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**THE ROLE OF CONSCIOUSNESS IN LOCKE'S THEORY OF MIND: PROBLEMS AND
CONSEQUENCES**

by

LYDIA HARTUNIAN

**A dissertation submitted to the Graduate Faculty in Philosophy in partial fulfillment of the
requirements for the degree of Doctor of Philosophy, The City University of New York**

2002

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Abstract

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Adviser: Stephen Grover

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The purpose of this dissertation is to examine Locke's theory of mind and the role consciousness plays therein. It is Locke's belief that consciousness is a necessary condition of all mental phenomena, of everything we experience, and that the notion of an unconscious mental state or experience is absurd. Consequently, we find that all of what Locke says the mind is capable of knowing and doing starts and stops in consciousness.

It will be my contention that Locke's theory of consciousness is problematic not only because of the inconsistent ways in which he explains how consciousness informs our theories of the world and functions in both sensation and reflection, the two sources from which he says all of the mind's contents are derived, but also because, as we will see, there is no way to provide a successful theory of mind without including the unconscious. That is, what I will argue is that it is not simply because Locke is careless in formulating his empiricist theory of mind and his belief about the role consciousness plays therein that it must be rejected, but because it is impossible to provide a theory of mind without somehow accounting for unconscious mental states, as even Locke sometimes is forced to do. By opening the door for unconsciousness to be included in our theories of mind, I argue, we not only allow for complete and coherent explanations of how the mind functions, but we allow for the possibility of defending a rationalist theory of mind. I will have the opportunity to examine the thesis of rationalism, at least as it exists in an historical context, throughout this treatment, as it is the existence of rationalism that motivates Locke to expound his empiricist views in the *Essay*. I will also have the opportunity to explain some of the rationalist perspective found in Leibniz's theory of mind, as in the final chapter I will examine Leibniz's criticism of Locke's theory. In the end I will argue that Leibniz's theory of mind wins over Locke's as we find that Leibniz is not only able to account for a wider range of experiences than Locke, but because by virtue of allowing for unconsciousness, Leibniz is able to provide a more coherent view of how the mind functions.

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This dissertation is dedicated to MARCEL, without whom my perceptions of “attached cat parts” would be meaningless.

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Introduction

A successful theory of mind, according to an empiricist, can be founded on experience alone and none of what is needed to determine our ideas or what we can know needs to be attributed to the innate constitution of mind. As such, empiricist views stand in contrast to rationalist theories of mind wherein it is argued that while experience is needed to help us become aware of what we know, experience by itself is an insufficient basis upon which to account for all knowledge. For a rationalist, the challenge is to show how the mind can be said to know or contain information even when not conscious of it. That is, if knowledge can exist as part of the innate constitution of mind then people can be said to know something independent of actually knowing (being aware) that they know it. The empiricist response to rationalism is typically of two varieties. On the one hand, an empiricist can argue that because the notion of a person knowing something without also being aware of it is absurd, rationalism is an unintelligible way to account for knowledge. On the other hand, an empiricist can argue that rationalism is simply unnecessary because all the contents of knowledge can ultimately be shown to originate in experience.

While many empiricists are content to show only the latter, that is, that experience can provide a sufficient base for accounting for all knowledge, and therefore that rationalism is unnecessary, John Locke is concerned to show both the latter and the former, namely, that rationalism is unnecessary and also unintelligible.¹ The account of mind found in his work, *Essay Concerning Human Understanding*, is designed not only to expose the inconsistencies and problems that Locke believes arise in accepting a theory of innate knowledge but also to show how all the contents of mind can be accounted for by experience.² Says Locke;

¹ It is interesting to note that other empiricists, such as Berkeley and Hume, use only the first strategy to discredit rationalism, that is, they argue that rationalism is unnecessary because experience is a sufficient basis for knowledge. However, interestingly, neither Berkeley or Hume prove that this is so, they only assume it. Nowhere in Berkeley or Hume can we find arguments that show why knowledge can't exist in the mind prior to experience, only that it doesn't and thereby how experience can account for all of what we know. I will refer to certain aspects of both their theories throughout this analysis.

² John Locke, *Essay Concerning Human Understanding*, edited by Peter Nidditch, Oxford Clarendon Press, 1975.

“Let us suppose the Mind to be, as we say, white Paper, void of all Characters, without any Ideas, How comes it to be furnished? ...To this I answer, in a word, From Experience: In that all our knowledge is founded; and from that it ultimately derives it self. Our Observation employed either about external, sensible Objects; [SENSATION] or about the internal operations of our Minds, perceived and reflected on by our selves, [REFLECTION], 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.”³

The overall goal of this analysis is to examine Locke’s theory of mind and the challenges and arguments brought forth in Locke’s polemic against innativist views. Specifically, I am interested in examining how Locke integrates consciousness into his accounts of the various aspects of mind and whether or not his commitment to consciousness and to an empiricist theory of mind is viable. Ultimately I will argue that it is not, that is, that while Locke’s account of mind is interesting in so far as it helps to bring to light many of the challenges a rationalist theory of mind must face, it is untenable and, like other empiricist theories, does nothing but burden us with an incomplete and at times incoherent account of mind. In the end I will have the opportunity to examine how the opposition theory, namely rationalism, can begin to fill in for all the empiricist is unable to account for. Leibniz’s theory of mind will be used as a basis for understanding rationalism and while it will be acknowledged that the rationalist doctrine is by no means burden free, the kinds of challenges rationalism presents are ones that need to be dealt with. Ultimately my suggestion is that certain features of the rationalist doctrine be embraced and that ways to defend it in contemporary contexts be sought out.

³ II.i.2.

Chapter One: Locke's Understanding of Rationalism

Part of what Locke believes is disconcerting about rationalist theories is that they rely on vague and metaphorical terms for articulation. Exactly what is innate, Locke argues, be it ideas, principles or truths is often left unclear, as is how those terms are to be understood, and hence, Locke believes, we are left wondering if what rationalists ascribe to the innate constitution of mind should be regarded as components of knowledge or as actual instances of knowledge themselves. Due to the noted ambiguity, Locke finds that rationalist theory can be interpreted in at least two different ways, neither of which, however, he believes is acceptable.

On the one hand, Locke notes, rationalism can be interpreted as a theory about innate capacities for knowledge wherein what is ascribed to the innate constitution of mind are dispositions or capacities for knowledge, dispositions that exist in the mind independent of experience and yet allow for instances of knowledge only upon being triggered by or "mixed" with experience. On this view we would believe that while our knowledge of color concepts may not be innate, the capacity to receive and comprehend color concepts is innate. That is, on this interpretation of rationalism what are ascribed to the innate constitution of mind are structures that, while not instances of knowledge in and of themselves, are necessary for knowledge to come about. Exactly which theorists Locke targets in his attack is a subject of debate amongst scholars, but it is generally agreed that with reference to the dispositionalist version of rationalism, Locke was at least targeting Descartes.⁴ Descartes is often cited for having made an analogy between innate ideas and congenital diseases, the symptoms of which may or may not become manifest in experience. According to Descartes, whereas innate ideas only represent what could be known should one happen upon experiences that will allow them to be uncovered, so a disease in its congenital form only represents the ill-health one could have should experience determine that the symptoms

⁴ For a more detailed analysis of which philosophers Locke had in mind when formulating his interpretation of rationalism see R. I. Aaron, *John Locke*, Oxford at Clarendon, 1937, chapter one, and John Yolton, *John Locke and the Way of Ideas*, Oxford, Clarendon, 1956, chapter two. Along with Descartes, it is speculated that Locke has in mind Lord Herbert of Cherbury's view, as well as a number of other seventeenth century moralists.

The problem with this view, Locke argues, is that if the innate dispositions are not in and of themselves a sufficient basis for knowledge and if experience is needed after all, then why say the dispositions are anything more than that which helps us *acquire* knowledge and that knowledge is therefore that which comes from experience? If all truths are discovered in experience then we can not distinguish between those that are innate and those that are not. Says Locke;

"The capacity, they say, is innate, the knowledge acquired. But then to what end such contest for certain innate maxims? If truths can be imprinted on the understanding without being perceived, I can see no difference there can be, between any truths the mind is capable of knowing in respect of their original: They must all be innate, or all adventitious: In vain shall a man go about to distinguish them."⁶

Hence, part of Locke's argument is that in order for rationalism to be necessary or non-trivial, it has to be about more than capacities for acquiring knowledge, it has to establish that at least some of what exists in the mind prior to experience are themselves actual instances of knowledge. According to Locke, a rationalist needs to distinguish between truths we are disposed to believe because we know them prior to experience (say, for example, the principle of identity) and truths we are disposed to believe because the ability to know them exists in our minds innately (say, for example, that grass is green.) Locke is prepared to admit that only the latter kind of dispositions exist in the mind but notes that some rationalist

⁵ Says Descartes, "[of ideas], I called then innate..in the same sense of the word that we say generosity is innate in certain families; or again that in others certain diseases, e.g. gout and the stone, are innate; not that infants of these families suffer from these diseases in their mother's womb, but because they are born with a certain disposition or liability to contract them." (Descartes, *Notes on a Certain Programme*)

⁶ I.ii.25. I leave this in the footnotes for now because it becomes the topic of discussion in later analysis, but one thing that Locke fails to note at this point is that because experience is needed to help uncover all truths does not mean that all truths actually come from experience in the sense that their content is determined by the contents of experience. For the rationalist, at least part of why truths get ascribed to the innate constitution of mind is based on the fact that their content can not be linked to experience. Later I will argue that in the case of at least some necessary truths, experience gives us less than what we find in the content of the truth itself and thus, based on the impoverished nature of experience we have reason to believe that at least some knowledge is innate. Of course, as we will soon see, Locke rejects this possibility outright because he thinks that to say some truths (much less all truths) are innate is to say that there are truths the mind both knows (is aware of) and does not know (is not aware of) at the same time. According to Locke, knowledge has to be conscious and the notion of innate knowledge implies that at least some of what we know we know unconsciously. I will spend a great deal of time refuting this claim in the upcoming chapters.

views ascribe the former (actual instances of knowledge) to the innate constitution of mind. Says Locke, "It is an established opinion amongst some men, that there are in the understanding certain *innate principles*; some primary notions, characters, as it were stamped upon the mind of man, which the soul receives from its very first being; and brings into the world with it."⁷ On this interpretation of rationalism, what I call "actualism," because at least some knowledge is said to exist prior to and independent of experience, experience is needed only to help us become aware of preexisting truths, not to determine them.⁸ That is, while experience may be needed to recall or uncover what we know innately, what counts as knowledge, the actual content, is determined by the mind alone.

According to Locke, this second version, the version wherein what are ascribed to the innate constitution of mind are said to be actual instances of knowledge not mere dispositions, is drawn from what he calls "universal consent", the observation that the

⁷ Ibid., p.48

⁸ It is interesting to note that, according to Leibniz, Locke is wrong to insist that a rationalist distinguish between what the mind is disposed to know because of the truths already in mind, and what the mind is disposed to know because of the mind's ability to acquire certain knowledge. The reason for this is because, according to Leibniz, all knowledge is innate. (See NE, 74.) If all knowledge is innate then everything the mind is disposed to know exists in the mind prior to experience and there is no such thing as a disposition to acquire knowledge. On Leibniz's view experience is only needed to help actualize what we know which is to say to help make us conscious of what we already know.

I realize that most people, including Locke, find that kind of rationalism ridiculous but I'm not convinced that it is. While it may seem odd for me to deny that, for example, at least some of what I know of my cat comes from experience and not from the depths of my mind, I can't help but think that the only way I get to know about my cat is by virtue of the fact that my mind is constituted such that I am able to perceive my cat in the way that I do, (for example, as a whole animal and not as detached cat parts,) and likewise that my cat gets to know me (however that may be) because of the innate structures in his brain. This is to say that of those innate structures that allow me to see the colors of my cat, to perceive him as whole, as enduring, etc., it may be wrong to say, as Locke would, that they are "void of positive content," and wrong to deny that they are instances of knowledge when in fact they do contribute information to the realm of experience. Of course, a view like this would require not only that we have a theory about how the mind came to be as such but also that we have a theory of knowledge that will allow for unconscious states of knowledge. Leibniz relies on his theory of monads to show that the whole of the physical universe is represented in mind, and uses God to establish that what's in mind is knowledge. But what could a modern day rationalist use? My suggestion would be that the modern day rationalist use DNA and scientific theories about evolution to explain how what we know is contained in mind and use the mere fact that what we know is innate to explain that it is knowledge, but neither possibility is without its problems. While I will make no attempts to argue that all of what we know is innate, in chapter four I will attempt to argue that some of what we know is innate and thus will have to address the issue of how what's in mind can count as knowledge.

fundamental principles of knowledge are agreed upon and assented to by all men and because they are so, are innate. "There is nothing more commonly taken for granted, than that there are certain Principles both *Speculative* and *Practical* (for they speak of both) universally agreed upon by all Mankind: which they therefore argue, must needs be the constant Impressions, which the Souls of Men receive in their first Beings, and which they bring into the World with them, as necessary and really as they do any of their inherent faculties." ⁹ By speculative principles Locke means those that we would find used in science, and in math and logic, for instance, that "whatever is, is," that "something can not be both true and not true," that "the whole is greater than it's parts," and so on. Practical principles, on the other hand, Locke believes, are moral principles, those we use to guide our understanding of "that which man himself ought to do, as a rational and voluntary agent, for the attainment of any end, especially happiness."¹⁰

While, again, Locke does not mention by name who he thinks holds this view, in so far as it is a view about actual instances of knowledge existing prior to experience and as part of the innate constitution of mind, one can easily attribute it to Plato.¹¹ Later I will argue that Leibniz, in his attempts to answer Locke's criticism of rationalism can rightfully be said to be an actualist and not, as is commonly assumed, a dispositionalist. In fact, as noted earlier (see footnote number nine) Leibniz believes not just that some of what we can know is innate but that all of what we know is innate and thus, Leibniz does not actually think that there are any dispositions for acquiring knowledge because everything is already known. Leibniz's view is unique in that regard because many rationalists believe that only some knowledge is innate and the rest adventitious. In the final chapter when I examine Leibniz's innateness hypothesis in more depth, I will leave aside his more grandiose claim that all knowledge is innate because to defend it takes us too far afield from the ultimate goal which is only to

⁹ I.ii.3.

¹⁰ Ibid., IV, XXI, I.

¹¹ Robert McRae argues in his article, "Innate Ideas" in an attempt to prove that Descartes was certainly not an actualist, that Locke is likely attacking Lord Herbert of Cherbury. (See *Cartesian Studies*, edited by R. J. Butler, Basil Blackwell, 1972, p.32.) Additionally it is known that Henry More and Malebranche held views wherein the mind was attributed not with potential but with actual instances of knowledge.

establish that Leibniz, as well as any rationalist, has a right to claim that at least some knowledge is innate. But for now the task is to determine why Locke dismisses the actualist version of rationalism which, as we find, is in part because he sees that the premise upon which rationalists base their claims is false.

According to Locke, rationalists begin with the assumption that at least some knowledge is uniform from person to person and that because therefore, there are propositions that all people will assent to, those that are universally assented to must be innate. Locke rejects this argument because as he notes, there are no principles that all men will or do assent to, and hence, there is no way to demonstrate that even some knowledge is innate. Says Locke, “[T]his argument of universal consent, which is made use of, to prove innate principles, seems to me a demonstration that there are none such: Because there are none to which all mankind has given an universal assent.”¹² According to Locke the rationalist derives the existence of innate content from an empirically false premise; there is after all no principle or idea that all men will or do assent to, and therefore, Locke argues, the rationalist has no basis for his claim.

While certainly it seems correct to say that there is no one idea or principle that we can attribute to the belief system of all people, it is far from clear that there are rationalists that actually make this claim. That is, Locke’s interpretation of the rationalist position in this regard has been dismissed by the critics as it is widely acknowledged that rationalists don’t actually rely on the fact of universal consent as a means of deriving beliefs about innate content.¹³ That is, while rationalists may be eager to claim that there are universal traits and instances of knowledge common to all human minds, that all minds are aware of these commonalities or that they need be is not something rationalists claim. Leibniz, for instance, claims that all minds harbor innate truths whether they are conscious of it or not, and explicitly denies Locke’s interpretation. Says Leibniz as Theophilus to Locke as Philathethes

¹²I.ii.4

¹³McRae argues that Lord Herbert of Cherbury actually relied on universal consent to support a belief in innate content. But, while Locke may have known one person to make this mistake, that is hardly a basis to thereby think that rationalists used this premise in general when he knows that the many others he was familiar with did not. (See McRae’s “Innate Ideas” in *Cartesian Studies*, edited by R. J. Butler, Basil Blackwell, 1972, p.33)

“I do not rest the certainty of innate principles on universal consent; for I have already told you, Philathethes, one should work to find ways of proving all axioms except primary ones....But I shall further add that fundamentally everyone does know them; that we use the principles of contradiction (for instance) all the time, without paying distinct attention to it; and that the conduct of a liar who contradicts himself will be upsetting to anyone, however uncivilized, if the matter is not one which he takes seriously. Thus, we use these maxims without having them explicitly in mind. It is rather like the way in which one implicitly has in mind the suppressed premises in enthymemes, which are omitted in our thinking of the argument as well as in our outward expression of it.”¹⁴

One could argue, however, that because Leibniz wrote after Locke, his construction of the rationalist position does not count as a representation of what Locke criticized because Leibniz was aware of Locke and deliberately trying to avoid his criticism. Hence, perhaps more interesting is to note that Descartes, writing of course before Locke, argued along the same lines as Leibniz. Regarding the idea of God which Descartes believes exists in all minds innately, Descartes says;

“I do not doubt that all have within themselves at least an implicit idea of God, that is to say, an aptitude to perceive it explicitly; but I am not surprised that they do not feel themselves to have it, or do not notice that they have it, and perhaps will not notice it even after the thousandth reading of my meditations.”¹⁵

“The idea of God is so imprinted on the human mind that there is no one who does not have in himself the faculty of knowing him; but this does not prevent many people from being able to pass their whole lives without ever distinctly representing this idea to themselves.”¹⁶

But even if rationalists did argue as Locke says and did make innate content a necessary condition of universal consent, the problem with Locke’s argument, as E. J. Lowe notes in his treatise on Locke is that it is “a blatant example of the fallacy of denying the antecedent.”¹⁷ If a rationalist actually did say that universal consent entails innate content then to deny that there is universal consent which is to deny the antecedent is not a valid means of dismissing

¹⁴ Leibniz, *New Essays on Human Understanding*, edited by Peter Remnant and Jonathan Bennett, Cambridge University Press, 1996, (p.76)

¹⁵ Letter to Hyperaspistes, AT III.430)

¹⁶ AT IV, 187

¹⁷ E. J. Lowe, *Locke on Human Understanding*, Routledge Press, 1995, p.24.

the consequent. But Locke might reply by noting that in a stronger move he is concerned to show not simply that there is no universal consent but that even if there were, it would not be a sufficient basis upon which to secure the existence of innate content. Says Locke, "This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths, wherein all mankind agreed, it would not prove them innate, if there can be any other way shown, how men may come to that universal agreement, in the things they do consent in; which I presume may be done."¹⁸ According to Locke, it is just as easily shown that the origins of what men believe (whether universal or not) lies in experience and that the need for positing innate foundations for knowledge is superfluous.

The problem in this case, however, again is that the rationalist simply doesn't say this and if universal consent is not used as a premise for substantiating the existence of innate content then while Locke's argument this time might be valid, it is not sound. Hence, the problem lies not with what the rationalist believes but with what Locke obviously believes, namely, that innateness would have to be accompanied by universal consent. That is, according to Locke, if all minds are naturally constituted with the same ideas or beliefs then all minds would have to be aware of possessing the content and, therefore, universal consent would have to exist. The reason for this is because fundamental to Locke's system is the belief that consciousness is a necessary condition for mentality which means that the possibility that content could exist prior to experience, as the rationalist thesis requires, is absurd.

Hence, independent of his argument against what Locke believes rationalists use to derive their conclusions about the existence of innate content, namely, universal consent, Locke believes he has reason to attack the conclusion itself. What Locke sees is primarily and most importantly wrong with the actualist version of rationalism, (the version rationalists are logically committed to should they avoid being trivialized) is that it asks us to consider the existence of knowledge prior to experience which, in effect, entails the existence of knowledge prior to our being aware of it. On Locke's view, to say that something is known

¹⁸ Ibid.

prior to our knowing it, meaning prior to our being aware of it is absurd. Says Locke;

“To say a Notion is imprinted on the Mind, and yet, at the same time to say, that the mind is ignorant of it, and never yet took notice of it, is to make this Impression nothing. No Proposition can be said to be in the Mind, which it never yet knew, which it was never conscious of. For if anyone may; then, by the same Reason, all Propositions that are true, and the Mind is capable of assenting to, may be said to be in the mind, and to be imprinted: Since if anyone can be said to be in the Mind, which it never yet knew, it must be only because it is capable of knowing it; and as the Mind is of all Truths it ever shall know.”¹⁹

The assumption or insight that Locke uses to substantiate his argument has at least strong, *prima facie* appeal. That is, at first glance, it does seem odd to say of S, for example, that S knows p to be true, and yet, S remains unaware of p and unable to say what p is. In other words, on what basis would we decide that S has knowledge of something if consciousness cannot be used as a means of correctly identifying, justifying and ascribing that knowledge to S? Without recourse to consciousness it seems we have no criteria by which to judge that, in this case, S really does know p.

One might believe that Locke's denial of unconscious states of mind is merely reflective of the “pre-Freudian” times in which he lived wherein established conventions for talking about or acknowledging unconscious states of mind had not yet been introduced. This is, undoubtedly, part of the story and part of what influences Locke's beliefs. But one cannot ignore the fact that Leibniz, a younger contemporary of Locke's, had a rather elaborate theory of the unconscious, nor that it is not unreasonable to believe that Plato, for example in the *Meno*, relied upon a theory of the unconscious in his theory of knowing and recollecting despite not actually using the term. The point being that while Locke, like anyone, is subject to the influence of the intellectual paradigms dominant at the time, (including the Cartesian model of mind wherein the mind is said to be defined by thought and therefore always in a state of thinking,) a notion of the unconscious was not rejected by him because it was absent from his realm of influence but rather was rejected because he truly believed it should be. According to Locke, to believe in the unconscious, that is, to believe that we can have things in mind of which we can have no awareness, is a logical mistake.

It is also interesting to note that despite the fact that theories of mind that include the unconscious have infiltrated twentieth century thought, we are still not likely to find views

¹⁹ I.ii.5.

that reject Locke's insistence on consciousness as a necessary condition for knowledge. That is, while more people today are at least willing to accept unconscious mental states, they are not willing to accept the notion of unconscious knowledge states. I will return to this discussion in chapter four, arguing that while the two can remain separate, we should work to include not only theories of mind that allow for unconscious states of mind but that allow for unconscious knowledge. For now, after having established how Locke interprets the thesis of rationalism, the goal is to determine the conditions and assumptions that guide the theory of mind he believes should replace rationalism. The following chapter provides a look into how Locke articulates his empiricist theory of mind.

Chapter Two

Locke's Empiricism

In Book One of the *Essay* Locke tells us that his main concern is to show that the thesis of rationalism, in any form, is unacceptable and that all knowledge can properly be said to come from experience. Says Locke,

“It is an established opinion among some men that there are in the understanding certain *innate principles* some primary notions, as it were, stamped upon the mind of man which the soul receives in its very first being and brings into the world with it. It would be sufficient to convince unprejudiced readers as to the falseness of this supposition, if I should show (as I hope i shall in the following parts of this discourse) how men barely by use of their faculties, may attain to all the knowledge they have, without the help of any innate impressions; and may arrive at certainty, without any such notions or principles.”²⁰

As noted in the last chapter, Locke rejects innativist hypotheses and believes that experience is both a necessary and sufficient base upon which to account for the contents of mind. Because Locke believes that knowledge comes from outside the mind, from the physical world, it is necessary to understand how Locke characterizes physical objects and their ability to interact with mind. Thus, the goal of this chapter is to determine not only what the basic parameters of Locke's empiricist theory of mind are but also to determine how these conditions inform his theory of the world outside of mind. Underlying all of this, as we will see, is his belief that anything we can know about mind or about physical objects is given to us in consciousness, hence, it is also necessary to examine the role consciousness plays in determining his theories and whether or not Locke is ever in violation of his own empiricist commitments. In the end I will argue that while at least with respect to his theory of physical objects Locke never outwardly violates his empiricist commitments, his empiricist model is still unable to account for all the contents of mind because not everything given to mind is conscious.

The Role of Experience in Locke's Empiricism

The term "empiricism" is typically used to refer to epistemological theories in

²⁰ I.ii.1.

philosophy which say that the contents of human knowledge are found only in experience and that anything that lies outside the scope of human experience is, in principle, unknowable to us. That Locke is an empiricist is evident in Book II as he begins to explain how given the mind's natural inclinations, the mind is able to derive all the contents of knowledge from experience. On Locke's view, everything the mind is capable of perceiving, every sensation, idea, belief, instance of knowledge, etc., is acquired from the mind's ability to have contact with the world outside of the mind.

It is important to note that while Locke insists that all the contents of the mind come from outside the mind itself, (mind as "tabula rasa,") he does not think the mind is therefore "void of all character." Rather what Locke means when he says that mind is like a "blank tablet" is that in its original form it is "without *positive* content", without any determinate units of knowledge. This is not to say that for Locke the mind is also or therefore devoid of innate processing mechanisms, functions or activities. As is typical of an empiricist, Locke is quite willing to ascribe content ("operations") to the innate constitution of mind so long as it is understood that the content in question is not characterized as knowledge.

Thus, Locke understands that if rationalists ascribe, say, color concepts or the principle of identity to the innate constitution of mind, they mean that nothing in experience can add to the already determinate nature of those instances of knowledge and that therefore, our knowledge of such instances exists prior to and independent of experience. For the rationalists, experience is not needed to determine our knowledge but rather to help us uncover that which we already know, that which is already determined and exists in the innate constitution of our minds.²¹ For Locke, however, that our minds are "hard-wired" to formulate color concepts or logical principles is not because any of the information concerning the concepts or principles exists in the mind prior to experience but because the

²¹ Leibniz, for instance says, "The senses, although they are necessary for all our actual knowledge, are not sufficient to give it all to us." (NE, 49.) What Leibniz means, as will become clear in chapter four, is that while experience is necessary for the uncovering or discovery of "actual knowledge" (which later we will see is tantamount to conscious knowledge) it is not needed for the determination of knowledge itself. That is, on Leibniz's view consciousness is not a necessary condition for knowledge and Locke is simply wrong to demand that it is. What reasons Leibniz has to persuade us of his position over Locke's will be considered in chapter four. Ultimately, I will argue that we do have more reason to accept Leibniz's model of mind over Locke's and that any theory of mind that precludes ascriptions of unconscious knowledge is necessarily deficient.

abilities to receive and interpret the information given to us in experience exist in the mind prior to experience.

While Locke believes that experience is the sole source of knowledge, he distinguishes two ways in which we acquire experience. “Our observation employed either about external, sensible objects; or about the internal operations of our minds, perceived and reflected on by our selves, is that, which supplies our understanding 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.”²² The two sources from where all the materials of knowledge are alleged to come, Locke calls “sensation” and “reflection.” Exactly how sensation and reflection are characterized by Locke and how he explains their ability to interact with objects in the universe is the topic of the succeeding analysis. Let us first note, how Locke accounts for the origins of mind itself and determine where Locke says our perceptual powers come from in the first place.

The True Origin of Mind

According to Locke, that our minds naturally exist with faculties able to perceive the data of experience and generate ideas is due to the way in which God, the “author of our being” has designed our minds. In keeping with his conception of a Christian God, Locke believes that whatever natural powers or abilities we have, we have them for a reason. On Locke’s view, God does nothing or would design nothing in vain and thus, that we are able to perceive the world through sensation and reflection is because God wants it so. “For though the comprehension of our understandings, comes exceedingly short of the vast extent of things; yet, we shall have cause enough to magnify the bountiful author of our being, for that portion and degree of knowledge, he has bestowed on us, so far above all the rest of the inhabitants of the mansion. Men have reason to be well satisfied with what God has thought fit for them, since he has given them, [namely,] whatever so is necessary for the conveniences of life and information of virtue.”²³

²²II. i. 1.

²³ I.i.5.

