.²⁰

Secondary qualities, for Locke, are in bodies only as powers to produce certain ideas in us, and the ideas which we have of them in no way resemble them.

Locke's language in dealing with primary and secondary qualities certainly might invite confusion and misinterpretation. He speaks of secondary qualities as being "imputed qualities",²¹ and he also calls them "sensible qualities."²² He also says that colors, smells, tastes,

sounds, and other sensible qualities are nothing but powers in objects to produce ideas in us.²³ But colors, smells, etc. are ideas, not powers or qualities; the qualities are just the powers to cause such ideas in us. As Locke says in one place, "what is sweet, blue, or warm in idea, is but the certain bulk, figure, and motion of the insensible parts"²⁴ by which a body has the power to produce such ideas in us; and he says in another place that "all colours, tastes, odours, and sounds, . . . are . . . ideas."²⁵ Locke says of what he has designated as the primary qualities that they may also "be called real qualities, because they really exist in . . . bodies",²⁶ and that our ideas of these qualities are resemblances of them, but that "there is nothing like our ideas [of secondary qualities] existing in the bodies themselves."²⁷ And, as we have pointed out, he acknowledges that he sometimes uses 'ideas' when 'qualities' is what he means, and that, though he does not acknowledge it, he sometimes does the converse, as indicated above regarding colors, smells, etc.

Walcott maintains that Berkeley is largely responsible for the long-time misunderstanding and the relatively common misinterpretation that Locke held secondary qualities to be subjective. He cites a passage from Berkeley's Principles of Human Knowledge wherein Berkeley "very evidently . . . misinterpreted Locke."²⁸

'Some there are who make a distinction between primary and secondary qualities. By the former they mean extension, figure, motion, rest, solidity, impenetrability, and number; by the latter they denote all other sensible qualities, as colours, sounds, tastes, and so forth. The ideas of these last they acknowledge not to be the resemblances of anything existing without the mind, or unperceived, but they will have our ideas of the primary qualities to be patterns or images of things which exist without the mind, in an unthinking substance they call Matter.' . . . But 'in short, extension, figure, and motion, abstracted from all other qualities, are inconceivable. Where therefore the other sensible qualities are, there these must be also, to wit, in the mind and nowhere else.'²⁹

Of Berkeley's remarks Walcott comments that

. . . here, very evidently, Berkeley misinterpreted Locke, whom he had 'more immediately in his view,' according to Fraser. He was true to Locke, as we have seen, in asserting that 'the ideas we have of these last are not resemblances of anything existing without the mind,' but untrue in asserting that 'the other sensible qualities,' that is, the secondary, are 'in the mind,' so far as Locke was concerned. With Locke, ideas were in the mind; qualities in the things; with Berkeley, qualities were in the mind; ideas -- that is, some of them -- were in the world objective to himself. Berkeley was privileged to deal with the situation as he pleased, but in so far as he implied that Locke had assumed any qualities in the mind, he was mistaken and misleading.³⁰

Jackson states that a number of writers are guilty of a similar misinterpretation of Locke, viz., identifying secondary qualities with the ideas of them. But he himself is guilty of a misinterpretation when he says that "Locke . . . frequently identifies secondary qualities with the sensations they produce. [And] Thus he draws a distinction between secondary qualities immediately and mediately perceivable."³¹ Locke does, indeed, draw a distinction between

secondary qualities immediately and mediately perceivable, but certainly not for the reason Jackson claims he does.

Let us look at the context wherein Locke makes his distinction.

Beside those before mentioned primary qualities in bodies, . . . all the rest, whereby we take notice of bodies, and distinguish them one from another, are nothing else but several powers in them, depending on those primary qualities; whereby they are fitted, either by immediately operating on our bodies to produce several different ideas in us; or else, by operating on other bodies, so to change their primary qualities as to render them capable of producing ideas in us different from what before they did. The former of these, I think, may be called secondary qualities immediately perceivable: the latter, secondary qualities mediately perceivable.³²

In this passage Locke clearly distinguishes between secondary qualities and the ideas, or sensations, they produce in us. The distinction he makes between secondary qualities immediately and mediately perceivable is one between what he has called secondary qualities per se and powers per se, i.e. that group of qualities he previously referred to as "a third sort, which are allowed to be barely powers;"³³ both of which he refers to here as secondary qualities. By secondary qualities immediately perceivable he means those secondary qualities (which are powers), which affect us directly, i.e., the secondary qualities of an object which act on us to produce ideas of them. By secondary qualities mediately perceivable he means those powers which act on other bodies, altering them, which bodies in turn act on us.

Jackson's claim as to Locke's reason for drawing this distinction overlooks not only the context in which the distinction is made, but also the vital point which we have been stressing throughout, viz., that qualities are powers in bodies to produce ideas in us; ideas are 'mental contents'; qualities are in objects; ideas are in the mind. To confuse secondary qualities with the ideas of them or with the sensations they produce is to ignore Locke's distinction between qualities and ideas.

Let us now consider briefly some of the objections to or criticisms of Locke's treatment of primary qualities. O'Connor objects that "Locke does not make it clear if the word 'quality' is here to be taken in the sense of determinable quality, like coloured, shaped, etc., or in the sense of determinate quality, like crimson, triangular, etc."³⁴ Locke, he says, gives us reason to assume that he uses the term in both senses. When Locke says that primary qualities are "such as are utterly inseparable from the body, in what state soever it be"³⁵ he is apparently using primary quality as meaning determinable. But when he says that "the ideas we have of primary qualities really resemble them"³⁶ he seems to be referring to determinate qualities, for "it would be both trivial and misleading to assert that our ideas of primary qualities resemble the qualities and that 'their patterns do really exist in the bodies themselves,' if he, meant, for

example, merely that what we sense as circular has some sort of shape."37

O'Connor's objection is well put, for the passages he cites, at first glance, indicate that Locke is using 'primary quality' in both senses. However, I think that we may assume that Locke intended to use 'primary quality' in the sense of determinable, not determinate, for Locke's first remark about primary qualities is that they are 'utterly inseparable' from body regardless of its state. Locke means that all bodies have these primary qualities, that is, all bodies are 'qualified' by solidity, extension, etc. O'Connor's example of circularity is somewhat deceptive. Obviously, if Locke maintains that our ideas of primary qualities resemble the quality, it would appear trivial to say that "what we sense as circular has some sort of shape," but this is only true of specific shapes, for what we sense as circular does not retain that quality in "what state soever it be," circularity could not strictly be held to be a primary quality, but shape could be. In other words, O'Connor would have to maintain that circularity, squareness, triangularity, etc., were themselves primary qualities, which on Locke's definition thereof, they are not, in a strict sense. That is, circularity, squareness, and so forth are particular instances of primary quality shape per se; i.e., any body must necessarily be shaped, but any body's particular shape

is a qualification, or modification of shape in general. Of course, every body does have a determinate shape, but that determinate shape can change; despite whatever change might be made in the shape of a body, the fact that it has some shape does not change. Strictly speaking, shape, not circularity, is a primary quality; circularity is a primary quality by virtue of being a type of shape, not through itself. Our idea of circularity resembles that shape, but if we do something to the body which is affecting us 'circularly' to change its shape, circularity vanishes from that body, but shape does not. The body will still affect us as shaped, but not as circular. Our ideas of particular shapes resemble those shapes, but particular shapes are separable from bodies, shape itself is not. The primary quality per se is shape in general, not particular shapes; And it is because shape in general is 'utterly inseparable' from bodies that shape is a primary quality. We might say that particular shapes are modes, or affectations, or instances of the primary quality shape in general, but are nonetheless called primary qualities because any shape is particular.

Perhaps I can clarify what I mean by introducing a point which Aaron makes in connection with Locke's grain of wheat example. Referring to primary qualities, Aaron sees Locke as saying "not only do we experience them in the ideas we have of those physical objects big enough to be seen and

felt, but also 'the mind finds [them] inseparable from every particle of matter though less than to make itself singly perceived by our senses.'"³⁸ If we divide the grain of wheat into parts until the parts become insensible, "'they must retain still each of them all those qualities' [i.e., the primary qualities.] They must retain the primary qualities."³⁹ Now the question is, where does Locke get the information that objects must retain these qualities?: for this information does not come through the senses. "Is this [contention] of Locke's inconsistent with Locke's empiricism?"⁴⁰ Perhaps, says Aaron, but it is possible that

the theory Locke has in mind might be of this kind: We begin with sensory experience, without which there could be no beginning. Now everything which I have experienced by means of the senses of sight and touch, the table, the chair, and all other objects, have been extended -- to take this quality only. The idea of extension is always part of my complex idea of things. Having observed and reflected on this, there flashes upon my mind an intuition for which experience has prepared me, the intuition that all external objects, which cause me to have the ideas I do have, are themselves extended. [Intuition, it should be pointed out, is an essential part of Locke's account of knowledge in Book IV.] The intellect now perceives that extension is an essential property of corporeal objects, so that we can say that any corporeal object, even though it be so small as to be invisible, is extended.⁴¹

Now if we apply this same line of argument to shape, we can say that shape is an essential property of objects: but circularity, squareness, etc. are not essential. We can remove circularity, squareness, from bodies, but we cannot remove shape in general, insofar that any body, to be

a body, must have shape; but we cannot say that any body, to be a body, must have circularity. O'Connor's objection possibly holds only in relation to particular bodies, but Locke's account of primary qualities is intended as an account of the primary qualities of all bodies, or bodies in general, not particular bodies.

It is possible that in contending that Locke makes primary qualities out to be determinate O'Connor is putting too much emphasis on Locke's statement that the ideas we have of primary qualities resemble them. For it may be that Locke's statements regarding resemblance are intended more to help differentiate between primary and secondary qualities than to make any definite statement about primary qualities, i.e. it is nothing more than a general statement about primary qualities to help clarify the distinction between them and secondary ones. That is to say, that bodies which affect us as shaped, extended, etc. are so, but they are not colored, warm, cold, etc., even though they affect us that way. In other words, the bodies have the primary qualities which we sense them to have, viz. solidity, extension, etc. but only at the general level. But even though the bodies have the secondary qualities which affect us, the qualities are entirely different from the way in which they affect us, i.e. from the ideas they produce in us.

My point is that when Locke says that our ideas of primary qualities resemble the qualities, he means at the determinable level, not at the determinate level, and that he says this only to clarify his position on secondary qualities. Aaron, though he says "I am afraid it is not possible to give a definite answer" to the question "are Locke's primary qualities determinates or determinables?",⁴² seems to be leaning toward the position I am suggesting when he says

The attempts to defend the view that the primary qualities resemble the ideas we have of them are hardly serious. In II. viii. 18 he remarks: 'A circle or square are the same, whether in idea or existence, in the mind or in the manna.' But this hardly helps us when we want to know whether the object which I now see to be circular is actually circular and this is the point that needs defending. Again, in II. viii. 21, Locke remarks, after explaining how the same water may appear warm to one hand and cold to another: 'which yet figure never does, that never producing the idea of a square by one hand which has produced the idea of a globe by another.' But surely this is hardly a sufficient defence. The apparent shape of an object varies with the conditions of perception, just as the apparent temperature of the water does.⁴³

But the fact that the body has some shape cannot vary, for any body, to be a body, must have shape.

