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Locke on Real Knowledge

A dissertation in partial satisfaction of the requirements for the degree of Doctor of Philosophy

in

Philosophy

by

Nathan James Rockwood

Committee in charge:

Professor Samuel C. Rickless, Chair Professor Stanley Chodorow Professor Fonna Forman Professor Donald Rutherford Professor Eric Watkins

The Dissertation of Nathan James Rockwood is approved, and it is acceptable in quality and form of publication on microfilm and electronically:

Chair

University of California, San Diego

2014

DEDICATION

For Sam

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ABBREVIATIONS

Abbreviations for works by John Locke

Е	<i>Essay Concerning Human Understanding</i> , ed. Peter H. Nidditch (Oxford University Press 1975)
ELN	Essays on the Law of Nature, ed. W. von Leyden (Oxford University Press 1954)
Life and Letters	The Life and Letters of John Locke: with Extracts from his Journals and Commonplace Books, ed. Lord King (London, 1884)
RC	The Reasonableness of Christianity, reprinted in The Works of John Locke volume 7 (London, 1823)
W	The Works of John Locke in 10 volumes (London, 1823)
2nd T	Second Treatise of Government, reprinted in Two Treatise of Government, 2nd edition, ed. Peter Lasalett (Cambridge University Press 1967)

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ABSTRACT OF THE DISSERTATION

Locke on Real Knowledge

by

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Professor Samuel C. Rickless, Chair

One of Locke's primary goals for the *Essay Concerning Human Understanding* is to provide a theory of knowledge that explains how we can have knowledge of the actual world. But because Locke holds a representationalist theory of perception, on his view we can directly perceive only the *ideas* of external objects (and not the objects themselves), which inevitably raises doubts about whether there *actually exist* any external objects corresponding to our ideas. To make matters worse, he defines knowledge as the perception of a relation *between ideas*. Many object that such an account of knowledge cannot give us knowledge of the actual world. But this criticism ignores a special category of knowledge that Locke calls "real knowledge", which is his own account of how we have knowledge of the actual world.

In this dissertation I use Locke's account of real knowledge as a way to understand how we have knowledge of the actual world. I argue that there are two requirements for real knowledge: the first requirement is the perception of a relation between ideas, and the second requirement is a necessary connection between these ideas and reality. It is because of this second requirement for real knowledge that, on Locke's view, we can have knowledge of the actual world. For when we perceive a relation between the relevant ideas, because those ideas are necessarily connected to reality, it necessarily follows that those ideas correspond to the way the world actually is. In this way my interpretation is able to explain how, according to Locke, the perception of a relation between ideas can give us knowledge of the existence of external objects, knowledge of the qualities of particular material objects, and knowledge of an objective moral standard. Thus Locke's account of real knowledge gives us the insight we need to understand how Locke thinks we can have knowledge of the actual world.

CHAPTER 1:

Introduction

§1 Locke's Aim in the Essay

One evening John Locke sat in his study with some friends. The topic of conversation turned to religion and morality. A dispute arose among them. Locke decided that in order to settle this debate they first needed to distinguish what we can know about the topic from what we cannot know. This task would require them to specify what the grounds for knowledge are, and to determine what the grounds for belief are when the evidence falls short of certainty. Locke set out to write *An Essay Concerning Human Understanding* to do just that: establish the extent, limits, and basis of human knowledge and rational belief (E I.i.2, 43).

For Locke, epistemology is not merely an academic exercise. Setting out the limits of human knowledge has significant implications for social policies and scientific practices. One of the aims in the *Essay*, for example, is to specify what we can know concerning religion and what is a matter of faith. The answer Locke gives in the *Essay* is that we can know that God exists and commands us to act in accordance with the principles of reason; but matters of revealed religion, such as the resurrection of the dead and theological interpretations of the Bible, are matters of religious faith. While religious faith is rationally justifiable, it falls short of certain knowledge. So we should be modest in our confidence that our faith is the one true religion. This point is not inconsequential. Locke lived during a time when Protestants and Catholics were engaged in a prolonged

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war in Central Europe,¹ the English Parliament passed laws excluding non-Anglicans from public office and from holding religious services,² and the King of England was forced to abdicate the throne in part because his son and heir apparent was a Catholic.³ In response to this religious tension and political unrest, Locke argues in *A Letter Concerning Toleration* that political leaders are no more likely to be right about religious matters than anyone else, and so it would be wrong for them to force their religious convictions on their subjects. Thus clearly defining what we can and cannot know