On Locke's view, because God set up the functionalities of mind, we must not doubt that our perceptual faculties can ultimately be trusted to give us accurate knowledge about the world. In a later section I will examine the kinds of problems this belief gives rise to as well as the kinds of problems his view poses for his overall empiricist commitments. For now, however, what is noted is that our ability to, for instance, perceive plants, and animals and human behavior arises not only because, as Locke believes, there are realities corresponding to the perceptions of each but because our minds are designed such that we can "pick up on" or perceive such phenomena. According to Locke, whatever we can and do perceive is due to the fact that our minds are designed to do so, and what our minds can't perceive, say, the true nature of substance, is that which God did not intend for us to have full knowledge of.²⁴ Says Locke. "[I]t would be impertinent to suppose, the ideas of color innate in a creature to whom God hath given sight and a power to receive them by the eyes from the external objects: and no less unreasonable to attribute several truths, to the impressions of nature, and innate characters, when we may observe in ourselves faculties fit to attain as easy and certain

²⁴ Regarding 'substance', Locke acknowledges that we have an idea of substance and that this idea is given to us from the naturally occurring 'substratum' that lies at the base of each physical object, but denies that we have access to the real nature of that substratum. In other words, the existence of a substratum is inferred, on Locke's view, from how the sensible ideas corresponding to an object, for example, the color, texture, scent, etc. all come together to form an idea of a whole object. That we perceive the properties of a rabbit as constituting a whole, for instance, and not as detached, floating rabbit parts, on Locke's view, is because there is an underlying substance that brings all the properties of the rabbit together and is an idea that we infer from the fact that our perception is given to us as a whole. Being unable to imagine how the qualities for an object can subsist by themselves Locke writes; "we accustom ourselves to suppose some substratum wherein they do exist." Essay, II. xxiii.1.

What is peculiar about Locke's view in the case of substance is that given his empiricist commitments, it represents a departure from believing only in that which can be directly linked to experience. And if he is willing in the case of substance to infer beyond what is directly observable in perception, then why shouldn't he be willing to do the same with respect to other ideas, for example, the idea of non-conscious states of mind? That is, if physical objects are alleged to have a reality beyond the reality of them given to us in experience, then why can't the mind be said to have a reality beyond what we have access to in our conscious experiences? Just as experience leads us to believe that physical objects appear to have more of a reality than what is given to us in experience, on Locke's view, so it could be argued that experience leads us to believe that the mind has more of a reality than what is given to us in consciousness. Of course, the kinds of experiences that warrant belief in unconscious experience will need to be identified as well as why characterizing these experiences as non-conscious is not contradictory in order to make better sense of this argument. The following analysis will attempt to do so, and I will return to this argument in more depth momentarily.

knowledge of them, as if they were originally imprinted on the mind.”²⁵ Just as we perceive color because our minds have color receptors and an ability to generate ideas about color, Locke could say, so we have “receptors” for all other ideas.

To say we have receptors for all ideas is not to suggest that all ideas result from sensory receptors nor is it to suggest that there is a particular receptor for every particular idea. That is, my use of the term “receptor” is used more generally to refer to both the faculties of sensation and reflection and to refer to the fact that whatever idea the mind is capable of perceiving and entertaining is by virtue of the fact that the mind is naturally receptive to being able to perceive or entertain the idea through at least one the faculties, sensation or reflection. Additionally, it is important to note that while with sensation and reflection the mind is receptive to generating a large number of ideas, given the vast and varied nature of our experiences not all ideas, on Locke’s view, are of the same kind. The way in which ideas present themselves to the mind, Locke believes, dictates that we classify ideas into two categories, namely, simple and complex. A brief mention of how Locke distinguishes between simple and complex ideas is useful in helping us understand how the faculties of experience, namely, sensation and reflection, are distinguished from one another.

Simple and Complex Ideas

Simple ideas, on Locke’s view, present themselves to the mind as nothing other than the uniform appearance of what is perceived and can not be known based on definition alone. For example, the way in which we come to know “red” or any term used to designate a color, Locke believes, is not by having someone describe it to us or by understanding a definition. Rather, the only way in which we can truly know what it means for something to be red is to see something that is red. Similarly, our idea of “motion” according to Locke, while different than red because it is suggested to us by more than one sense, is an idea we can understand only by experiencing motion, not by trying to understand a definition of it. Says Locke,

“[H]e that has not before received into his mind, by proper inlet, the simple idea

²⁵ I.ii.1

which any word stands for, can never come to know the signification of that word, by any other words, or sounds, whatsoever put together, according to any rules of definition. The only way is, by applying to his senses the proper object; and so producing that idea in him, for which he has learned the name already.”²⁶

Complex ideas, on the other hand, are derived from or made up of simple ideas, Locke believes, and are such that they can be understood through analysis. For instance, on Locke’s view, a full understanding of what is designated by the term “man” is not found in perception alone but rather is found in understanding the composite of all the simple ideas that make it up, for example, figure, extension, motion, thinking, willing, reasoning, etc. “Says Locke, “[I]n complex ideas, which consisting of several simple ones, it is in the power of words, standing for the several ideas, that make that composition, to imprint complex ideas in the mind, which were never there before, and so make their names be understood.”²⁷

Whereas the role of the mind with regard to simple ideas is described as passive, on Locke’s view, the role of the mind with regard to complex ideas is active. In other words, while simple ideas are those we receive immediately in perception and are such that we neither create them nor are able to destroy them, (they are, so to speak, forced upon us,) complex ideas are those which the mind actively creates by virtue of the mind’s natural abilities to combine, compare and abstract ideas. Our abilities to combine, compare and make abstractions, Locke believes, exist as part of the natural constitution of mind and are what allow us to create ideas beyond those given to us immediate perception.

Thus, upon entering a room and surveying the objects found therein, what my eyes can not help but see, so long as I turn my gaze upon them, are the various shapes and colors of the objects found in the room. The *pink* color of the wall, the *rectangular* shape of the table and *smooth* texture of the vase, are all simple ideas I acquire merely by looking at the said objects and are therefore, Locke believes, ideas we acquire passively. Additionally, I may notice the *organization* of the objects in the room, the *beauty* of the flowers in the vase or the *cheerfulness* of the pink color of the walls. While “organization”, “beauty” and “cheerfulness” are not tied to any experience in particular, by virtue of being able to combine,

²⁶ III. iv. 11.

²⁷ III. iv. 12.

compare and abstract ideas, my mind is able to create them out of what I do experience more directly. Says Locke,

“For the objects of our senses, do many of them, obtrude their particular ideas upon our minds whether we will or no: And the operations of our minds, will not let us be without, at least some obscure notion of them. These simple ideas, when offered to the mind, the understanding can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones in itself than a mirror can refuse, alter or obliterate the images or ideas which the objects set before it, do therein produce. As the bodies that surround us, do diversely affect our organs, the mind is forced to receive the impressions; and can not avoid the perception of those ideas that are annexed.”

According to Locke, both faculties, sensation and reflection, are independently capable of receiving simple ideas and in some cases a simple idea is given to us both in sensation and reflection. Complex ideas, on the other hand, are generated in reflection only. Only in reflection can we “see” what is in the mind and therefore “see” beyond what is given to us in immediate perception.²⁸ While much more can be said about how Locke characterizes the different kinds of ideas generated from experience, for now it is important to note that regardless of what the idea is, on Locke’s view, sensation and reflection allow for the generation of all ideas. Sensation is that which allows us to perceive objects that exist outside of our minds, and reflection is that which allows us to perceive what is in our minds including the processes or operations our mind uses to sort and comprehend that which is given to us in sensation.

Hence like the rationalists, Locke is concerned to determine what the innate constitution of mind is like and the extent to which our innate faculties determine our ability to know. However, unlike the rationalists, Locke is not willing to admit that the mind’s innate faculties determine knowledge or add any content of their own, only that they help us acquire ideas from the outside world. Thus, as is the case with all empiricists, Locke needs to show that all the contents of mind actually can be accounted for through experience. And, as Locke believes, empiricists not only can do this but must because the very idea that knowledge could exist independent of and prior to experience which means prior to consciousness is absurd. The next chapter will provide an in-depth look at how Locke relies on consciousness to characterize his theories of sensation and reflection. For now however, we continue to lay

²⁸ See II.ii-vii and III.iv-viii, for Locke’s full discussion of simple and complex ideas.

out his theory of mind noting how Locke uses sensation and reflection to account for all the contents of mind.

Mind as Machine?

Given the mechanistic way in which Locke characterizes the input--output relationship between perception and ideas, it is not uncommon to find critics, at least in contemporary contexts, characterizing Locke's theory of mind in terms of machine models. Anthony Saville, for instance, argues that because Locke believes that sensations are the stimuli needed to give rise to ideas and that sensation is that which "kick starts" all functionings of the mind, it is easy to see that Locke's model of mind "aspires to give a theoretically adequate account of the mind's working on the basis of an exiguous piece of machinery performing strictly a limited number of operations." Says Saville by way of illustrating the machine that he thinks is "Locke's mental psychology:"

"In essence the machine consists of a) a sensory receptors, b) recording and storage apparatus, c) a scanning and selection mechanism, d) a generalizing instrument and e) a printing mechanism. Following in-built modes of operation the sensory receptors receive information from the world and transmit it to the recording apparatus by which it is then registered and stored, In producing and utilizing concepts and knowledge thus acquired, the mind scans the records, selects from them and prints its selection in the form of speech."²⁹

I will have something to say about how the features mentioned in Saville's points (b-c), namely, memory, selection of memory, inferencing, and language function in Locke's theory of mind in later analysis.³⁰ In the final chapter I will also have something to say about the appropriateness of using a machine model to simulate Locke's theory of mind and will argue that while on a very basic level it works to explain the input-ouput relationship Locke thinks exists between experience and ideas, it is not appropriate for modeling more complicated aspects of this theory, for instance, his theory about how we come to know necessary truths.

²⁹ Anthony Saville, "Leibniz's Contribution to the Theory of Innate Ideas", *Philosophy (Journal of the Royal Institute)*, XLVII, 1972., p.113.

³⁰ I will only briefly discuss the role of language in Locke's theory of mind in chapter three, but will give an extended analysis of memory in that section and I will give an extended analysis of Locke's theory of how the mind makes inferences in chapter four.

The reason for this, I will argue, is because Locke's theory, not the machine model is unable to fully explain how the mind works. For now, however, the focus is with what Saville identifies as feature (a), namely Locke's account of how our sensory receptors, including both sensation and reflection are able to generate all the contents of knowledge which, in part, requires a look at how sensation and reflection interact with the world and the role consciousness plays therein.

The Relation of Locke's Theory of Physical Objects to His Theory of Mind

Because in sensation Locke says we are able to perceive objects that exist outside of our mind, while in reflection we perceive objects found inside the mind (including the operations of mind and in some cases the ideas given to us in sensation), the question arises, what does Locke say about the nature of the objects that our faculties are able to interact with? A look at Locke's ontological descriptions of reality including both mind and physical objects is important, as we will find that his views (and sometimes lack of views) are shaped by his insistence that consciousness is a necessary condition of experience and that all mental states must ultimately be conscious states. In the end, I will argue that Locke does not actually succeed at incorporating his consciousness principle into all of his theories and that this is not only because at times he leaves room for or admits unconscious states of mind but also because no coherent theory of mind can be given should it seek to eliminate unconscious states of mind and seek to deny that perhaps a great deal of mental content exists prior to experience.

Qualities of Physical Objects

Physical objects, on Locke's view, are defined in terms of three constituents: 1) substance, 2) secondary qualities, and 3) primary qualities. Of the latter two constituents, Locke thinks we can have genuine knowledge, but of substance, Locke thinks we can't know its true nature. I will examine Locke's theory of substance momentarily and why I

think it represents a peculiar feature of his overall philosophy, especially given his commitment to grounding all knowledge in consciousness. First let us examine the properties he thinks belong to substance and which he thinks are accessible to us through sensation and reflection, namely, secondary and primary qualities.

Secondary qualities, according to Locke, are those we are most accustomed to identifying in our everyday experience as they are those we experience when we see, hear, touch, taste and smell. The red color of the cherry, its fruity aroma, its sweet but acidic taste are sensations given to me by virtue of the cherry's secondary qualities. Similarly, that I can hear my cat yowl or feel his soft fur is by virtue of the fact that my cat makes loud sounds and has soft fur, both of which cause me to have sensations. Not only do secondary qualities account for the qualities we sense for instance, the red color of the cherry itself or the softness of my cat's fur, but they produce the effect in our mind by which we perceive the qualities, for instance, the sensation we have upon seeing a red color or feeling softness. Thus Locke uses the expression "secondary quality" to cover both the sensible effect (which typically we think of being in or on the object) as well as the effect the sensible quality has on our senses (our sensations of red or of softness.)

It is important to note that to say that secondary qualities exist *in* or *on* objects is misleading, on Locke's view, if what is meant by that is that the quality we perceive-- say red-- is something we can isolate in reality or, say, pick up off the surface of an object and put in a jar. Rather, the red of the cherry that appears to us as if in or on the cherry is a power not easily discerned in reality and which produces the red effect associated with the cherry itself as well as the red effect given to us in sensation (our seeing of red.) That is, secondary properties do not inhere in objects the same way in which we might say one has a splinter in his finger. Rather, secondary properties exist only insofar as the powers that make up the qualities interact with or stimulate our perceptual faculties. Hence, the way in which a secondary property exists in reality is different from the way in which it exists in our sensation. That secondary qualities are not represented in the object in the same way in which they appear to us in perception, however, on Locke's view does not make them unreal but means only that the power that is the quality takes on the appearance we find in perception only when perceived. Thus the cherry continues to have the quality of red even when the

cherry is no longer perceived but not because it continues to look red (it does not unless looked at) but because it continues to have the power to produce a red appearance. Secondary qualities, then, can be thought of as dispositional properties, properties whose function it is to take on an appearance when interacting with a perceiver.

Primary qualities, on the other hand, says Locke, appear to us the same way in which they exist in the object. Not only is it appropriate to say of primary properties that they are actually in the object, it is appropriate to characterize the way they exist in the object as the same as they appear to us in perception. Examples of properties Locke identifies as primary are solidity, extension, figure, motion or rest and number. The solidness of the cherry, the small amount of space it takes up and its somewhat rounded shape are all qualities we observe directly in the cherry itself and from which we form corresponding ideas. Primary qualities, says Locke, are “utterly inseparable from the body, in what state soever it be; such as in all the alterations and changes it suffers, all the force that can be used upon it, it constantly keeps; and such as sense constantly finds in every particle of matter, though less than to make itself singly perceived by our sense.”³¹ In saying that the qualities are primary, Locke means to say that other qualities might be explained in terms of them and that they are therefore more important to scientific investigation. For example, while the redness of the cherry or softness of the cat’s fur produce distinct qualities by virtue of the power in the cherry and cat, what the power is in each case is really just a different arrangement of primary qualities.

There are well-known problems with Locke’s theory of secondary and primary qualities, one having to do with whether or not there is a real distinction to be made between the two kinds of qualities. Berkeley is famous for having addressed this problem and for pointing out the difficulty in saying, for instance, that a cherry is more fundamentally shaped than it is colored.³² The reason for this, Berkeley argues, is because the only way in which we identify what Locke calls primary qualities is by virtue of being able to also identify the secondary qualities. Thus while Locke thinks secondary qualities can be explained in terms

³¹ II,viii.9.

³² Berkeley’s arguments are found both in *Principles of Human Knowledge*, (in particular see 9-15) and *Three Dialogues Between Hylas and Philonous*, (in particular , the First Dialogue.)

of primary qualities only, Berkeley thinks that primary qualities can be explained in terms of secondary qualities as well. For instance, Berkeley would argue that in order to know that the cherry has a round shape we have to be able to see or feel the “outline” of the cherry and distinguish its round shape from the shapes of other nearby objects. The only way we can do this is if we see or feel lines and surfaces which indicate to us that the cherry is round shaped and that indicate what its extended quality is like. But in order for us to see the outline and surface of the cherry there has to be something there to see or feel, in particular, there has to be something colored or something textured. Without color and without texture, Berkeley believes, the outline of the cherry would not be detectable any more than color or texture would be detectable without shape. Hence while Berkeley acknowledges that there are different qualities that allow us to distinguish, for example, the shape of an object when taking its measurements and the color of the object when painting its picture, it is wrong to believe that either of the qualities is more fundamental than the other.

Jonathan Bennett, on the other hand, sees that there is a real distinction to be made between primary and secondary qualities and that despite poor articulation of the theory, Locke’s theory serves to capture something true about the nature of physical objects.³³ According to Bennett, primary qualities actually are more fundamental than secondary qualities and we can begin to see that by examining the different ways we think and talk about the two sets of qualities. When it comes to identification of primary qualities, Bennett observes, people tend to have little or no disputes over how to describe them, while disputes or differences in peoples’ accounts of a secondary quality are not hard to come by. What this suggests, Bennett argues, is that the nature of each quality is actually different and where the difference lies, Bennett believes, is in the way in which each quality is “fixed” in reality. Whereas primary properties are tightly bound with one another and thereby leave no room for subjective interpretation, secondary qualities are more loosely connected in reality, thereby more closely connected to the ideas in our minds.³⁴

To illustrate, Bennett considers how we ordinarily speak of solidity and colors.

³³ See Jonathan Bennett, “Substance, Reality and Primary Properties” in *Locke and Berkeley*, edited by C. B. Martin and D. M. Armstrong, University of Notre Dame Press, 1968, pp.86-124.

³⁴ *Ibid.*, pp.114-117.

According to Bennett the reason no two people will disagree over whether or not an object is solid is because observations about the nature of solidity are made based on solidity itself and are not made based on subjective impressions of the solid object. A definition of solidity that allows for what is solid to be also liquid simply wouldn't make sense, and because nobody tries to define it as such, Bennett reasons, there has to be something about the nature of solidity itself that prevents us from perceiving it or defining it otherwise.

Secondary properties, on the other hand, Bennett argues, are such that we will allow for conflicting perceptions to co-exist, if we find them. While typically there is a great deal of agreement, say, in our perceptions of color, if we do find an instance where, say I perceive an object as pink while you perceive it as orange (and both of us otherwise agree on when to apply the terms "pink" and "orange") we find that we are happy to explain the differences in perceptions by assuming differences in our individual physiological constitutions. My constitution makes me see the object as pink while your physiological constitution makes you perceive it as orange. Or similarly, Bennett argues, if under intense lighting I see an object as red that I don't truly believe is red (in normal light it is decidedly green) I still don't hesitate to say that as I see it now (under intense light) it is red. Says Bennett of this case,

"If the need for a decision did arise...we could choose to give our color terminology a purely visual basis and still have it doing pretty much the work it does for us now. Analogous remarks apply also to all other secondary properties. Not so, however, for primary qualities....the interrelations between things in respect of their primary qualities are numerous and various and tightly interlocked....Secondary quality predicates of objects have these [specific] logical connections with mental predicates...but primary qualities don't."³⁵

On Bennett's view, what is at stake in denying or misperceiving the reality of a color is not the same as what's at stake when misperceiving whether or not something is solid. That there can be conflicting reports about the color of an object might imply that someone is misperceiving the color but would not lead us to believe that the reality of the color changes from one perception to the next. That people have varying ways of perceiving color is accepted as fairly common. Conflicting reports about the solidity of an object, however, would lead us to believe that something is seriously and unusually wrong with one of the person's perceptual capabilities, or would lead us to believe that the object perceived

³⁵ Ibid., pp. 155 & 120.

somehow changes from person to person. If you perceive liquid wax when I perceive solid wax, either one of us is hallucinating or the object has a mysterious ability to change from liquid to solid in an instant. But because the latter scenario almost never happens-- that is, we almost never have disputes about the reality of an object's primary properties-- whereas disputes about qualities like colors and scents are common, Bennett argues, we know that there has to be something truly different between primary and secondary properties.

Thus while, again, Bennett doesn't think Locke actually articulated the primary/secondary quality distinction with as much clarity as he could have, he does think Locke's distinction marks a genuine insight about the way in which physical objects exist and interact with our minds. That solidity, for instance, is perceived in a uniform manner by almost everyone, Bennett believes, means that Locke is right to say the primary qualities exist in objects *as we perceive them*. And while secondary qualities are more connected to our varying perceptions, to what's in our minds, Bennett believes, Locke is right to say that the secondary qualities exist in objects *in a different manner than the way in which they are perceived*.

The debate about the reality and misconceptions concerning Locke's distinctions between primary and secondary properties is treated extensively in the literature and to go further with the analysis at this time, takes us too far outside the scope of this project.³⁶ Personally I think that Bennett is right to want to preserve the distinction, if for no other reason than that there at least appear to be two different sets of properties. However, the extent to which even our perception of primary properties depends on the nature of our minds, that is, on the nature of our innate perceptual faculties, I think, is probably greater than Bennett seems to think. That is, I think that the fact that we perceive objects as extended, as solid, etc., is because the objects do exist as such, at least in some manner close to what we think, but is also because our minds are constituted so as to interpret the data of experience in such ways. That is, while an object's solidity may be the cause of our idea of its solidity, the idea is also caused by the innate structures in our mind that allow us to see

³⁶ For further discussion see Mackie's first and second chapter in *Problems From Locke*, Oxford at Clarendon, 1976, and see also Reginald Jackson's article, "Locke's Distinction Between Primary and Secondary Properties" in *Locke and Berkeley*, edited by Martin and Armstrong, University of Notre Dame Press, 1968, pp.53-77.

things as solid, and thus I would argue that primary properties are just as connected to our ideas as secondary properties are, despite the fact that the perceptual faculties for the latter have greater chance of varying from person to person. (This might be explained by the fact that for evolutionary reasons, our ability to perceive things like extension and solidity are more important for survival than our ability to perceive color, and hence the latter has a greater chance of “mutating” or being flawed amongst members of the species.)

But regardless of how we perceive the difference, or rather why we perceive the difference, it is interesting that we do and, I think, an important topic for philosophy of mind. What is more important in the context of this analysis, however, is to note that whatever the reality of the distinction turns out to be, there is no problem with Locke’s theory of physical properties in so far as it fits with his theory of consciousness. According to Locke, everything we can know of both secondary and primary qualities is given to us in consciousness--through sensation and reflection. However, Locke might have a problem in trying to reconcile his theory of primary qualities with his theory of consciousness if Berkeley is right and reality originates in perception. If, as Locke insists is true, what we know is given to us in experience, then how can he also say that we know there to be primary qualities even when we aren’t experiencing them?

Of course what Bennett assumed and what I assumed is that when defending a distinction between primary and secondary properties we are talking of properties that have at least some reality outside of mind, and that there is really no reason for Berkeley to question the distinction, much less the reality of objects that exist independent of us. That is, according to Bennett there is no “veil of perception” that stands between the real world on the one side and our minds on the other and that makes it impossible for us to have direct knowledge of physical objects. Bodies, says Bennett, are just as Locke defined them, at least in terms of making us perceive two kinds of properties and in terms of existing independent of our perceptions, and this, according to Bennett, constitutes “a deep conceptual fact” about how both reality and perception work.

Berkeley, however, as is well known, does not let the assumption rest and disagrees not only with Locke’s right to a real distinction between primary and secondary qualities but with Locke’s assumption about causality, namely that it can exist between different kinds of

substances. That is, Berkeley sees that nothing other than an idea itself, a certain kind of non-material substance, can interact with and cause other non-material substances or ideas to occur. To allow that physical objects are as Locke defines them, viz., as objects that exist independent of our perception and that cause our perceptions, Berkeley thinks is absurd. So long as it takes perception to make observations about the world, Berkeley argues, all judgments about the world are ultimately dependent on perception in such a way that the reality of what we perceive is perceptual itself. That is, according to Berkeley, the very notion of that which exists outside of our minds is understood to be contradictory once we realize that the idea of a mind-independent object is mind-dependent, which means that ultimately it is impossible to conceive of that which exists outside of our conceptions.

While Berkeley has an interesting logical argument about the definition of physical objects, Locke could argue-- and probably would-- that Berkeley's view can not account for the fact that regardless of whether or not we are justified in doing so, we continue to believe that physical objects appear to exist independent of us. That is, Locke could argue-- as Hume did-- that no amount of logic or reasoning will dissuade us from believing that there are physical objects and that they are the cause of at least most of our ideas. For Hume, however, our belief in physical objects can never be justified; rather it is something we are merely accustomed to believe.³⁷ For Locke, however, the fact that we believe and are justified in believing in the existence of objects outside of our perception is because God wants it so. That is, on Locke's view, God intended for us to perceive objects as existing independent of us because in fact there are physical objects. Says Locke, "God has given me assurance enough of the existence of things without me: since by their different application, I can produce in myself both pleasure and pain, which is of one great concernment of my present state. This is certain, the confidence that our faculties do not herein deceive us, is the

³⁷ See Hume, *A Treatise of Human Nature*, edited by L. A. Selby-Bigge, Oxford at Clarendon, Book I.

greatest assurance we are capable of, concerning the existence of material beings.”³⁸

Of course, there are also well-known problems with saying that our inner feeling of confidence can be relied upon as a basis for making metaphysical determinations about the world, and for saying that what is given to us in consciousness is a reliable basis for knowledge. Some of the problems involved with this view will be discussed in chapter four when I compare Locke’s theory of mind with Leibniz’s, who believes that it’s not the case that all of what is needed to make a determination of knowledge is given to us in consciousness. For now, however, what is important to note is that with respect to the ontological nature of physical objects, Locke thinks that all of their properties, namely, the secondary and primary properties, can be known and are therefore accessible to us in consciousness.

However, it is also important to note that on Locke’s view to say that all the properties of physical objects can be known is not to say that we therefore know all there is to know about physical objects. That is, as mentioned earlier, there are three constituents to physical objects, on Locke’s view, namely, secondary properties, primary properties and substance, the last constituent of which Locke thinks we can’t have genuine knowledge. While Locke believes that all the effects or properties of objects can be known, he denies that we can know the real essence or underlying ‘stuff’ of a physical object that allows for all the properties to exist or in which all the properties are said to subsist. In other words, on Locke’s view, while substance is said to genuinely exist, it is not something we can genuinely know. I turn now to Locke’s account of substance with the intention of showing how this theory presents challenges to his theory of consciousness.

Locke on Substance

Regarding our idea of substance Locke says,

³⁸IV.xi.3 . The way in which Locke uses God as an explanatory base for minds will be discussed more in chapter four. There I will argue that by relying on God to explain the mind in the places that he does, Locke prevents certain mental phenomena from being explained and thereby also prevents certain naturalistic explanations from being used to explain mind. So long as naturalistic explanations can be given they should be given and yet by introducing God where he does, namely, at the level of consciousness, Locke cuts off that possibility at too early a stage.

“Because, as I have said, not imagining how these simple ideas can subsist by themselves, we accustom ourselves, to suppose some substratum, wherein they do subsist, and from which they do result, which therefore we call substance. So that if anyone will examine himself concerning his notion of a 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 qualities, which are capable of producing simple ideas in us; which qualities are commonly called accidents.”³⁹

Despite not knowing exactly what substance is, Locke argues, our belief that something like it should exist is justified because logically it seems that if something didn't exist to hold all the properties together, we wouldn't be able to perceive objects in the coherent, holistic way that we do. That is, while experience doesn't give us an exact idea of substance, reason allows us to fill in the gaps, so to speak, and invent the idea as such so that we can make sense of how our experience appears to us. Thus, on Locke's view, if I weren't able to invoke the idea of substance, I would be unable to understand that my cat exists as the whole animal that I perceive him as and instead would have to believe he exists as a bundle of unattached cat parts or properties. Substance, for Locke, is that which brings the properties of objects together and is that which we need to assume, lest we believe that properties merely float about uncontained, which would not be consistent with what we learn in perception.

Once again, Locke has presented us with a problematic view. One well-known problem with this view is advanced by Berkeley, who argues that while Locke introduces substance as a category logically distinct from secondary and primary properties, logically the two (substance and physical properties) can not be separated.⁴⁰ That is, Berkeley argues not only that there is no real distinction between primary and secondary qualities because neither category can exist on its own-- but also that there is no real distinction between substance and physical properties because neither of these phenomena can exist on their own. The insight that drives Berkeley's argument is that if substance is a part of physical matter, as Locke would like it to be, then it must also have the properties of physical matter and, on Locke's view, that necessarily includes primary and secondary properties. In other words, Berkeley believes that for substance to exist it has to take up space and therefore have *extension*. And

³⁹ II.xxiii.2

⁴⁰ For Berkeley on substance, see Berkeley, *Principles of Human Knowledge*, 16-17 and 49.

if it takes up space, it has to have some kind of *shape*. And we wouldn't know there is shape or what the shape is unless we could see it or feel it, in which case the substance must also be colored or textured and therefore have secondary properties also. Of course, on Berkeley's view all of these properties, while fitting with our definition of physical objects, exist only as ideas and therefore, on Berkeley's view, physical objects do not exist independent of ideas--of our perception of them. For Berkeley, it is impossible to think that we can conceive of an object that exists independent of our conception of it, and therefore Berkeley rejects the "scientific" notion of physical object for the same reasons that Locke rejects the notion of unconscious mental states, namely, because he believes it is unintelligible. I will return to both Berkeley's and Locke's arguments in a moment. The task now is to see if-- independent of Berkeley's argument-- Locke's notion of substance can be made sense of. While Locke may be wrong about what substance can be, because he doesn't claim to know what it is anyway, is he at least justified in introducing an idea like substance that would help make sense of how we experience that which is given to us in sensation and reflection? In other words, is the reason Locke introduced substance in the first place, namely, to help make sense of the way in which we experience physical objects, justified, especially given his empiricist commitments and belief that all ideas must come from experience?