Such then is Locke's position; the question we must ask is: is this position tenable? It seems that it is not. Although Berkeley misinterpreted Locke's conception of secondary qualities, he (and later, Hume) makes two damaging criticisms of Locke's position.

First, O'Connor states, Berkeley points out that

the argument that ideas of secondary qualities cannot be genuine properties of the objects they seem to qualify because they change with the position of the observer and with his physical and mental state applies equally to ideas of primary qualities. Size, shape, and motion, as we perceive them, are all relative to the conditions under which they are perceived, no less than colour, taste, temperature and the other ideas of secondary qualities.⁴⁴

Remember Locke's example of porphyry; take away light from it, and its color vanishes. But at the same time its shape and extension, which produce the ideas of shape and extension in us through operating our eyes, vanishes. But what of touch?; the body could still produce such ideas in us through our sense of touch, it might be said. Block our sense of touch though, and we could not feel the shape or extension, just as we could not see it without light. In short, Locke's own argument that secondary qualities are not 'real' is being turned against him.

Take away the sensation of them; let not the eyes see light or colours [or shape, extension, etc.] nor the ears hear sounds; let the palate not taste, nor the nose smell [nor the hands touch]; and all colours, tastes, odours, and sound [and shape, extension, figure, motion or rest, and solidity], . . . vanish and cease . . .⁴⁵

Thus the primary qualities are not in the bodies "whether any one's senses perceive them or no"⁴⁶ any more than the secondary ones are. Stand at a distance from the fire and it produces warmth, and looks small; stand close and it produces pain and looks large. From a great distance a speeding

train appears to move very slowly or not at all; draw close and it moves quickly. From afar a mountain looks small; at close range it looks massive. Alter the condition for perception, and the ideas produced by the primary qualities, like those produced by the secondary ones, change, for all are "relative to the conditions under which they are perceived."⁴⁷

What then is the basis for Locke's asserting that primary qualities are real? There seems to be none which is sound.

It is true . . . that things can be said [emphasis added] to have the primary qualities of shape and bulk, i.e., their dimensional extension, [and of all the rest]. But the reason for this is not a contingent fact, viz. that the primary qualities of bulk and figure [and all the rest] always do, in practice, qualify material objects. [So that "there flashes upon my mind an intuition for which experience has prepared me, the intuition that all external objects"⁴⁸ do have all these qualities]. Rather it is the case that material objects are defined in terms of these properties so that Locke's assertion that material things always have the primary qualities of bulk and figure [and the others] is no more than an analytic triviality, exemplifying the ways in which these English terms are used.⁴⁹

In other words, Locke's 'primary qualities' are what is meant by body or object and nothing more, i.e. 'primary qualities' equal the definition, or defining properties of bodies. "And in this case, of course, it is not surprising that they are 'inseparable from bodies 'in what state soever they be.'"⁵⁰

Berkeley's second objection to Locke's theory of primary and secondary qualities is stated by O'Connor in this manner:

We have no more reason for supposing that the primary qualities of shape and extension can qualify bodies which are not present to our senses than we have for supposing that such bodies can be literally coloured, noisy, or fragrant. For we can no more talk of things being merely extended without having some extensible quality such as redness, smoothness, etc., than we can talk of a non-extended colour or tactual property.⁵¹

The criticism being advanced here is based on the notion that what we are presented with or confronted by in experience are objects which affect us as colored shapes, i.e. produce such ideas in us. Such objects may also produce in us ideas of smell, hardness, roughness, warmth, etc. In order to have ideas of the so-called 'primary qualities', it is necessary to have ideas of secondary qualities as well, e.g. we could not have an idea of something as circular or square, or even as shaped, to be more precise, unless we also had an idea of that thing as colored, or, to counter the argument that a blind man, or a person holding his eyes shut, or someone blindfolded could do so, unless we also had an idea of smoothness, hardness, warmth, or, perhaps, some combination of these. Thus, ideas of 'primary qualities' must necessarily be accompanied in experience by ideas of secondary qualities; in order for ideas of primary qualities to be perceived, ideas of secondary qualities must be perceived in conjunction. That is, in order to have ideas of primary qualities as ideas of sensation, one must at the same time have ideas of secondary qualities as ideas of sensation.

The question of whether ideas of primary qualities can be imagined without ideas of secondary ones depends, of course, on how one explicates imagining. If one wishes to understand the term and the process or activity of 'imagining' as "image-ing", the answer to the question would seem to be "no". But there are, of course, other ways one might understand the term.

It may be meaningful to talk about ideas of primary qualities apart from those of secondary ones, it may even be meaningful to talk of primary qualities apart from secondary qualities. But even so, the assertion that primary qualities are somehow real, i.e. really in bodies in a way correspondent to our ideas of them, and that secondary ones are not is open to question. Since we are not acquainted with the qualities themselves, but merely with the ideas which they produce, what is the basis for saying that some of these qualities -- the primary ones -- are real, but that the others are not? All ideas are equally real as ideas, but inasmuch as we are not in a position to know or perceive the causes of ideas, it would seem that we could not distinguish between them with respect to 'real-ness'.

Hume reformulates this type of criticism somewhat and argues that 'primary qualities', that is, ideas of them, can only be understood in reference to 'secondary' ones. If we deny colors, tastes, smells, sounds, etc. real existence in

bodies, as Locke does at II. 8. 7., for example, then, says Hume, "nothing we can conceive is possest of a real, continu'd, and independent existence; not even motion, extension and solidity, which are the primary qualities chiefly insisted on."⁵²

Hume quickly dismisses motion, for it is a quality inconceiveable alone, without or apart from some object, and thus "must resolve itself into the idea of extension or of solidity; and consequently the reality of motion depends upon that of these other qualities."⁵³ Almost as quickly, he does away with the independent and continued existence of extension; we conceive it, he argues, only as parts either colored or possessing solidity. Since color has previously been denied a real existence, extension must rely upon solidity. "The idea of solidity is that of two objects, which being impelled by the utmost force, cannot penetrate each other; but still maintain a separate and distinct existence."⁵⁴ Hume points out that we need bodies to make this notion meaningful; sensible or secondary qualities have been done away with so far as real existence is concerned; motion depends upon extension, and extension upon solidity; thus there is nothing left for solidity to be based upon, so no suitable notion of solidity, or of any of the so-called primary qualities is possible. Thus the distinction between primary

and secondary qualities on the grounds of real existence breaks down.

As O'Connor points out, Berkeley's "objections [and, we might add, Hume's, as well] are fatal to the theory of primary and secondary qualities."⁵⁵ Locke's distinction, even the basis for his distinction, is untenable. His own arguments, or part of them at least, have been turned back against him to show that his assumptions about 'primary qualities', as well as those about 'secondary' ones, could not be justified. "For we only have to ask: if all we can ever experience directly are ideas and if we can never look behind the curtain of ideas to observe the physical objects which cause our ideas, how can we ever know anything about the 'qualities' of such objects . . .?"⁵⁶

Locke's treatment of primary and secondary qualities provides us with some helpful clues as to what his conception of substance is going to be. He speaks of qualities of bodies, which indicates that he is going to see substance as something which has qualities, i.e. as something besides all the qualities which it demonstrates. His account of qualities presupposes his view of substance. The qualities which he denominates of bodies give us some indication as to what his idea of substance, or more precisely, of substances,

is going, in part, to be, but as we have said, since qualities are qualities of, we also see that substance is going to be something other than qualities, something by virtue of which the qualities exist. His assertion that perceivable qualities, i.e. qualities which affect us, derive from 'insensible parts', is closely linked to his notion of 'real essence', as we shall see. It is also linked to 'nominal essence', for since we are ignorant of these 'insensible parts' and of their 'operations', by virtue of which bodies are what they are and affect us in the way that they do, we are going to have to denominate bodies by the effects, not by the cause(s).

We now know, then, that qualities are qualities of, and therefore dependent upon, something. That something is substance. Accordingly, Locke's conception of substance will be the subject of the next chapter, in which we will see the important role which qualities play in Locke's treatment of substance.

IV

THE IDEA OF SUBSTANCE

Our idea of substance arises from the influx of various simple ideas via the senses (or from reflection in the case of immaterial substance or spirit). Certain of these ideas are observed to go always together and are thus presumed to belong to one thing and for the sake of brevity or expediency are given a name which denotes these conjoined ideas. We may think of this name as signifying a simple idea, but what it actually refers to is many simple ideas together; but, says Locke, we cannot imagine how these simple ideas subsist by themselves, so we suppose a substratum in which they subsist and from which they result, and this supposed substratum we call substance.¹

Indeed, Locke tells us that besides all the simple ideas which make up our complex ideas of substances, we "have always the confused idea of something to which they belong, and in which they subsist"² and that this thing is substance, which is "supposed always something besides the . . . observable ideas, though we know not what it is."³

Having been forewarned, however, we must guard against confusing 'ideas' with the qualities which produce them, and against being misled by Locke's own interchanging of these terms or concepts. Admittedly, it is, on Locke's account,

certain combinations of simple ideas which we notice to occur and recur together, but is it to these ideas or to the qualities which produce them that the notion of substance (support) belongs? I believe that it is the latter, for Locke says in one place that ". . . if anyone will examine himself concerning his notion of pure substance in general, he will find he has no other idea of it at all, but only a supposition of he knows not what support of such qualities which are capable of producing simple ideas in us . . ."4 And he further says that "the idea . . . to which we give the general name substance, . . . [is] nothing but the supposed, but unknown, support of those qualities we find existing . . ."5 It is the ". . . collection of those several simple ideas of sensible qualities"6 which engenders the idea of substance. If one examines "his own thoughts, [he] will find, that he has no other idea of any substance, v.g. let it be gold, horse, iron . . . , but what he has barely of those sensible qualities, which he supposes to inhere; with a supposition of such a substratum as gives, as it were, a support to those qualities or simple ideas, which he has observed to exist united together."7

O'Connor, in discussing the traditional notions of substance remarks that "for Locke . . . it was the notion of substance as the substratum necessary for the existence of qualities which is the important sense of the word . . ."8 For "the 'unknown substratum' theory of substance ostensibly offers an

answer to the question: 'What is it that supports qualities and unites them into stable individual things?'"⁹

Locke reinforces this interpretation in the Third Letter to Stillingfleet wherein he says that he concludes that there is substance "'because we cannot conceive how qualities should subsist by themselves.'"¹⁰

The idea or notion of substance as an underlying substratum or support, then, is added to our ideas of qualities, because we are unable to imagine or conceive the qualities producing such ideas existing by themselves; this addition is, for Locke, a requirement of our understanding. Such a position, though, produces numerous problems, as we shall see.

The notion that the qualities which produce our ideas subsist in the substratum and cannot subsist without it, indicates or implies that the qualities, being dependent upon the substratum do not compose the substance, but are, in a sense, parasitic upon it. Locke's account of primary and secondary qualities suggests this as well. If this is the case, then the substratum is something entirely different from any ideas which we have of or from the qualities producing them. This brings the problem of inherence (subsistence) to the fore. If qualities inhere (subsist) in the substance, it must, as Locke admits, be taken to be something supporting qualities, or something which underlies them. And this involves us in difficulties of both terminology and understanding.

The point in question is the basis for establishing something which is in fact and in principle unknowable as the basis for the qualities which produce ideas in us. To put this another way, if all we really have are ideas of qualities, how do we make the assumption that the qualities inhere in and are supported by something we call substance? Why can we not imagine qualities subsisting by themselves? This question, though, is considered more fully elsewhere.