As another example, Locke argues that we cannot have scientific knowledge of material bodies. A science, according to Locke and his contemporaries, is a deductive system of knowledge which begins with general principles which are known to be true and then derives particular facts from those principles. But for Locke our knowledge of the natural world is derived from experience, and our limited experience cannot demonstrate with absolute certainty the truth of general principles concerning material objects, for example in Boyle's chemistry or Newton's physics. On Locke's view, there is always the possibility that future experience will lead us to revise our theories of the natural world. Our lack of knowledge of general principles forces us to continue to rely on experience in advancing our understanding of material objects. Far from being a skeptical conclusion, Locke sees himself as steering inquiries concerning the natural

¹ The Thirty Years War (1618-1648).

² The Corporation Act (1661) and the Conventicle Act (1664).

³ The Glorious Revolution (1688).

world into a more productive direction. Again, then, showing the extent and limit of our knowledge has practical relevance.

In addition to clearly establishing the limits of human knowledge, Locke wants to give a positive account of our knowledge of the actual world. The two things we can know which have the greatest practical relevance are knowledge of God's existence and knowledge of morality. For Locke these are related. The moral goodness of an action is defined as obedience to God's commands, whereas the moral badness of an action is defined as disobedience to God's commands. We can also know that God will reward us for obedience and punish us for disobedience to his commands in an afterlife. For these reasons our knowledge of God's existence and of his commands has great importance for how we choose to conduct our lives.

One of Locke's other aims in writing the *Essay* is to develop an epistemology that would account for our knowledge of the physical world. For if an account of knowledge did not give us certainty about the actual world then "our most serious Thoughts will be of little more use, than the Reveries of a crazy Brain; and the Truths built thereon of no more weight, than the Discourses of a Man, who sees Things clearly in a Dream, and with great assurance utters them" (E IV.iv.2, 563). Any adequate theory of knowledge, then, must be able to account for knowledge of the existence of external objects and their qualities. Yet it is also here that Locke's theory of knowledge faces its most challenging and persistent criticism. Many object that Locke's theory of sense perception and his conception of knowledge make it impossible for us to have knowledge about the actual world. In this dissertation my aim is to show how Locke thinks his theory secures knowledge of the actual world. I do this by turning to his account of *real knowledge*. In the following chapters I argue that knowledge of our own existence, God's existence, and the existence of material objects and their qualities, as well as knowledge of morality, all count as real knowledge. One significant implication of this novel interpretation is that all these items of knowledge have the same general structure, for they all must meet the requirements for being real knowledge. This insight also explains how, according to Locke, we can have knowledge of the actual existence of external objects and their qualities. For Locke intends his account of real knowledge to show how we can have certain knowledge concerning the actual world. So this interpretation promises to be Locke's own answer to the persistent criticism that, on his account, we cannot have knowledge of the actual world.

To get clearer on Locke's account of real knowledge and my contribution to the literature on Locke's epistemology, I turn first to a brief exposition of Locke's theory of knowledge. (The interpretation presented below is widely accepted unless otherwise noted.)

§2 An Introduction to Locke's Epistemology

The starting point of Locke's epistemology are *ideas*. Locke defines an idea as the "Object of the Understanding when a Man thinks" (E I.i.8, 47). When we are conscious, the thing we are aware of is an idea. Many of our ideas represent objects in the world. While dreaming, for example, we may perceive that we have a hand in a fire. The thing

we are aware of is our *idea* of the hand being in the fire; but when we are dreaming there is no *actual* fire. So our idea of the fire cannot be identical to an actual fire. Instead, according to Locke, the idea of the fire is a mental image or mental representation of the fire.

Even in sense perception we directly perceive ideas rather than the objects themselves. For suppose we have the sensation that we have a hand in the fire. The object of our sensation is an idea. Yet, as the dreaming example shows, the idea of having a hand in the fire is not identical to an actual hand in the fire. For this reason Locke says that ideas are the *immediate* objects of perception (E II.viii.8, 134), meaning that we are immediately aware of the idea. By contrast, the actual hand in the fire is the *mediate* object of perception, meaning that our awareness of the actual hand in the fire is mediated by an idea. That is, we do not ever immediately perceive the *actual* hand in the fire; instead, we perceive an *idea* of the hand in the fire, and this idea represents and corresponds to the actual hand in the fire. Thus Locke holds a representationalist theory of perception, since he holds that we immediately perceive ideas, and many of these ideas represent actual objects in the world.