Upon hearing that Locke is willing to allow for a category of existence like "substance" that he says can not be perceived, one should be immediately struck by the fact that at least on the surface, it appears that Locke has violated his most cherished belief, namely, that all ideas must come from experience--from sensation and reflection. Locke explicitly states that in the case of substance, that we have an idea of it is not because we perceive it in either sensation or reflection but rather is because we reason that substance must exist, that it is needed to explain how physical properties cohere as if in one object. Our idea of substance, according to Locke, is a complex idea we create on the basis of other general ideas and thus it might be argued that the idea comes from the understanding alone, and not from experience. Says Locke,

"I never said that the general idea of substance comes in by sensation and reflection; or, that it is a simple idea of sensation and reflection, though it be ultimately founded on them: for it is a complex idea, made up of the general idea

of something, or being, with the relation of support to accidents. For general ideas come not into the mind by sensation or reflection, but are the creatures of inventions of the understanding.”⁴¹

However, one need not be convinced, especially in light of the above quote, that Locke actually has violated his empiricist principles by allowing for his theory of substance. Kathleen Squadrito, for instance, in her second book on Locke notes that by virtue of saying our idea of ‘substance’ is a complex idea, Locke has made it possible to link our concept of substance to experience. In the case of substance, Locke believes that our simple ideas of extension, figure and solidity give rise to more general ideas like “being” which in turn provide the understanding with a basis for coming up with substance. Our idea of substance, then, according to Locke, is derived from what we perceive directly in either sensation or reflection. Says Squadrito, “Had Locke held the view that the idea of substance is a simple idea, his position would have been inconsistent, for he claims that our understanding can have no other simple ideas but either from sensation or reflection, admitting at the same time that the idea of substance cannot be received by the understanding from either of these two sources.”⁴² But Squadrito goes on to argue that because the idea of substance is complex and is, therefore, built up from ideas we do get from sensation and reflection, Locke has merely extended his empiricism to include an idea that we don’t directly experience. That is, Squadrito argues that because Locke says we are allowed to have the idea only after having certain experiences and because the experiences are what allow the mind to infer the existence of substance, so the idea of substance is acquired “just as much from reason as from experience.” On Squadrito’s account, Locke’s theory of substance is derived from his empiricist principles, not independently of it.

I agree with Squadrito that Locke’s decision to include substance--to include an idea completely inaccessible in experience--does not violate his empiricist commitments. In fact I think Locke’s decision to allow for inferences made about the existence of things we can only infer from what we experience is much like Hume’s argument that, for instance, while

⁴¹ Locke’s letter to the Bishop of Worcester, in Works, III,19., p.19.

⁴² Kathleen Squadrito, *John Locke*, Twayne Publishers, 1979, p.49. Squadrito’s first book on Locke is *Locke’s Theory of Sensitive Knowledge*, University Press of America, 1978.

we may never have seen a particular shade of blue, based on the shades of blue we have experienced we can imagine what the non-sensible blue is like.⁴³ However, I think that there is still a problem with Locke's decision to include substance as an idea not derived from experience, namely, that it opens the door for one to decide that other ideas like substance that are introduced to help make sense of experience but yet are not themselves directly experienced, should be introduced too. If Locke is willing to allow an idea that is off limits to our perceptual capabilities in the case of substance then what's to prevent him from allowing other kinds of epistemologically inaccessible ideas or phenomena that can also be used to make sense of what we experience? Unless Locke can produce an argument that would prevent a slippery slide into having to admit the existence of other "logical" ideas, it seems Locke has provided opponents with reason to argue that not all of what we can know is given to us in experience.

Specifically, I'm arguing that should we allow for the idea of "substance" on the basis of its logical necessity, that is, for the reason that it is needed to make sense of the kinds of experiences given to us in consciousness, then we should also be able to argue the same with respect to our idea of the "unconscious,"--an idea Locke thinks is absurd only because, by definition, it is inaccessible to consciousness. In other words, if we accept that on Locke's view substance is not an idea we get from experience (yet perhaps it is suggested by other experiences) and we get to include it in our metaphysics anyway because it helps to make sense of experience, then why can't Locke at least allow for the possibility that the same is true for the unconscious? So long as there are experiences that at least point to the possibility of unconscious mental phenomena, it seems we should be allowed to include the notion the same as substance.

My suggestion is that while it is true that necessarily all of what we are aware of experiencing is conscious, (simply because that is the definition of being conscious--that we are aware of what's in mind--) it is not unreasonable to argue that there are phenomena, say in the case of what is clinically known as "repression", that are best explained by admitting an unconscious realm. In the case of repression, at least as it is defined by Freud, we find

⁴³ David Hume, *A Treatise of Human Nature*, edited by L.A. Selby-Bigge, Oxford University Press, 1973, p.6

that one's conscious behaviors are best explained by motives and intentions that are not consciously accessible.⁴⁴ For instance, it's reasonable to believe that John's obsessive fear of his neighbor's dog, which in consciousness John attributes to his belief that the dog will eat his garden flowers (which the dog has never attempted to do) is better explained (even though John does not think so) by the memories he had of being viciously attacked by a dog when he was a small child--memories of which John has but is unaware of having.⁴⁵ While everyone else close to John knows that the scars on John's leg are from the childhood dog attack (more reason for John to accept the true reason he fears dogs) John believes they were acquired when falling off his childhood swing set (which did happen, but did not produce scars). And while everyone else believes John fears his neighbor's dog because of the childhood trauma, when confronting John with the memory, John denies he has any recollection of ever having been attacked by a dog. In this example we find that John's conscious beliefs regarding his fear of dogs are best explained by admitting a realm of mentality that, for whatever reason, are not accessible to John's consciousness at the time.

Notice, however, in this case of describing a person's denial, I said that invoking the unconscious is *best* as opposed to *logically necessary*, the latter of which would imply that there are no other possible explanations, the former of which makes our belief in the unconscious only likely. For this reason one might think that there is a disanalogy between Locke's idea of "substance" and the idea of "unconsciousness," because as Squadrito says, on Locke's view substance is logically entailed from other perceptions. Hence, whereas the unconscious is only a possible way to explain, say, John's fear of dogs, substance is the only way to explain why physical properties stick together.

The reason for the shift from *logical* to *best*, however, is to emphasize that while Locke believes that logically something is needed to explain the phenomenon of physical properties existing as if they inhere in a common subject, because he also believes that we can't ever have a clear idea of exactly what substance is, his argument cannot be that the idea is logically entailed from other ideas that we can perceive, but rather that the idea is only

⁴⁴ See Sigmund Freud, *Introductory Lectures*, Hogarth Press, 1953

⁴⁵ In chapter three I will address the connection between memories and the unconscious and how both function in Locke's theory of mind.

suggested by them, or, as he says, is what we “suppose” to exist. That is, because Locke admits that we can’t know the real essence of substance, it doesn’t make sense to say that he would also think that the idea of which we don’t have a clear idea is entailed from what we perceive. If substance were logically entailed from other ideas, we would know what substance is or at least have a better understanding of what it is. But all we have, Locke admits, is an idea that something is needed to account for the fact that we believe physical properties inhere in objects as if they belong to something that allows them to subsist and yet, that is separate from the properties themselves. In other words, Locke introduces substance because he thinks it is the best way to account for the fact that physical properties at least appear to inhere in objects, that is, it is what reason invents so as to help account for that which we can’t know in experience, despite the fact that it itself is not something that is accessible to us in experience. Hence, while Berkeley’s argument against substance can undermine the logic of the idea itself, it does not undermine the purpose of the idea which is to introduce something that can help explain how it is that physical objects at least appear to us as having properties all of which cohere together.

Likewise, with respect to the prospect of introducing unconscious mental states into our explanations of mind and behavior, I’m not saying that in the case of repression, for instance, one can secure knowledge of what the unconscious is like or know absolutely that it exists, only that introducing the unconscious is the best way to explain how the person behaves. Just as in the case of substance, where Locke believes there are experiences that warrant the introduction of something over and above our experience, so it is the case with the unconscious mental states -- experience warrants their introduction. This is to say that some of what we experience in consciousness provides us with reason to believe that there is unconsciousness. Of course, I’m not therefore saying that I agree with Locke’s move to introduce substance-- that that is the best way to explain the phenomena of perceiving physical objects and their properties -- only that I agree with the reasoning behind the move, or rather with the belief that experience or what is given to us in consciousness does not always provide us with everything we need to explain and understand what we perceive. Sometimes it is necessary to allow reason to introduce subjects that can help us make sense of experience that are not themselves found in experience.

Again, I emphasize that Locke cannot, at this point argue that there is a disanalogy between “substance” and “unconscious mental states” because he believes the latter notion and not the former is unintelligible. One possible reason is that if Berkeley is right, then because Locke’s notion of substance entails a featureless kind of stuff, or rather, because it entails the existence of physical matter with no physical properties, it too is an unintelligible notion. However, the problem with this defense is that it’s also possible that Berkeley isn’t right and that we can actually make sense of Locke’s notion of substance. Locke could get around Berkeley’s argument by saying that substance was introduced only to make sense of what we experience, that is, as the best way to explain the way in which physical objects appear to us and, therefore, that his characterization of substance as “featureless matter” was not introduced as an essential definition. It’s possible, given the tenuous nature of the way in which Locke characterizes substance (viz., as “something we know not what”) that Locke could admit it has physical properties but that the way in which the properties are arranged makes it seem like it is something different from the primary and secondary properties. That is, Locke might have-- as some commentators have pointed out-- introduced substance as a way to delineate a kind of property that is even more basic than the so-called primary properties. For instance, substance might be used by Locke as a means of identifying what we would now identify as sub-atomic particles. Says E .J. Lowe in defense of this possibility;

“[R]ecalling Locke’s sympathy for atomism, might we not suppose that what he understands by the ‘substratum’ of a macroscopic object like a tree is the complex, organized assembly of material atoms that are its ultimate constituents-- what he elsewhere calls the real essence of such an object...After all, in view of Locke’s allegiance to the ‘mechanical philosophy’, we know that he is sympathetic to the notion that all of the observable, macroscopic qualities of a large scale object--its weight, density, color, shape and so forth-- are in principle explicable in terms of the primary qualities and organization of its microstructure constituents.”⁴⁶

If Lowe is right, it is possible that Locke’s notion of substance actually does make sense but

⁴⁶ E. J. Lowe, *Locke on Human Understanding*, Routledge Press, 1995, p.75. Similarly, John Yolton argues, before Lowe, that Locke’s notion of substance needs to be given a “scientific translation” which for Yolton entails that “there is nothing fundamentally mistaken in saying [as Locke does] the real essence is ‘hidden away in the unknowable but necessary substratum,’ though it is more precise to talk of the unknowability of real essences because of our inability to understand how particles cohere.” From Yolton, *Locke and the Compass of Human Understanding: A Selective Commentary on The Essay*, Cambridge, 1970, p.53.

only if we allow that it represents a deeper level or way to characterize physical properties, not something that is independent of them.

Still, even if we can make sense of substance, Locke cannot claim there is a disanalogy between substance and unconsciousness and that the former makes sense while the latter does not, because it is simply wrong to believe that “unconsciousness” is unintelligible and, as I will continue to argue, nowhere does Locke provide us with reason to think otherwise. Rather “unconsciousness” is simply that which is not accessible to consciousness and, on Locke’s view, the same applies to substance, that is, substance, too, is that which is epistemologically inaccessible to us but nevertheless exists.

Of course, one might argue that being inaccessible to consciousness is part of the definition of unconsciousness, and while it is also true that substance is inaccessible, it is so only accidentally. Whereas Locke defines unconsciousness as that which is inaccessible to consciousness, one might argue that’s not part of what he thinks defines substance although it is part of what he thinks accounts for our inability to perceive it. In other words, one might argue that the inaccessibility of substance is part of its epistemological status not its ontological status, whereas in the case of unconsciousness being inaccessible to consciousness is part of its definition.

However, an objection of this kind will not suffice as a means of destroying the analogy between “substance” and “unconsciousness” because as noted earlier, it’s possible to interpret Locke such that he doesn’t define substance in any way at all, and yet, he does define “unconsciousness.”⁴⁷ If there is no definition of substance to compare to the definition of “unconsciousness,” there is no analogy to be made between the two on the basis of how they are defined. Hence what is now in question is not what the true nature of either notion is, but whether or not Locke has any more warrant to introduce substance than he

⁴⁷ I will spend more time spelling out Locke’s understanding of unconsciousness in the next chapter. Here it is important to note that while he doesn’t reject a notion of the unconscious outright, as he does allow that the mind sometimes “goes to sleep” and has no consciousness, he refuses to believe that in those times of unconsciousness, the mind is thinking or feeling or doing anything that could significantly contribute to the determination of thought in consciousness. “To suppose the soul to think and the man not to perceive it, is, as has been said, is to make two persons in one mind.” (II.i.19.) Hence, when I use the term “unconsciousness” in this analysis I use it to designate that which Locke adamantly rejects, namely, unconscious states of mind that involve either sensational activity or rational activity.

does unconsciousness, and I think the answer is no. That is, I am only concerned at this point with the epistemological status of each and with the fact that if he allows for one, he will have to allow for the other. Of course this assumes that there is a need to introduce unconscious states of mind just as Locke thinks there is a need to introduce "substance," but I think that at least in the case of memory, and many other kinds of mental phenomena, (for example "repression") that unconscious mental states exist cannot be denied.⁴⁸ I will argue further for the case of unconscious memories in the next section when we examine the kind of threat Locke's account of memory poses to his belief that all mental states must be conscious states. But again, my argument now is that because there is no reason to believe that the notion of an unconscious mental state is unintelligible nor that it represents non-existent states of mind and because in fact there is good reason to believe unconscious states exist, Locke should allow for it. Furthermore, because Locke allows, in the case of substance, for an idea that corresponds to something beyond what we can experience in consciousness, he has no basis to reject unconscious states of mind simply on the basis of their being inaccessible to consciousness. If substance is allowed on the basis that it helps to make sense of what we do directly experience, then so should unconscious states of mind be allowed to help make sense of at least some of what we are given in consciousness. Just as the scientist or philosopher of physics has a right to assume there is more to the nature of physical reality than what appears to us, so a scientist or philosopher of mind has a right to assume that there is more to the nature of mind than what appears to us or is accessible to us in consciousness.

⁴⁸ Other kinds of mental defense mechanisms defined by Freud besides repression include "projection" and "reaction formation." Whereas "repression" is characterized as a mechanism that prevents "dangerous" memories from entering into consciousness, "projection" is characterized as the mechanism that allows one to believe that an unconscious memory actually belongs to the external world, not one's own mind. "I hate him" becomes "He hates me." In "reaction formation" we find that in order to suppress the anxiety one feels because of certain instincts or urges, the person spends time in consciousness thinking about the opposite of what they truly (unconsciously) want. One who wants really to kill his abusive father may, in consciousness, spend his time trying to please his father and show that he truly loves his father so as to avoid having to deal with his murderous thoughts. What all defense mechanisms have in common is the fact that the thoughts or drives that exist in unconsciousness are prevented from entering consciousness, typically because of the anxiety and fear they cause one to feel in consciousness. Locke, of course (perhaps for denial mechanisms of his own,) is prevented from allowing for full psychological descriptions of mind as well as more simplistic descriptions involving memory and sleep.

A Physics of Mind?

While we have now determined what Locke's theory of physical objects is and some of what it entails-- specifically, that it entails an understanding of empiricism that allows for ideas that are not directly experienced-- the next task is to determine what Locke says about the ontological nature of mind. As mentioned earlier, part of the need to understand Locke's theory of physical objects is to provide us with a basis for better understanding his theory of mind and how the mind acquires ideas. Physical objects, on Locke's view, are what cause the mind to have ideas, so how do they do it? How does the mind generate ideas and knowledge as a result of what it receives in experience?

Interestingly, while we find that Locke is more than willing to speculate about the physics of that which is said to exist outside of mind, he has almost nothing to say about the physics of mind.⁴⁹ That is, Locke admits that he is not concerned to "meddle with the physical consideration of the mind...or by what motions of spirits or alterations of our

⁴⁹ Gordon Clapp argues that Locke's ontological vision of mind can be characterized in three ways, none of which, however, involve expounding on the physics of mind and none of which provides us with an account of how the mind does what it does. The three different kinds of characterizations found in the *Essay*, Clapp says, are "1. The definition of mind by simile...2) the definition of the mind in terms of Locke's controlling hypothesis, wherein Locke assumes that there is a real physical world of bodies, and that the mind is furnished "from EXPERIENCE"; 3.) The definition of the "mind" in terms of its powers, as a substance, and in terms of Locke's theory of knowledge." Gordon Clapp, *Locke's Conception of Mind*, Columbia University Press, 1937, p.iii.

The first mode, I would argue, leaves us with nothing but ambiguity. The second option tells us what I have already outlined, namely, that physical objects are alleged by Locke to be the cause of our ideas but does not tell us how this happens. Hence the third mode of characterizing the mind is the only one that could shed light on this question, that is, the question of how the mind performs its functions; but this, as even Clapp recognizes, is unfulfilling. That is, Clapp recognizes that Locke is only willing to characterize the mind in terms of powers in so far as the powers or operations are performed or manifest, not in so far as we are told how they are performed. That is, as Clapp argues, for Locke, "the reality of mind lies in the performing of these functions, i.e., the powers which a mind is said to have are significant are real only in relation to the manifestation of them." What this means, then, is that, for example, the powers to combine or abstract are real only in so far as ideas are combined or abstracted. The problem, then, is that this account fails to tell us how the mind performs its functions or on the basis of what information it is able to perform such functions. In chapter four I will argue that minds don't just perform without instructions of how to perform. That is, if the mind is able to combine ideas it's by virtue of having instructions to do so and the instructions to do so contain content of which could not have come from experience. This argument will be part of what is used to support Leibniz's criticism of Locke's conception of mind and to support a rationalist conception of mind.

bodies we come to have any sensation by our organs or any ideas in our understandings." Nevertheless, he is willing to say what he thinks the effect of such mechanisms is in the mind and how the results of sensation, the ideas we generate to mark or represent what we sense, factor into our ability to know.⁵⁰ For this reason, D. J. O'Connor has noted in his analysis of Locke, that Locke "is not talking as a psychologist but as a philosopher," meaning he is not trying to describe the "processes of manufacture" by which the contents of mind are worked on by the mind. Rather, as O'Connor says, Locke is merely "trying to give a rational reconstruction of the process of knowing, to distinguish the various elements involved in it and to trace them to their origins in experience."⁵¹

That Locke should proceed with a theory of mind and expect to construct a science on the basis of what is given to us in experience without speculating about how the mind is able to do so, seems to me hardly intelligible. That is, I find it difficult to imagine how one can be a philosopher of mind without at least in some sense being also a psychologist. By psychologist I do not mean brain scientist, (I do not think a philosopher of mind needs to be a "brain surgeon"); rather, by saying a philosopher of mind must also be a psychologist I mean that he/she should be one who is at least willing (and hopefully able) to explain the mental phenomena (be they physical or not) needed to explain how the mind does what it does. Locke does this only sometimes. That is, sometimes-- for instance, in the case of "red"-- he is able to use experience to tell us a story about light and it's interaction with our vision that is not only coherent but that is roughly consistent with what our science tells us today.⁵² But not all ideas, on Locke's account fare as well. For instance, as I will explain in a moment with regard to our concepts of "number" and "identity", Locke is unable to tell a complete story about how we get them from experience without running into circularity or inconsistency. I will examine Locke's account of both "number" and "identity" and lay the groundwork for what will be my conclusion in chapter four, namely, that Locke's empiricist

⁵⁰ D. J. O'Connor, *John Locke*, Dover Publications, 1967, p.43.

⁵¹ Ibid.

⁵² For a thorough account of Locke's ideas about the mechanics of sense-perception see P.J. White's "Materialism and the Concept of Motion in Locke's Theory of Sense-Idea Causation" in *Studies in History and Philosophy of Science*, 2 (1971).

theory of mind can not give us a complete or coherent picture of how the mind works.

“Number” and “Identity”: Data For the Unconscious

Locke begins his account of number by telling us that the idea of “one”, which we get from perceiving individual objects (physical or mental objects), is the most simple of all ideas. Says Locke, “Amongst all the ideas we have, as there is none suggested to the mind by more ways, so there is none more simple, than that of unity or one...every object our senses are employed about; every idea in our understandings; every thought in our minds brings this idea along with it.”⁵³ When “one” is repeated in our minds, and when we add the repetitions together, Locke says, we are able to generate ideas about other numbers or what he says are the *modes* of one. Thus that I see the apple as one but the group of doughnuts as twelve is because in perception I am able to detect a difference between the separate groups of objects and am able to give each quantity a name. The single apple we name “one,” while the dozen doughnuts we name “twelve”. What decides the names is convention but what the names refer to, namely, the various configurations of one, Locke believes, is determined by what we find in perception. Thus on Locke’s view we would say that a child begins life with no awareness of “one” but gains this idea after perceiving singular objects in the world and then, as the child’s mind matures, by repeating and adding the concept of one in order to identify other groups of objects so as to acquire concepts of other numbers. Says Locke;

“Thus children, either for want of names to mark the several progressions of numbers, or not having yet the faculty to collect scattered ideas into complex ones, and range them in a regular order, and so retain them in their memories, as is necessary to reckoning, do not begin to number very early, nor proceed in it very far or steadily, till a good while after they are well furnished with other ideas, and one may often observe them discourse and reason pretty well, and have very clear conceptions of other things before they can tell 20.”⁵⁴

Presumably the ability to add is not innate, on Locke’s view, because he never identifies it as such, but the abilities to order and compare and contrast, all of which are needed to generate ideas about numbers, are. If so, then how can we not notice the circularity that his account of numbers entails? While the ability to detect samenesses and differences in objects

⁵³ II.xvi.1.

⁵⁴II.ξϖ.7.

or between perceptions is innate, on Locke's view, how is it that he thinks the mind is able to do this? How does the mind know, for example, that one object is identical to itself and different from another unless the mind first has the concepts or principles that allow it to perceive identity and difference? Presumably one can be taught to add, but how is one taught generally to compare and contrast? While I may need a great deal of training in order to be able to perceive the subtle differences between a variety of wines, I need no training, even as a child, to perceive the difference between say, my mother and my father. This is not to say that a child doesn't learn the difference between mother and father by paying attention to what is given in experience, for example, "Mommy" has long hair, "Daddy" has short hair, only that the basis for understanding that long hair is not short hair is not given in experience. Thus Locke can claim that a certain amount of experience is needed before a child is able to consciously acknowledge and articulate that her mother and father are different, (difference being needed to perceive that x is *one* thing and not another) and yet, Locke also says that "one" accompanies all perceptions, in which case the child does perceive that her mother is not the same as her father even when not conscious of doing so. If "one" accompanies all perceptions, as Locke says it does, and yet "one" is not what consciously accompanies all perceptions, Locke has admitted unconscious thought into his system. Hence, either Locke says all perceptions, no matter what kind of mind they belong to are accompanied by the perception of "one"-- in which case infants (and even oysters which Locke says can sense, as will see later) have unconscious perceptions-- or we deny that "one" accompanies their perceptions just yet, in which case what Locke says about the concept of one is false--it does not accompany all perceptions. Furthermore, as noted above, Locke's view leaves us wondering how the mind performs the various functions that it does; for example, how it can detect instances of sameness and difference without first knowing what sameness and difference are?

When examining Locke's account of "one" and of number, I quickly shifted the focus to how "identity" and "diversity" are identified by the mind, but this is because I'm assuming, as I think Locke's account implicitly assumes-- that a person cannot construct an idea of "one" if he or she is not also able to know when one thing is different from another and the same as itself. But perhaps I am judging too quickly, as Locke has a chapter on "Identity

and Diversity” and there we might find an empiricist account of how the mind acquires these ideas such that we can understand how they could come from experience.

As would be expected, however, Locke is not able to provide a non-circular account of “identity” and “diversity,” and says almost nothing that would help us understand how these concepts could possibly come from experience. “Identity” is defined by Locke as the perception that the objects in question (be they physical objects or mental objects) do not vary and are the same from one moment to the next.

“Another occasion, the mind often takes of comparing, is the very being of things, when considering any things as existing at any determined time and place, we compare it with it self existing at another time, and thereon from the ideas of *identity* and *diversity*. When we see anything to be in any place in any instant of time, we are sure (be it what it will) that it is that very thing, and not another, which at that same time exists in another place, how like and undistinguishable soever it may be in all other respects: And in this consists *identity*, when the idea it is attributed to vary not at all from what they were at that moment, wherein we consider their former existence, and to which we compare the present.⁵⁵

While Locke doesn’t explicitly say, presumably “diversity” is defined as a perception that two or more things are not identical. How the mind does this, Locke says, is due to what I now think must be a magical ability (magical only because Locke cannot explain it) namely, our ability to compare. Again, Locke provides us with nothing but circular descriptions of mind.

In chapter four (wherein Leibniz’s criticisms of Locke’s theory of mind will be considered) we will be able to alleviate some of the burden Locke’s model of mind presents. In part the burdens stem from the fact that experience simply is not a sufficient basis upon which to account for the origins of all ideas as I think the accounts of “number” and “identity” can show, but they also stem from the fact that by insisting that all of mind is conscious, Locke cuts the mind short and leaves out large chunks of mental phenomena needed to make sense of mind and of knowledge.⁵⁶ As noted above, a philosopher of mind

⁵⁵ II.xxvii.1.

⁵⁶ In chapter three I’ll argue that the unconscious is needed to account for memory and that Locke, at times, acknowledges this and thereby violates his empiricist commitment to consciousness as a necessary condition of all mental phenomena. In chapter four I’ll argue that without the unconscious and without the opportunity to attribute at least some knowledge to the innate constitution of mind, Locke’s empiricist commitments make him unable to explain how the mind intuits the truth of certain propositions whose truth is deemed necessary.

needs to be somewhat of an astute psychologist or observer of mind, and this is not something Locke is. Leibniz agrees, saying “Locke did not adequately appreciate the dignity of our mind, nor did he adequately understand that the principle of necessary truths are latent in it; nor did he adequately distinguish these from other truths; and in general he serves more to confirm common opinions than to establish sound judgments.”⁵⁷ And Nicholas Jolley, commenting on Leibniz’s remark, says “Taken in isolation, the charge that Locke underestimates the mind’s dignity might seem to be directed against his alleged materialism, but the context points in a different direction. What Leibniz seems to mean is that Locke underestimates the cognitive powers of the human mind.”⁵⁸ I couldn’t agree more.

Hence, a philosopher of mind should no more just place ideas in experience without being able to account for how experience allows for the idea than he should just place capacities in the mind without telling us how the capacities function in the mind--how they are able to perform. Locke, while eager to ascribe a great many abilities to the mind including the abilities to compare, contrast, abstract, and make inferences, tells us nothing about the basis upon which the mind is able to do so. That is, if the mind is naturally able to combine and abstract, to compare and contrast, we need to know how it is able to do so. If a machine were attributed with such operations, when asked how the operations function, presumably we would not hesitate to break down the processes into the various instructional components that allow for the operations to occur. And the same should be true, I argue, for the mind. Whatever abilities we attribute to the mind, we should be able to say something about how they perform, which will include identifying the information or data that allow for their function. I will have the opportunity to expound on this argument in chapter four, but for now it is important to note that on Locke’s view, the mind’s innate operations *cannot add any new materials* and hence, on Locke’s view, all the contents of mind come from sensation and reflection. That is, sensation and reflection, by virtue of being able to convert our sensations into ideas, Locke believes, allow us to know everything there is for us to know

⁵⁷ Leibniz to Bierling, undrafted letter of 24 October 1709 (G VII, p.485), as quoted in Nicholas Jolley’s book, *Leibniz and Locke*, Oxford University Press, 1984, p. 164.

⁵⁸ *Ibid.*

about our minds and the physical world.⁵⁹

⁵⁹Lest we think that my request that Locke speculate more about the mind's functioning and abilities is merely reflective of the psychological knowledge and standards found more in modern times, it is important to note that Leibniz, writing in no more modern times than Locke, was willing to speculate about how the mind performs certain functions, for example, inferencing, and is thereby a better psychologist and philosopher of mind than Locke. This argument will be the main topic of chapter four wherein I conclude that empiricist theories of mind are necessarily unable to provide complete or coherent models of mind.