Fraser comments that

Locke's perplexity about substance partly arises from the tendency of his philosophic thought to isolate it from all its phenomena or qualities, and then try to find meaning in a term which pretends to express what is thus meaningless because isolated. 'Taking notice,' he says, 'that a certain number of simple ideas go together, and not imagining how they can subsist of themselves, we accustom ourselves to suppose some substratum wherein they do subsist, and from whence they do result.' Of this 'substratum' our only idea would be the impossible one of something without qualities.¹¹

Locke's way of talking, i.e. the use of 'subsist', 'support', 'inhere', indicates that he has just this sort of notion of substance. Indeed, he calls it something, he knows not what. It is a metaphysical entity, an unknown, but supposed existent, an underlying, but unseen foundation.

In knowing the phenomenal data, he seems to imply that we know nothing of the substantial reality, which is thus concealed instead of being revealed by its own phenomena. The substantial reality with Locke seems to be something that exists without making any revelation of what it is; not a something that is continually revealing itself in its qualities, which are its various ways of acting, in which it is concentered while they in turn are concentered in it. He complains that we have an obscure notion, or indeed cannot know at all, a substance

thus stripped of all its qualities, and existing in its empty 'reality'.¹²

Perhaps part of Locke's difficulties in connection with substance can be attributed to his philosophical heritage. Aristotle spoke of substance as that which is always a subject, never a predicate. Qualities are predicated of substance. Substance is that which is primary; qualities or predicates are secondary and dependent. The entire medieval account of substance (and modifications of Aristotle's views) played a large part in Locke's treatment of substance. The notions of subject and accident, or subject and predicate, inherence, formed the rough framework within which Locke had to try to treat of substance. O'Connor says that

. . . the traditional theory, from which Locke in spite of his criticism never dissociated himself, was a compound of three independent and not entirely compatible elements.

(a) Substance was ens per se stans or that which had a capacity for independent existence and was the genuinely real feature of the universe. All other features, qualities, relations, events, or facts had a reality merely derivative from that of substance

(b) Substance was also quod substat accidentibus, the substratum in which qualities inhere.

(c) Substance was that which could be subject but not predicate of a proposition in logical form.¹³

Locke speaks of substance in a way which reflects all three of these views. Locke's treatment of primary and secondary qualities demonstrates the view labeled (b) in the above list; qualities are of things. Locke's primary view of substance is that it is something which supports qualities. But this view also contains element (c). Qualities are pre-

icated of substance. These two views are closely linked, and are interwoven by Locke in his doctrine of substance, and are clearly evident in his account thereof.

Locke's own steeping in scholasticism was also a shaping factor in his account of substance, for when he was attending Oxford,

The characteristic conservatism of that university restricted philosophical studies at that time to a particularly arid form of medieval Aristotelianism, 'perplexed,' as Locke described it, 'with obscure terms and useless questions.' But though he thought little of the rather debased form of scholasticism which he had to study as an undergraduate, he absorbed more of it than he realized. Many of the suppressed premisses of his own thinking were derived from medieval scholasticism and he never quite succeeded in reconciling the unacknowledged influence of his scholastic training with the natural trend of his own thought.¹⁴

Similarly, Aaron says of Locke that

The first philosophy which he had learnt was the scholastic; and it was only gradually, with infinite pains that he found it possible to free himself even partially from its leading-strings. His terms and his central conceptions were derived from scholasticism. He took over bodily its logical framework, its substance and accidents, its modes, its essences, its genus and species, its universals and particulars It would be wrong, of course, to say that there was no advance -- or, at least, modification -- in Locke. But it is equally wrong to suppose that he was uninfluenced by his early training. Locke did not start wholly afresh. He built on the traditional foundation bequeathed to him by the schools.¹⁵

Locke's own epistemology, however, demanded that he accord a somewhat different treatment to the notion of substance. He admits that he has "no other idea of it [substance] at all, but only a supposition of he knows not what support

of such qualities . . ."16, an admission required by his epistemology and by his position on qualities. The limitations imposed by his epistemology can be seen as he develops his account of substance more fully. He readily admits our (his) inability to even talk about the supposed substratum.

If any one should be asked, what is the subject where-
in-colour or weight inheres, he would have nothing to say, but the solid extended parts; and if he were demanded, what is it that solidity and extension adhere in, he would not be in a much better case than the Indian . . . who, saying that the world was supported by a great elephant, was asked, what the great elephant rested on; to which his answer was -- a great tortoise: but being again pressed to know what gave support to the broad-backed tortoise, replied -- something, he knew not what.¹⁷

When we begin to talk of inherence or support, this is the type of difficulty which arises. We either enter into a regress or are brought up short and must confess our ignorance.

Locke, though, contributes to this difficulty when he speaks of color or weight (or any other qualities) inhering in, or subsisting in the 'solid extended parts' of the subject. As Hume later pointed out in the Treatise, the so-called 'primary qualities' are only knowable through, or in connection with, the 'secondary ones.' Thus to speak of the inherence of the latter in the former is unnecessary or meaningless. Nonetheless, Locke is firmly committed to and still asserts the literal substratum position with its inherence-support-dependence doctrine.

We can see all three of the traditional notions of substance as well as the qualification which Locke's epistem-

ology requires, in the following passage:

And thus here [i.e. in attempting to give the ultimate subject of inherence, or the substratum], as in all other cases where we use words without having clear and distinct ideas, we talk like children; who, being questioned what such a thing is, which they know not, readily give this satisfactory answer, that it is something: which in truth signifies no more, when so used, either by children or men, but that they know not what; and that the thing which they pretend to know, and talk of, is what they have no distinct idea of at all, and so are perfectly ignorant of it, and in the dark. The idea then we have, to which we give the general name substance, being nothing but the supposed, but unknown, support of those qualities we find existing, which we imagine cannot subsist sine re substante, without something to support them, we call that support substantia; which, according to the true import of the word, is, in plain English, standing under or upholding.¹⁸

The first portion of this passage, ending with "in the dark", entails a criticism of the literal substratum view, insofar as it in any way asserts that we can know anything about substance; this criticism follows from Locke's account of the way in which we come to have knowledge. When we speak of substance in this way, i.e. as a subject of inherence or a substratum, we do not know, in fact, what we are talking about. Locke tells us that our ideas of particular sorts of substances are just "the complication or collection of those several simple ideas of sensible qualities, which we . . . find united."¹⁹ To these collections of ideas we add the supposition of a substratum or support, but "we have no clear or distinct idea"²⁰ of it. And he later says that "our idea of substance is . . . obscure, or none at all, . . . it is but a supposed I know not what, to support those ideas we call

accidents."²¹ We are using a word, which is intended to stand for an idea, with no clear conception of what it is representing. We are using a word without a meaningful referent; we are "ignorant of" that about which we are speaking. Our idea of substance is just the supposition of a supporting something; it is not anything known.

In the remaining portion of the passage we see the three views of substance listed above. Here, even though still admitting that we do not know substance but only suppose it, Locke takes it to be a substratum or substantia, in which various qualities, "which we imagine cannot subsist sine re substantive,"²² subsist or inhere. Locke admits the weakness of this position, but adopts it nonetheless, for he cannot imagine the qualities existing without something which supports them.

View (a) in the list above is indicated or implied by Locke's statement that we suppose a substratum or substance because we cannot imagine how qualities could exist by themselves, without something to support them; this support being substance. If qualities require a support, this support must necessarily be capable of independent existence, otherwise it would just be a quality of something by which it itself was supported. Thus substance is an "ens per se stans." And since the qualities require substance for their existence, they can properly be said to inhere in it, for they "cannot

subsist sine re substante." Indeed, this passage deals with the difficulty involved in attempting to give the ultimate subject of inherence. And just prior to the passage quoted, Locke speaks of qualities which "are commonly called accidents." Substance then is also "quod substat accidentibus", view (b). View (c), as we have said, is entailed or implied by Locke's speaking of qualities as qualities of, for in doing so he is predicating qualities of substance; substance is the subject which has predicates (qualities).

When Locke turns to a discussion of our ideas of "particular sorts of substances", we see a slightly different view of substance arising, i.e. there is a slight shifting of emphasis. According to Locke, we come to have such ideas "by collecting such combinations of simple ideas as are, by experience and observation of men's senses, taken notice of to exist together, and are therefore supposed to flow from the particular internal constitution, or unknown essence of that substance."²⁴ Here Locke is speaking of substance not primarily as a substratum, but as a shorthand way of describing various particular sets of qualities. Of course, Locke always retains the notion of the substratum which supports these qualities; this is the notion of substance in general which figures in our ideas of particular sorts of substances only as a "confused idea of something"²⁵ which supports the various qualities which produce certain combinations of ideas in us. That is,

when we consider any particular 'substance', we consider it primarily as a certain set of qualities. This position sounds much like that of Hume, who says in the Treatise that "we have . . . no idea of substance, distinct from that of a collection of particular qualities, nor have we any other meaning when we talk or reason concerning it",²⁶ except that Locke always retains the supposed substratum.

Thus we come to have the ideas of a man, horse, gold, water, &c., of which substances, whether any one has any other clear idea, further than of certain simple ideas coexistent together, I appeal to every one's own experience. It is the ordinary qualities observable in iron, or a diamond, put together, that make the true complex idea of those substances . . . ; who, whatever . . . he may talk of, has no other idea of those substances, than what is framed by a collection of those simple ideas which are to be found in them.²⁷

These examples which Locke offers show that in speaking of particular substances he means chiefly certain sets of qualities, but the concomitant idea of being supported which qualities always carry with them must never be overlooked.

One problem which arises here is that of just which qualities or sets of qualities serve to make up the complex ideas of particular sorts of substances. For example, if we call man a sort of substance, by which qualities would he (it) be identified? Color could not be included, for men are of various colors; shape or figure would cause problems in the case of amputees, dwarfs, deformed persons, etc.; even simple variations in size or shape would be troublesome. Soul or spirit are rather obscure notions at best, and are not observ-

able qualities, i.e. ideas, anyway. Reason, often cited as that which distinguishes man, is not itself observable in others, only its effects or results can, perhaps, be observed. Reasoning itself is observable to an individual through reflection. But even if we can observe the effects of reasoning in another through his actions, discourse, etc., what do we conclude in the case of idiots, morons, or retarded persons? Do they come under the name man or not?

Locke's shift to particular sorts of substances as a 'shorthand' way of identifying certain sets of qualities raises the problems of (1) abstraction, and (2) essence. We can easily see the problem of abstraction arising in connection with the passages quoted above. The first indication comes when Locke says we obtain or come to have the ideas of "particular sorts of substances" by collecting combinations of simple ideas which are noticed in experience to exist together. The word 'sorts' indicates that Locke wishes to deal with groups or classes of objects, each of which are individual instances of a particular substance, i.e. set of qualities. That is, the name assigned to a particular sort of substance is a general or abstract term which includes many individual objects, which may vary in differing degrees with regard to their particular qualities. For example, man or horse, with no reference to a particular man or horse is a sort of substance, while John Doe, a man, or Majestic Prince, a horse,

are individuals or particulars which belong to that sort. The individual substance participates, if you will, in the sort of substance, the sort being a "class" which includes many particulars.