There are two sources of simple ideas: sensation and reflection. Sensation, or sense perception, is the source of ideas of sensible qualities of external objects. A fire has a certain size, shape, temperature, and color. Through sensation we observe these qualities. The fire causes us to feel its heat, and see its color, size and shape (cf. E II.i.3, 105). Further, having the sensation of an object for the first time can give us new ideas. Holding a hand in the fire for the first time can give us the first idea of its intense heat, and in the same way eating a pineapple for the first time will give us the idea of a taste of pineapple (E IV.xi.4, 632).

The other source of simple ideas is reflection. Reflection "is the *Perceptions of the Operations of our own Minds* within us" (E II.i.4, 105). Perceiving, doubting, believing, and willing are all operations of the mind. When the mind performs one of these mental operations, we perceive an idea of the mind doing these things. Reflection is an "internal Sense" which is meant to be the analog of sensation or external sense (cf. E II.i.4, 105); sensation is the perception of ideas which represent and correspond to external material objects, while reflection is the perception of ideas must be derivable from sensation or reflection, for "we have nothing in our Minds, which did not come in, one of these two ways" (E II.i.5, 106). So Locke is an empiricist who holds that at the mind begins as "white Paper, void of all Characters, without any *Ideas*"; therefore, all the ideas that we do have must come from experience, either from sensation or reflection (E II.i.2, 104).

Once we receive simple ideas from sensation and reflection we can form complex ideas. A complex idea is a collection of simple ideas combined into one idea. For example, simple ideas might include: white, cold, wet. We can then combine these ideas to form the idea of a white-cold-wet-thing, and give it the name "snow" (E II.xi.6, 159; cf. II.xxiii.1, 295). Thus we are able to take simple ideas and combine them to form new ideas. We can also combine two complex ideas to form a new idea, such as when we take the idea of gold and the idea of a mountain and form the idea of a gold mountain. This process of combining ideas can give us an infinite variety of complex ideas.

Another way we can form complex ideas is by the process of abstraction. We begin by having several particular ideas, such as the ideas of snow, chalk, and milk. We might notice "the same Colour being observed to day in Chalk or Snow, which the Mind yesterday received from Milk". If we focus on "that Appearance alone" (i.e. the appearance of white) that is common between snow, chalk, and milk, and abstract away the difference between those ideas, then the mind will form an abstract idea of *whiteness*. This idea of whiteness then becomes a general idea that represents several particular ideas, including the whiteness of snow, chalk, and milk (E II.xi.9, 159). Thus from particular ideas we can form abstract ideas.

Locke defines knowledge as the perception of a relation (an agreement or disagreement) between two ideas (E IV.i.2, 525). There are four sorts of relations which, when perceived, give us knowledge (E IV.i.3, 525):

- 1. identity or diversity
- 2. relation
- 3. co-existence or necessary connection
- 4. real existence

The perception of these four sorts of relations between ideas corresponds to four sorts of knowledge (E IV.i.7, 527).

Arguably, the perceived relation in knowledge is always a *necessary* relation. Knowledge of identity, for example, is the perception that an idea is identical to itself, such as when we perceive that the idea of white is the idea of white. This is a necessary relation. So we have knowledge of identity by perceiving the necessary relation of identity. Similarly, we have knowledge of diversity when we perceive that the idea of white is not the idea of black (cf. E IV.i.4, 526). Thus knowledge of identity or diversity is the perception of a necessary relation. The second sort of perceived relation is a generic category which includes any necessary relation. The paradigm examples of knowledge of relation are the necessary relations in mathematics. We have knowledge of relation, for instance, when we perceive the necessary relations between the idea of a triangle and the idea of its properties. Yet knowledge of relation includes the perception of any other necessary relations between ideas. Locke even concedes that knowledge of identity and knowledge of coexistence are just notable instances of knowledge of relation (E IV.i.7, 527).