Chapter Three:

Consciousness in Sensation in Reflection

By saying, as I did in the conclusion of the last chapter that sensations give rise to or generate ideas, on Locke's view, it seems we should be able to distinguish the having of a sensation and the having of an idea, the former being that which the mind first experiences upon interacting with the world through the senses and the latter being that which the mind perceives afterward. The problem with this, however, is that if my idea of red and my sensation of red, for example, are in some sense distinct then we need to know what the experience of each is like. Is what happens to the mind when we sense, something we are conscious of or are we only conscious of the ideas we have of the sensations? For instance, upon seeing a patch of red, do I say that I am conscious of the sensation that produces the idea of red along with the idea of red that the sensation produces, or am I conscious only of the idea itself? If the latter is true and we are conscious of our perception of the idea only then surely we will wonder what our unconscious sensations are like. But Locke is adamant that all perceptions, whether they be of ideas of sensations or just sensations, are conscious and that consciousness is a necessary condition for mentality. Says Locke, "Consciousness is the perception of what passes in a man's own mind", indicating that all perceptions no matter what they consist of are conscious.⁶⁰ In fact, for Locke all perceptions, all mental phenomena have to be conscious because to assume otherwise is to engage in contradiction, it is to say that we don't perceive that which we perceive, or to say that we have in mind that which is not in mind. "For to imprint any thing on the mind without the mind's perceiving it, seems to me hardly intelligible."⁶¹

While I mentioned this in the last chapter, it is important to note again that by rejecting a notion of the unconscious, Locke is not assuming that the mind never enters into unconsciousness (as it might in the case of dreamless sleep) only that he believes that so long as the mind is unconscious it is not involved in any kind significant mental activity which

⁶⁰ II.i.19.

⁶¹ II.i.5.

means the mind does not think, (if by thought we mean rational activity,) nor have sensations when it is “turned off.” Yet, in a passage about dreaming, Locke seems to acknowledge that in some instances, in dreaming, the mind does have activity (perceptions) even when not conscious. Says Locke, “’Tis true we have sometime instances of perception, while we are asleep and retain the memory of those thoughts: but how extravagant and incoherent for the most part they are; how little conformable to the perfection and order of a rational being, those who are acquainted with dreams need not be told.”⁶² While an extended version of this passage is often cited to show that Locke sometimes (as in this passage) uses the term “thought” to denote rational activity and at other times (see II.ix.1) he uses the term to denote any kind of mental activity whatsoever, I think the more interesting point about this passage is whether or not it serves to contradict his commitment to consciousness as a necessary condition for mentality.⁶³ If Locke admits we have perceptions while asleep is he also admitting that we have unconscious states of mind?

The answer, I think, is no, or at least that he need not. For one, Locke is clear in his account of dreams that the dreams represent instances of memory and memory, according to Locke, does not involve the recollection of thoughts that are unconscious but involves the recollection of thoughts or perceptions that used to exist and now do again by virtue of being recalled. If we can make sense of this view (and later I will argue we can not) then on Locke’s view, even remembering involves conscious activity. This is not to say that his account of memory gets him out of having to acknowledge unconscious states of mind, only that Locke thinks it does. I will return to Locke’s account of memory later in this chapter.

But regardless of whether or not Locke can give us a coherent account of memory, Locke could say, (although he never explicitly does) that the activity in our dreams although not rational activity is nevertheless conscious activity. Dreaming does not take place at the same level (intensity) of consciousness we are used to in our waking moments, but Locke can say that it takes place consciously simply because we are aware of it. The only way to know that one is dreaming or to later recall that one was dreaming is through consciousness.

⁶² II.i.16.

⁶³ For further discussion on Locke’s inconsistent use of the term “thought” see John Mabbots, *John Locke*, Macmillan Press, 1973, pp.51-57.

Unconscious activity, on the other hand, represents that which is in mind but is such that we have no awareness of it being in mind, and Locke is never inconsistent about denying the possibility of such activity. If the mind is not conscious, on Locke's view, it's not that the mind ceases to exist, only that it is no longer active, it is, so to speak, turned off. But when turned back on, when the mind "wakes up," all of it's activity is then conscious. The point being that regardless of how Locke does or does not define thinking, he defines all mental activity as conscious activity. I will continue to argue this point and argue that because Locke insists on at least this much, his overall theory of mind is incoherent. Nevertheless, despite not having a right to do so, Locke repeatedly says that all mental states have to be conscious states because he thinks that the notion of something being in mind that we are not aware of is absurd. Says Locke,

"I would be glad also to learn from these men who so confidently pronounce that the human soul, or which is all one, that a man always thinks, how they come to know it; nay, *how they come to know, that they themselves think when they themselves do not perceive it...*It is possible that the soul may not always think; and much more probable that it should sometimes not think than that it should often think and that a long while together, and not be conscious to it self the next moment after, that it had thought."⁶⁴

Thus the challenge is to try and figure out how Locke can say this when so much else he says regarding the mind points to the fact that not all of what takes place in mind is conscious. The dream passage was one wherein he appears to be admitting unconscious activity, but in that case I said Locke could admit that we are conscious of dreams. At the start of this chapter, however, we were discussing Locke's view that sensations give rise to ideas and said that this seems to indicate that the sensation that gives rise to the idea of the sensation and the idea itself are two separate things. If so, then either we are conscious of both or we are conscious only of the idea itself. The former can't be true because then Locke has to say, for example, that when I am looking at a patch of red, I am conscious both of seeing the red patch and of the idea I acquire upon looking at it, which is contrary to experience. But the latter can't be true either because that would then mean that sensations are unconscious on Locke's view and Locke would then have to admit that there are things we have in mind of which we are not aware of.

In an attempt to help solve this dilemma, Locke may try to enlist help from his theory of

⁶⁴ II.i. 18-19.

reflection. Recall that in addition to sensation, on Locke's view, the faculty of reflection is also said to give us ideas. Reflection, according to Locke, is the means by which we are not only able to perceive (be conscious of) the ideas we get from sensation but to perceive the nature of the operations in our minds that allow us to associate ideas. Says Locke, "The mind receiving the ideas,..when it turns its view inward upon itself, and observes its own actions about these ideas it has, takes from thence other ideas which are as capable to be the objects of its contemplation, as any of those received from foreign things."⁶⁵

Thus, on Locke's view, we can be conscious of our idea of red as well as the sensation that allows us to perceive the red with the faculty of reflection. "What perception is, everyone will know better by reflecting on what he does himself, when he see, hears, feels, etc., or thinks, than by any discourse of mine. Whoever reflects on what passes in his own mind, cannot miss it. And if he does not reflect, all the words in the world cannot make him have a notion of it."⁶⁶ Other processes we become conscious of in reflection, according to Locke, are the operations of discerning, comparing, and abstraction, all of which Locke believes exist as part of the innate constitution of mind, but as noted earlier, do not in and of themselves supply the mind with content.⁶⁷

Hence, all the content for knowledge, on Locke view, is acquired from the ideas we receive either in sensation or reflection. But as noted, reflection has a dual role in that it allows us not only to perceive the operations of our mind but also to perceive the contents of sensation which means that while sensation by itself allows for a consciousness of what of what we sense, reflection allows for consciousness of what we are conscious of in sensation as well as for consciousness of the processes that give us our ideas and allow us to generate knowledge claims. In other words, in reflection we are aware of perceiving what we perceive, and that level of consciousness must exist, Locke argues, in order for us to generate propositions about what we acquire from experience. This is to say that on Locke's view, in addition to the consciousness that accompanies sensation there is another level of awareness effected by reflection that is needed to attend to the contents of the mind in such a

⁶⁵ II,vi, 1.

⁶⁶ II. ix.2.

⁶⁷ See II, xi-xii for further discussion of these operations.

way that we can know what they are.

While in a later section we will examine how Locke relies on consciousness and uses reflection to establish his theory of knowledge, for now it is important to note that, according to Locke, reflection is that which allows us to become aware of or notice not only the conscious perceptions given to us in sensation but also the faculties or operations in the mind that allow us to think about them. Reflection, says Locke, is the “perception of the operations of our own minds 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 that could not be had from things without: and such are perception, thinking, doubting, believing, reasoning, knowing, willing and all the different actings of our minds, which we being conscious of and observing in ourselves, do from these receive into our understandings, as distinct ideas, as we do from bodies affecting our senses.”⁶⁸ According to Locke, in reflection, a faculty developed only after sensation has been effected, we are able to turn consciousness on itself, so to speak, and thereby become aware of what we are given in sensation as well as of the mental processes that help us to become aware.

While reflection and sensation are distinct processes in terms of the origins of the ideas they perceive, reflection would have no ideas to perceive if sensation wasn't already effected even though we can have sensations without reflecting on them. In other words, sensation is a necessary condition for reflection, on Locke's view, but reflection is not a necessary condition for sensation. Says Locke, "In time the mind comes to reflect on its own operations, about the ideas got from sensation, and thereby stores it self with a new set of ideas which I call ideas of reflection."⁶⁹ Only when one is able to reflect can one begin to think about what he senses and therefore foster an understanding or knowledge of perception.

Hence, while sensation allows us to acquire ideas by virtue of perceiving the external world, sensation does not by itself allow us to be reflectively aware of what we sense. What needs to be effected in addition to our sensing in order for us to understand what we sense is

⁶⁸ II.i.4.

⁶⁹ II.i.24.

an awareness of the sensing which, according to Locke, is brought about in reflection, in the perception of the contents of our minds. Based on this interpretation, we can say that on Locke's view, babies and small children are conscious without having to also say that their consciousness entails an awareness of what they experience, that is, without having to ascribe reflective awareness to them. Or similarly, we can say of our own minds that while much of what we sense at any given time is not experienced in the same manner as what we attend to or give notice to in reflection that, nevertheless, it is experienced as being conscious. Says Locke,

"Men then come to be furnished with fewer or more simple ideas from without, according as the objects, they converse with, afford greater or lesser variety; and from the Operation of their minds within, according as they more or less reflect in them...And hence we see the reason, why 'tis pretty late, before most children get ideas of the operations of their own minds; and some have not any very clear, or perfect ideas of the greatest part of them all their lives. Because though they pass there continually; yet like floating visions, they make not deep impressions enough to leave in the mind clear, distinct lasting ideas, till the understanding turns inward upon it self, reflects on its own operations, and makes them the object of its own contemplation."⁷⁰

Given Locke's commitment to the notion that mental states must at all times be conscious, it seems we should say that it is not that babies and small children have no ideas, on Locke's view, but only that they have very few and that this is so due to their relatively small number of experiences and their inability to yet reflect. So for instance, when Locke says ideas pass continually through a child's mind but that the ideas do not make "deep impressions," what we should understand is that the ideas or first impressions a baby has are conscious but just not conscious enough for the baby to pay considerable attention to it. Of course, Locke now needs to explain what he means by suggesting that there are different levels of consciousness as well as what it means to pay considerable attention to a mental state, and I will do my best to decipher what Locke says about these kinds of phenomena. In the end what we will find, however, is that because Locke does not speak consistently to these issues and because he insists that consciousness is a necessary condition for mentality, we really can not find a coherent theory of mind in Locke. First, it is noted that what Locke appears to be saying of younger minds is that while they may have few experiences and therefore few ideas, (all of which must be conscious, on Locke's view,) they may not be

⁷⁰ II.I.7-8.

aware of them which is to say perceive them reflectively. Only as experience increases and the mind matures are we able to "register" ideas, to reflect and think about them and subsequently work them into knowledge states, into an understanding of what those states are.

Hence, on Locke's view, because all mental states must be conscious states, we wouldn't say that a baby or young child is any less conscious of perceiving what it senses than an adult is, only that the younger mind is less aware of the conscious perceptions, which is to say that it hasn't yet attended to or thought about what it perceives in sensation.⁷¹ While children have ideas prior to reflecting on them, it is not until they are able to reflect that they can come to have knowledge of what they perceive. At what age reflection takes place Locke does not make clear but we can gather that it starts relatively early and around the time when language is also being effected and, hence, when the meanings of terms, the ideas the

⁷¹ Later we will examine Essay, I.i.22 as a means of establishing not only that children acquire knowledge upon developing the ability to reflect but that they acquire awareness of even having any mental states at all at the same time. That is, later I will argue that while Locke is notoriously inconsistent with the articulation of his view, it is possible to interpret him as saying that children only become aware of what they perceive upon being able to reflect and therefore that Locke is stuck with the problem of having to say what the child's mind is like prior to reflection. While we know Locke wants to say the child's mind prior to reflection, as it is at all times, is conscious, he does not always allow for this and sometimes say what passes through the mind of a child, and even an adult at times, is inaccessible to consciousness.

terms stand for are beginning to be understood.⁷² Of course, with time and with practice, or rather, with the efforts of reflection, one can sharpen his understanding of the ideas he perceives and eventually be competent to judge of his perceptions whether they are true or false. Hence, while reflection starts at an early age it gradually matures and gives one the opportunity, whether they use it or not, to determine clear and distinct ideas of what they perceive, to have knowledge.

Two Levels of Consciousness?

Thus, on Locke's view all conscious states are of ideas and are therefore about something but that is not to say that we are therefore always aware of what they are about.

Being conscious and being able to think about or be aware of what's in consciousness,

⁷² While it consists of a project that lies outside the scope of this one, I think it can be argued that language, on Locke's view, indicates the emergence of reflection. This is not to say that language in and of itself entails an ability to reflect as it is possible, as Locke notes, to be able to use language unwittingly, that is, to use it and not be aware of what the language indicates or serves to represent. Nevertheless, Locke does seem to argue that one can not be aware of what they perceive without using language. That is, while how we use language is decided by convention, on Locke's view, that we use language is a necessity and is what allows us to comprehend what we perceive. In other words, all conscious experiences, on Locke's view, are interpreted through language. Consequently, because language is a necessary condition for being able to reflect and reflection is that which allows us to comprehend what we perceive and to turn our perceptions into knowledge, language is a necessary condition for knowledge. This view would be in contrast to a rationalist view wherein what is ascribed to the innate constitution of mind are actual instances of knowledge, instances that are known prior to consciousness and the emergence of language. Hence, one could argue that it is not merely consciousness but also language, on Locke's view, that because they are necessary, make the rationalist views unintelligible. For further discussion of Locke on language see D. J. O'Connor, *John Locke*, Dover Publications, 1967, Chapter Six, and E. J. Lowe, *Locke on Human Understanding*, Routledge, 1995, Chapter Seven.

I also want to mention John Yolton's remarks on Locke's view of language in the child, for two reasons; one because Yolton rightly observes that for Locke "memory, comparison and the use of language are necessary before we can know know the truths of the propositions cited by the innativists", and as Yolton, notes, one must first have some access to or use of reflection in order for that to happen. But secondly, I call attention to Yolton's analysis because he conducts his analysis in this instance, and in other contexts, by assuming that "to know" in the case of the child, for instance, in the pre-linguistic states, means 'conscious of'. The problem with this is that, once again, it leaves us wondering what it's like to be conscious when not also aware of being conscious and in this case not being able to interpret our conscious states through language. Nowhere in Yolton's extensive treatments of Locke's theory of mind do we find a clear conception of what being conscious means, on Locke's view, and hence, the ambiguities in Locke's theory of mind persist. (See John Yolton, *Locke, and Introduction*, Basil Blackwell, 1985, p. 128, as well as his two other books on Locke, namely, *Locke and the Way of Ideas*, Basil Blackwell, 1956 and *Locke and the Compass of Human Understanding*, Cambridge, 1970.

according to Locke, are two different states of mind, the latter available only through reflection. But, if that be the case, if there are in fact two levels of consciousness then we need to know just what sense of consciousness is involved at each level. If Locke means to distinguish sensation from the ability to consider or attend to perception (which is done only in reflection,) then what is the nature of a non-reflected state of consciousness? Or conversely, if Locke means to characterize sensation as a kind of awareness then how does he do that? What would it mean to say of all sensing creatures that they are also thinking or noticing creatures?⁷³ For instance, what would it mean to say of infants or even of oysters, both of which Locke is willing to say sense and have ideas, that they also notice what they sense whether it be willful notice or not? I will examine these questions more closely in the context of Locke's arguments and determine what the possibilities for Locke's responses are.

As mentioned, if we understand Locke as wanting to separate sensing and noticing then we are left needing to know what Locke means by "bare naked perception." If taking notice of what we perceive is done only in reflection then what is a non-reflected sensation like? We know that Locke insists that a sensation is a conscious state but if it isn't also a noticed state or one we are able to think about, take notice of or consider (that which Locke tells us we can do when reflecting) then in what sense is it conscious? How can one be conscious without also being conscious that they are conscious? That one can't, that is, that it isn't possible for one to be conscious and not be conscious of being conscious is indicated by Locke when he tells us;

"This being premised to find wherein personal identity consists, we must consider what person stands for; which I think is a thinking intelligent being, that has reason and reflection and can consider itself as itself the same thinking thing in different times and places; which it does only by that consciousness, which is inseparable from thinking, and as it seems to be essential to it: It being impossible for any one to perceive, without perceiving, that he does perceive. When we see, hear, touch, taste, feel, meditate or will anything, we know that

⁷³ I will sometimes, hereafter, use the term "thinking" to designate what I think Locke means by "taking notice of." While that may add yet another definition of "thought" to Locke's arsenal and thus make things more confusing, I do so not to broach the issue of what thinking is according to Locke, but rather to broach the issue of what mental states are or more specifically, to broach the issue of what conscious states are, according to Locke. Because Locke insists that all mental states are conscious states and because we know that being conscious means being aware of something, we need to determine not only what the mind is aware of when it senses and when it reflects but also the level of awareness effected in each faculty as Locke indicates that in reflection more noticing taking place than does in sensation.

we do so.”⁷⁴

Stated as such, however, it is not clear whether Locke means that sensations are known only when reflected upon and therefore that reflective consciousness, the ability to be conscious of what we are conscious of, belongs only to reflection or whether he is telling us that reflective consciousness, at least to some degree, exists in sensation also. If the former is true of Locke’s view then we still need to know what a non-reflected state of consciousness is like, that is, what would it would mean to say that one is conscious of x but unable to attend to or consider x, but if the latter is what Locke intends for us to believe then we have to believe that at least some degree of noticing or reflective awareness takes place in sensation as well.

That Locke believes the latter, that is, that he is willing to ascribe an attention eliciting mechanism to sensation as well as to reflection is how many critics twentieth century critics interpret him. The problem with these views, however, is that while they want to distinguish the nature or degree of consciousness present in sensation from that which exists in reflection, they either don’t say how we are supposed to understand the distinction, or they do but the analysis they provide doesn’t make sense.

Robert McRae, for instance, setting up the distinctions between Locke’s and Leibniz’s theory of mind in his book *Leibniz, Perception, Apperception and Thought*, assumes that there are levels of awareness or attention to distinguish in Locke’s theory, but says nothing that can help shed light on how to understand the distinctions. Literally all McRae tells us is that in Locke, “[I]t is one thing to be conscious of what is going on in the mind. It is another thing to notice or to engage in observing what is going on.”⁷⁵ What the difference between being conscious and noticing are, on McRae’s view, is never explained.

But McRae’s book was meant to be more an exegesis on Leibniz, thus perhaps we can find a more detailed account in one who writes mainly on Locke. In his book, *John Locke*, John Mabbot spends a great deal of time examining various problems that arise from Locke’s theory of sensation and reflection, but there too, we find only almost no explanation of how

⁷⁴ II.xxvii.9.

⁷⁵ Robert McRae, *Leibniz, Perception, Apperception and Thought*, University of Toronto Press, 1976, p.16.

each faculty is defined in terms of consciousness.⁷⁶ Mabbot merely assumes that we understand what it means for our sensations to be conscious and thus says nothing about the role of consciousness in sensation, and of reflection says only that “[I]n ordinary modern usage ‘reflection’ means thinking, pondering, meditating, whereas in Locke ‘reflection’ is equivalent to our term ‘introspection’”⁷⁷ Mabbot does indicate that reflection or introspection on Locke’s view involves some kind of attention to what we are conscious of, but beyond that he never defines “thinking” or “intropsection” such that we could understand how the two are supposed to be different. That is, Mabbot fails to give an account of what it means to say reflection is a form of introspection beyond noting what Locke says about reflection, namely, that it occurs “when the mind turns its view inward upon itself and contemplates its own actions.” Mabbot does shed light on other important ambiguities in Locke’s account of reflection, for example, whether it is said to begin later in a child’s life or right at the beginning and whether or not reflection is a reliable faculty, however, because he never really explains what Locke means by reflection or what he means by introspection, nor the role consciousness plays therein, we are at a loss to fully understand his account.⁷⁸

What is missing from McRae’s and Mabbot’s analysis, to a certain extent, can be found in an earlier analysis given by James Gibson in his book, *Locke’s Theory of Knowledge and*

⁷⁶ J. D. Mabbot, *John Locke*, Macmillan Press, 1973.

⁷⁷ Ibid. p. 18

⁷⁸ Moreover, while Mabbot defines introspection only by telling us that it is different from thinking or pondering, he goes on to tell us that no clear account of thinking can be found in Locke’s analysis while at the same time never bothering to tell us what it should mean such that we can understand his claim. That is, although Mabbot rightly points out that Locke sometimes confuses an understanding of thinking as a general term for perceiving (including sensing) with an understanding of thinking as reasoning (excluding sensing), because Mabbot does not go on to tell us what the appropriate sense of thinking should be we have no means of understanding what he means when he says that introspection is distinct from thinking. If thinking is understood as a general term for perception which includes reflection then there is no way to make sense of Mabbot’s definition of reflection as that which is distinct from thinking. If, however, Mabbot intends for thinking to be understood as reasoning then we need to know how introspection and reasoning differ. And while perhaps this can be done, nothing Mabbot says helps us understand how to do so. Consequently, in the absence of an account of how to understand the nature of intropsection, claims like Mabbot’s wherein reflection is likened to introspection remain unclear. See discussion in Mabbot, pp. 51-57.

its Historical Relations.⁷⁹ Gibson believes that according to Locke, “[S]ensation is a mode of thinking and the mere reception of the simple idea involves an operation of the understanding by which its content is noticed or perceived [and while] notice is an essential condition of the reception of simple ideas in sensation, in the case of reflection it is at once of greater importance and of greater difficulty.”⁸⁰ And, in a more contemporary analysis wherein a great deal of time is spent analyzing this very issue we find that in his book *Leibniz on Apperception, Consciousness and Reflection*, Mark Kulstad agrees with Gibson and argues that while both sensation and reflection entail notice, reflection is distinguished from sensation by the fact that in it our notice is more focused and because of it we “attend to nothing else at that moment or we attend to nothing else as intently” whereas in sensation our notice may only entail that what we perceive can be perceived “while being scarcely taken notice of.”⁸¹ Kulstad, like Gibson, believes that the notice involved in both sensation and reflection is distinguished only by a matter of degree.

In what follows I will examine the analysis Gibson and Kulstad each give of Locke's theory but argue against both analyses noting that the text from Locke each uses to substantiate his interpretation is contradicted by Locke himself at times or is ambiguous enough to allow that alternative interpretations be given. Later, I will add to the discussion by examining how D. J. O'Connor accounts for the issues noting how the ambiguities in Locke's theory of sensation and reflection pose other problems for Locke, in particular, for his theory of self and his theory of memory. In the end I will argue that Locke could avoid these problems were he only willing to expand his theory of mind and include a theory of the unconscious like the rationalists.

Gibson on Locke's Theory of Consciousness

In his book, *Locke's Theory of Knowledge*, James Gibson argues that on Locke's

⁷⁹ James Gibson, *Locke's Theory of Knowledge*, Cambridge University Press, 1917.

⁸⁰ *Ibid.*, p.55.

⁸¹ Mark Kulstad, *Leibniz on Apperception, Consciousness and Reflection*, Philosophia, 1991, pp.92 and 97.

view consciousness is at least in part defined by one's ability take notice of what one perceives and hence that Locke distinguishes sensation and reflection is so, Gibson believes, not because Locke thinks the latter involves notice while the former does not but is because Locke believes that reflection affords us a stronger or more intense means of effecting notice than does sensation. Says Gibson;

"All mental functions are for him functions of thoughts and [for Locke] 'thinking consists in being conscious that one thinks.' Hence, the operations of our minds will not let us be without at least some 'obscure notions of them.' A special act of 'notice' or attention is, however, required to enable us to form definite ideas of specific operations and it is this which constitutes Reflection. Such 'notice', as we saw, was an essential condition of the reception of simple ideas of Sensation; in the case of Reflection it is at once of greater importance and of greater difficulty."⁸²

If Gibson's interpretation is correct then we find that the question raised earlier in my analysis, namely, what are non-reflected states of consciousness like, can be answered on Gibson's view and that the answer is that they are simply less noticed states of mind. While both sensation and reflection, according to Gibson, effect notice, in sensation the notice or attention given to an idea may only be slight or brief whereas in reflection it is more focused and intense leaving us, at times, with a more lasting impression. Gibson supports his interpretation with the following passage from Locke noting that for Locke part of what it means to have a sensation is to notice that you do. Says Locke;

"How often may a man observe in himself, that whilst his mind is intently employed in the contemplation of some objects, and curiously surveying some ideas that are there, it takes no notice of impressions and sounding bodies made upon the organ of hearing with the same alteration that uses to be for the producing of the idea of sound?...Want of sensation, in this case, is not through any defect in the organ, or that the man's ears are less affected than at other times when he does hear; but that which uses to produce the idea, though conveyed in by the usual organ, not being taken notice of in the understanding, and so imprinting no idea in the mind, there follows no sensation."⁸³

An immediate problem in relying on this passage, although not a problem that speaks directly to Gibson's interpretation, is that Locke's reference to sensory stimulation that does not result in sensation is a peculiar if not contradictory notion. While, personally I think it is contradictory to admit that there are stimuli that effect our sense organs but do not result in

⁸² James Gibson, *Locke's Theory of Knowledge and Its Historical Relations*, Cambridge, 1917, p.57.

⁸³ II.ix.4 and in Gibson, p.55

sensation, if there is a way to admit such phenomena it seems we should at least be able to account for them and explain how such things get to be non-sensations. What would it mean to say, as Locke does, that in the cases where there is no notice elicited by the stimuli that the senses are impacted the same as when there is notice? If the senses are impacted the same then why would the mind not be also? What is the mechanism that allows for some of what we experience to become conscious and to become ideas and for others not to be? Locke never answers these questions nor can he answer them, I argue, so long as he insists that all mental states have to be conscious states. Without being able to admit that some of what we experience and some of what reaches the mind exists unconsciously and goes without notice, we have no means of even acknowledging the presence of non-noticed sensations. I will expand on this point later in the analysis, but for now it must be noted that even if Locke's account remains deficient as a means of helping us understand the intricate workings of the mind, we still need to consider whether what he says will suffice as a means of supporting Gibson's interpretation that according to Locke all mental states, even sensory states, involve notice.

But in fact, I don't think it will. That is, I don't think Gibson can reliably use this passage as a means of supporting his interpretation because there are passages in Locke, oddly enough some of which Gibson uses in support of his own interpretation, that contradict not only Gibson's interpretation itself but that contradict Locke's commitment to the notion that all mental states must be conscious states. For instance, in the following passage that Gibson cites as a means of establishing that notice is an integral part of all mental states, we find Locke admitting that not all of what we perceive is conscious. Says Locke;

"Sometimes the mind fixes itself with so much earnestness upon the contemplation of some objects, that it turns their ideas on all sides, remarks their relations and circumstances, and views every part so nicely, and with such intention, that *it shuts out all other thoughts and takes no notice of the ordinary impressions* made then in sensation which at another season would produce very sensible perceptions; at other times it barely observes the train of ideas that succeed in the understanding, without directing and pursuing any of them; and at other times it lets them pass almost quite unregarded, as faint shadows that make no impression."⁸⁴ (My italics.)

⁸⁴ II.xix.1., In Gibson, p.60.

While this passage does speak to the having of barely noticed sensations, a degree of notice that would be sufficient to support Gibson's interpretation, it also speaks of sensations not noticed at all and of thoughts being "shut out" which leaves it open for us to believe that these thoughts still exist just not consciously. Furthermore, immediately following the citation of this passage Gibson says that these thoughts (those we shut out or take no notice of) are those that Locke believes we can with attention "revive" which, contrary to what either Locke or Gibson acknowledge, makes it necessary for us to believe that there is something there (in the mind) to be revived.⁸⁵ If with attention we can recover from our minds what we once perceived then mustn't there be something still in the mind for us to recover and therefore things that exist in the mind that we are not conscious of? A thorough response to this question requires that we examine Locke's theory of memory and will be addressed later in the analysis.⁸⁶ Before doing so, however, I would first like to examine Kulstad's interpretation of Locke and determine whether his reasons for believing as Gibson does, that is, for believing that Locke ascribes notice to all mental states, fare any better.