Such [combinations of simple ideas and nothing else] are the ideas we have of their [particular sorts of substances] several species in our minds; and such only do we, by their specific names [Locke means specific general names, for he has already discounted (at II. 11. 9) the possibility of giving every thing a specific name of its own], signify to others, v.g., man, horse, sun, water, iron; upon hearing which words, every one who understands the language, frames in his mind a combination of those several simple ideas which he has usually observed, or fancied to exist together under that denomination.²⁸

The signification referred to is clearly an abstract, or general, one, i.e. the combination of simple ideas or qualities which make up the particular sort of substance under consideration is left up to each individual to supply from his experience with some degree of flexibility.

Abstraction arises, for Locke, out of the necessity to avoid an endless chain of names, each of which would refer to a particular thing.

The use of words then being to stand as outward marks of our internal ideas, and those ideas being taken from particular things, if every particular idea that we take in should have a distinct name, names must be endless. To prevent this, the mind makes the particular ideas received from particular objects to become general; which is done by considering them as they are in the mind such appearances, -- separate from all other existences, and the circumstances of real existence, as time, place, or any other concomitant ideas. This is called ABSTRACTION, whereby ideas taken from particular beings become general representatives of all of the same kind; and their names general names, applicable to whatever exists conformable to such abstract ideas. Such precise, naked appearances

in the mind, without considering how, whence, or with what others they came there, the understanding lays up (with names commonly annexed to them) as the standards to rank real existences into sorts, as they agree with these patterns, and to denominate them accordingly.²⁹

At this point Locke is considering simple, not complex, ideas, but it is his method of abstraction that is important here. Notice that he says that to make ideas become general, we consider them apart from any other existence and from circumstances such as time, place, or other concomitant ideas. If we apply this method to ideas of particular sorts of substances, the question of just which other concomitant ideas are to be excluded becomes vital. In fact, it renders the abstraction process, and substance as well, meaningless on that level. In the case of particular sorts of substances, we are abstracting sets or combinations of ideas (qualities), or, more precisely, we are abstracting from these sets to a general term which represents them. We cannot separate the term from that particular set of qualities, and the difficulty arises as to what we are to do in the cases where the qualities presented in or by an object vary from those from which we abstracted the general term. The crux of the problem is from which qualities do we abstract?; that is which qualities are to be considered essential in pronouncing something to be of a particular sort of substance, and how much variation is to be allowed in the qualities?

Immediately following the passage quoted above, Locke gives us an example of what he means by the abstraction process.

Thus the same colour being observed to-day in chalk or snow, which the mind yesterday received from milk, it considers that appearance alone, makes it a representative of all of that kind; and having given it the name whiteness, it by that sound signifies the same quality wheresoever to be imagined or met with; and thus universals, whether ideas or terms, are made.³⁰

There are two things to be noted in the quotation. First, Locke is speaking of an abstraction process of the same color (idea or quality). He is isolating an identical idea (or roughly identical one if we concede that various shades of the color all fall under the same general term whiteness) from its surrounding or concomitant ones and then assigning it a term that is general in signification. The abstracting that is done in regard to particular sorts of substances is somewhat different. True enough, we are, in the case of particular sorts of substances, isolating sets of qualities from surrounding sets of qualities and then assigning a general term to these isolated sets, but this one abstraction is not enough. We need a second abstraction to the essential qualities from the non-essential ones, i.e. to separate the distinguishing ones from the non-distinguishing ones. (We can see the problem or question of essence cropping up here, but discussion of it will have to be delayed until later.)

Secondly, notice that Locke is abstracting an idea (quality) from an object, that is, he is moving from complex to simple. He can say that his general term represents a certain color; he can frame an idea of that color in his mind because that color is determinate (again, allowing for the variation between shades of the color). A possible example of this sort of isolating or abstracting process might be seen in the teaching of colors, or the names of colors to children. If we attempt to teach a child what 'red' means, i.e. the color to which it refers, by showing him an apple and repeating red, he would not know if we meant that the shape was what was meant by red, or that the object was named red, or what. But if we show him several different objects of various shapes, all of which were red, and repeated 'red', he would begin to see that we meant something other than the shape, or than the object itself, and would begin to conclude that what we meant was the color (even though he might not have the conception of color). And if we then showed him identical objects that were yellow and repeated yellow, switching back and forth from the yellow objects to the red and repeating yellow and red accordingly, he would eventually grasp the significance of the term(s).

In the case of the ideas of particular substances, however, we are not abstracting an idea (quality) from an object, but moving in the opposite direction, i.e. from

simple to complex, and abstracting a substance (object) from a combination of ideas. But this is where the difficulty with Locke's account arises. We cannot say, as he seemingly wants to do, that the name assigned to a certain set or combination of ideas, and by which it is called a substance, is determinate unless we either enumerate the essential distinguishing ideas, or allow for a variance in the qualities. Thus it seems that Locke must either make an attempt to deal with the essential ideas involved in our ideas of particular sorts of substances, or else leave room in his account thereof to allow for the numerous variations among the ideas (qualities) which make up these complex ideas.

Locke's account of 'general terms' in Book III suggests that he might have been aware of this problem for some of the statements he makes in Book III partially overcome the difficulties in his doctrine of our ideas of particular sorts of substances. Consider the following passage wherein he is discussing ideas in the minds of children.

The ideas of the nurse and the mother are well framed in their minds; and, like pictures of them there, represent only those individuals . . . and the names of nurse and mamma, the child uses, determine themselves to those persons. Afterwards, when time and a larger acquaintance have made them observe that there are a great many other things in the world, that in some common agreements of shape, and other qualities, resemble their father and mother, and those persons they have been used to, they frame an idea, which they find those many particulars do partake in; and to that they give, with others, the name man, for example. And thus they come to have a general name, and a general idea. Wherein they make nothing new,

but only leave out of the complex idea they had of Peter and James, Mary and Jane, that which is peculiar to each, and retain only what is common to them all.³¹

If we consider the phrase "in some common agreements of shape and several other qualities, resemble their father and mother and those persons they have been used to, they frame an idea which they find those many particulars do partake in; and to that they give, with others, the name man, for example,"³² we see an 'abstraction,' or, more precisely, the assigning of a general term, based not on a collection of certain determinate simple ideas coexisting, but on a resemblance or similarity of certain qualities found in various particulars. That is, we are not giving a name to, or calling a substance a certain or specific set of qualities, but are calling different particular objects with varying sets of qualities (i.e. collections of ideas), by virtue of their resembling each other with respect to some of their qualities, by a term or name to which we attach a general signification. "Words are general . . . when used for signs of general ideas, and so are applicable indifferently to many particular things; and ideas are general when they are set up as the representatives of many particular things."³³ Here Locke indicates that words or names of general signification can be applied to many. It is evident in the passages quoted that general terms are applicable to many particulars with varying qualities, because of their

resemblance in some of them; that is, they are all of a sort of thing or sort of substance. "That then which general words signify is a sort of things; and each of them does that, by being a sign of an abstract idea in the mind; to which idea, as things existing are found to agree, [i.e. resemble] so they come to be ranked under that name"³⁴ Such a position requires that our general term is not derived from a combination of certain determinate qualities (ideas) coexisting together, but rather that it be derived from varying sets of qualities with varying degrees of coexistence, i.e. certain ones of them may or may not coexist together at any one time.

Speaking of abstract or general ideas, Hume says in the Treatise that Berkeley

. . . asserted that all general ideas are nothing but particular ones, annexed to a certain term, which gives them a more extensive signification, and makes them recall upon occasion other individuals, which are similar to them.³⁵

What Locke is doing in the passages cited above is, it seems to me, advancing an account quite similar to that which Hume attributes to Berkeley, especially with regard to particulars and similarity or resemblance. Whether or not one can show conclusively or decisively that "Locke adopts Berkeley's theory rather than the general image theory" is open to question. I have suggested that he does.

One reference which, perhaps, lends a measure of

support to this interpretation can be found at III, 3, 11. where Locke says that ". . . universality belongs not to things themselves, which are all of them particular in their existence, even those words and ideas which in their signification are general."³⁶ Also, Locke says at II, 11. 9, that abstraction is the process whereby "ideas taken from particular beings become general representatives of all of the same kind."³⁷

These two passages indicate that it is quite possible to interpret Locke as holding a view similar to that of Berkeley, but it seems difficult to say conclusively what Locke's position was.³⁸

The importance of similarity (similitude) in Locke's account can be seen in the following passage:

But yet I think we may say, the sorting of them [things] under names is the workmanship of the understanding, taking occasion, from the similitude it observes amongst them, to make abstract general ideas, and set them up in the mind, with names annexed to them, as patterns or forms, (for in that sense, the word form has a very proper signification,) to which as particular things existing are found to agree [resemble], so they come to be of that species, have that denomination, or are put into that classis.³⁹

It is from similitude that general ideas are formed, and it is from similitude that particulars are said to be of this or that species or sort.

If we can attribute such a position to Locke, and there seems to be sufficient evidence for doing so, some of the problems involved in abstraction are avoided, most notably

the problem of what to do about the variance among the qualities or particulars which need to fall under the term used to designate a certain set of qualities which coexist together. And at the same time, such a position will allow for the use of general or abstract terms so as to avoid the difficulties which would arise in giving a distinct name to every particular existent.

Turning to the discussion of essence, Locke says that the essences of species, i.e. sorts of things, "set out and marked by names, [are] . . . those abstract ideas in the mind; which are, as it were, the bonds between particular things that exist and the names they are to be ranked under."⁴⁰ That is to say, the essence -- Locke will later term this the 'nominal essence' -- is the abstract idea of that set of ideas which we find existing together, to which we assign a general term and which that term represents. "It is the bond or intermediary between the name and the 'particular things that exist,' to which the name is applicable."⁴¹ It is by these abstract ideas or 'nominal essences' that we rank things into species or sorts of things under general terms which serve as signs for these abstract ideas. It is important to note here that unless Locke held the position attributed to him above, i.e. that position based on resemblance and similitude, he faces the same problems mentioned in regard to

fraction, particularly the questions of just which ideas are going to make up the 'nominal essence' and of variations or deviations from these ideas. I maintain that Locke gives us ample evidence to believe that he held such a position, and that what he means when he says that our ideas of particular sorts of substances, or abstract ideas and general terms represent collections of certain ideas coexisting together, what, in fact, he means, is that they represent collections of similar or resembling ideas coexisting together, with considerable flexibility as to the degree of similarity and as to just which ones of them need to coexist in any particular in order for it to be pronounced to be of a certain sort of substance or species.

That such is Locke's intention we can see from the following quotations:

Nor will any one wonder that I say these essences, or abstract ideas (which are the measures of names, and the boundaries of species) are the workmanship of the understanding, who considers that at least the complex ones are often, in several men, different collections of simple ideas; and therefore that is covetousness to one man, which is not so to another.⁴²

Here Locke is making allowance for the variance in ideas which make up abstract ideas, and even for the fact that the same abstract term may signify different simple ideas. The important element in the making of the former allowance is similarity or resemblance between the particulars which fall into one class.