The third sort of perceived relation is "*Co-existence*, or *necessary connexion*" (E IV.i.3, 525). This category may, at least nominally, be divided into knowledge of coexistence and knowledge of necessary connection. The knowledge of necessary connection is obviously the perception of a necessary relation between ideas. It is less obvious, though, that knowledge of coexistence is the perception of a necessary relation. For knowledge of coexistence includes knowledge we have from sensation that an object has contingently related qualities. We might perceive, for example, that gold is malleable even though the malleability of gold is only contingently related to its other qualities (E IV.xii.9, 644). However, knowledge that "gold is malleable" comes from sensation which makes it "sensitive knowledge" of material objects. So whether knowledge of coexistence is the perception of a *contingent* relation between ideas or the perception of a *necessary* relation between ideas depends on what kind of relation is perceived in sensitive knowledge. In this dissertation I argue that sensitive knowledge is the perception of a necessary relation between ideas, which thereby makes knowledge of coexistence the perception of a necessary relation between ideas. Thus the third sort of perceived relation is also a necessary connection between ideas.

The fourth sort of relation is "Real Existence" (E IV.i.3, 525), including sensitive knowledge (i.e. knowledge from sense perception) of the existence of material objects. Commentators have found this category of knowledge by far the most puzzling, and much of the present dissertation is dedicated to clarifying Locke's general account of knowledge of real existence and specific account of sensitive knowledge. One difficulty is showing how, according to Locke, perceiving a relation between ideas can give us knowledge of the existence of external objects. For, on the one hand, it seems that perceiving a relation between ideas cannot tell us whether an object actually exists, but, on the other hand, if sensitive knowledge is not the perception of a relation between ideas then his account of sensitive knowledge is inconsistent with his definition of knowledge. Further, even if we grant that Locke takes sensitive knowledge to be the perception of a relation between ideas, another interpretive issue concerns whether the perceived relation is *contingent* or *necessary*. In this dissertation I argue that sensitive knowledge includes the perception of a necessary relation between ideas. On this interpretation, then, in all four sorts of knowledge we perceive a necessary relation.

As we have seen, Locke distinguishes knowledge by the content of what is known, dividing knowledge into the four sorts of knowledge discussed above; he also distinguishes knowledge by the way in which it is known. Intuitive knowledge is the *immediate* perception of a relation between two ideas (E IV.iii.2, 539), whereas

demonstrative knowledge is the *mediate* perception of a relation between ideas. For example, suppose that there is a necessary connection between the idea of A and the idea of B, and also a necessary connection between the idea of B and the idea of C. It follows, of course, that the idea of A is necessarily connected to the idea of C, but this relation is mediated by A's connection to B and by B's connection to C. As Locke sees it, we immediately perceive the necessary connection between the idea of A and the idea of B, since we perceive the relation between A and B "without the intervention of any other Idea" (E IV.ii.1, 531). Thus the immediate perception of the relation between the idea of A and the idea of B gives us intuitive knowledge. By contrast, the perception of the relation between the idea of A and the idea of C does not give us intuitive knowledge. For the perception of this relation is mediated by the idea of B. We mediately perceive the relation between two ideas when there are "intervening *Ideas*, which serve to shew the Agreement" between these ideas (E IV.ii.3, 532). Thus we mediately perceive the relation between the idea of A and the idea of C, and the mediate perception of this relation gives us demonstrative knowledge.

Locke claims that there are "*three degrees of Knowledge*": intuitive, demonstrative, and sensitive (E IV.ii.14, 538). Intuitive and demonstrative knowledge are clearly distinguished as different ways of knowing: one is the *immediate* perception of a relation between ideas while the other is the *mediate* perception of a relation between ideas. However, the perception of a relation between ideas can be either immediate or mediate; these options appear to be exhaustive. Thus it is difficult to see how sensitive knowledge could be a third way of perceiving a relation between ideas. In this dissertation I argue that sensitive knowledge is the mediate perception of a relation between ideas, and so counts as a kind of demonstrative knowledge. However, what makes sensitive knowledge distinctive, and so its own degree of knowledge, is that one of the ideas is always an idea of sensation.

The three degrees of knowledge correspond to three degrees of certainty. For Locke, "the highest Probability, amounts not to Certainty; without which there can be no true Knowledge" (E IV.iii.14, 546). So the degrees of certainty do not correspond to degrees of probability, with the more probable being the more certain. Instead, certainty and mere probability are mutually exclusive. This fits well with the interpretation of knowledge given above according to which we have knowledge by perceiving a necessary relation between ideas. The perception of any contingent relation does not count as knowledge, for knowledge is the perception of a *necessary* relation. However, if all knowledge is the perception of a necessary relation, then we need some explanation for why Locke thinks there are degrees of certainty.