Kulstad on Locke's Theory of Consciousness

In his book, *Leibniz on Apperception, Consciousness, and Reflection*, Kulstad argues, much like Gibson, that it is important to distinguish consciousness and reflection on Locke's view not because the former involves no notice but rather because while they both involve noticing, reflection affords us a higher degree of attention and therefore is distinguished from mere consciousness by an ability to effect a more directed, concentrated and voluntary focus

⁸⁵ Says Gibson, "Attention, moreover, is recognized by Locke as the chief factor upon which the revivability of our ideas depends." (p. 60.) Later in an examination of how Locke characterizes the

⁸⁶ What my analysis of Locke's theory of memory will show is that contrary to his insistence otherwise, sometimes Locke does admit unconscious states into his theory of mind (which I believe he is doing above) and, I will argue, the reason Locke does so is because he has to, that is, that they only way to accurately characterize much of what goes on in the mind is to include a theory of the unconscious.

not afforded in our mere conscious perceptions.⁸⁷ It is worth noting again what Kulstad says in this regard, namely, "Let me stipulate [is true of Locke] that we focus our attention on something just in case we attend to it to a fairly high degree and make it our primary object of attention., i.e., either attend to nothing else at that moment or attend to nothing else as intently."⁸⁸

For Kulstad, as is the case with Gibson, part of what it means on Locke's view to perceive something is to take notice of it and because Locke stipulates that all perceptions, including those acquired in sensation, are conscious, what it means to be conscious is simply to take notice of what we perceive whether what we perceive (the idea) be derived from sensation or reflection. The end result, Kulstad believes, is that something in our mind can be perceived and yet be "scarcely taken notice of" and therefore, on Locke's view sensation really is only different from reflection in terms of notice by a matter of degree. Kulstad cites the following two passages from Locke as support for his view that Locke intends for us to believe that attention exists not only in reflection but in sensation as well.

"Thus the first years are usually employed and diverted in looking abroad. Men's business in them is to acquaint themselves with what is to be found without; and so growing up in a constant *attention* to outward sensations, seldom make any considerable reflection on what passes within them, till they come to be of riper years; and some scarce ever at all."⁸⁹

"For, though he that contemplates the operations of his mind can not help but have plain and clear ideas of them; yet, unless he turn his thoughts that way and considers them *attentively*, he will no more have clear and distinct ideas of all the operations of his mind... than he will have all the particular ideas of any landscape...who will not turn his eyes to it and *with attention* heed all the parts of it." (Emphasis added by Kulstad.)⁹⁰

According to Kulstad, what these passages show us is twofold; first, that according to Locke there are different kinds of objects perceived in sensation and reflection, the former involving the ideas we acquire from our perceptions of external objects or those that exist

⁸⁷ Mark Kulstad, *Leibniz on Apperception, Consciousness and Reflection*, Philosophia Verlag, 1991.

⁸⁸ Ibid., p.92.

⁸⁹ Ibid., p.86

⁹⁰ Ibid.

outside the mind, and the latter involving the ideas we acquire from our perceptions of internal objects or the operations of the mind, and secondly, that in both sensation and reflection there is attention to what is perceived, a point Kulstad emphasizes by italicizing Locke's use of the term. With regards to the second point what Kulstad believes is that in both sensation and reflection "attending to" takes place and hence whereas in sensation we can say that the external senses, (seeing, hearing, tasting, for example,) are what allow us to notice the objects that exist outside of our mind, in reflection we might say that our internal sense, (our mind's eye, so to speak,) allows us to notice what exists inside our minds. Consequently, Kulstad argues that aside from the different sets of objects perceived by each, the only thing that distinguishes sensation and reflection is the degree to which the noticing takes place in each.

While I find no reason to doubt Kulstad's first point that Locke distinguishes between the kinds of objects sensation and reflection each are capable of perceiving, I think it is questionable as to whether or not these passages establish his second point that attention is an essential condition of each. An alternative interpretation of the above passages, one that Kulstad does not consider is that while the attention eliciting mechanism referred to may be given *to* sensation, it may not actually be a part *of* sensation but rather something that accompanies it. It might be that attention is the mechanism that allows us to notice sensation but is itself separate from it and is that which is effected in reflection. Earlier we saw that Locke characterizes reflection as that which allows us to perceive and think about that which passes through our minds including the operations of our minds and that which we receive from sensation. If that is what Locke means then perhaps it isn't possible to notice what we experience from sensation until we are able to reflect on it, that is, perhaps it is the case, as Locke sometimes suggests, that notice only takes place in reflection. Consider the following passage from Locke that would seem to support this interpretation and that is therefore problematic for Kulstad's interpretation.

"When the mind turns its view inward upon itself and contemplates its own actions, thinking is the first that occurs. In it the mind observes a great variety of modifications and from thence receives distinct ideas. Thus the perception which actually accompanies, and is annexed to any impression on the body, made by an external object being distinct from all other modifications of thinking, furnishes the mind with a distinct idea which we call sensation, which is, as it were, the actual

We know that for Locke the faculty that allows us to “turn inward” and perceive the contents of mind is reflection and therefore that the perception referred to as that which is annexed to sensory input or to “any impression on the body” is one coming from reflection. And if that be the case then what Locke goes on to say in the above passage is that through reflection we are able to become aware of what we sense as well as of what sensation is. It appears that Locke is saying, at least in the above passage, that our reflective perceptions and therein our ability to notice is what accompanies sensations and that notice is therefore effected in reflection only. If so, then Kulstad’s interpretation is called into question. Moreover, because a lot of what Locke says in regard to his theory of consciousness and the roles of sensation and reflection therein is inconsistent, it is difficult to show that the interpretation either Gibson and Kulstad offer is definitive.

O’Connor on Locke’s Theory of Consciousness

Before proceeding it is important to note that there is another analysis of Locke’s theory of reflection provided by D. J. O’Connor that provides us with an extensive examination into Locke’s characterizations of reflection and of which, curiously, is not included in Kulstad’s analysis, (the latter of which is presented as accounting for the various interpretations of Locke’s theory of reflection that critics have offered over the years.)⁹² According to O’Connor, it is difficult to see why, if the kind of non-reflected consciousness found in sensation is sufficient to explain our acquaintance with ideas, it shouldn’t also be sufficient in the case of reflection. O’Connor wonders why Locke even bothers to attribute a different kind or degree of consciousness to reflection when what he (O’Connor) sees as the ordinary, automatic awareness that occurs in sensation would suffice as an explanation of

⁹¹ II.xix.1.

⁹² D. J. O’Connor, *John Locke*, Dover Publication, 1967.

how we become aware of ideas got from reflection just as well.⁹³ Says O'Connor,

“Locke apparently failed to realize that he could not make a distinction between reflection and the ordinary reflex awareness which he alleged to accompany every mental state without having to amend his doctrine of sensation. If the awareness is sufficient to account for the fact that we come by ideas of sensation, there seems no reason why it should not account for the origin of ideas of reflection also. But if the mind can not acquire ideas of reflection without a special mental activity of ‘taking notice of’ its own operations, how can it acquire ideas of sensation without analogous process of ‘taking notice of’ those ideas?”⁹⁴

O'Connor's argument is that ultimately, Locke's theory of reflection can be dispensed with and exactly how O'Connor reaches his conclusion needs to be established.

Like Mabbot, O'Connor believes that Locke's notion of reflection should be likened to the more modern day notion of introspection. Just as introspection is said to allow us to observe what goes on in our mind, O'Connor argues, so reflection, as Locke notes, is like an “inner sense” and allows for “the notice which the mind takes of its own operations.” Unlike Mabbot, however, O'Connor does not believe that references to the phenomenon that introspection or reflection are alleged to account for should be included in a theory of mind. The reason for this is that O'Connor believes that it is questionable if not false to believe that we can properly ascribe faculties or *acts* to the mind much less special acts that allow us to attend to our mental states. O'Connor believes that a careful examination of experience will reveal that there is nothing in reality to correspond to what the act of reflection is alleged to correspond to and, that all we will find when trying to isolate such faculties or acts of mind

⁹³ The suggestion that an analogous process of ‘taking notice of’ should be attributed to sensation, O'Connor goes on to argue, is obviously and patently absurd which means that the other suggestion, namely, that Locke should eliminate ascriptions of reflection all together is what O'Connor feels Locke is obligated to. I will proceed to examine O'Connor's reasons for arguing as such but for now note that one problem O'Connor's interpretation will encounter, in light of his belief that attributing a ‘taking notice of’ process to sensation would be absurd, is that if ‘taking notice of’ is eliminated from sensation, as O'Connor argues would have to be the case (without telling us why,) then we are left wondering what the consciousness of sensation is like. That is, while O'Connor spends a great deal of time dissecting Locke's account of reflection and establishing an argument that requires the elimination of reflection, he spends almost no time explaining what we are then left with, namely, Locke's theory of sensation. Moreover, as will be noted, while O'Connor rejects the notion that there is a special faculty like reflection able to effect focused degrees of attention, he doesn't deny that we are at times able to pay close attention to our mental states and hence, we'll need to see how O'Connor can account for the phenomenon without invoking a special faculty that allows the phenomenon to occur.

⁹⁴ Ibid., p.99.

are individual mental states and the way in which the succession of the states is presented to us. That is, a proper ontology of mind, O'Connor believes, should only consist of terms denoting *mental states* and mental *processes* or *events*, the latter of which he defines as "a set of successive states in which the latter members of the set are discernibly different from earlier members" and of which he thinks should replace any reference to *mental acts*.⁹⁵ According to O'Connor, not even terms like "mind" or "self" should be granted ontological import and should be regarded, at best, as linguistic conventions used to refer to other kinds of physical phenomena that can be directly observed.

Hence, on O'Connor's view, the term "mental act" is best viewed as a linguistic convention that really only refers only to various processes or events that take place in the mind but of which are not separate from the rest of the mind's activities. For O'Connor, if in addition to mental states and processes, we allow for mental acts, the likes of which presumably there is an agent or entity to which to refer as the acting agent, then we allow for the existence of something over and above the contents of the mind--the contents that Locke would have the act of reflection observe. In doing so, O'Connor notes, that is, by invoking a special faculty of mind able to perceive the contents of mind, we have entered the realm of fiction, a realm wherein the agent to which the act gets ascribed can only be described by relying on suspect ontological terms. "[W]hen we talk of mental acts there is no observable agent; there is only a hypothetical entity, a 'mind', 'self', or 'soul' to which, by analogy, we refer the act."⁹⁶ On O'Connor's view, because it is wrong to ascribe 'acts' to the mind, what appears to be or is alleged to be an 'act' is in need of an alternative explanation, one free from the vagaries and ambiguities of language. It is better to provide descriptions of mental activities, O'Connor believes, such that nothing other than the content of each mental state observed and possibly the physical mechanisms needed to make the observations are used in the explanations. Says O'Connor,

"[M]y acts of attention have no content or positive character other than a) the character of the object to which I am attending, and b) such concomitant organic and muscular sensations (feelings of eyestrain, muscular tensions, etc.) as may accompany my attending. There is thus nothing relevant which I can make clear

⁹⁵ Ibid., p.101.

⁹⁶ Ibid.

and bring, as it were, into focus, by my act of introspection.⁹⁷

Thus, on O'Connor's view, if I am found focusing intently on my cat's behavior to the point where I am aware of nothing else but the current state of my cat's behavior, the way in which we describe what I am doing is not by saying that I am able to focus on my cat's behavior because I have a special faculty of attention that allows me to focus on that which I perceive, but rather would say that during the time in which I pay close attention to my cat's behavior there exists a series of mental states of which are about paying close attention to my cat's behavior. In other words, what O'Connor's view implies is that attention is 'built in' to the character of the mental states, and is not, as O'Connor thinks Locke's view suggests, a faculty distinct from mental states themselves. And for this reason, that is, because on O'Connor's view act and object are one, O'Connor argues that Locke is unable to say, as his theory of reflection entails, that in addition to perceiving the other operations of mind, the reflective faculty is able to perceive itself. If attention is a mechanism we need to attribute to reflection, as on Locke's view certainly it is, then as O'Connor notes, we will have to question whether or not it makes sense to say we can "attend to x and simultaneously attend to our attending to x."

The answer to this question, O'Connor believes is no, that is, he does not believe that there is any sense in saying that the mind has a faculty able to perceive itself for the same reasons he thinks there are no mental acts. According to O'Connor, it is not possible to say that in the instances where the mind attends to a mental state that there is something in the mind distinct from the 'attending to' itself that does the attending. One can not say that when the mind attends it is attending to *other* mental states only that the states themselves are attending states. To assume otherwise, O'Connor believes, is to depend on hypothetical entities such as 'self', the likes of which can not be substantiated in reality. O'Connor thus concludes that as a result of defining reflection as an 'inner sense' or as "the notice which the mind takes of its own operations", Locke introduces "unnecessary complications and difficulties" that can not be resolved lest the theory be abandoned all together.

Upon considering O'Connor's view and his recommendation that the term "mental act" or even terms, like 'self' and 'mind' be eliminated, one may wonder how distinctions

⁹⁷ Ibid. p.103.

between mental states can still be said to be observed or how ownership of the states is determined if there is no observing agent or 'self' to which the observations and mental states can be referred. While I agree with O'Connor that defining the terms needed for an ontology of mind is a difficult task and that one must be aware of when the terms used can be eliminated or reduced to other more basic phenomena, in the case of 'self', I don't think it is possible to eliminate references to it all together and deem the term entirely fictional. The reason for this is not simply because our linguistic convention makes it notoriously difficult to eliminate the term (as even O'Connor's characterizations of mind show) but is because the reason that the linguistic convention is so difficult to eliminate in the first place is because there actually is an empirical basis corresponding to the term. As the noted twentieth century neurophysiologist Charles Sherrington observed, our concept of self is so pervasive in all facets of existence, from our private experience, to language to acknowledgments in the law, that it would be absurd to think that there isn't something in reality that constitutes its existence.⁹⁸

Furthermore, as recent studies suggest, I think it is not unreasonable to believe that there are physical mechanisms responsible for creating the phenomenon of 'self' and that make it necessary for us to include ascriptions of 'self' in our philosophical theories of mind.⁹⁹ This is not to say that one must be an identity theorist about the self or about any other mental phenomena, nor is this to say that all of the ways in which the mind appears to us must be accounted for in a scientific context. Surely there are some mental terms, as O'Connor suggests, that are used to refer to things that don't really exist and that are therefore better explained by other mental phenomena the existence of which can be verified. And it might turn out that "acts" as O'Connor suggests, are one of those terms or one of those phenomena that need to be eliminated, but not, I argue, for the reasons O'Connor thinks. That is, my problem with O'Connor's argument at this point is not that he wants to

clean up the ontology of mind and include more empirically or behaviorally based criteria to

⁹⁸ Charles Sherrington, *The Integrative Action of the Nervous System*, Yale University Press, 1947. See also Karl Popper and John Eccles, *The Self and Its Brain*, Routledge, 1977.

⁹⁹ For an extended treatment of the empirical aspects of the self see *Altered Egos: How the Brain Creates the Self*, by Todd Feinberg, Oxford Press, 2001, and for treatment of the philosophical issues see *Self Knowledge*, Oxford University Press, 1994, and *Self and World*, Oxford, 1997, both by Q. Cassam.

explain mental phenomena, but rather is with the fact that one of the phenomena he wants to eliminate, namely, the self, can not and should not be eliminated. Like Kant and Leibniz and a myriad of contemporary neurologists and philosophers, I argue that as a condition of our being able to consciously know anything about the world or our minds, there must be a unified "I" or 'self' to which all experiences are ultimately referred. What the evidence is and how arguments in favor of the self are constructed constitutes a fascinating body of work that needs to be examined if arguments for the self can truly be incorporated into a theory of mind. However, because an examination and analysis of these arguments would take us too far outside the scope of the present discussion, let me just say here that should we be able to include ascriptions of self in our theories of mind in scientifically viable ways and find that ascriptions of self are necessary such that no theory of mind is complete or can be successful without them, then not only will we have reason to include an observing agent in our descriptions of mind and therefore possibly acts also, but will also have a means (and this is a slightly unrelated argument at this point) of being able to say that there is more to the mind than what is presented to us in consciousness. While I think it is appropriate to characterize most of what is identified as the self as a conscious phenomenon, it is not appropriate to think that the self comprises all of mind and that some of what makes up the self, and other parts of mind, are unconscious states.

This last point is one that also needs more discussion but is one I will take up in later analysis when I return to the discussion of whether or not Locke means for us to understand sensation as an attention eliciting mechanism or if attention or 'taking notice of' is that which is found in reflection only. If the latter is true, then Locke has to say that sensations, in and of themselves, are not conscious, but if the former is true and sensation does entail notice then Locke will have to say of all sensing creatures, including infants and oyster, that they take notice of what they sense. If infants and oysters are aware of what they sense then infants and oysters must also be attributed with a sense of self. Later I will argue that something can not be said to notice what it perceives unless it can also identify what it perceives as belonging to 'it' but because O'Connor takes that away from us, because he blocks any reference to 'self,' his arguments against Locke become unintelligible.

At times Locke argues that the whole of one's consciousness is what constitutes the self

but, as we will later see, at other times seems to deny that at certain stages of human development, for example in early childhood, the self is present even while there is consciousness.¹⁰⁰ He also seems to deny that other sensing creatures have a sense of self in which case we are left wondering what the consciousness in both contexts, that is, in small children and in other conscious species, is like. I will discuss what Locke's options are for answering this question but argue that no matter what he decides, so long as he insists that all mental states are conscious states, his theories are unintelligible. Before being able to examine this point further, let us return to a discussion of O'Connor's view and see what else he says about Locke's theory of reflection that might help us shed light on how to understand Locke's theories of sensation and reflection.

While I disagree with O'Connor's metaphysical inclinations and with his desire to reduce mind to nothing more than mental states and processes, I can hardly disagree with his demand for definitions of mental terms and clarification of the context in which the terms are properly used, nor do I disagree with his accusation that Locke fails to do so. Part of Locke's problem, as O'Connor rightly points out, is that he mistakenly assumes he can provide a coherent theory of mind without carefully defining and clarifying the various terms he uses to describe the mind's contents and operations. For O'Connor, Locke's failure to do so in the case of reflection leaves it open for us to deny the phenomenon and for O'Connor to believe that if Locke had "taken the trouble to work out a theory of attention, he would have rendered the theory of reflection superfluous."¹⁰¹ If the awareness elicited in sensation is enough to account for the ideas we acquire upon perceiving external objects, O'Connor argues, then it should also be able to account for the ideas we acquire upon perceiving the contents of mind. On O'Connor's view, sensation is a sufficient basis upon which to

¹⁰⁰ See II, xxvii.9 for Locke's discussion of self.

¹⁰¹ I.iv.22.

Presumably then, like Gibson and Kulstad, O'Connor believes that for Locke all mental states including sensations are "attending states". It is difficult, however, to know exactly what O'Connor believes about the nature of the consciousness in sensation or in what he refers to as our "ordinary reflex awareness" because he never addresses the issue directly and focuses his analysis on the kind of attention alleged to exist in reflection only. Furthermore, what is odd about O'Connor's view is that because he acknowledges that there are times when we are able to effect greater attention upon our mental states, he seems to acknowledge that what Locke was trying to account for with reflection is, at least in some sense, a real phenomenon. That is, O'Connor admits that we need to distinguish between the automatic, involuntary states of consciousness we acquire in sensation and the more focused states of awareness wherein "some degree of voluntary attention" is required. And while O'Connor denies that the phenomenon associated with voluntary attention is effected by a special act of mind, following the suggestion of C.D. Broad, he thinks we might be able to account for the phenomenon by calling it 'inspection' rather than 'introspection.' Characterizing Broad's

¹⁰² But that Locke needs to define his terms more carefully is not the whole of O'Connor's argument in this regard and there are aspects to his views, even independent of his metaphysical inclinations that I find troublesome. Recall that earlier in connection with characterization of Locke's theory of sensation that O'Connor was noted as believing that Locke is better understood as a philosopher and not a psychologist. Recall also that this is true of Locke, as he himself admits to not being concerned with the physics of the mind (even though oddly, he does feel qualified to comment on the physics of objects that exist outside of the mind.) My problem with Locke's attitude and with O'Connor's complacency about it is that I find it difficult to know how in the case of philosophy of mind, the one, namely philosophy, can be done without awareness of or an inclination for understanding the other, namely, psychology (which in this context I understand as, at least in part, a study of the mind in so far as it is a brain, that is, with the physics of mind.)

This is not to suggest that Locke or any other theorist need be a mind-brain identity theorist, but only that barring any warrant for being a phenomenologist, or one who believes that there is nothing more to the reality of mind than how it appears to us, upon undertaking to identify and characterize certain features of mind, for instance, sensation, a philosopher of mind should also take it upon himself to understand how the mind is capable of performing such functions. For instance, while Descartes certainly was not a physicalist about the mind, he was interested in determining how the brain produces mind and therefore in how the physics or mechanics of the mind help shape and determine our mental experiences. In that sense Descartes was, I claim, much more of a psychologist than Locke and therefore a better philosopher of mind than Locke. Similarly, while Leibniz was not the empirical scientist or neurologist that Descartes was, Leibniz was, as I will later argue, greatly interested in providing explanations for how certain functions of mind, for example, inferencing, can occur. That is, Leibniz was not content to identify merely that the mind can reason and make inferences, but was committed to providing an explanation as to how and why the mind is able to make inferences. That is, whereas Locke merely says that the mind is capable of making inferences and that that is just the way it is, Leibniz wants to account for how the mind is able to do so and for that reason, I argue, Leibniz is more of a psychologist and therefore better suited to be a philosopher of mind.

position O'Connor says,

“When we inspect, no less than when we introspect we attend to an object, but the object in the case of inspection, is the characteristics of our immediate experience. By adopting this suggestion we shall avoid confusing a recognizable and respectable mental states with a far more dubious and debatable process for which Professor Broad reserves the word ‘introspection’, viz., the process of attending to *other mental acts* or *events* such as perceiving, remembering, desiring, willing and so on. In calling the process dubious and debatable, I intend to suggest that it is very doubtful (i) if such alleged acts of introspection ever occur, and (ii) whether, if they did occur, they could be introspected.”¹⁰³

What we find then is that while O'Connor is willing to acknowledge the existence of the kind of phenomena Broad refers to with the term ‘inspection’ he is suspicious of Broad’s willingness to admit a further phenomenon of ‘introspection’. And while we may still want to know if O'Connor is right to exclude acts from a theory of mind, because he allows for “inspected states” we also want to know what the distinction is between inspected states and sensations. Presumably O'Connor thinks there is a distinction, as he doesn’t use the term “sensation” or “ordinary reflex awareness” when describing the kind of phenomena associated with inspection. But if so, the question arises, if attention or “taking notice of” is reserved for inspection only then what happens in sensation? Again, if O'Connor wants to place attention within sensations themselves then he needs to say that. But because he doesn’t, I argue that O'Connor’s view, like Gibson’s and Kulstad’s interpretations of Locke, can not help us fully understand Locke’s theory.

Moreover, what further analysis of Locke’s philosophy reveals, is that if O'Connor, like Gibson and Kulstad, interprets Locke as ascribing attention to sensation then holding that view in light of all else Locke says will be difficult. If it turns out that Gibson and Kulstad (and O'Connor if he means to ascribe attention to sensation also) are correct, or if it turns out that Locke at least *meant* for notice to be a part of sensation, then how does what Locke allegedly says fit in with the rest of what he has to say about consciousness and the role it plays in sensation and reflection? Specifically, I want to determine whether or not if it is correct to interpret Locke as believing that sensation elicits attention, it would also make sense to say on Locke’s view, all creatures that sense also notice what they sense. If it’s true, as Gibson says it is, that sensation for Locke is a “cognitive act” and elicits not just the

¹⁰³ O'Connor, *John Locke*, Dover Publications, 1967, p.100.

data for an idea but notice of the idea also, then wouldn't we have to ascribe cognition or the phenomenon of noticing ideas to infants and to all other creatures alleged to sense?

While perhaps some people would be willing to do so, to say of an oyster, for example, that it has awareness of what it senses, it is not at all clear that Locke is one of those people. As we will see, it can be argued that much of what Locke says about infants as well as non-human sensing creatures, leaves it questionable as to whether or not he does think all sensations result in notice, and as I would like to argue, rightfully so. That is, I don't think it is appropriate to say of either infants or oysters that they are cognitive creatures or that they are capable of noticing what it is they sense. This is not to deny that infants have sensations, only to deny that they are aware of having them. I do not think we have any basis for saying that infants actually notice what they perceive in such a way that it is appropriate to say they are conscious of what they perceive. The reason for this, as I alluded to earlier, is because like Leibniz I believe that the ability to notice requires an awareness of self or some point of reference wherein one is conscious of owning his/her perceptions. I further believe that this reference point or 'self' is not yet present in infants and is likely never to be present in oysters.¹⁰⁴ Hence, unless Locke be willing to ascribe self awareness to creatures whose mental capacities are as underdeveloped as an infant's or to those as primitive as an oyster, he should not be able to ascribe sensations to these creatures unless he is willing to describe them as unconscious states of mind. In order to fully explain this problem and establish how it transpires from what Locke says, it is necessary to further examine what he says about the status of underdeveloped minds, keeping in mind that ultimately we are trying to determine not only whether or not consciousness is a necessary condition for the having of mental states but also whether or not even Locke is able to consistently articulate this view.

¹⁰⁴ It is important to note that Locke only discusses the self in reference to human beings. Hence, my demand that he needs to consider the level of self-awareness in other species may seem unwarranted. My problem with Locke's account of consciousness and self, however, is that if the 'self' exists in persons only, and yet consciousness can exist in other species, as Locke allows, then what is the consciousness, say, of an oyster like if it is not also self-consciousness? When discussing small children, at times Locke says they are not yet aware of what they perceive in which case we would also assume that they are not self-aware. And yet, Locke is committed to saying they are conscious so, again we ask, what is consciousness like if it doesn't also entail self-consciousness or assume an "I" as the reference point to which all perceptions are referred to as originating from?

Of Infants and Oysters; Locke On Early Consciousness

The problem before us now is to determine whether or not Locke at least meant to ascribe notice to sensation and if so, whether or not we can find this view consistent with much else Locke says about sensation. The question that arises in connection with Gibson's and Kulstad's interpretation is that if sensation does involve notice or is cognitive, as Gibson says, and therefore is a mode of thinking, then wouldn't Locke have to ascribe cognition to creatures with low level perceptual capacities such as infants and even to oysters? Surely he would and would therefore be obligated to explain what it could mean to say of such creatures that they are able to think or that they are able to give attention, no matter how little, to what they perceive. However, that is not what Locke does or says. Even Locke acknowledges that limited sensing capacity does not afford one a full range of consciousness. Consider the following passage,

"We may, I think, from the make of an oyster or cockle reasonably conclude that it has not so many, nor so quick senses as a man, or several other animals...But yet, I can not but think, there is some small dull perception, whereby they are distinguished from perfect insensibility. And that this may be so, we have plain instances, even in mankind it self. Take one, in whom decrepit old age has blotted out the memory of his past knowledge, and clearly wiped out the ideas his mind was formerly stored with; and has, by destroying his sight, hearing and smell quite, and his Taste to a great degree, stopped up almost all the passages for new ones to enter; or, if there be some of the inlets yet half open, the impressions are scarce perceived, or not at all retained. How far such an one...is in his knowledge, and intellectual faculties, above the condition of a cockle, or an oyster, I leave to be considered."¹⁰⁵

¹⁰⁵ II.x.13. Locke does, however, say that talking birds, for instance, are able to think because they show an ability to retain and recall stimuli even when the stimuli are not immediately present. In the case of an oyster, however, and even with the infant, because there are no apparent language skills we need to know how we would determine that retention of sensation, that which Locke says is necessary for thought, is established. Furthermore, even if we could establish that the infant or even oyster is retaining what they experience, without access to language, how can we know that they are conscious of what they experience? That is, if notice is a distinguishing feature of consciousness and allows for one to be aware of what they perceive, then what kind of notice would we say exists in infants and oysters? My own view is that it would be better to say in the case of infants and oysters that while they feel, hear, touch smell and taste the various stimuli in their environment that they are not conscious of doing so and that consciousness like reflection is something that develops gradually. I would also argue that even if infants or oysters had access to an intelligible language that we would still not be able to determine that they are conscious, as we know can be the case with robots or machines that are able to retain information and talk about it but are not determined to be conscious. Hence, ultimately I am arguing that consciousness can be verified only when there is self-consciousness or self-awareness and that until a reference point for what a child experiences is established, we can not actually say the child is conscious if by conscious we mean able to take notice. See II.xi.10.

Because sensations result in ideas, on Locke's view, and because Locke believes that an oyster is able to have at least some sensations, if Locke also believes that sensation is a form of thinking or is a cognitive act then Locke is obliged to say that oysters have ideas and are able to think about them. If Locke means to ascribe notice to all sensations then if an oyster can sense, it must also be able to attend to what it senses. And yet, Locke seems skeptical that what the oyster does when it senses counts as thinking. The reason for this is that if ideas are not retained, as Locke admits they might not be in the case of the oyster nor in the case of the aged mind, then how can they be attended to? According to Locke, "To think often, and never to retain it so much as one moment is a very useless kind of thinking," and if we can characterize thinking in such a way that it is useless we have characterized it in such a way that it doesn't exist, in such a way that God would never have designed it to be.¹⁰⁶ "Nature never makes excellent things, for mean or no uses: and it is hardly to be conceived that our infinitely wise creator should make so admirable a faculty as the power of thinking...to be so idly and uselessly employed...without remembering any of those thoughts."¹⁰⁷

Hence, because retention is necessary for thought, for one to even have ideas to think about, it is unclear what to say of minds in which the existence of memory or retention is doubtful. And even in the cases where what is sensed is retained, it is not clear how to say that the sensations are noticed or thought of if they are not also reflected upon. The point is that if Locke includes sensing as a kind of thinking then he is obliged to ascribe thinking to non-reflective creatures including humans who have not yet developed or have lost their ability to retain ideas and therefore can't reflect upon them, as well as to lower animal species in which it is doubtful retentive or reflective capacities even exist. And yet it seems Locke is unwilling to say of these people or of the other species that they think, in which case we are back to wondering if Locke understands thinking as a reflective activity only.