Nay, even in substances where their abstract ideas seem to be taken from the things themselves, they are not constantly the same; no, not in that species which is most familiar to us, and with which we have the most intimate acquaintance: it having been more than once doubted, whether the foetus born of woman were a man, even so far that it hath been debated, whether it were or were not to be nourished and baptized: which could not be, if the abstract idea or essence to which the name man belonged were of nature's making; and were not the uncertain and various collection of simple ideas, which the understanding puts together, and then, abstracting it, affixed a name to it.⁴³

The flexibility which the terms uncertain and various allow shows that what is to be considered are not the sets of certain simple ideas which coexist, but the similarity or resemblance between varying sets of ideas. The implication of the remainder of the passage, viz. "which the understanding puts together, and then, abstracting it, affixed a name to it", is that the abstraction is not from the collections of ideas, but from particular things and the resemblance which the mind (understanding) discerns in them, i.e. in the ideas which their qualities produce.

By essence, Locke tells us, two significations must be understood. First, essence may be taken to be, or to signify, that whereby anything is what it is.

And thus the real internal, but generally (in substances) unknown constitution of things, whereon their discoverable qualities depend, may be called their essence. This is the proper original signification of the word, as is evident from the formation of it; essentia, in its primary notation, signifying properly, being. And in this sense it is still used, when we speak of the essence of particular things, without giving them any name.⁴⁴

This sort of essence is what Locke terms the 'real essence'.

Pringle-Pattison comments that

. . . by this 'real but unknown' internal constitution Locke might naturally be supposed to mean the 'substance' or the substratum or support which he supposes to be 'always something besides' the qualities, 'though we know not what it is'. The assertion of our ignorance of the real essence of things would in this case be simply a reassertion of the unknowableness of substance, as laid down in chapter 23.⁴⁵

Pringle-Pattison goes on to point out, however, that Locke does not mean the same thing by real essence as he does by substance, and quotes a passage from the First Letter to Stillingfleet wherein Locke

. . . objects to a phrase of Stillingfleet's in which the internal frame and constitution of things is spoken of as 'flowing from substance'. 'My notion of these essences differs a little from your Lordship's; for I do not take them to flow from the substance in any created being, but to be in everything that internal constitution or frame or modification of the substance, which God in his wisdom and good pleasure thinks fit to give to every particular creature, when he gives a being.'⁴⁶

Similarly, Fraser remarks that

Locke's conception of the (undiscoverable) real essence is that in material substances it is something physical -- texture of the primary particles, on which their secondary qualities and other powers depend, and from which, if discovered, those qualities and powers might be deduced . . .⁴⁷

What Locke means by 'real essence' is very close to, or identical with, what he has previously called the primary qualities of the insensible parts of bodies. In fact, Pringle-Pattison tells us that primary qualities are "These

utterly inseparable' qualities [which] Locke afterwards calls the 'real essence' of body."⁴⁸

Locke has told us that the 'secondary qualities' "are nothing in the objects themselves, but powers to produce various sensations in us by their primary qualities, i.e., by the bulk, figure, texture, and motion of their insensible parts."⁴⁹ This statement agrees with what Locke said in Book III about 'real essence', viz. that it is that upon which the discoverable qualities depend. It also agrees with the quotation from the First Letter in which Locke called the 'real essence' the "internal constitution or frame or modification of the substance."⁵⁰ We can also see in this statement the basis for Fraser's saying that the 'real essence' is the "texture of primary particles [insensible parts] on which their [substances] secondary qualities and other powers depend."⁵¹ Locke also says that powers are "by the same primary qualities."⁵²

And at II, 21. 75., Locke says that

. . . my present purpose being only to enquire into the knowledge the mind has of things, by those ideas and appearances which God has fitted it to receive from them, and how the mind comes by that knowledge; rather than into their causes or manner of production, I shall not, contrary to the design of this Essay, set myself to enquire philosophically into the peculiar constitution of bodies and the configuration of parts whereby they have the power to produce in us the ideas of their sensible qualities.⁵³

The parts of this passage to which I have added emphasis, viz. constitution, and configuration of parts, and the emphasized portions of those passages quoted above provide evidence for concluding that 'primary qualities' of insensible parts and 'real essence' are the same thing for Locke. An assertion that real essence is equal to primary qualities would appear to raise a serious difficulty, in that Locke asserts that real essence is unknown, for he has said that we know (i.e. perceive) primary qualities of bodies. However, the distinction which we made in the previous chapter between primary qualities at the macroscopic level and at the insensible (microscopic) level is important here. It will be remembered that Locke referred to secondary qualities and powers of bodies as resulting from or deriving from "their primary qualities, i.e. . . . bulk, figure, texture, and motion of their insensible parts."⁵⁴ If primary qualities are aspects of insensible parts, it would seem that we could never know primary qualities. But if the distinction which we made in Chapter III is a correct one, this problem is overcome, for sensible primary qualities are a result of the primary qualities of insensible parts. It is the primary qualities at the insensible level which we cannot know, and it is these qualities which I am equating with real essence.

Locke has said that it is by "the configuration of parts" or real essence that bodies have the power to produce ideas of their sensible qualities in us; and it is secondary qualities to which he assigns the term 'sensible,' and secondary qualities, as we have seen, result from the primary qualities of insensible parts. Secondary qualities, then, depend on, or result from (1) real essence, and (2) primary qualities of insensible parts.

Locke also says that it is real essence upon which the discoverable qualities of bodies depend. Qualities are discovered by virtue of the ideas they produce in us. Now if our distinction in Chapter III holds, primary qualities of sensible bodies, as well as secondary qualities and powers depend on the primary qualities of insensible parts. And all qualities, insofar as they are discoverable, i.e. perceivable, in the sense of producing ideas in us, depend on real essence. Thus, we now have all discoverable qualities, primary, secondary or sensible, and powers depending on two things: (1) real essence, and (2) primary qualities of insensible parts, and Locke speaks of each one as if it were the cause of these qualities. And rather than claim any sort of contradiction or grave inconsistency on Locke's part, inasmuch as his doctrine of primary and secondary qualities, and that of real

essence (and nominal essence as well), are very important aspects of his philosophy, I would prefer to conclude that Locke means the same thing by real essence as he does by the primary qualities of the insensible parts.

Part of the difficulty surrounding this point is that Locke, as we know, speaks of primary qualities at both the sensible and insensible levels. A greater measure of clarity could, perhaps, have been achieved had Locke used a different term for the qualities at each level, possibly terming the insensible primary qualities 'ultimate qualities', and the sensible just primary qualities as he did. Adopting this terminology, the ultimate qualities would be unknown, the primary ones known; and it would be the ultimate qualities, which, as the basis for all sensible qualities, we would be equating with real essence. Thus on this interpretation, the difficulty which such an equating seemingly raises is shown to be at best a pseudo-difficulty, which only arises because of a lack of clarity on Locke's part.

We can easily see from this that substance and 'real essence' are not the same, as Pringle-Pattison suggests they might be supposed to be, for substance in the above context is referred to as the insensible parts, while 'real essence' is the bulk, figure, texture, motion and configuration of these parts.

The second signification of essence, which Locke calls the 'nominal essence', arises from the classification of things according to genus and species.

. . . the word essence has almost lost its primary signification: and, instead of the real constitution of things, has been almost wholly applied to the artificial constitution of genus and species. It is true, there is ordinarily supposed a real constitution of the sorts of things; and it is past doubt there must be some real constitution, on which any collection of simple ideas co-existing must depend. But, it being evident that things are ranked under names into sorts or species, only as they agree to certain abstract ideas, to which we have annexed those names, the essence of each genus, or sort, comes to be nothing but that abstract idea which the general, or sortal (if I may have leave so to call it from sort, as I do general from genus,) name stands for. And this we shall find to be that which the word essence imports in its most familiar use.⁵⁵

What Locke means by 'nominal essence' is the same as what he means by the abstract (general) idea, given a general name, which he has of a particular sort of substance, which is nothing but a collection of certain simple ideas co-existing. That is to say, the 'nominal essence' is that collection of simple ideas which the abstract idea or name represents, i.e. what we mean by 'nominal essence' is those ideas or qualities which we denote by the abstract idea and general name. Thus we find Locke saying,

Again, to be a man, or of the species man [remember that Locke has said that man is a particular sort of substance], and have the essence of a man, is the same thing. Now, since nothing can be a man, or have a right to the

name man, but what has a conformity to the abstract idea the name man stands for, nor anything be a man, or have a right to the species man, but what has the essence of that species; it follows that the abstract idea for which the name stands, and the essence of the species, is one and the same.⁵⁶

Thus the 'nominal essence' is that abstract idea, taken from collections of ideas, whereby we judge a thing to be of the species or sort that we do.

A note by Fraser perhaps best expresses Locke's twofold usage of essence; "The nominal essences of Locke are the meanings of terms; his real essences are the ultimate (physical) constitution of particular things."⁵⁷

As was said above, we distinguish things, not by the 'real essence', which is unknown to us, but by the 'nominal essence', which is the same as that abstract idea which we form from collections of simple ideas. We might note that the 'nominal essence' is dependent upon the 'real' one.

For, it is the real constitution of its insensible parts, on which depend all those properties of colour, weight, fusibility, fixedness, &c., which are to be found in it; which constitution we know not, and so, having no particular idea of, having no name that is the sign of it. But yet it is its colour, weight, fusibility, fixedness, &c., which makes it to be gold, or gives it a right to that name, which is therefore its nominal essence. Since nothing can be called gold but what has a conformity of qualities to that abstract complex idea to which that name is annexed.⁵⁸

And again,

This [i.e. 'nominal essence', or 'that abstract idea to which the name is annexed'], though it be all the essence of natural substances that we know, or by which we distinguish them into sorts, yet I call it by a peculiar name, the nominal essence, to distinguish it from the real constitution of substances, upon which depends this nominal essence, and all the properties of that sort; which, therefore, as has been said, may be called the real essence: v.g. the nominal essence of gold is that complex idea the word gold stands for, let it be, for instance, a body yellow, of a certain weight, malleable, fusible, and fixed. But the real essence is the constitution of the insensible parts of that body, on which those qualities and all the other properties of gold depend.⁵⁹

What was said above regarding abstraction, viz. that general terms must be understood in terms of resemblance or similarity between particulars is directly applicable to 'nominal essences', for inasmuch as the 'nominal essence' and the abstract idea of a thing are "one and the same", the same considerations apply to both.

Locke's account of real essence reaffirms the notion of a literal substratum which supports the various qualities we find in any particular sort of substance. In fact, the notion which he says he has of real essence in the First Letter to Stillingfleet, which was cited above, viz. "that internal constitution or frame or modification of the substance", presupposes a substratum. And as Locke has told us that the observable qualities are different from, but dependent upon,

the 'real essence' ("for . . . the powers or qualities that are observable by us are not the real essence of that substance, but depend upon it, and flow from it")⁶⁰ it is not surprising that he includes the conception of a substratum in his treatment of particular sorts of substances. Without the assertion of a substratum, his account of 'real essence' is meaningless, and his 'nominal essence' would become the 'real' one, i.e. all that we would mean by a substance would be a set of ideas (or the qualities which produce them); the notions of subsistence, support, and inherence would have to be discarded.

Thus we find Locke including the 'substratum theory' in what I have called his 'shorthand' usage of substance. Returning to Locke's account of the particular sorts of substances, we find him saying,

Only 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 a body is a thing that is extended, figured, and capable of motion; spirit, a thing capable of thinking; and so hardness, friability, and power to draw iron, we say, are qualities to be found in a loadstone. These, and the like fashions of speaking, intimate that the substance is supposed always something besides the extension, figure, solidity, motion, thinking, or other observable ideas, though we know not what it is.⁶¹

This passage reminds us of that third conception of substance which O'Connor said that Locke 'inherited', viz. that "sub-

stance was that which could be subject but not predicate of a proposition in logical form."⁶²

The assertion of this passage is, however, made in addition to what Locke has said just before, viz. that we have no clear idea of any particular sorts of substances farther than that of "certain simple ideas co-existent together", and that "it is the ordinary qualities observable in iron, or a diamond, put together, that make the true complex idea of those substances."⁶³ And rather than saying anything positive about substance, it merely reflects the way we use language, particularly the subject-predicate form, which is transmuted into the substance-quality doctrine. And here again we see the effect which that part of the traditional theory which saw substance as "quod substant accidentibus", had upon Locke's thought. To say that substance is an 'unknown something' which supports qualities is actually to say something about qualities, not about substance; while to say that qualities carry with them the idea of support is a consequence of the structure of language.

Locke's example of the loadstone indicates this. For, analogous to his examples of iron and a diamond, what we mean by loadstone are just those properties which Locke enumerates, but we speak of them as qualities of or in something, which

is a direct consequence of the subject-predicate form of language. The general name loadstone represents that abstract idea which we have of certain qualities existing together, but qualities are predicates and must be substantiated, or referred to a subject. The 'substance' which the name loadstone represents is just those qualities which Locke has specified, the supposition of a support being imposed by the structure of language. The notion that qualities belong to something necessarily presupposes, rather than proves, or even justifies the notion of a substratum: a presupposition made necessary by the fact that whenever we speak of qualities, we speak of them as qualities of something; a fact which leads to the assumption that substance is "always something besides" the qualities.

Locke's retention of the 'literal substratum' viewpoint, and of the subject-predicate (substance-qualities) form, is undoubtedly a direct result of his philosophical heritage, a point which was briefly mentioned earlier. This retention can also be seen as an attempt, because of this heritage, to avoid a strictly phenomenalist treatment of substance, to which his accounts of particular sorts of substances and of 'nominal essences' seem to point. However, given Locke's empiricist starting point, his admitted ignorance of substance as any-

thing other than a supposed, but unknown, something which supports those qualities we find existing, and his phenomenalist tendencies re particular sorts of substances, the die is cast, so to speak, and we later find Berkeley and Hume 'throwing out' the supposition of material substance or of a literal substratum in favor of a conception of substance based solely on "those qualities we find existing."⁶⁴ As O'Connor remarks, "by emphasizing that there are no empirical grounds for the substratum theory, he [Locke] gave it a blow from which it never recovered."⁶⁵

An aspect of Locke's conception of substance that should be stressed is that in addition to serving as a support for qualities, substance accounts for certain qualities, indeed for any qualities existing together. The fact that qualities exist together, not just that they exist, is the basis for the supposition of substance. Locke says at one point that we have "no other idea of any substance . . . but those sensible qualities . . . observed to exist united together,"⁶⁶ and he adds that we suppose "such a substratum, as gives, as it were, a support to those qualities . . ."⁶⁷ In another place he says that our ideas of particular sorts of substances come from combinations of simple ideas that

are noticed "to exist together, and are therefore supposed to flow"⁶⁸ from an internal constitution or unknown essence; in other words, from the real essence of a material substratum. It is important to note that in both cases the supposition of the substratum arises from the union or 'existing together' of the ideas (or of the qualities which produce such ideas in us). Thus the substratum is being asserted to account for the fact that the qualities exist together.

In another place Locke says that

Whatever therefore be the secret abstract nature of substance in general, all the ideas we have of particular distinct sorts of substances are nothing but several combinations of simple ideas, co-existing in such, though unknown, cause of their union, as makes the whole subsist of itself.⁶⁹

Substance, then, is the cause of the union or combination of certain simple ideas.

The bare existence of qualities which produce simple ideas is not the basis for the supposition of a substratum, it is the co-existence of the qualities which cause certain simple ideas to be observed to go constantly together which prompts this supposition. Certain qualities, and in turn the simple ideas which they produce in us, always accompany one another, and there must needs be a "cause of their union, as makes the whole subsist of itself"⁷⁰ and this cause is sub-

stance, or a substratum, "which really is the cause of the strict union of some of them one with another, and the exclusion of others."⁷¹ Locke always maintains that the idea of substance arises from the combination of simple ideas, i.e. the qualities producing them, noticed to go constantly together; substance is assumed as the basis of this unity.

These combinations of ideas, and the combinations of what qualities which produce them, do not just exist together, they necessarily exist together, for as we have noted, substance is "the cause of the strict union" of them, to the exclusion of others. In Book IV, where Locke is dealing with "knowledge in general", he tells us that of the four sorts of agreement or disagreement of ideas, the perception of which constitutes knowledge, the third sort, viz. "co-existence, or necessary connexion"⁷² "belongs particularly to substances."⁷³

Thus when we pronounce concerning gold, that it is fixed, our knowledge of this truth amounts to no more but this, that fixedness, or a power to remain in the fire unconsumed, is an idea that always accompanies and is joined with that particular sort of yellowness, weight, fusibility, malleableness, and solubility in acqua regia which make our complex idea signified by the word gold.⁷⁴

These ideas are all a part of our complex idea of gold because they are all found in the same subject to which we apply that term. And they are all found in that subject because of the substratum which unites them.

There is nothing in these ideas, or in the qualities which produce them, that requires or necessitates that they be connected. Yellowness need not be accompanied by fusibility, or malleableness, nor these latter by solubility in aqua regia: none of them are in any way necessarily connected with each other. But in experience we find all these ideas combined with each other and going 'constantly together'; we find many, many ideas always accompanying each other in combination. And 'not imagining' how or why these combinations of ideas should subsist or exist by themselves, we suppose a substratum, which, "though unknown, [is the] cause of their union, as makes the whole subsist of itself."⁷⁵ Substance, or substratum, accounts for and denotes this unity of ideas. We might note too that substance used in this way reflects the view of substance as "ens per se stans", or that which is capable of independent existence.

Some attention must be given to the subject of powers, for Locke says that "powers make a great part of our complex ideas of substances."⁷⁶ Among the collections of simple ideas which make up our ideas of particular sorts of substances are included ideas of "active powers and passive capacities, which, though not simple ideas, yet in this respect, for

brevity's sake, may conveniently enough be reckoned amongst them."⁷⁷ At II. 23. 9., Locke says

The aptness we consider in any substance, to give or receive such alterations of primary qualities, as that the substance so altered should produce in us different ideas from what it did before; these are called active and passive powers: all which powers, as far as we have any notice or notion of them, terminate only in sensible simple ideas.⁷⁸

Or, in other words, passive capacities and active powers are, considered "in one thing the possibility of having any of its simple ideas changed, and . . . the possibility of making that change"⁷⁹ respectively. "Thus we say, Fire has a power to melt gold, i.e. to destroy the consistency of its insensible parts, and consequently its hardness, and make it fluid; and gold has a power to be melted."⁸⁰ That ideas of powers are a part of our ideas of particular substances can be seen in Locke's account of our idea of a loadstone, for one of the qualities or properties included in this idea being the "power to draw iron,"⁸¹ and in his statement regarding fire, that it has the power "to change the colour and consistency of wood."⁸²

Further, powers are important in our ideas of substances for secondary qualities, which are themselves just powers, are a large part of our ideas of particular sorts of substances.

Nor are we to wonder that powers make a great part of our complex ideas of substances; since their secondary qualities are those which in most of them serve principally to distinguish substances one from another, and commonly make a considerable part of the complex idea of the several sorts of them. For, our senses failing us in the discovery of the bulk, texture, and figure of the minute parts of bodies, on which their real constitutions and differences depend, we are fain to make use of their secondary qualities as the characteristical notes and marks whereby to frame ideas of them in our minds, and distinguish them one from another: all which secondary qualities, as has been shown, are nothing but bare powers.⁸³

That is to say, ideas of powers, both in the sense of active powers and passive capacities, and of secondary qualities, constitute a large portion of the 'nominal essence' of particular sorts of substances. As Locke says re our complex idea of gold, several of the ideas that make it up are only ideas of powers:

. . . . As the power of being melted, but of not spending itself in the fire; of being dissolved in aqua regia, are ideas as necessary to make up our complex idea of gold, as its colour and weight: which, if duly considered, are also nothing but different powers. For to speak truly, yellowness is not actually in gold, but is a power in gold to produce that idea in us by our eyes, when placed in a due light: and the heat, which we cannot leave out of our idea of the sun, is no more really in the sun, than the white colour it introduces into wax.⁸⁴

Powers, however, are subject to the same sort of variations or fluctuations that secondary qualities are, so once again we see the importance of resemblance, similarity, or

similitude in deciding whether things be of a particular sort of substance or not. At best, ideas of powers seem to provide us only with additional evidence or tests for making such a decision.

SUMMARY AND CONCLUSIONS

We have seen what Locke's conception of substance is, and that his conception or treatment thereof is primarily based in the scholastic or traditional notion of it. What, then, can be said of his account?

It is important to point out that Locke is dealing with the idea of substance, not with its existence. But even so, "he did not deny the being of substance, and he did not deny the need of a support to qualities."¹ What he did deny was "that we have knowledge of this substance."² And "in his first letter to Stillingfleet he explains that his arguments concern the idea alone and not the being of substance, and that to show that we have no clear idea of substance is not to deny that substances exist."³

Indeed, Locke's account of qualities, powers, and real essence, for example, presuppose the existence of material substance. In fact, the very way in which he says that we come to have ideas of sensation, viz. by the operation of external objects upon our senses, makes this presupposition. However, Locke's account of substance is concerned with the idea of it, so let us consider what he has said about this idea.

It will be remembered that Locke has said that sensation and reflection are the two sources from which all our ideas stem, and that although the mind can perform various operations on the ideas so provided and thus make up new complex ones which were not given in either of these two ways, the ideas so constructed are dependent on, and ultimately derived from ideas of sensation or of reflection. "All the ideas that we have or can have . . . must have been experienced in one or the other of these ways, so far as their elementary constituents are concerned; otherwise the words supposed to have meanings are only empty sounds."⁴

Now what of the idea of substance? Is it given, or even capable of being given, in either sensation or reflection? Locke clearly says that it is not.

The idea of substance; . . . we neither have nor can have by sensation or reflection By those ways whereby other ideas are brought into our minds, this is not, we have no such clear idea at all; and therefore signify nothing by the word substance but only an uncertain supposition of we know not what, i.e. of something whereof we have no [particular distinct positive] idea, which we take to be the substratum, or support, of those ideas we do know.⁵

The idea of substance, then, is not, and cannot be, presented in experience, therefore it must be an idea which the mind constructs. Locke very clearly states that the idea of substance is a complex idea. How, then, do we construct this idea? We experience various ideas such as smells, tastes, colors, shapes, etc., but the idea of substance does not arise merely from combining these; such an activity would only pro-

duce an idea of a combination of simple ideas, a combination in which the idea of substance would never arise.