Consider in the following passages how Locke characterizes the development of the human mind and how he characterizes awareness of perception--the ability to attend to one's perception--as an ability a child develops gradually after he or she has acquired some ideas

¹⁰⁶ II.i.15.

¹⁰⁷ II.i.15.

“He that attentively considers the state of a child, at his first coming into the world will have little reason to think him stored with plenty of ideas, that are to be the matter of his future knowledge. ‘Tis by degrees he comes to be furnished with them: And though the ideas of obvious and familiar qualities, imprint themselves, before the memory begins to keep a register of time and order, yet ‘tis often so late, before some unusual qualities come in the way, that there are few men that can’t recollect the beginning of their acquaintance with them: And if it were worthwhile, no doubt a child might be so ordered as to have but a very few, even of the ordinary ideas, till he were grown up to a man. But all that are born into the world being surrounded with bodies, that perpetually and diversely affect them, a variety of ideas, *whether care be taken about it or no*, are imprinted on the minds of children.”¹⁰⁹ (My emphasis.)

“He that will suffer himself, to be informed by observation and experience, and not make his own hypothesis the rule of nature will find few signs of a soul accustomed to thinking in a new born child. ...Follow a child from birth and observe the alterations that time makes, and you shall find, as the mind by the senses comes more and more to be furnished with ideas, it comes to be more and more awake; thinks more, the more it has matter to think on.”¹¹⁰

What these passages suggest is that awareness is something that the mind gradually develops, something that the mind can effect only after it has started to receive sensations and has learned to process and attend to what it senses. If that be the case then presumably there is a time at which sensations pass through the mind unattended to and then a point at the beginning of a child’s life wherein it is appropriate to characterize the child as having unconscious states--states that pass through the mind but go unnoticed. But it’s not just in the child’s mind that Locke believes this can happen because Locke admits that the potential to either willfully or inadvertently “block out” what one perceives exists in the adult mind also. Says Locke:

“Sometimes the mind fixes itself with so much earnestness upon the contemplation of some objects, that it turns their ideas on all sides, remarks their

¹⁰⁸ Although Locke admits that a fetus, for the most part, “differs not much from the state of a vegetable,” he does say that “I doubt not but children by the exercise of their sense about objects, that affect them in the womb receive some few ideas before they are born,...I think the ideas of hunger and warmth are two: which probably are some of the first that children have and which they scarce ever part with again.” And yet, while Locke is willing to ascribe ideas to a fetus nowhere do we find him willing to say that the fetuses are aware of what they sense. Rather what we find him saying is that during the period when one develops from a fetus to an infant and to a young child one also develops the ability to become aware of what they sense such that they can attend to what the mind receives in sensation. See Book II, Chapter I, sections 20-22, and II. IX.5.

¹⁰⁹ II.i.6.

¹¹⁰ II.i.22.

relations and circumstances, and views every part so nicely, and with such intention, that *it shuts out all other thoughts and takes no notice of the ordinary impressions* made then in sensation which at another season would produce very sensible perceptions; at other times it barely observes the train of ideas that succeed in the understanding, without directing and pursuing any of them; and at other times it lets them pass almost quite unregarded, as faint shadows that make no impression."¹¹¹ (My emphasis.)

While consistency would require that Locke say a non-attended state is a non-existent state, there are times he acknowledges the existence of non-attended mental states. "But all that are born into the world being surrounded with bodies that perpetually and diversely affect them, variety of ideas, *whether care be taken about it or not*, are imprinted on the minds of children."¹¹² The reason he does so, I argue, is because he has to. Because the mind is not always aware of what's in mind, and because not even Locke can deny this, he ends up having to include unconsciousness in his theory of mind after all. Hence, while Locke can insist that all mental states be characterized as conscious states, he can only do so dogmatically and without reason. Experience dictates that there is more to mind than what is given in consciousness and not even Locke is able to deny this.¹¹³ Consequently, Locke's position is untenable not only because it is internally inconsistent but because it runs counter

¹¹¹ II.xix.3, In Gibson, p.60.

¹¹² II.i.6.

¹¹³ Because it's true that mental states are not always conscious, Locke is forced, at times, to have to acknowledge them. For instance, in the case of memory, "selective attention", and lesser developed minds, Locke admits that sometimes what passes through the mind is unconscious, is unnoticed. Of course, Locke would rather say that when an idea is not immediately conscious it is no longer an idea and hence that there are no unconscious ideas. But then the question is, what is it? How could it be that ideas that cease to exist come back as the same idea when called upon simply because the mind wills them to? Certainly it makes more sense to believe that the reason the mind can "find" an idea it was not presently attending to is because the idea was there to be found, that is, that the idea already exists and exists in the mind. And even if Locke says it does exist, only not as an actual idea rather as a potential idea, then we have to ask, what is the nature of a potential idea? If consciousness is the only thing that keeps a potential idea from becoming an actual idea then we have to assume consciousness is in some way responsible for the content or determination of the idea and that potentialities are, therefore, contentless. But as I have argued, and as I will continue to argue in the following chapter, we have to regard potential ideas as having as much reality in terms of content as actual ideas and hence, distinguish the two only in terms of consciousness. On this view, consciousness is regarded more as a locator of mental content not as a determining factor. That some content comes to us in consciousness does not mean that the aspect of consciousness itself determine the ideas. Rather consciousness only determines consciousness and therefore determines the relationship we have to the content of our minds which can exist independent of consciousness.

to the way in which minds are actually experienced. Some phenomena, for example, the phenomena of memory, dictate that we admit unconscious states of mind into our theory of mind, and there is perhaps no better way to witness the tension in Locke's beliefs, the tension that results from wanting to deny unconscious mental states while being forced to include them anyway, than in his analysis of memory.

Locke on Memory

Upon admitting that we store memories, that at least some of what we experience gets "etched" onto the mind such that it can be said to exist even after we experience it, one would assume that Locke has thereby committed himself to saying that there exist in our minds things of which we are not always conscious--that at least in some instances, the ideas or perception in mind are unconscious. And yet, as we know, Locke emphatically denies even the possibility of unconscious states. Hence, the better way to understand the phenomenon of memory--the mind's ability to retain ideas even when it no longer consciously perceived them--Locke argues, is that in the case of memory we need to understand that what the mind retains and is therefore able to call into consciousness is not an actual idea but rather is merely the potential or capacity to retrieve the idea that has already been perceived. Memory is not to be understood in terms of content (actual ideas), on Locke's view but in terms of capacity for perceiving content.

While we know Locke has to say this because he has committed himself to saying that the notion of an unconscious idea is unintelligible, the question arises as to whether or not his own position is intelligible and to whether or not he actually holds to it. That is, we need to consider whether or not it makes sense to say that there is no actual memory in the mind after consciousness of the idea only the potential to remember the idea, and whether or not based on his statements to the contrary, that is what Locke actually believes? Consider the following passage wherein Locke tries to stipulate that memories, if understood to consist of ideas that exist in our mind unconsciously, are actually non-existent;

"But our ideas being nothing, but actual perceptions in the mind, which cease to be anything, when there is no perception of them, this laying up of our ideas in the repository of the memory, signifies no more than this, that the mind has

a power in many cases to revive perceptions which it has once had, with this additional perception annexed to them, that it has had them before. And in this sense it is, that our ideas are said to be in our memories when indeed they are actually nowhere, but only there is an ability in the mind, when it will, to revive them again."¹¹⁴

But question is, revive what? How can one revive that which exists nowhere? If there is no such thing as the storing of an actual idea then what is it the mind has the ability to do? What happens to a perception when it is no longer perceived but is capable of being remembered? While Locke says nothing to help us understand these issues, he also says nothing to preclude them from being asked and to preclude us from arguing that memories continue to exist in the mind even when the mind is not conscious of them. Logically, I think one must distinguish between the mental state being recalled and the process by which the states is recalled, and that theories of memory necessarily entail the existence of unconscious mental states. So long as it's appropriate to distinguish between a particular mental state and a person's ability to recall the mental state, then we have to admit that the mental state is in mind both when the person is conscious of it and when he is not. If some mental states need to be called into consciousness then some mental states exist prior to or independent of consciousness.¹¹⁵

Hence, what Locke calls "lasting impressions"--that which he thinks makes up the stuff of memories--are as much a part of the mind as any conscious state even if we can't confirm the existence of such states except by inferences from what is consciously accessible to us. The idea that there is a means of verifying the existence of unconscious mental states will be the subject of a discussion in the next chapter wherein I will argue that the notion of having

¹¹⁴ II. x. 3.

¹¹⁵ Leibniz argues this way, saying, "Our gifted author seems to claim that there is nothing *implicit* in us, in fact nothing of which we are not always aware, but he can not hold strictly to this; otherwise his position would be too paradoxical, since, again, we are not always aware of our acquired dispositions or the contents of our memory, and they do not even come to our aid even when we need them, though often they come readily to mind when some idle circumstance reminds us of them, as when hearing the opening words of a song is enough to bring back the rest." *New Essay*, Preface, 52.

That Leibniz is able to identify and account for the more elusive kinds of mental phenomena, for instance, those of forgetting or of denial, I think, is exactly that makes him a better philosopher of mind than Locke and is impressive given that much of how he accounts for mind ends up being consistent with much of how science characterizes the mind today. I will pursue this argument in chapter four.

states we are not aware of having is not as paradoxical or absurd as Locke and other critics would suggest. For now, the point is that Locke can not insist that all mental states are conscious states if he also acknowledges that when recalling a memory, one is able to bring into consciousness (revive) that which exists but is not yet conscious.

Before continuing to see how Locke ends up including unconscious states of mind, let us look further at the view I am advocating, namely, the view that memories exist as unconscious state of mind even when not consciously entertained. One might argue, as was suggested to me by Professor Fred Purnell, that to say that the revived memory exists in mind even when not conscious is just as peculiar or problematic as to say that a song continues to exist even when not being sung. Purnell's suggestion is that just as we say the song no longer exists when not sung, so Locke can say that a remembered idea no longer exists when not remembered and thereby not have to account for unconscious states of mind.

The problem with this suggestion is that without knowing how to first understand the ontology of the song we know exists, we don't know what to say about the ontology of the song that is no longer sung. That is, because it is possible to view songs as mind dependent entities (e.g., the song I have in mind that plays in my head all day long, or the song I sing aloud because I remember hearing how the song was sung on the radio) it is possible to think that the song is really no different than, say, my memory of my friend's phone call, and that therefore, wherever the song goes, it's the same place the idea of my friend's call goes. That is, it's not clear to me that there is an analogy to be made between the existence of the non-conscious memory and the existence of the unsung song unless we deny that the song exists as a mental state and say it is only like a mental state. If on the other hand we say, we establish that the song is at least dependent on mental states, as a memory would allegedly be, then there's no difference between the two kinds of phenomena and therefore no analogy to be made. Let's consider each possibility further and see what the consequences are for Locke's theory of memory.

The question is whether or not it makes sense to say of memories that they exist as actual states of mind or whether they don't exist at all when not remembered and, therefore that all that's in mind is a capacity to recall memories. What was suggested to me was that if we grant existence to memories when they are not consciously being remembered we should

also have to grant existence to songs when they are no longer being sung. And my question is, while we know that in the case of memory what's in question is a mental state, what do we say of the song? The reason for asking is that surely there are songs we have 'in mind' and that seem to 'play out' only in our heads, and surely there are also songs we can sing aloud because we have a memory of what they sound like upon having heard them at an earlier time. In both those instances it makes sense to say that the song in question is mind dependent. But surely it also makes sense to say that some songs exist independent of our mental states while they exist on paper or stored in a machine (although one may still argue that to even know that the songs are on paper or in the machine requires mental states.) Now, if the analogy is between how the song exists on paper or in the machine when not being played and how an idea in the mind exists that is not being recalled, then the analogy is fitting but poses no problem. For example, if the song in the machine, which is not a mental state, is likened to a memory in mind then it seems to me that we would no more deny that the machine stores the song and that the song still exists in the machine even when not being played than we would deny that a memory exists in the mind even when not a conscious memory. Yes, we will still have to say in what form the song exists while stored and establish that it exists as something distinct from the ability to be recalled (as logically there is nothing else to say, as I will argue momentarily.) But if in some cases our reference to a song includes reference to something that can not exist independent of our minds then the analogy is not fitting because really there is no analogy to be made. If the song in question is a mental state then it's status as an unsung song is no different than the status of any idea we store in memory, and the unsung and memories are ontologically on a par.

In other words, there is no reason to assume that an unsung song can't exist as part of our mind, as content capable of being revived than say, my memory of conversation with my friend. More importantly, however, even if it is incorrect to characterize the song as a mind dependent entity and to place it ontologically on a par with memories, we still need to say that in the case of memory, the reason the memory is capable of being revived or called into consciousness is because mental states that allow for the memory already exist and exist prior to being recalled. Whether or not what I say about the song is incorrect and songs at least don't always have to be mind-dependent entities, I still don't see how Locke can, without

circularity, avoid having to say that memories exist in the mind as more than just as capacities. In other words, to say that a memory is nothing more than the *capacity* to revive a *memory*, is already to distinguish between the actual memory or mental state and the process of recalling the memory that allows for retrieval of the mental state. If all that exists in the mind is the capacity then what does the capacity retrieve? The capacity can not be said to be retrieving it's own capacity, that is not what characterizes memory. There has to be something other than the capacity itself that makes up memory, and I argue, at least part of what makes up memory are unconscious mental states.

Hence, while we know that Locke would like to argue that memories exist as mere capacities and that he needs to be able to say this so that he can avoid having to ascribe unconscious content to the mind, logically, he is unable to do so. Logically, memory entails that there are mental states that exist in the mind when one is not aware of them.¹¹⁶ But, regardless of whether or not Locke needs to include unconscious states of mind in his theory of mind, (which of course, I believe he does,) it is interesting to note that this is, at times, exactly what Locke seems to indicate. That is, as the following passages will note, Locke often has trouble sticking to his original empiricist commitments and at times is forced to have to characterize mental phenomena as unconscious.

Evidence For Unconsciousness in Locke's Theory of Mind

Consider the following series of passages;

“Attention and repetition help much to the fixing any ideas in the memory: But those which naturally at first make the deepest and lasting impression, are those which are accompanied with pleasure or pain,”(II.x.3) ,

“Concerning the several degrees of lasting, wherewith ideas are imprinted on the memory, we may observe some of them have been produced in the understanding by an object affecting the senses only once and no more than once: Others that have more than once offered themselves to the senses have yet

¹¹⁶ Furthermore, to distinguish between capacity and content so as to suggest that capacities are somehow “contentless” is a mistake. For instance, color receptors are not such that merely receive data, but rather are such that they possess data of their own that allows them to identify and process the information from without. That I have a capacity to perceive colors is not simply because information travels to my retina but is because within my retina there is information used and relied upon to interpret the incoming data. For this reason I think capacities are more suited to be called instances of knowledge themselves--not merely that which allows for knowledge.

been little taken notice of; the mind, either heedless as in children, or otherwise employed, as in men intent on only one thing, not setting the stamp deep into it self.”(II.x.4.)

“The mind very often sets itself on work in search of some hidden idea, and turns, as it were, the eye of the soul upon it; though sometimes too they start up in our minds in their own accord and offer themselves to the understanding; and very often are roused and tumbled out of their dark cells into open daylight by some turbulent and tempestuous passion, our affections bringing ideas to our memory which has otherwise lain quiet and unregarded...So that though ideas formerly imprinted are not all constantly in view, yet in remembrance they are constantly known to be such as have been formerly imprinted, i.e., in view and taken notice of before by the understanding.” (II.X.5.)

In all of these passage what we find are descriptions of ideas being imprinted, stamped, and stored as well as implicit or explicit reference to the existence of ideas that go unnoticed. And while we can understand ascribing a potential to the mind to retrieve or revive imprinted perceptions, it seems impossible to understand how the ability to recall the perception can be equated with the perception itself. What would it mean to say that a childhood memory is recalled not because an actual memory of the event exists in my mind but rather because I simply have the ability to recall it? That I have the ability to recall the selected event is true, but that I do so not because an actual idea of the event exists but merely because of my ability to recall the idea seems absurd. The admission that there is an idea to be recalled is the admission that there is an idea, and where else would the idea exist but in the mind? Even Locke, despite being logically committed to the contrary, has trouble maintaining the position that all mental states must be conscious states and, as the above series of passages indicate, seems unable to avoid attributing to the mind states that while they can become conscious or attended to are not always.

Hence, because Locke dogmatically insists that all mental states must be conscious states and because consciousness needs to be understood as an ability to notice or be aware of something, Locke’s theory as a whole can not be understood. In particular, it is difficult to make sense of his analysis of sensation and reflection. If consciousness is a necessary condition for all mental states then all sensations are conscious states and Locke will have to say that any creature that senses is also aware of what they sense, a peculiar consequence in light of some of what Locke says about memory and selective attention and when we consider the case of infants and oysters. If, on the other hand, Locke is interpreted as saying

that the ability to notice what we sense is effected through reflection only then we find that Locke is stuck having to say, at least in the case of sensation, that not all mental states are conscious states, a consequence that will undermine his whole attack against the rationalists. The only other alternative is to admit that sensations are conscious states but that they aren't noticed until reflected upon, in which case Locke is now stuck with unnoticed conscious states, a notion that at best seems contradictory.

The point is that Locke's theory of sensation and reflection is incoherent only because he insists that all mental states be characterized as conscious states, and yet, without this condition his argument against the rationalists falls apart. Were he to allow for unconscious states he would be able to account for memory in a more coherent fashion and could also account for the many ways in which minds, whether mature or not, do not always attend to what they perceive. Yet, were he to allow for unconscious states, his argument against the rationalists, the argument that says rationalism is unintelligible because it entails the existence of unconscious states, falls apart. If unconscious states can exist then so can rationalism and it is not that rationalism is unintelligible by virtue of including unconscious states as Locke says, but that Locke's argument is unintelligible by virtue of excluding them.

And yet, simply by admitting the existence of unconscious states one has not established that those states are innate nor has one established that even if there are unconscious innate states that those states are also knowledge states, both conditions of which a successful rationalist position needs to prove. Aside from making room for unconscious states of mind a rationalist needs to establish that at least some of our unconscious states are so because they are innate and that by themselves those states represent instances of knowledge. Recall that a genuine rationalist position is not one that ascribes dispositions for knowledge to the innate constitution of mind but rather is one that ascribes actual instances of knowledge. Hence, it is possible that even if Locke were to allow for some mental states to be unconscious at least some of the time, it is not clear that he must therefore admit that some of those states are innate and certainly it is not clear that he must concede that those states are actual instances of knowledge. The point being that while Locke is unable to show that rationalism is unintelligible because it requires a model of unconscious mental states, he may still be able to argue that it is unnecessary because all mental states can ultimately be shown to be derived

from experience.

Furthermore, while the notion of an unconscious mental state remains intact, contrary to Locke's wishes, the notion of unconscious knowledge may still be a problem. Even if we grant that some of the mind's content can not be traced to experience and therefore that there are innate unconscious states, it remains to be seen whether those states can or should be considered knowledge states. Leibniz, however, in direct response to Locke's theory of mind, thinks that both demands can be met and that so long as we allow for unconscious states, we can also show that what is unconscious is innate and counts as knowledge. The purpose of the next chapter is to examine Leibniz's criticism of Locke's theory of mind and to determine whether or not his criticisms, which are also his arguments in favor of rationalism, have any merit. In doing so we will find that a rationalist's greatest challenge is not explaining why the innateness hypothesis is needed to fully explain mind but explaining how what is innate can be properly understood as knowledge. To say it is challenging, however, is not to say that it is impossible and I think that so long as it is admitted that not all of what we know comes from experience, we should work to find a way to call that which is innate knowledge.

Chapter Four

Leibniz on Locke

While Locke has at times referred to the mind as a blank tablet it is incorrect to think that he thereby thinks it contains nothing in its original constitution. Rather Locke's vision of mind includes a rather rich supply of innate processing mechanisms or operations needed in order to allow experience to imprint on the mind. Because Locke never fully explains these operations and because so many of them add their own content to experience, I think we are better off characterizing these dispositions as actual instances of knowledge and not just dispositions for acquiring knowledge which is in fact how Leibniz characterizes them. According to Leibniz, the notion of a "contentless" capacity makes little sense and so long as the mind has innate dispositions that contribute to the determination of how we experience the world, the mind has knowledge prior to experience. On Leibniz's view, Locke need not be converted to rationalism because Locke already is a rationalist. For instance, by virtue of saying that the faculty of reflection allows us to perceive the mind's innate operations and to thereby acquire ideas of what's in mind, Locke has admitted that the mind comes equipped with predetermined knowledge. Says Leibniz:

"But reflection is nothing but attention to what is within us, and the senses do not give us what we carry with us already. In view of this, can it be denied that there is a great deal that is innate in our minds, since we are innate to ourselves, so to speak, and since we include Being, Unity, Substance, Duration, Change, Action, Perception, Pleasure, and hosts of other objects of our intellectual ideas? And since these objects are immediately related to our understanding and always present to it (although our distractions and needs prevent our being always aware of them) is it any wonder that we say that these ideas, along with what depends on them, are innate in us?"¹¹⁷

According to Leibniz, because Locke admits that the innate operations are what allow us to have ideas of the operations themselves, why not say that the ideas originate from what is already in the mind and that the operations themselves have content? Leibniz does not deny that consciousness is needed in order for us to become aware of what's already in mind and that in that sense, experience is a necessary condition for knowledge. But as I have argued--

¹¹⁷ NE, Preface, p.52.

in some instances-- for example, in the case of our ability to know the principle of identity, experience is not needed to secure *what* we perceive, it is only needed to secure *that* we perceive or rather that we perceive consciously. Again, to say that consciousness is needed for conscious perceptions is only trivially true and therefore cannot be that which grounds an empiricist theory of mind. What is needed, what Locke needs to show us, is that consciousness is a necessary condition not just for making us aware of ideas but for the content or origin of the ideas themselves. What I argue, and what Leibniz argues, is that in some cases this simply can't be done.

Hence, on Leibniz's view, rather than use the blank tablet metaphor to characterize the original constitution of mind, we should liken the mind to the block of marble that a sculptor intends to carve into a human figure wherein just as the natural veins of the marble determine how the sculptor must carve out the veins of his figure, so the natural abilities of the mind determine how we are able to perceive or think about the world. Says Leibniz;

"Hercules is in a piece of marble when the marble is entirely neutral as to whether it assumes this shape or some other. However, if there were veins in the block which marked out the shape of Hercules rather than other shapes, then that shape would be more determined to be that shape and Hercules would be innate in it, in a way, even though labor would be required to expose the veins and to polish them into clarity, removing everything that prevents their being seen. This is how ideas and truths are innate in us--as inclinations, dispositions, tendencies, or natural potentialities, and not as actualities (actions); although these potentialities are always accompanied by certain actualities, often insensible ones, which correspond to them."¹¹⁸

On Leibniz's view, so long as the innate operations of mind can rightfully be characterized as having content, or rather as being content, they can also be characterized as knowledge. To say that our minds have an innate potential for, say, understanding the principle of identity, is to say that the principle of identity exists in us and is known by us prior to experience, that is, prior to our becoming aware of it. It is also to say that whether or not one becomes aware of the principle, the principle is known by the person and it is that which structures and determines at least some of the person's thoughts and intellectual capabilities. If we can find instances wherein we can properly say that the mind has no choice in what it can think about or how it can think about things, we can assume that the

¹¹⁸ NE, Preface, 51-52.

mind, like the veined block of marble, is predetermined to manifest itself in certain ways.

Thus while the statue and the veined block of marble are different in that the statue is that which has been refined by experience, they are the same in that the fundamental structure and parameters of the veined block before carving are the same as those that exist after carving the statue. Similarly, while the content of the principle of identity is the same before and after experience (experience adds nothing to its already determined nature) how the principle becomes manifest in our world or which instances we apply it to depends entirely on experience. On Leibniz's view, however, it's not just that some of what we know is innate and therefore that only some of the statue was predetermined or that only the principle of identity is innate, but rather that everything about the statue was predetermined and everything we can know is innate. Again, according to Leibniz, experience only helps "carve out" or shed light on what we already know.

It is also important to note, however, that while Leibniz does say he believes everything we can know is innate and while his theory of monads helps to prove this, he recognizes that he must "conform to accepted ways of thinking" and often speaks as if experience contributes some knowledge and that, perhaps, only necessary truths and some practical principles should be considered innate. I will not concern myself with Leibniz's more grandiose claim that all knowledge is innate and will stick with the more "accepted" view that only some of what we know is innate. The reason for this is not only because the former concern would take us too far outside the scope of this analysis, but also because the deciding question between empiricism and rationalism is not how much knowledge is innate but whether or not any knowledge is innate. I have argued that in some instances, for example, with respect to the law of non-contradiction and with respect to some number concepts, that what we know is innate because there is no non-circular way to tie it to experience and that experience is not a sufficient base upon which to ground all knowledge.

However, it is one thing to say that the content needed for determining some truths is innate and another thing to say that the content thereby represents genuine instances of knowledge. That is, when deciding the debate between empiricism and rationalism two things need to be determined, one, is the innateness hypothesis even necessary? and two, does the innateness hypothesis entail a theory of innate knowledge? In light of all we've

learned about the brain to date, it is not uncommon to find people who are willing to admit that the innateness hypothesis is at least necessary. However, for almost everybody, as was the case with Locke, the idea that we can justify knowledge without experience or outside of consciousness remains absurd.¹¹⁹ My concern throughout this analysis has been to raise questions about the need for consciousness and to suggest that it is at least not absurd to think that a notion of knowledge can be had without it. I will now turn to a direct discussion of that matter noting that this context is not the place to give it its proper due, and afterward will turn to establishing the need for innateness and argue that only with a robust innateness hypothesis can one begin to make sense of the mind.

Can that which is innate be knowledge?

The discussion of knowledge, while not suited to fully appear in this context, is one that a supporter of rationalism has to address at some juncture because, as Locke points out, in order for rationalism to be non-trivial it has to be about innate instances of knowledge. For many this fact is disturbing because while they may be willing to credit the mind with innate intellectual structures the content of which is not found in experience, they are not willing to characterize the content as knowledge. John Mackie, for instance, argues that while Leibniz is justified in characterizing the mind with innate content, Leibniz will have difficulty outside of direct appeal to divine authority in establishing that what is innate is actually known. And yet, even with divine authority, Mackie believes, one cannot really guarantee that what is innate is actually true. According to Mackie, “The only means of gaining such certainty is to test these [innate] truths against experience.”¹²⁰ Only by being able to “match” our beliefs with experience, Mackie believes, can we avoid circular justifications for knowledge and

¹¹⁹ There is one point at which Chomsky, who believes that the innateness hypothesis is at least necessary to explain our knowledge of grammar, indicates that he also believes that what is innate is knowledge worrying only that his characterization of innate structures as such would displease philosophers. This is not to say that Chomsky actually does believe that the innate intellectual structures are knowledge nor that philosophers should be displeased, only that I think views like Chomsky’s should encourage us to think of ways to include innate content in the realm of knowledge. See Chomsky in *Behavioral and Brain Sciences*, 1980.

¹²⁰ John Mackie, *Problems from Locke*, Oxford University Press, 1976, p. 221

determine that what we believe is actually true. Says Mackie,

“[I]f Descartes or Leibniz could, say, demonstrate that our innate beliefs had been given to us by a benevolently veracious God, then those beliefs would become, for him, items of authoritative knowledge. But they are not so merely in so far as they are innate, and they would not be so for men who lacked this philosophical demonstration. And if this demonstration itself rests upon an innate idea of God or upon innate knowledge of this existence, then it will be viciously circular, and we shall never be able in this way to achieve authoritative knowledge either of God’s existence or of the content of any other divinely implanted beliefs.”¹²¹

Ultimately Mackie’s plea is that we allow experience (which Mackie assumes is always conscious) to provide the basis for that which proves that a proposition is true, and for some reason Mackie sees that Leibniz’s view, or any rationalist’s view, precludes that possibility. That is, somehow Mackie believes that if a rationalist appeals to experience to help validate that which one believes, that the rationalist has thereby abandoned his own principles. What I would argue, however, is that even for the rationalist and certainly for Leibniz, part of what helps determine that what is in our minds is true *is* experience and that this does not mean that the content comes from experience only that experience is the “place” wherein we discover what we know innately and how what we know does or does not fit with the world of experience. Thus, for instance, on Leibniz’s view we would say that the reason we believe that the law of non-contradiction is true is not only because God guarantees it but because God guarantees that our experiences will support it. In that case what we find is that should we not know that God does guarantee our innate beliefs, we will still have reason to believe them because of what experience tells us. Mackie’s concern is not whether or not our experiences must also be deemed reliable only that we have access to them as a means of justification, and what I am arguing is that we always do even when the content of what we believe cannot be linked to experience. That is, even when the content of what we believe cannot be traced back to experience, we still have experiences to provide either confirming or disconfirming instances of what is alleged to be innate. (Noting that for now the issue of whether or not we even need to include innate intellectual structures in our theory of mind is being left aside.)

Mackie rejects this line of thinking, however, arguing that while that could be the case,

¹²¹Ibid., p. 221.

that is, while it could be the case that our minds are preprogrammed to believe certain things simply because God wants it that way or because of natural selection, to buy either view is to place our minds in “a state of intellectual servitude” whereby we are forced to believe that which our minds “tell us” to believe which means, according to Mackie, that we would then be unable to defend them by appeal to anything found in experience. Says Mackie,

“Consider in how weak a position men would be if they had true beliefs implanted by God or developed by natural selection, but had no independent way of justifying them by appeal to their own observations or calculations. Their beliefs would be true, but they could not defend them if they were challenged; if any skeptical doubts arose in their own minds they could do nothing to overcome them. We could indeed describe them as cognitively healthy: their believings on these matters would tend to be correct. But these men would be in a state of intellectual servitude. It might be a comfortable state as long as skeptical doubts did not arise, but it would be servitude nonetheless.”¹²²

My question, however, to Mackie’s line of thinking is that while one may not be happy characterizing our minds as “slave” to what’s inside, with respect to certain intellectual constructs, how can minds be thought of as anything but slave to what’s inside? For instance, if it’s true, as Leibniz believes, that the law of non-contradiction is innate then wouldn’t that explain why, try as we might, we are not able to comprehend contradictions as being anything but false? How could our inability to comprehend the truth of a contradiction be due to anything but the innate constitution of our minds just as our inability to grow four arms is the result of the fact we have been genetically programmed to grow two arms instead? That we will discover the law of non-contradiction or that our two arms actually do get to grow is dependent on experience and in that sense experience is used to “test” whether or not what we believe is true or whether or not the manifestation of our physical constitution is in keeping with our genetic constitution. Experience does not, however, determine all of what are we able to experience nor all of how we will interpret these experiences. Hence, part of what Mackie fails to realize is that experience, whether God guaranteed or not, is

¹²² Ibid., p. 220. It is important to note that the fact that we use and need experience (our own “observations and calculations”) to constantly confirm or deny what we know does not entail that what we know has to come from experience. Whether or not what is known is innate is established on the basis of other concerns, namely, those having to do with the impoverished nature of experience. I will address this issue in the next section for now it is important to note that while Mackie’s arguments in this context may cast doubt on the possibility of characterizing what is innate as knowledge, they do not serve to determine whether or not the innateness hypothesis is needed to make sense of mind and experience.

accessible to the rationalist in the process of justification. As noted earlier, experience is not only the “place” wherein we become aware of all that we can know but the particular experiences we have serve to help us determine what the various intellectual constructs that exist in our minds prior to experience are.

Oddly enough, with this last point Mackie actually agrees. In fact, Mackie believes that in some cases it has to be the case that experience is not the sole determinant of what we know and that we have “[I]nnate propensities to perceive things realistically, to interpret impressions as impressions of persistent things or of repeated processes rather than to accept disorder as ultimate, to reason inductively, and to make the sorts of projection that contribute to our concept of causation. The other area is that of the forms of language, where Chomsky argued that all human natural languages share specific structures, and that this general form of grammar is innate in that infants tend to interpret the linguistic data they encounter as conforming to it, and so acquire a grasp of the grammar of whatever particular language is spoken around them more readily than they otherwise could.”¹²³

Mackie concedes that, for instance, if a child ends up being able to automatically interpret linguistic data as having a certain form, clearly it is because of an inborn psychological structure that determines the child’s ability to do so. But Mackie also believes that because the child has no “explicit beliefs” about the fundamental structures of language, we are precluded from saying that the child has genuine knowledge of the linguistic structures. According to Mackie, not until the child has “found that these automatic interpretations work, that having learned the language in accordance with these predispositions they can use it successfully for communication with those who already speak it” can they have genuine or “authoritative knowledge.”¹²⁴

But again, my question is why must “explicit beliefs,” which I take to mean conscious beliefs, be required? Why must the child, or anyone found having beliefs the content of which we truly are not able to link to experience and which a mind is “forced” to have, have to wait for experience to justify what they believe? If consciousness is required for knowing, or if we have to wait until people have “explicit beliefs” about what they allegedly

¹²³ Ibid., p.222.

¹²⁴ Ibid., p.223.

know, then surely we will have to admit that most people know very little indeed. The point being that so long as we can admit there are innate intellectual structures (although this is an issue that has yet to be determined) that in a sense force us to think and behave in certain ways (for example, force us to see contradictions as false, another issue I will return to later) then why wouldn't we call this content knowledge or at least work to make our criteria for justifying knowledge be applicable to unconscious states of mind in addition to conscious states of mind?

Admittedly, an answer to this last question requires that we explore the issue further and embark upon a proper analysis of what knowledge is or should be. To do so however, in this context would take us to far outside the scope of the present analysis and will be deferred for another time. In this context what is important to establish is whether or not Leibniz has a right to call that which is innate knowledge and my argument is that he does. My own view, as I have begun to outline, as to why Leibniz can do this is because so long as an intellectual structure can be positively identified as innate and as that which helps determine various forms of conscious thought and behavior then we should have every right to call it knowledge. But, as is important to note, that view is not the one Leibniz uses to establish that what is innate is knowledge. According to Leibniz, we automatically have the right to call what is innate knowledge so long as we understand that the innate content is from God. Mackie, of course, thinks that relying on God is not a good means of securing knowledge, and with this point I would agree but not for the same reasons that Mackie holds. That is, Mackie rejects divine authority as a means of guaranteeing what we know not because we first have to prove whether or not there is a God, but because he thinks that if we do, we relinquish the ability to use experience as a means of confirmation. But, as I've argued, whether it be divine authority (not a likely option) or natural selection (a likely option) so long as the origins of the content in question are linked to fundamental forms of thought and behavior and cannot be found in experience (only confirmed or disconfirmed by experience), we should work to find a means of saying that what is innate constitutes knowledge. So long as Mackie does not have any 'in principle' arguments against relying on either God or natural selection as a means of justification, the possibility of doing so remains open.

Thus while the issue of whether or not what is innate is actually knowledge may not be

settled here, that Leibniz at least intends for us to understand innate structure as knowledge has to be admitted. Part of why Leibniz thinks we need to ascribe knowledge to the innate constitution of mind is because he thinks God would not have put anything in our minds other than genuine knowledge, but also because he sees it is the only way to account for how in consciousness we are able to recognize necessary truths which, for Leibniz, include the fundamental truths of logic, math and geometry.

“Although the senses are necessary for all our actual knowledge, they are not sufficient to provide it all, since they never give us anything but instances, that is particular or singular truths...But from this it appears that necessary truths, such as we find in pure mathematics and particularly in arithmetic and geometry, must have principles whose proof does not depend on instances nor, consequently, on the testimony of the senses, even though without the senses it would never occur to us to think them.”¹²⁵

On Leibniz’s view if we find that a child or person with lack of formal education and with little assistance from experience is able to derive certain truths about geometry, just as the slave boy was able to do in Plato’s *Meno*, we can only say that the person knew the truths prior to experience. Or similarly, should we find that the same “unknowing” child is able to identify an instance of identity, for example, “that white is white,” even without ever having been introduced to the principle of identity, the only way to explain how such inferences are made in light of the child’s impoverished experience is by appeal to the innate constitution of mind. That is, on Leibniz’s view just as in Plato’s, certain instances of knowledge, certain truths and fully formed concepts exist in our mind prior to experience thereby entailing that the process of bringing them to light in consciousness throughout the course of our lives is really just the process of recollecting or relearning them.

The principle of identity is important for Leibniz not only because he sees it as that from which all necessary truths can ultimately be derived, but also because he believes it is innate. Whether or not all necessary truths actually can be derived from the principle of identity is a matter to be determined in another context. What is important in the context of this analysis is why Leibniz thinks the principle of identity is innate. On Leibniz’s view, the principle of identity has to be innate because it is the only way to explain how the mind functions the way it does, for example, how the mind is able to recognize instances of identity in the first place.

For Locke, however, as will become clear, everything we need to know about any truth or
¹²⁵ NE, Preface, 49-50.

any instance of a general truth is given to us in the conscious perception we have of it at the time. What needs to be determined, therefore, is which view is more persuasive, Locke's or Leibniz's. The purpose of the remaining analysis is to address the issue of innateness all together and to determine whether or not an innateness hypothesis is even needed in one's theory of mind. Ultimately, I will argue that only with a theory of mind like Leibniz's wherein some truths are attributed to the innate constitution of mind can we hope to fully or even adequately explain how the mind functions. In other words, while the preceding analysis broached the issue of whether or not Leibniz had a right to call that which is innate "knowledge," the succeeding analysis will explore the issue of whether or not Leibniz even has a right to posit the existence of innate intellectual structures.

I will begin by examining some of the arguments put forth by critics of Leibniz, in particular John Harris, Margaret Wilson and Martha Brandt Bolton, all three of whom reject Leibniz's theory of mind, and all three of whom feel that Locke's intuitions about how the mind works come closer to depicting reality than Leibniz's. My own argument, however, is that it is Leibniz not Locke who has the better theory of mind and hence, my goal is to show that the arguments used by Harris, Wilson and Brandt are not defensible.

Is Innateness Necessary?

In his article, "Leibniz and Locke on Innate Ideas" John Harris intends to show that while Locke's theory of mind is not without its problems or complications, ultimately it is designed to explain certain functions of mind better than Leibniz's. Part of what motivates Harris' attack on Leibniz, as was the case with Mackie, is the fact that on Leibniz's view we are asked to believe that what is innate is also knowledge. The problem with this view, Harris like Mackie believes, is that outside of relying on God, we have no means of establishing that knowledge can exist without consciousness. Says Harris, "[H]ow can that which we have never openly considered and understood be called knowledge--or even belief, for that matter? As Locke says, in one of his more modern-sounding passages: 'if those words (to be in the understanding) have any propriety, they signify to be understood.'

Knowledge must be *known* by the person who possesses it."¹²⁶

Clearly Harris, like Mackie, believes that consciousness or "being aware" is needed in order for one to establish that a proposition is known. Earlier I noted why I think it is possible for Leibniz or any rationalist to defend his or her view against the kind of claim Harris and Mackie make, and while it is acknowledged that a proper defense on behalf of the rationalist requires an in-depth analysis of knowledge that can not be entered into here, let me just say here, again, that outside of dogmatic insistence that consciousness be required for the determination of knowledge, I can see no reason why we must rely on it.

But whether or not what is innate can successfully be characterized as knowledge, there is another facet of Leibniz's innateness claim to consider, one Harris also takes issue with, namely, whether or not the innateness hypothesis is needed to explain how the mind acquires knowledge of necessary truths. Harris argues that it is not, and that ultimately Locke's model which attempts to eliminate the need for innate intellectual structures is sufficient to explain how we acquire knowledge of necessary truths. Says Harris, "If we think of Socrates and the slave boy it is natural to suppose that the conditions which are on both Locke's and Leibniz's accounts necessary for the boy to learn geometry were also sufficient for this to happen. No hypothesis of innateness (apart from the minimal one which allows us natural faculties and the ability to use them) is required."¹²⁷ On Harris' account, which would also be Locke's account, because the slave boy becomes conscious of the concepts and principles of geometry in experience, we have no reason to assume that anything other than experience was needed for the boy to learn. And if what Harris says is true then it might seem that Leibniz merely stipulates that certain truths are innate without actually having any reason to do so and, therefore, that the theory of innate knowledge is at best unnecessary.

Harris concedes, however, that at this point Leibniz has an advantage over Locke because Leibniz says not just that certain truths are innate but that certain truths *have to be* innate. Says Harris, "Leibniz in fact backs up his claim...by arguing that there is some

¹²⁶ John Harris, "Leibniz and Locke on Innate Ideas" in *Locke on Human Understanding*, Selected Essays, edited by I. C. Tipton, Oxford University Press, 1977.

¹²⁷ Ibid. p.33.

knowledge and some ideas that just could not be acquired in this fashion, [through experience.]”¹²⁸ On Leibniz’s view, as noted already, the most fundamental truths and concepts of geometry, mathematics and logic are innate and the reason we must think so is because there is nothing in experience that corresponds to the actual content of these principles and concepts that will suffice to tell a non-circular story of how we come to know them (despite the fact that there are confirming instances of each found in experience.) In chapter two I argued that our concept of “one” and our knowledge of the principle of identity are examples of the kind of ideas and principles that experience assumes rather than provides. Whenever we find that we can not give a non-circular account of how experience accounts for what we know, we have reason to assume that the nature of experience is lacking and therefore that it can not be that which provides the content for all knowledge. Thus, when Leibniz uses this strategy, that is, when he demonstrates not simply that what we know (at least some of it) could be innate but that it has to be innate, he gives us reason to believe that his theory and not Locke’s is correct. Says Leibniz,

[T]he whole of arithmetic and of geometry should be regarded as innate, and contained within us in an implicit way, so that we can find them within ourselves by attending carefully and methodically to what is already in our minds, without employing any truth learned from experience or through being handed on by other people. Plato showed this in a dialogue where he had Socrates leading a child to abstruse truths just by asking questions and without teaching him anything [Meno 82b]. So one could construct these sciences in one’s study with one’s eyes closed, without learning from sight or even from touch any of the needed truths; although it is true that if one had never seen or touched anything, one would not bring to mind the relevant ideas.”¹²⁹

Harris, however, rejects the idea that some knowledge has to be innate arguing that Leibniz’s defense of the view constitutes an *a priori* argument, that it is based merely on what is logically possible, and because of that it need not be taken too seriously. Says Harris of Leibniz’s strategy, “But if this *a priori* argument fails we are back where we started, and we will have to find some experimental means of deciding the case; perhaps, in the end, we will have to turn to neurophysiology and a direct examination of the brain for the answer to this

¹²⁸ Ibid.

¹²⁹ NE, I. i. 5.

key question which recurs again and again in arguments about innateness.”¹³⁰

Harris is clear that he thinks that innativist claims about knowledge could be true, that is, that they are not unintelligible as Locke claims, but that empirically we have no reason to accept them as true and that Leibniz has not given us any empirical reasons to assume that they are. Harris illustrates his point by arguing that while logically it’s possible to imagine finding support for the innateness hypothesis in a class of people who with no prompting or aid from experience are able to articulate true and maybe obscure facts about history, empirically there is no reason to assume this would ever happen. According to Harris, “The substantial questions about innateness are factual ones, those which are experimentally (and I don’t mean armchair experimentally) decidable ones...*A Priori* arguments, whether for or against innateness seem to fail and [this can be shown] with regard to the arguments Leibniz uses for the innateness of certain truths.”¹³¹

Harris’s claim in this regard is confusing, I feel, because Leibniz’s arguments are hardly based on a mere logical possibility and I don’t see how Harris could think otherwise. Leibniz describes the mind the way he does because, like Chomsky in a more modern context, Leibniz observes that in order for the mind to exist and function in the manner that it does it needs to bring with it, so to speak, a lot of instruction and information. When Leibniz insists on at least some innate content and asks, upon considering Locke’s “blank tablet” theory, “[W]hy must we acquire everything through awareness of outer things and not be able to unearth anything from within ourselves? Is our soul in itself so empty that unless it borrows images from outside it is nothing?” he is not just asking questions based on what it is possible for our minds to conceive, but is asking questions based on what, empirically, he thinks is the case.¹³² According to Leibniz, based on what we find in experience, it’s more reasonable to assume that our minds come with a certain range of predetermined knowledge than it is to assume that experience supplies all the relevant data. As I have argued, to assume the mind is “contentless” prior to experience, to assume that our

¹³⁰ Ibid.

¹³¹ Ibid., p.34.

¹³² NE, Preface, 53.

innate faculties don't also contain information of their own that plays a great role in shaping and determining what we do gain from experience, makes no sense. But Harris, for some odd reason, sees that Leibniz's argument about the poverty of the stimulus is an *a priori* argument and, therefore, concludes that if Locke's account can explain how the slave boy comes to know the truths of geometry just as well as Leibniz's, then at least by virtue of Occam's razor, we have reason to cut out innateness and thereby reject Leibniz's model of mind.¹³³

And Harris is not alone in believing that the innateness hypothesis is unnecessary. Margaret Wilson, in her article "Leibniz and Locke on First Truths", also argues that Leibniz has no right to introduce innateness as means of explaining our knowledge of necessary truths when, as Locke suggests, nothing in experience indicates that anything is missing from our explanations.¹³⁴ Wilson's account provides a more indepth analysis of the issues underlying the debate between Locke and Leibniz than does Harris' and requires that we first have a proper understanding of Locke's and Leibniz's position on necessary truths. Hence, before examining Wilson's view, I will now turn to an analysis of Locke's and Leibniz's respective positions on necessary truths in an attempt to expose the underlying intuitions that govern each and to show why I think Leibniz's theory does a better job of capturing at least some of the realities of mind.

Locke and Leibniz on First Truths

According to Locke, while it's true that our perception of a particular truth, for example, that "white is white" is an instance of the more general truth "whatever is, is", it is not the case, as Leibniz believes, that we first need to know the more general truth in order to know the more particular one and certainly, Locke believes, it is not the case that the more general truth is innate. On Locke's view, everything we need to know in order to know that "white" actually is identical to "white" is given to us in our perception of the particular instance. Just

¹³³ See Harris, page 34.

¹³⁴ Margaret Wilson, "Leibniz and Locke on First Truths", in *Journal of the History of Ideas*, Vol. 28, No. 3, 1967.

as Harris thinks that experience is sufficient to explain how the slave boy came to know geometry in the lesson with Socrates, so Locke believes that experience is sufficient for us to know that an instance of the principle of identity is true. On Locke's account both the general truth of identity and the particular instance of identity are known in our perception of each or more specifically, in our perception that the ideas contained in each proposition "agree." This is because, on Locke's account, knowledge is "the perception of how ideas in propositions either do or do not agree" which is to say that on Locke's view knowledge involves a comparison of the ideas signified by the subject and predicate terms of a proposition. Says Locke,

"Whenever the mind with attention considers any proposition, so as to perceive the two ideas signified by the terms, and affirmed or denied one of the other to be the same or different; it is presently and infallibly certain of the truth of such a proposition; and this equally whether these propositions be in terms standing for more general ideas, or such as are less so: e.g., whether the general idea of Being be affirmed of itself, as in this proposition, "whatsoever is, is"; or a more particular idea be affirmed of itself, as "a man is a man" or "whatsoever is white is white"¹³⁵

Hence, for Locke to know that "x is equal to x" is a matter of perceiving that in this case that which exists, or the being of "x" as subject agrees with the idea of that which exists "x" as predicate. In like fashion, we say that on Locke's view, in the case of "white is white", the fact or existence of "white" as subject agrees with the idea of "white" as predicate.

Consequently, on Locke's view we find that "white is white" is an instance of and is derivable from the more general principle "whatever is, is," but that that fact no more establishes that the general truth is "in mind" or is known prior to the particular instance. That is, Locke believes that the fact that "white is white" can be derived from the more general principle that "whatever is, is," does not mean that he also believes that the perception of the former necessarily leads to the perception of the latter. On Locke's view, while logically "white is white" is entailed from "whatever is, is", we don't know that until we perceive it-- until we perceive that "white is white" actually is an instance of "whatever is, is." In other words, on Locke's view both propositions, the general and the particular instance, can be known based only on what is given to us in the perception of each. For Locke the two propositions are, to borrow Wilson's phrase, "epistemologically on a level"

¹³⁵ Essay, IV, vii, 4.

meaning that none of that which is needed to perceive their truth is dependent on the truth of any other proposition.¹³⁶

For Leibniz, however, the reason we perceive the truth of “white is white” is not because our ability to perceive the truth of a proposition is based on an ability to understand and perceive agreement between the terms contained therein, but is because we perceive that “white is white” is an instance of the more general proposition, viz., “whatever is, is” and therefore, according to Leibniz, our knowledge of the latter perception must come before the former. On Leibniz’s view “white is white” is true because it is logically entailed from the proposition “whatever is, is” and while we might happen across the proposition “white is white” in the course of our experiences before becoming aware of the proposition “whatever is, is”, we can not know that the former is true unless we first know that the latter proposition is true. Says Leibniz:

“To say that the body is larger than the trunk, does not differ from the axiom of Euclid [that a whole is greater than its part except in that this axiom is limited to what is essential but in instantiating it and giving it body, one makes the intelligible sensible, because to say that a certain whole is larger than a certain one of its parts is in effect the proposition that whole is larger than its parts, but with the features charged with a certain coloring or addition, as when one says AB, he says A. Thus one must not oppose the axiom and the instance as different truths in this respect, but consider the axiom as incorporated in the instance and rendering the instance true.”¹³⁷

Thus, according to Leibniz, the two propositions, “whatever is, is” and “white is white” are not such that the truth conditions for each can be determined merely by apprehending the agreement of the ideas contained in each. Rather Leibniz thinks that the propositions are true because they follow a particular “natural order” wherein what makes them true is the fact that they are logically connected to one another, which means that so long as the principle of identity is true, the instance “white is white” has to be true also. What makes “white is white” true, according to Leibniz, is not simply that we perceive it as such but is because our minds are naturally constituted so as to allow us to recognize that white really is identical to

¹³⁶ Margaret Wilson, “Leibniz and Locke on First Truths”, in *Journal of the History of Ideas*, Vol. 28, No. 3, 1967, p. 354.

¹³⁷ N.E., IV, vii, 10.

white. If we didn't first know what an identity is, or have knowledge of the identity principle prior to experience, Leibniz says, we would have no means of being able to tell that what we experience is or is not an instance of identity.

The way in which we rely on what's in mind, for example, on the principle of identity even when we aren't conscious of doing so Leibniz thinks is much the same way that we rely on the suppressed premises of an enthymeme. Just as in an enthymeme where the premise or premises needed to secure the truth of the conclusion are not made explicit, ("Socrates is mortal" is explicitly inferred from "Socrates is a man" but not also from "All men are mortal") so the more fundamental truths we use to guide and determine some of our reasonings are not always conscious. Says Leibniz,

"We ground our thinking on these general maxims just as we do on the major premises which we suppress when reasoning by enthemes; for although we often do not pay distinct attention to what we do in walking and jumping, it is still true that the force of the conclusion consists partly in what is suppressed and could not come from anywhere else, as will be found when we seek to justify it."¹³⁸

On Leibniz's view, necessary truths exist as part of the innate constitution of mind and because they are innate they are genuinely known by all those whose minds possess them.¹³⁹

Hence it's not just that we know necessary truths even without being conscious of that knowledge, on Leibniz's view, but that we need to know or have in mind the more general truth prior to being able to identify a particular instance of it. According to Leibniz, we have to assume the existence of the more general truth, that it exists in mind, because otherwise we would be unable to explain how we recognize the particular truth as an instance of identity. Thus, while a child may be completely unaware of what a contradiction is, so long as the child is able to determine, for instance, that "that which is sweet is not also bitter," (assuming that "bitter" can mean "non-sweet") he has knowledge of the principle of non-contradiction. On Leibniz's view, not all mental states, nor all knowledge states, need to be

¹³⁸ NE, IV, vii, 19.

¹³⁹ Again, as already noted, the reason Leibniz can say that what is innate is also knowledge is because he has access to God as a means of establishing that what's in mind is true. That is, because on Leibniz's view, ultimately our minds are designed by God, how our minds function and what they function with, (the innate dispositions) are guaranteed to provide us with genuine truth. It was also noted that without God a rationalist will have a more difficult time convincing one that what is in mind is also true and yet, as I argued in the section, "Can That Which is Innate Be Knowledge?", I do think that relying on natural selection as a base for accepting that what's in out heads is true, is a viable option.

conscious and the only way to explain what is conscious is to assume the existence of innate content.

On Locke's view, however, we need not appeal to anything other than the content of a proposition itself to determine if it is true. Rather, according to Locke, we need only pay attention to whether or not the ideas within the proposition before us do or do not agree with one another. What this means is that for Locke the confirmation process for determining the truth of a proposition is immediate and is performed during the time we are conscious of what we perceive. This is not to say that on Locke's view the proposition ceases to be true when we cease to be conscious of it. Consciousness is not what is said to make the proposition true, on Locke's view, but rather is that which allows us to discover whether or not the proposition is true. Propositions are made up of ideas and as has been established, on Locke's view all ideas come from experience. Consequently, if we want to know what makes a proposition true, Locke believes, we have to consult the ideas in the proposition and the only way to do that is to be aware of what the ideas are and aware of how they do or do not agree.

Thus, according to Locke, while a child may be able to identify that the sweet chocolate is also not the bitter chocolate, the child can do this only because it's true that sweet chocolate is also not bitter which means that it is the child's experience with the chocolate that tells the child that "that which is sweet can not also be not sweet," not anything about the mind. On Locke's view, there is no need to invoke innateness as a means of explaining how we come to know necessary truths because everything we need to know about a proposition is given to us in experience. Says Locke;

"Cannot a country wench know that, having received a shilling from one that owes her three, and a shilling also from another that owes her three, the remaining debts in each of their hands are equal? Can't she know that, I say, unless she fetch the certainty of it from this maxim, that is, *you take equals away from equals the remainder will be equals*, a maxim which possibly she never heard or thought of? I desire any one to consider, from what has been elsewhere said which is known first and clearest by most people, the particular instance of general rule, and which it is that gives life and birth."¹⁴⁰

Returning to the example of the slave boy found in Plato's *Meno*, on Locke's view we say that the fact that the slave boy learns geometry based on what we find in experience simply is

¹⁴⁰ IV.xii.3.

the proof that no prior knowledge is needed. Should the boy come to know the more general truths of geometry it is only because he first has access to particular examples.

Leibniz disagrees, however, arguing that the order in which we perceive propositions in experience has no bearing on how we perceive their truth conditions. On Leibniz's view that something is true or is part of the natural order is not dependent on or a result of how we perceive things, but rather, is dependent on the predetermined structure of thought represented in the original constitution of mind. Again, this is not to say that on Leibniz's view everyone will at some point consciously consider the truths of logic, but it is to say that consciously or not, one knows what those truths are so long as one is able to perceive particular instances of the laws in experience. On Locke's view, whether or not I ever learn the truths of logic would depend on things like whether or not I have ever read a logic book, taken a class on logic, watched an instructional video, etc., but on Leibniz's view, in the event that I never consciously happen upon the truths of logic in any of my experiences, I will still know them provided I am able to place what I have learned from experience, say, that my cat is not both orange and not orange, into logical contexts. The reason for this is because the principle of identity, which for Leibniz really is the law of non-contradiction, is a general truth I have in my mind prior to experience.

Hence, on Leibniz's view, that we realize an instance of a necessary proposition is true is not dependent on the temporal order in which our perceptions have been given to us but is dependent on our ability to utilize the general truths imprinted in our minds. Says Leibniz, "It is not a question here of the history of our discoveries, which is different for men, but of the connection and natural order of truths which is always the same."¹⁴¹ For this reason, Leibniz believes, we can say that a proposition is "in mind" despite the fact that we are unaware of it. The question that remains, however, the question both Harris and Wilson ask is why must we assume that a principle we have no awareness of and maybe never become aware of is innate? So long as an inference can be maintained in experience and with principles we are aware of, why say it is anything but experience that allows for us to make such inferences?

¹⁴¹ NE.i.18.

Like Harris, Wilson believes that the innateness hypothesis is unnecessary and now, after having examined Locke's and Leibniz's view in more detail, we are in a better position to understand her arguments. According to Wilson, that one can successfully complete an inference without knowing the conditions that make the inference true no more shows that the person unconsciously knows what makes the proposition true than it shows that the person consciously knows it. Says Wilson, "[O]ne does not have to accept Locke's repudiation of the conception of a formal order to find fault with this [Leibniz's] reasoning. It seems no less paradoxical to suppose that we unconsciously carry out the sort of theoretical deduction that Leibniz offers before we are certain [for instance,] that two and two are four, than to suppose that we do so consciously."¹⁴² Continuing, Wilson says, "The supposed fact that " $2+2=4$ " can be shown to follow logically from the principle of identity would seem no more to establish that everyone who is certain of this truth has (consciously or unconsciously) derived it from identity by the manipulation of definitions, than the fact that "this man is rational" follows from "all men are rational" establishes that I have arrived at certainty of the former proposition by at least "implicitly" carrying out the instantiation."¹⁴³ According to Wilson, there is no reason to have to invoke the innateness hypothesis when our ability to make inferences within the domain of necessary truths can be successfully explained without it.