In his letters to Stillingfleet, Locke asserts that the idea of substance, being a support, is framed by us as an idea of relation. In the First Letter to Stillingfleet Locke says that

All the ideas of all the sensible qualities of a cherry come into my mind by sensation; the ideas of perceiving, thinking, reasoning, knowing, &c. come into my mind by reflection: the ideas of these qualities and actions, or powers, are perceived by the mind to be by themselves inconsistent with existence; i.e. that they cannot exist or subsist of themselves. Hence the mind perceives their necessary connexion with inherence or being supported; which being a relative idea superadded to the red colour in a cherry, or to thinking in a man, the mind frames the correlative idea of a support. For I never denied, that the mind could frame to itself ideas of relation, but have showed the quite contrary in my chapters about relation.⁶

Fraser quotes a portion of the Third Letter to Stillingfleet, wherein Locke makes much the same point as in the above passage, but in which he emphasizes that "an 'obscure' concept of substance (not an idea-image) is necessarily formed in the human mind."⁷

'I never said,' he tells Stillingfleet, 'that (complex) ideas of relations, such as that of substance, come in as simple ideas of sensation or reflection. I never denied that the mind could form for itself ideas of relation, and that it is obliged to do so I conclude there is substance, because we cannot conceive how qualities should subsist by themselves Sensible qualities carry the supposition of substance along with them, but not intromitted by the senses with them By carrying with them a supposition, I mean that sensible qualities imply a substratum to exist in.'⁸

The idea of substance, then, is a relational idea; that relation being as support to supported, or of subject to accident. The fact that we have no clear idea of this support poses no problem according to Locke. For

. . . because a relation cannot be founded in nothing, or be the relation of nothing, and the thing here related as supporter or support is not represented to the mind by any clear and distinct idea; therefore the obscure, indistinct, vague idea of a thing or something, is all that is left to be the positive idea, which has the relation of a support or substratum to modes or accidents.⁹

The idea of substance, then, is an idea of 'something', "with the relation of a support to accidents."¹⁰

There are several points, which arise in connection with Locke's asserting that the idea of substance is an idea of relation, that need to be considered. As Locke told Stillingfleet, he does maintain that ideas of relation derive from sensation or reflection: "all relation terminates in, and is ultimately founded on, those simple ideas we have got from sensation or reflection."¹¹ The point which is important here, however, is how we get the idea of relation; and Locke clearly and constantly asserts that we get ideas of relation from comparing ideas. In one place he says, "relation . . . consists in the consideration and comparing one idea with another."¹² At another place, he tells us that we get all ideas of relations from bringing together two ideas and setting them beside each other, "so as to take a view of them at once, without uniting them."¹³ And in another place, he says that one of the mind's operations about the ideas it has is "the

COMPARING them one with another, . . . [which] is that upon which depends all that large tribe of ideas comprehended under relation."¹⁴ And in still another place, we find him saying "that all we have in our thoughts ourselves, . . . or would signify to others, when we use words standing for relations, is nothing but some simple ideas, or collections of simple ideas, compared with one another."¹⁵

What, though, are we comparing when we form the idea of relation which involves substance? That is to say, if the idea of substance is an idea of relation, it must be compared to something else, but in order to compare it to something, we must already have it. But Locke is not comparing substance to anything, but rather attempting to derive it from the fact that certain qualities which produce certain ideas exist together. He is not comparing the idea of substance to "all the ideas of all the sensible qualities of a cherry," but 'superadding' it to them.

Gibson states Locke's problem in this manner:

The difficulty which really confronts Locke is not that of admitting an idea which is not itself a datum of immediate experience, but that of bringing the idea of substance into line with his general account of our ideas of relation. For, an idea of relation, we are told, can only arise as the result of an act of comparison between two distinct terms; whereas, in the case we are now dealing with, only one term of the relation is given. The difficulty is, however, hidden from Locke by his initial assumption that our simple ideas from the first involve a reference beyond themselves.¹⁶

In other words, for the idea of substance to be an idea of relation, we must first have the idea of substance completely

apart from the ideas of various qualities together before we can frame an idea of relation between them, and on Locke's account we can have no such idea. Locke is attempting to establish a relation between two ideas (or terms), one of which not only have we not experienced, "but which ex hypothesi, never can be experienced."¹⁷ And on Locke's account of relation, this is impossible.

Secondly, Locke is attempting to establish this relation between qualities and support as a fact of nature. He tells us that we cannot conceive how qualities could exist without a support; that it is impossible to do so, for qualities imply a substratum. Thus this relation is a necessary one, and the mind is obliged to form it. But Locke says that relations are not aspects or properties "of things as they are in themselves."¹⁸ Relations are "not contained in the real existence of things, but something extraneous and superinduced."¹⁹ How, then, are we 'obliged' to form an idea of a relation when relations are not in any way "contained in the real existence of things." How can the qualities imply a substratum or carry with them the notion of inherence or of being supported?

Locke's assertions that our idea of substance is as something which supports qualities, and that qualities, or ideas of them, carry with them or imply a substratum appears to be a consequence of the way in which he talks about qualities. For it is certainly not logically self-contradictory

to assume that the qualities which produce the ideas of red, sweetness, noises, smells, should exist or subsist by themselves; not self-contradictory, that is, unless one sees or defines qualities as modes, or affectations, or powers, or properties, or accidents of something.

Locke is working with the traditional subject-accident and subject-predicate distinctions. These distinctions, and the scholastic doctrine that held substance to be "ens per se stans" and "the genuinely real feature of the universe",²⁰ while qualities depended upon substance for whatever reality they possessed, were the shaping factors in Locke's treatment of substance. His account of qualities presupposes these distinctions. His statement in the First Letter to Stillingfleet that

. . . the ideas of these qualities and actions, or powers, are perceived by the mind to be by themselves inconsistent with existence; or as your lordship well expresses it, 'we find that we can have no true conception of any modes or accidents, but we must conceive a substratum or subject, wherein they are',²¹

presupposes and requires these distinctions. That these things are "by themselves inconsistent with existence" and require the concept of a substratum "wherein they are" is merely a consequence of the subject-accident and independent-dependent distinctions.

Locke has taken over these traditional distinctions, and a great part of his treatment of substance 'finds its footing' in them. Locke's epistemology required that he assert

the unknowability of substance, as we have seen; he was not, however, ready to "discard substance out of the reasonable part of the world."²²

We have seen that he attempted to make substance a complex idea of relation, and that this attempt entailed problems. It appears, however, that any attempt to deal with substance as a complex idea is doomed to failure. We saw that in Book II Locke listed three operations of the mind, by which, from its simple ideas of sensation and reflection, it produces all those other ideas which it has. These three operations were combining, comparing, and separating or abstracting. Combining and comparing we have already ruled out as the means by which we come to have the idea of substance. What, then, of abstraction? The idea of substance cannot be a result of abstraction, for abstraction, we saw, consists in considering one idea apart from "any [i.e. all] other concomitant ideas."²³ But our idea of substance only arises, indeed is only meaningful, in conjunction with other ideas. That is to say, take away all the ideas and sensible qualities of a cherry, for example, and the idea of substance or substratum vanishes as well.

Locke always maintains that our idea of substance is always as something besides its qualities, but even so, it is meaningless if considered apart from them, for conceived as something which supports qualities, it can never be conceived

of in isolation from them. It appears, then, that none of the three activities of the mind, by which it constructs complex ideas, is capable of providing us with the idea of substance. "The idea of substance is 'obscure' and 'confused' because it is not given to us in sensation or reflection and never could be",²⁴ and likewise because none of the activities or operations of the mind are capable of constructing it out of the materials which sensation and reflection provide.

Locke has told us that the ideas of qualities and the idea of substance are necessarily connected, that sensible qualities carry with them the supposition of substance, i.e. that they "'imply a substratum to exist in'."²⁵ Now this is an assertion that, as we have noted, is a direct consequence of Locke's acceptance of the subject-accident or substance-accident distinction, whereby qualities or accidents are defined in terms of substance, i.e. as properties of, and dependent on, substance. The knowledge of this implication is not in any way given in experience, but rather the implication is taken as axiomatic, or at least is required by Locke's position re qualities. That qualities imply substance is a result of the way that qualities have been defined. That Q implies S is obviously true if we have defined Q in such a way that it implies S; this is why Locke can assert that Q implies S.

Locke, however, has asserted that all ideas come either from sensation or reflection, or that in the case of complex ideas the ultimate materials of them come from one of these

two sources. But there is nothing in the nature of qualities or our ideas of them which implies a substratum. Qualities are just qualities, and no matter how long we might observe them, i.e. that they produce ideas in us, or how many of them we might observe, the ideas of substance would never arise.

Further, to assert that qualities and substance are necessarily connected would require not only some knowledge of qualities, but also some knowledge of substance. That is, we cannot assert two things to be necessarily connected if we only know one of them. And Locke's claim that he is dealing only with the idea of substance is of no help here, for it is equally impossible to assert two ideas to be necessarily connected if we only know one of them.

Moreover, even if we had some knowledge of these two things or ideas, viz. qualities and substance, we would have no grounds upon which to conclude that they were necessarily connected. As Hume pointed out, experience provides us only with the idea of constant conjunction, not with that of necessary connection. Even the notion of constant conjunction, however, requires that we know two ideas, not just one, and experience never provides us with the idea of substance. Locke asserts that the 'obscure' idea of substance is always conjoined or connected to ideas of qualities. He tells us that qualities always carry with them the supposition of substance. But this idea is not something provided us by experience; rather it is something we add to the ideas of qualities. It

is conjoined or connected only because we make it so.

Why, we might ask, do qualities carry with them the supposition of a substratum? Why is it that we cannot imagine these qualities as subsisting or existing by themselves? Why do they require a support? Locke provides us with no answers for these questions, and, we might note, neither do sensation or reflection. There is nothing in the ideas of qualities which intimates to us that they are incapable of self-subsistence. Rather, that they require some sort of support seems to be an a priori assumption about them; an assumption that Locke inherited from scholasticism. Qualities carry with them the supposition of substance only because we begin by assuming that they do, by defining them as having "a reality merely derivative from that of substance."²⁶ Thus it is not surprising that qualities should carry with them the supposition of a substratum. But again we must point out that this is not an idea which experience provides us with, but merely a consequence of Locke's presuppositions.

We can also observe that the assumption that qualities are incapable of self-subsistence and require a support, which support is substance, implies that we have some knowledge of substance, namely, the knowledge that substance is capable of supporting qualities, and that it itself needs no support. Our supposition that substance is the support of qualities requires the additional assumption that substance is that which is able to make "the whole subsist of itself."²⁷ And

Locke makes this additional assumption when he says that the combinations of simple ideas (or of the qualities which produce them) are supposed "to rest in and be, as it were, adherent to that unknown common subject, which inheres not in anything else."²⁸ But the idea that substance is capable of independent existence, or "inheres not in anything else" does not arise from experience any more than the idea that qualities require support. We do not know that substance can exist by or through itself, for we have no knowledge of substance. The supposition of substance as that which supports qualities in no way entails the additional supposition that substance is self-supporting. If we assume that qualities require support, what reason do we have for assuming that substance does not? Just as Locke begins by assuming that qualities need a support, so also does he assume that substance does not. And both are unjustified assumptions.

Locke's supposition of substance is not the result of an analysis of experience, but of his initial acceptance of the substance-quality distinction. He accepted the views of substance as "ens per se stans" and as "quod substat accid-entibus"²⁹, from the outset, which acceptance made it impossible for him to imagine how qualities should exist without a substratum which supported them.