Moreover, Wilson argues that Leibniz's appeal to the case of enthymetic reasoning as a means of helping us understand how a proposition can be used to make an inference even when the proposition is not conscious is of no use because as she says, "We are not ready to say, every time someone leaves out a step in reasoning that his mind has supplied the premise "implicitly."¹⁴⁴ So for instance, when a student of beginning logic is surprised to learn that the law of identity is that which allows for her belief that her cat can not be orange and not orange at the same time, according to Wilson and also to Locke, we don't say that the student knew the law of identity prior to learning it in class and that she was just not

¹⁴² Margaret Wilson, "Leibniz and Locke on First Truths", *Journal of the History of Ideas*, Vol. 28, No.3, p.359, 1967.

¹⁴³ *Ibid.*, p.359.

¹⁴⁴ *Ibid.*

aware of knowing it, rather, we say that the student simply didn't know anything about the principle before learning about it, not even that it existed. Thus, on Wilson's and Locke's view, if we find that our beginning logic student is unable, even when asked, to make explicit the premises she implicitly relied on to make an inference, we should say that her inability to produce the suppressed premise is simply due to the fact that she doesn't know what the suppressed premise is, not that she knows but can not demonstrate her knowledge. According to Wilson and Locke, the mere fact that a conclusion and series of premises are logically connected says nothing about the mind of a person making inferences based on that connection. What one knows and what makes something an instance of knowledge are two separate issues for both Wilson and Locke, the former issue having to do with psychology, Wilson argues, and the latter having to do with logic and justification.

Hence, Wilson's and Locke's view entails that it's reasonable to believe I could spend my whole life never knowing what a contradiction is, or without ever acknowledging the principle of identity, and yet still be able to spot instances of contradictions. I may know that my cat is not both in the bedroom and not in the bedroom at the same time, or know that if my cat is eating he is not drinking, or that when my cat is sleeping he is not also awake, so on and so forth, without ever having to say that I know what a contradiction is or even that my "cat-beliefs" belong to the same logical category, so long as Wilson and Locke are correct. In fact, on their view it is possible that to imagine that my life with my cat passes such that I am never aware of any of the general principles that support the truth of my "cat-beliefs," principles Leibniz would say make my beliefs true.

While surely it might be possible for me to never learn anything other than what my cat does or does not do (not a bad situation!), if we grant Locke's argument or deny that there is more to our inference-making than the perception of what is consciously accessible, the fact that I am able to make the inferences I do remains unexplained. That is, it seems clear that part of why the unconscious is introduced in Leibniz's system is to provide a logical and causal explanation for how certain inferences are made. It is not unreasonable to introduce the unconscious realm as a means of explaining the fundamental mechanism by which the mind is able to make the inferences that it does, and that is part of why Leibniz includes it. By invoking unconscious knowledge Leibniz is able to provide a more profound and

expansive account of mind and is able to explain at least some of why our minds are able to do what they do. Neither Harris nor Wilson accepts this and both defend Locke's theory of mind. Hence, neither Harris, Wilson nor Locke is able to entertain fundamental questions about how the mind works. I will have more to say about this in the next section, but first I turn to Martha Brandt Bolton's analysis of these issues as we find that while she is willing to accept that Leibniz introduces innateness as a means of explaining how the mind functions in certain contexts, she thinks that the innateness hypothesis is still unnecessary so long as Leibniz grounds truth in God. That is, unlike most critics who think that Leibniz's innateness theory can be saved only if he has access to God, Bolton sees that by introducing God into his system Leibniz has eliminated the need to also have innateness. I will consider Bolton's views and conclude my analysis by showing why I think that whether or not one does or even can accept Leibniz's view in whole, some of his insights about the nature of mind (independent of whatever religious foundations ultimately ground his beliefs) provide a more powerful and realistic interpretation of mind than can Locke's and need to be given serious consideration when constructing a theory of mind.

The Need for Innateness

In her article, "Leibniz and Locke on Necessary Truths", Bolton attacks Leibniz's rationalism for many of the same reasons the critics already considered (Mackie, Harris and Wilson) did.¹⁴⁵ For instance, like all three critics, Bolton sees that innateness cannot properly be called knowledge. Says Bolton, "It's not clear why Leibniz should think that a person who subconsciously proves a proposition *knows* the proposition to be true. She can not produce the proof as evidence for this proposition, nor can she review the proof to check that it is correct. So whether or not Leibniz thinks that a person completes a subconscious proof, we are left with the puzzle why he should think that the person with respect to a general necessary proposition knows that the proposition is true."¹⁴⁶

¹⁴⁵ Martha Brandt Bolton, "Leibniz and Locke on Necessary Truths" in *Central Themes in Early Modern Philosophy*, edited by J. A. Cover and Mark Kulstad, Hackett Publishing, 1990, pp. 195-226.

¹⁴⁶ *Ibid.*, p. 209.

Hence, again we find that the need to address the status of knowledge in a rationalist position is crucial, but again that in order to do so one must engage in a serious analysis of knowledge. In this analysis all I hope to establish is that there are reasons to believe that the content of knowledge neither is nor has to become conscious. The argument for this, as I began to outline in connection with Mackie's analysis, rests on accepting two conditions, one, that we are justified in believing that only with certain innate structures are we able to produce certain kinds of beliefs, (Mackie accepts this condition, which ultimately relies on acknowledging the impoverished nature of experience) and two, that it is acceptable to rely on the theory of evolution or another scientific theory to account for how minds came into being and came to be equipped with the structures in question. Mackie, as we saw earlier, rejects the latter condition because he feels that it disallows for freedom of thought and that with it we are forced to characterize the mind as slave to what's inside. I argued that I don't find this a problem and that it is perhaps delusional to think otherwise when, for example, we consider the fact that no mind can conceive of the truth of a contradiction. So long as there is reason to believe that the brain supplies a certain amount of information used and needed in the determination of our knowledge claims, as Mackie agrees there is, then I see no reason why we shouldn't start to think of that information as genuine knowledge. In other words, if there is reason to posit the existence of innate intellectual structures, then there is reason to begin a reevaluation of knowledge such that it is allowed to accommodate these structures. Hence, while the subject of innateness will always bring us to the subject of innate knowledge, before that issue can be broached it is necessary to first establish that there are reasons to believe that the innateness hypothesis is necessary.

Bolton, however, like Wilson and Harris and Locke, sees that the innateness hypothesis is not necessary because like the others Bolton believes that everything needed to explain how we know and what we know is provided in experience. That is, part of why Bolton rejects Leibniz's innativist claims is because she sees that a theory like Locke's can provide the same kind of explanatory power and, therefore, by virtue of Occam's razor should be eliminated. Says Bolton,

“Leibniz does suppose that the inner causal source of our innate dispositions non-accidentally causes assent to propositions that are true... But as far as I can see, the demand for an account of knowledge that posits this sort of causal ground

is equally well met by Locke. For on Locke's account, a person knows a necessary truth only if she assents to the proposition as a result of an act of intellectual perception. And intellectual perception is a process that non-accidentally actualizes our innate capacity to recognize truth."¹⁴⁷

As I began to argue in response to Wilson's account of this argument, I think that it is a mistake to believe that Locke's theory does the same work that Leibniz's does when in fact the two theories are not even trying to address all of the same issues. Whereas Locke is content to show only that the mind is able to apprehend necessary truths, Leibniz is trying to show that the mind can apprehend them and to explain why this is so. If Leibniz's theory is designed to explain more than Locke's, as I think is the case, then to believe that Locke's account will suffice in place of Leibniz's theory is a mistake. I will return to this argument momentarily. First it is necessary to point out that Bolton doesn't reject Leibniz's innateness hypothesis simply because she thinks Locke can explain the same kinds of phenomena without it, but because additionally she thinks that Leibniz doesn't even have a right to the innateness hypothesis so long as he remains committed to the idea that God guarantees all knowledge. That is, Bolton believes that reason to reject Leibniz's theory of innateness is found within the conditions of the theory itself.

According to Bolton, Leibniz relinquishes his ability to say that the innateness hypothesis is needed to explain how we make certain inferences so long as he also argues that the necessity or truth of the innate propositions is grounded in something other than the original constitution of our minds. While Bolton is careful to note that some of Leibniz's passages imply that "the mind is the source of the 'necessity' of propositions," (passages noted by Bolton include Leibniz, NE, 80, 75 and 84,) she believes that other passages in Leibniz clearly show that "Leibniz thinks that innate propositions have a necessity grounded in something other than the workings of our minds."¹⁴⁸ (Curiously, for this last argument Bolton cites only one reference, NE, 447.)¹⁴⁹ Bolton's concern is that if Leibniz uses God to

¹⁴⁷ Ibid. pp. 210-211.

¹⁴⁸ Ibid., p.211.

¹⁴⁹ The only passage Bolton cites in favor of her view that the innateness hypothesis is unnecessary for Leibniz is the following, "The ultimate foundation of truth [is] that Supreme and Universal Mind who cannot fail to exist and whose understanding is indeed the domain of eternal truths...This is where I find the pattern for ideas and truths which are engraved on our souls." NE, 447.

guarantee that our beliefs are true and not the mere fact of their innateness, then it's not just that Locke's theory can explain things just as well, it's that the innateness hypothesis serves no function for Leibniz at all. According to Bolton, so long as Leibniz favors a "non-realist account of necessary truths,...we have not found that Leibniz has a point about the inner, non-sensory source of knowledge of necessary truths that is a telling objection to Locke."¹⁵⁰

While it can hardly be denied that Leibniz, (not unlike Locke, by the way,) holds God responsible for whatever truths are knowable to us, it is wrong to think that in either of their systems God is involved in our individual perceptions of truth. That is, what Bolton fails to realize is that even if Leibniz acknowledges that God provides the final justification for our knowledge (as he does,) that does not negate the fact that the reason we know what God knows, or what God wants us to know is because it exists in our minds. Leibniz's theory is a theory of mind and part of explaining mind requires explaining how minds came to be so that we can assess the value of what's in them. Inquiring into the origins of minds does not take away from the fact that there is still mental phenomena to be explained. Thus, Leibniz does not detract from his position that innateness is necessary by saying that God is the source of all knowledge and also that knowledge exists in our minds, but only further explains how we come to know by telling us how the knowledge came to be in our minds in the first place. Whereas today we could use natural selection to explain how our minds came to be constituted as such, in Leibniz's day science included and allowed for God as the final explanation although, typically, not before all possibilities for scientific explanations had been exhausted.

Thus, an advantage to Leibniz's position over Locke's, an advantage I believe Leibniz was clearly aware of is that by planting the formal structures for thought in our minds, and by saying how those structures came to be, Leibniz is not only able to explain the mechanism or basis in the mind that allows us to make the inferences that we are capable of making, but can also explain where this basis or these abilities came from. When Locke says we are able to perceive the truth of a proposition merely by intuiting the agreement or disagreement between the ideas contained therein, what we still need to know is, how? What allows the mind to "see" connections in one way and not another? As Bolton notes, on Locke's view,

¹⁵⁰ Ibid.

“[A] person knows a necessary truth only if she assents to the proposition as a result of an act of intellectual perception. And intellectual perception is a process that non-accidentally actualizes our innate capacity to recognize truth.”¹⁵¹ On Locke’s view, however, we are left wondering what our “innate capacity to recognize truth” is grounded on. Again, Locke can tell us only that the mind does apprehend truths not how or why whereas Leibniz’s theory is able to explain how the mind is able to execute certain functions regarding truth as well as how the mind acquired such abilities and such truths.

Of course, as we saw in chapter two, Locke also says that our ability to recognize truth comes from our God-given powers (see again, *Essay*, I, i, 5.) Like Leibniz, Locke believes that the fact that we can recognize truth is ultimately due to the way in which God has designed our minds. But, while both Locke and Leibniz rely on God to explain the origins and nature of mind, Locke invokes God much earlier in the explanatory process than does Leibniz, namely, at the point at which the mind *consciously* recognizes truth. On Locke’s view, truth is recognized in consciousness and the reason we are able to recognize truth in consciousness is because God makes it so. And, while the explanatory process has to end somewhere lest we spiral into infinite regress, that it ends where Locke should end it is not realistic. It is not realistic, I argue, to end all explanations of mind in consciousness because it doesn’t actually fit with the facts nor account for all the facts, facts like memory, “denial” or the mind’s ability to recognize instances of identity even before having learned the principle. Leibniz’s model of mind, however, by virtue of acknowledging the existence of unconscious states of mind can account for these various kinds of phenomena and can therefore provide a more comprehensive and scientific account of mind than can Locke.

Hence, while Leibniz is often credited with wanting to explain truth from a logical point of view, I think it can not be overlooked that he also wants to explain it from a psychological point of view, that is, by accounting not simply for the various kinds of functions the mind is

¹⁵¹ *Ibid.*, p.211.

able to perform but by explaining how the mind is able to do so.¹⁵² Again, Locke merely credits the mind with a variety of processes and abilities to recognize truth, but makes no efforts to speculate about how the mind does so, or what must occur in the mind in order for consciousness to exist. Leibniz, on the other hand, is willing to push the analysis and explanatory process back a step further and account for how the mind does what it does before introducing God as the ultimate explanation.

I realize that at this point I might appear to be ignoring the fact that Locke simply denies that in the case of necessary truths anything more is needed to explain our apprehension of them than what is given to us in consciousness, and hence, that my defense of Leibniz, and Leibniz's position itself, merely cross right over Locke's interpretation of how the mind works. I do this, however, not only because as I think Leibniz also believed, it is painfully obvious that there is more to mind than what is given in consciousness (and therefore, more of mind to explain that will not require consciousness,) but also because, as I hope the following scenario will illustrate, I think that if the functions in question (e.g., apprehension of necessary truth and inference making abilities) were ascribed to a machine, we would not hesitate to say that what explains the machine's abilities to perform the functions is the

¹⁵² I realize that Harris would object to this point arguing that if we allow Leibniz to ground his evidence for innateness in observations about what is logically true, (for example, his belief that all coherent discourse presupposes the law of non-contradiction,) we end up conflating issues of psychology with issues of logic. Harris's question is how can the fact that "x" is entailed from "y" tell us anything about our minds? According to Harris, like other seventeenth century philosophers, for Leibniz the "question of the origin of ideas which [Harris] has called the psychological was not distinct from the logical one concerning their truth and validity primarily because innate ideas, in Leibniz's words, 'indicate something divine and eternal'. " Harris continue saying, " This then is the reason for the link between 'innate' and 'necessarily true' that we find in the writings of Leibniz which otherwise would seem inexplicable." John Harris, "Leibniz and Locke on Innate Ideas," in *Locke on Human Understanding*, I.C.Tipton, Oxford Press, 1977, pp.39-40.

In response, however, I think that once it is acknowledge that the truth of a proposition is known only because our minds allow for it, (like would be the case with necessary propositions, according to Leibniz and would be the case with what we end up believing about causation, according to Mackie) then we realize that to connect, not conflate, psychological and logical issues is imperative. Again, I would argue that so long as our minds are incapable of understanding contradictions, for instance, as anything other than false, we have reason to say that this is in part because our minds are constituted as such (in part it is also because experience allows us to discover instances of this truth.) In other words, I think that in some cases, having to connect logical issues to psychological issues is all that we can do and whether or not Leibniz is right about in which cases this needs to be done, so long as there are innate structures that contribute intellectual content, it will need to be done.

information programmed into the machine. That is, if there is any analogy to be made between minds and machines, I think it is in terms of function, and if the functions of a machine can be explained only by reference to the inherent constitution of the machine itself, then so too must the functions of mind be explained by reference to the inherent constitution of mind.

From Mind to Machine

As a means of illustrating my argument, consider the fact that if the ability to apprehend truth or make inferences were functions ascribed to a machine, we would have no difficulty in saying that the machine does what it does because it was programmed to do so. That is, if a machine is able to successfully perform a function, one way to explain how the function is performed is by the fact that the steps or information needed to complete the function already exists in the machine. So for instance, say we design a machine able to grade students' essay exams and say that the machine is designed such that, among other things, it is able to detect when the student has contradicted himself. In the case of this machine, no matter how simple or complex the programming for the function may be, it seems the only way to explain how the machine performs its function is by reference to the predetermined information the machine needs to detect contradictions. On the "outside," the machine's functional abilities will be judged based on what it outputs, that is, on whether or not it is consistently able to detect contradictions, and on the "inside," the machine's abilities will be judged based on whether or the mechanical pieces are all in proper working order. If the machine fails to notice that a student has erred when she has said both that "Locke was a good philosopher" and "Locke was a bad philosopher" then we will deem the machine dysfunctional and will most likely turn inside the machine to find the source of the error. Conversely, if when scanning the students' essays the machine does identify every time a student contradicts herself, we have reason to say that the machine performs its function well, and in our moments of colloquial speech, we might even say that the machine "knows" what it is doing.

Whether or not we can or even would want to ascribe knowledge to a machine is a point worth consideration, but can not be decided until we decide on a definition of knowledge. Personally I have no problem saying that the machine actually does “know” what it is doing when it performs correctly but this is in part because I have no problem eliminating consciousness from the realm of justification. Additionally, I feel that given all we know about minds today and given our ability to build machines that can mimic fairly sophisticated mental functions, we *need* analogies between minds and machines at least at the level of function.¹⁵³ Hence, just as the machine is able to identify contradictions because it has been programmed to do so, so we should say that the reason minds are able to identify contradictions even when not taught is because the instructions for doing so have been programmed into them. As Leibniz suggests, the reason we are able to identify contradictions is because the principle for doing so exists as part of the innate constitution of mind--as part of our “mental hard drive.” And if this is correct, or rather if it’s correct to ascribe at least some knowledge to the innate constitution of mind, (perhaps not everything Leibniz would ascribe) then it’s correct to believe the innateness hypothesis is not, on Leibniz’s view, nor on any rationalist’s view, invoked without reason.

The machine analogy is used to illustrate the fact that just as a full explanation of machine function (what it outputs) requires reference to what’s inside the machine, so the only way to completely explain what the mind does in consciousness is to include what the mind does in unconsciousness, in other words, to include what it does and has as part of its innate programming. Leibniz’s theory of mind can do this, Locke’s can not and therefore, Leibniz’s theory of mind provides us with explanatory power more consistent with the way in which the mind actually works.

I conclude that Locke’s theory of mind is deficient not only because he refuses to include unconscious states of mind and, therefore, makes for very peculiar doctrine at times, (for example, in the case of memory) but also because he does not bother to explain a great deal of what needs explaining and what is important when considering the mind’s function,

¹⁵³ Ontological issues will also have to be sorted out, for example, whether or not we think biology is needed for knowing. Thus, while my view would urge that we eliminate consciousness as a necessary condition for knowledge, it might not entail that all non-conscious things can think. The ability to have thought may very well be a result of biochemical reactions that would not be able to exist in all machines.

(for example, how the mind is able to recognize certain instances of truth.) On Locke's account we are left with a magical account of mind wherein all of the mind's powers are presented to us in consciousness and are introduced as brute facts. And while at some point brute facts will have to be introduced, that they are introduced in consciousness seems to me just wrong. I have used an analogy between minds and machines to strengthen this view and think that because Locke's account of mind can not be appropriately modeled after a machine, it loses appeal. Given everything we know about brain function and the capability of machine design today (especially with "nano-technology," whereby we are able to design biological machines) to introduce a theory of mind that can not map onto a theory of a machine is a mistake. While a great deal of mind remains mysterious to us, it seems to me that it will at some point be reducible to a set of functions that can be empirically marked and modeled in a machine. Locke's account of mind is unable to do this, I argue, not only because he ignores large chunks of mental phenomena (all the unconscious phenomena) but also because he insists that somehow the mind is able to do all its recognizing, all its knowing, in single acts of perception. A machine would never work this way, and I argue, neither would a mind. Hence, even if Locke was able to rectify some of his internal inconsistencies and carefully define, for instance, his understanding of "consciousness," of "reflection" or "sensation," all of which are terms that give him problems, he would still not be able to redeem his theory of mind because he refuses to acknowledge unconscious states and the role they play in the determination of consciousness. Unconsciousness, I argue, allows us to explain not only certain mental phenomena like memory or "denial" but allows us to explain the mechanics of the mind, mechanics needed to make sense of what takes place in consciousness or in experience and without which our theories of mind would be incomplete. Thus while more is needed to fully ground a rationalist theory of mind, namely, that a means of securing innateness as knowledge is established, we can remain certain that empiricist theories of mind will not suffice so long those theories refuse to acknowledge the significant contributions innate mental structures make to the determination of what we know.

Bibliography

Locke, Primary literature:

An Essay Concerning Human Understanding, John Locke, edited by Peter Nidditch, Oxford, 1975.

Locke, Secondary Literature:

Richard Aaron, *John Locke*, Clarendon Press, 1955.

James Gordon Clapp, *Locke's Conception of Mind*, Columbia University Press, 1937.

James Gibson, *Locke's Theory of Knowledge and its Historical Relations*, Cambridge and New York, 1917.

Nicholas Jolley, *Leibniz and Locke*, Clarendon Press, 1984.

E. J. Lowe, *Locke on Human Understanding*, Routledge Press, 1995.

J.D. Mabbott, *John Locke*, MacMillan Press, 1973.

J. L. Mackie, *John Locke*, Clarendon Press, 1976.

D.J. O'Connor, *John Locke*, Dover Publications, 1966.

J. Douglas Rabb, *John Locke on Reflection*, University Press of America, 1985.

Kathleen Squadrito, *Locke's Theory of Sensitive Knowledge*, University Press of America, 1978.

Kathleen Squadrito, *John Locke*, Twayne Publishers, 1979.

I. C. Tipton, editor, *Locke on Human Understanding*, Oxford University Press, 1977.

Thomas E. Webb, *Intellectualism of John Locke*, Lenox Hill, 1973.

R. S. Woolhouse, *Locke*, Harvester Press, 1983.

J.W. Yolton, *Locke and the Compass of Human Understanding*, Cambridge, 1970.

J. W. Yolton, editor, *John Locke - Problems and Perspectives*, Cambridge Press, 1969.

J.W. Yolton, *John Locke and the Way of Ideas*, Oxford, 1956.

Locke, Articles:

Martha Brandt Bolton. "Leibniz and Locke on the Knowledge of Necessary Truths" in *Central Themes in Early Modern Philosophy.*, edited by J.A. Cover and Mark Kulstad, Hackett, 1990.

John Harris, "Leibniz and Locke on Innate Ideas," in *Locke on the Human Understanding*, edited by I. C. Tipton, Oxford University Press, 1977.

Robert McRae, "Locke and Leibniz on Linguistic Particles" in *Synthesis* 75, pp.155-161, 1988.

Gilbert Ryle. "John Locke on the Human Understanding" in *Locke and Berkeley*, ed. C.B. Martin and D.M. Armstrong, New York, 1968

Margaret D., Wilson. "Leibniz and Locke on First Truths" in *Journal of the History of Ideas*, 28, pp.347-366, 1967.

Leibniz: Primary Literature

Discourse on Metaphysics, Correspondence Between Leibniz and Arnauld, Monadology, translated by George R. Montgomery, The Open Court Publishing Co., La Salle, Illinois, 1950.

New Essays on Human Understanding, edited and translated by Peter Remnant and Jonathan Bennett, Cambridge University Press, 1981.

New Essays Concerning Human Understanding by G. W. Leibniz Together With an Appendix Consisting of Some of His Shorter Pieces, edited and translated by A.G. Langley, 3rd edition, Lasalle, 1949.

Gottfried Wilhelm Leibniz: Philosophical Papers and Letters, edited and translated by L.E. Loemker, 2nd ed., Dordrecht, D. Reidel, 1969.

Philosophical Writings; Leibniz, translated by Mary Morris, J. M. Dent & Sons Ltd., 1951.

Leibniz: Secondary Literature

C. D. Broad. *Leibniz: An Introduction*. Cambridge, Cambridge University Press, 1975.

Marcelo Dascal. *Leibniz. Language, Signs and Thought*. John Benjamins Publ., 1987.

Harry Frankfurt. *Leibniz: A Collection of Essays*. New York 1972.

M. Hooker. *Leibniz: Critical and Interpretive Essays*. Minneapolis, 1982.

Nicholas Jolley. *Leibniz and Locke: A Study of the New Essays on Human Understanding*. Oxford: Oxford University Press. 1984.

Nicholas Jolley, editor. *The Cambridge Companion to Leibniz*. Cambridge University Press, 1995.

Mark Kulstad. *Essays on the Philosophy of Leibniz*. Rice University Studies in Philosophy, 63, 1977.

Mark Kulstad. *Leibniz on Apperception, Consciousness and Reflection*. Philosophia, 1991.

Robert McRae. *Leibniz: Perception, Apperception and Thought*. University of Toronto, 1976.

Nicholas Rescher. *The Philosophy of Leibniz*. Englewood Cliffs: Prentice Hall, 1967.

Leibniz: Articles

Jonathan Bennett. "A Note on Descartes and Spinoza." *Philos. Rev.*, 1965, 379-380.

Martha Brandt Bolton. "Leibniz and Locke on the Knowledge of Necessary Truths" in *Central Themes in Early Modern Philosophy.*, edited by J.A. Cover and Mark Kulstad, Hackett, 1990.

E. M. Curley. "Leibniz on Locke on Identity." in M. Hooker, "*Leibniz: Critical and Interpretive Essays.*" Minneapolis, 1982, 302-326.

Marcelo Dascal. "Empirical Significance and Relevance." *Philosophia*, 1, 81-106.

Montgomery Furth. "Monadology." *Philos. Rev.*, 76, 1976,

John Harris, "Leibniz and Locke on Innate Ideas," in *Locke on the Human Understanding*, edited by I. C. Tipton, Oxford University Press, 1977.

Mark Kulstad. "Two Arguments on *Petite Perceptions.*" in *Rice University Studies*, vol.63, Nr. 4, Fall 1977.

----- "Leibniz' Theory of Innateness in the New Essays, followed by a few remarks on the possible impact on Kant" in *Leibniz, Werk and Wirkung*, IV, International Leibniz Congress, Hannover., 1983.

General and Historical Literature:

Nancy Andreason. *The Broken Brain*. Harper and Row, 1984.

Ned Block, editor. *Readings in the Philosophy of Psychology*, vol I-II. Harvard University Press, 1981.

Harry Brackman. *Mind and Language: Essays on Descartes and Chomsky*. Foris Publications, 1984.

Q. Cassam, *Self Knowledge*, Oxford University Press, 1994.

----- *Self and World*, Oxford University Press, 1997.

Noam Chomsky. *Language and Mind*. New York, Harcourt, Brace and World, 1968.

- Noam Chomsky. *Rules and Representation*. Columbia University Press, 1980.
- Noam Chomsky. "Rules and Representation: Open Peer Commentary with Replies" *Behavioral and Brain Sciences. Journal of Current Research and Theory with Open Peer Commentary*. Volume 1, 1980.
- J. Collins. *The Continental Rationalists*, Milwaukee: Bruce, 1967.
- Fiona Cowie. *What's Within, Nativism Reconsidered*. Oxford, 1999.
- E. M. Curley. *Descartes Against the Skeptics*. Cambridge Mass, Harvard University Press, 1978.
- Fred D'Agostino. *Chomsky's System of Ideas*. Clarendon, 1986.
- Todd Feinberg. *Altered Egos: How the Brain Creates the Self*, Oxford Press, 2001.
- Sigmund Freud. *Introductory Lectures on Psychoanalysis*, Norton and Co., 1965.
- Sigmund Freud. *Therapy and Technique*. Macmillan Publishing Co., 1963.
- Susan Greenfield. *The Human Brain*. Basic Books, 1997.
- David Hume. *An Enquiry Concerning Human Nature*. Oxford, 1973.
- Kornblith, Hilary, editor. *Naturalizing Epistemology*. MIT Press, 1985.
- Jaques Hadamard. *The Psychology of Invention in the Mathematical Field*. General Publishing Co., Ontario, 1946.
- A.C. MacIntyre. *The Unconscious*. Routledge. 1958.
- Roger Penrose. *Shadows of the Mind: a Search for the Missing Science of Consciousness*. Oxford, 1994.
- Steven Penrose. *The Conscious Brain*. Knopf, 1975.
- Jean Piaget. *Biology and Knowledge*. University of Chicago. 1971
- Karl Popper and John Eccles, *The Self and Its Brain*, Routledge Press, 1977.
- Stephen Priest. *The British Empiricists*. Penguin, Great Britain, 1990.
- Oliver Sacks. *The Man Who Mistook His Wife For a Hat*. London, 1989.
- *An Anthropologist on Mars*. Knopf, New York, 1995
- Charles Sherrington, *Integrative Action of the Nervous System*, Yale University Press, 1947.
- T.V. Smith and Marjorie Green. *From Descartes to Locke*, University of Chicago, 1957.
- L. Weiskrantz, editor. *Thought Without Language*. Clarendon Press, Oxford, 1988.