Locke did well to assert that we did not have, and could not have any knowledge of substance. Substance is in

no way a datum of experience, as Locke well realized. And although Locke was not willing to "discard substance out of the reasonable part of the world",³⁰ "by emphasizing that there are no empirical grounds for the substratum theory, he gave it a blow from which it never recovered."³¹

Locke's fault, if it can be called such, was his failure to break away from the traditional substance-accident distinction. Perhaps Locke realized the difficulties inherent in this distinction, for he remarks that "they who first ran into the notion of accidents, as a sort of real beings that needed something to inhere in, were forced to find out the word substance to support them."³² But even though Locke recognizes that these notions are of little use "in deciding of questions in philosophy"³³; and even though he tells us that a man would certainly think himself mocked if he should be told in regard to architecture "that a pillar is a thing supported by a basis, and a basis something that supported a pillar"³⁴, he himself was unable to avoid falling into the substance-accident mode of thought and speech, for he treats of qualities as being something which inhere in and subsist by substance, and of substance as that which supports qualities.

Locke's empiricism provided him with the key to break away from the traditional substance-accident distinction, but for some reason he did not utilize this key. Perhaps this failure can be attributed to the importance of the doctrine

of substance in theology, an importance so great "that the concept of substance could not be criticized without endangering the associated theological dogmas" and it "thus acquired a diplomatic immunity from criticism."³⁵ It is even more likely that the traditional (or scholastic) conceptions had been so deeply imprinted or impressed on Locke that he was simply unable to separate himself from them. And the structure of language certainly did its part in flavoring Locke's thought.

It is always easy in retrospect to say that a philosopher should have done or said this, that, or the other, but invariably such remarks are a result of later developments or trends in philosophy and fail to give sufficient consideration to the philosophical milieu in which he was operating. It is indeed unfortunate that Locke did not fully utilize his empiricism to free himself and his thought from the traditional conceptions by which he was hobbled. But even so, he made a start. "In Berkeley's words, he 'bantered the idea of substance' and though he himself did no more than point the way to his successors, the traditional theory never recovered from the attack which he led."³⁶

Had Locke been able, by means of his empiricism to sever the chains of scholastic thought by which he was bound, it is likely that he would have come to a conception of substance much like that of Hume, who told us that we have "no

idea of substance, distinct from that of a collection of particular qualities [or sense-data], nor have we any other meaning when we either talk or reason concerning it."³⁷ Close as he might have been to it, Locke could not take the steps which would have put him in a position to realize and to say, as Whitehead later did, "that apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness."³⁸

I

FOOTNOTES .

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II.

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²Introduction. 7.

³Ibid.

⁴Ibid.

⁵Introduction. 3.

⁶Frederick Copleston, A History of Philosophy (New York: Image Books, 1964), Vol. 5, Part 1, p. 81.

⁷Immanuel Kant, Critique of Pure Reason, trans. Norman Kemp Smith (New York: St. Martin's Press, 1965), p. 93. (A51, B75).

⁸III. 11. 4.

⁹Introduction. 7. (The italics are mine.)

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¹¹Richard I. Aaron, John Locke (Oxford: The Clarendon Press, 1955), pp. 79-80.

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¹³Locke, op. cit., p. 32, note 2.

¹⁴Introduction. 8.

¹⁵Aaron, op. cit., p. 100.

¹⁶Connor, op. cit., p. 34. (The italics are mine.)

¹⁷Ibid., p. 35.

¹⁸Ibid., pp. 35-36.

¹⁹Introduction. 8.

²⁰Aaron, op. cit., p. 101.

²¹IV. 4. 3.

²²IV. 21. 4.

²³I. 1. 15.

²⁴Ibid.

²⁵II. 1. 1.

²⁶II. 1. 2.

²⁷II. 1. 3.

²⁸David Hume, A Treatise of Human Nature, ed.
L. A. Selby-Biggs (Oxford: The Clarendon Press, 1888),
p. 6.

²⁹Ibid.

³⁰II. 1. 5.

³¹II. 1. 4.

³²Ibid.

³³Ibid.

³⁴Ibid.

³⁵II. 1. 5.

³⁶Locke, op. cit., p. lxi.

³⁷II. 1. 24.

³⁸II. 2.2.

³⁹Locke, op. cit., p. lxi.

⁴⁰Ibid., p. lxxiv.

⁴¹II. 32. 1.

42II. 32. 4. (The italics are mine.)

43Introduction. 2.

44IV. 1. 3.

45IV. 1. 6.

46II. 2. 1.

47II. 1. 25.

48II. 6. 1.

49O'Connor, op. cit., p. 51.

50II. 12. 4.

51II. 12. 6.

52II. 12. 7.

53II. 12. 1.

54Ibid.

55Aaron, op. cit., p. 113.

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57Gibson, op. cit., p. 66.

58Introduction. 2.

III

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¹II. 8. 7.

²Ibid.

³II. 8. 8.

⁴II. 8. 9.

⁵Ibid.

⁶Ibid.

⁷II. 8. 15.

⁸II. 8. 18.

⁹II. 8. 17.

¹⁰II. 8. 10.

¹¹Ibid.

¹²G. D. Walcott, "Primary and Secondary Qualities",
Philosophical Review, XXXV (1926), 469-470.

¹³II. 8. 22.

¹⁴II. 8. 10.

¹⁵II. 8. 15.

¹⁶II. 8. 19.

¹⁷Ibid.

¹⁸II. 8. 17.

¹⁹II. 8. 13.

²⁰Alfred North Whitehead, Science and the Modern
World (New York: The New American Library, 1925), p. 55.

²¹II. 8. 22.

²²II. 8. 23.

²³II. 8. 14.

²⁴II. 8. 15.

²⁵II. 8. 17.

²⁶Ibid.

²⁷II. 8. 15.

²⁸Walcott, op. cit., p. 472.

²⁹Ibid., pp. 471-472.

³⁰Ibid.

³¹Reginald Jackson, "Locke's Distinction Between Primary and Secondary Qualities", Mind, XXXVIII (1929), p. 70. (The first italics are mine; the second are in the original).

³²II. 8. 26.

³³II. 8. 10.

³⁴O'Connor, op. cit., p. 66.

³⁵II. 8. 9.

³⁶Ibid.

³⁷Ibid.

³⁸Aaron, op. cit., p. 118.

³⁹Ibid.

⁴⁰Ibid., p. 124.

⁴¹Ibid., pp. 124-125.

⁴²Ibid., p. 127.

⁴³Ibid., note 1.

⁴⁴O'Connor, op. cit., p. 65.

45II. 8. 17.

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49O'Connor, op. cit., pp. 67-68.

50Ibid., p. 68.

51Ibid., p. 65.

52Hume, op. cit., p. 228.

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54Ibid.

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IV

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¹II. 23. 1.

²II. 23. 3.

³Ibid.

⁴II. 23. 2. (The italics for 'qualities' are mine).

⁵Ibid. (The italics for 'qualities' are mine).

⁶II. 23. 4. (The italics are mine).

⁷II. 23. 6.

⁸O'Connor, op. cit., p. 75.

⁹Ibid., p. 82.

¹⁰Locke, op. cit., pp. 390-391, note 3. (The italics for 'qualities' are mine).

¹¹Fraser, op. cit., p. 150.

¹²Ibid., p. 151.

¹³O'Connor, op. cit., p. 74.

¹⁴Ibid., pp. 14-15.

¹⁵Aaron, op. cit., p. 8.

¹⁶II. 23. 2.

¹⁷Ibid.

¹⁸Ibid.

¹⁹II. 23. 4.

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²¹II. 23. 15. (The italics are mine).

²²II. 23. 2.

²³Ibid.

²⁴II. 23. 3.

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²⁶Hume, op. cit., p. 6.

²⁷II. 23. 3.

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²⁹II. 11. 9.

³⁰Ibid.

³¹III. 3. 7.

³²All italics except those for 'man' are mine.

³³III. 3. 11.

³⁴III. 3. 12.

³⁵Hume, op. cit., p. 17.

³⁶III. 3. 11.

³⁷II. 11. 9.

³⁸In fact, Aaron, for example, contends that "it is possible to distinguish at least three strands in Locke's argument, which he himself never explicitly distinguishes and never wholly disentangles." Aaron, op. cit., p. 197.

³⁹III. 3. 13.

⁴⁰Ibid.

⁴¹John Locke, An Essay Concerning Human Understanding, ed. A. S. Pringle-Pattison (Oxford: The Clarendon Press, 1950), p. 231, note 2.

⁴²III. 3. 14. (The italics for 'different collections' are mine).

⁴³Ibid. (The italics for 'uncertain' and 'various' are mine).

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⁴⁵Locke, op. cit., ed. Pringle-Pattison, p. 233, note 1.

⁴⁶Ibid.

⁴⁷Locke, op. cit., ed. Fraser, Vol. II, p. 26, note 3.

⁴⁸Locke, op. cit., ed. Pringle-Pattison, p. 66, note 3.

⁴⁹II. 8. 10.

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⁵¹Locke, op. cit., ed. Fraser, Vol. II, p. 26, note 3.

⁵²II. 8. 10.

⁵³II. 21, 75. (The italics for 'constitution' and 'configuration of parts' are mine, others are in the original).

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⁵⁷Locke, op. cit., ed. Fraser, Vol. II, p. 62, note 3.

⁵⁸III. 3. 18.

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⁶⁰II. 31. 13.

⁶¹II. 23. 3.

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⁶⁴II. 23. 2.

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⁶⁶II. 23. 6.

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84^{II}. 23. 10.

V

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¹Aaron, op. cit., pp. 178-179.

²Ibid., p. 179.

³O'Connor, op. cit., p. 77.

⁴Locke, op. cit., p. lxi.

⁵I. 3. 19.

⁶John Locke, Works, 10 Volumes (Germany: Scientia Verlag Aalen, 1963, (Reprint),), Vol. IV, p. 21.

⁷Locke, An Essay Concerning Human Understanding, Vol. I, p. 108, note 2.

⁸Ibid.

⁹Locke, Works, Vol. IV, p. 21.

¹⁰Ibid., p. 19.

¹¹II. 28. 18.

¹²II. 12. 7.

¹³II. 12. 1.

¹⁴II. 11. 4.

¹⁵II. 28. 18.

¹⁶Gibson, op. cit., p. 95.

¹⁷O'Connor, op. cit., p. 79.

¹⁸II. 25. 1.

¹⁹II. 25. 8.

²⁰O'Connor, op. cit., p. 74.

- ²¹Locke, Works, Vol. IV, p. 21.
- ²²Ibid., p. 5.
- ²³II. 11. 9.
- ²⁴O'Connor, op. cit., p. 79.
- ²⁵Locke, An Essay Concerning Human Understanding, Vol. I, p. 108, note 2.
- ²⁶O'Connor, op. cit., p. 74.
- ²⁷II. 23. 6.
- ²⁸Ibid.
- ²⁹O'Connor, op. cit., p. 74.
- ³⁰Locke, Works, Vol. IV, p. 5.
- ³¹O'Connor, op. cit., p. 83.
- ³²II. 13. 19.
- ³³II. 13. 20.
- ³⁴Ibid.
- ³⁵O'Connor, op. cit., p. 74.
- ³⁶Ibid., p. 73.
- ³⁷Hume, op. cit., p. 16.
- ³⁸Alfred North Whitehead, Process and Reality, An Essay in Cosmology (New York: Harper and Row, Publishers, 1960), p. 254.

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