I suggest that the degrees of certainty may be understood as degrees of the visibility or transparency of the relation between ideas. In intuitive knowledge the relation is so transparent that as soon as we perceive the ideas together we perceive the relation between them. Perceiving the ideas together by itself forces us to perceive the relation (E IV.ii.1, 531). By contrast, in demonstrative knowledge the relation is not always perceived even when it is present (E IV.ii.2, 531) and it takes mental effort and reasoning to see that one idea is mediately related to another idea (E IV.ii.4, 532). Thus the relation in demonstrative knowledge is less visible or less transparent when compared

to the perceived relation in intuitive knowledge. Finally, sensitive knowledge requires that we reflect on the source of our ideas; we must perceive that we are having a sensation. But the source of ideas is not immediately obvious to us, and it requires mental effort to perceive that we are having a sensation. For this reason sensitive knowledge is even less transparent than intuitive and demonstrative knowledge. (For a fuller defense of this interpretation, see the chapter 5 of this dissertation.) As I interpret Locke, then, the degrees of certainty correspond to the visibility or transparency of the relation between the ideas: the more visible the ideas and transparent the relation, the more certain it is, and vice versa. Thus intuitive knowledge is the highest degree of certainty, demonstrative knowledge is the next highest degree of certainty, and sensitive knowledge is the lowest degree of certainty.

Perhaps the most important category of knowledge for Locke's epistemology is *real* knowledge. Because Locke defines knowledge as the perception of a relation between ideas, there is some question about whether our "knowledge" (i.e. the perception of relations between ideas) corresponds to the way the world actually is. Indeed, many object that on Locke's theory of knowledge we cannot have knowledge of the actual world. Locke anticipates this objection, however, and introduces the category of real knowledge in order to address it. Yet, notwithstanding its great importance, commentators have failed to see how Locke's account of real knowledge is supposed to give us knowledge of the actual world. The primary aim of my dissertation is to explicate Locke's account of real knowledge and show how Locke thinks perceiving relations between ideas can give us knowledge of the actual world.

Knowledge is the perception of a necessary relation between ideas, and that knowledge is *real* "only so far as there is a conformity between our *Ideas* and the reality of Things" (E IV.iv.3, 563). Thus real knowledge includes both the perception of a necessary relation between ideas and a relation between ideas and reality. On Locke's account there are two ways of corresponding to reality. Most obviously, our ideas correspond to reality if the ideas correspond to actual objects in the world (cf. E IV.iv.12, 568-569). Thus our knowledge that "all horses are animals" counts as real knowledge because the idea of horses and the idea of animals corresponds to objects in the actual world. By contrast, the idea of a centaur does not correspond to anything in the actual world, so our knowledge that "all centaurs are animals" is not real knowledge. A second way for ideas to correspond to reality, according to Locke, is for ideas to represent themselves (E IV.iv.5, 564). One of his motives for making this claim seems to be that an idea that represents itself is not capable of misrepresentation, and therefore should count as real (cf. E II.xxx.3, 373). Locke holds that ideas in moral discourse are all of this kind. So he claims that knowledge of morality counts as real knowledge (E IV.iv.7-8, 565-566).

Locke's account of real knowledge goes a long way in addressing the standard criticism of his position. His critics argue that his epistemology does not allow us to have certain knowledge of the actual world. However, Locke introduces his account of real knowledge in order to address this very objection. This point has been has been passed over in most of the commentary on Locke's epistemology. The aim of this dissertation is to show how Locke intends his account of real knowledge to provide us with certain knowledge of the actual world.

§3 The Literature on Locke

As we have seen, one of Locke's primary goals for the *Essay Concerning Human Understanding* is to provide a theory of knowledge that explains how we can have knowledge of the actual world. There are several interpretations of Locke's account of knowledge of the actual world, most of which focus on his account of sensitive knowledge of the existence of material objects. These interpretations, though, either fail to take Locke's account of real knowledge into account or limit the scope of real knowledge so much so that this account cannot explain how we have knowledge of a wide variety of facts about the actual world.

The Direct Perception View holds that we know an external object exists by directly perceiving it. Some maintain that we directly perceive our own existence, and others maintain that we directly perceive the existence of material objects. However, the Direct Perception View conflicts with the widely accepted interpretation of Locke according to which we directly perceive only our *ideas* of things, but we never directly perceive the actual object itself. Further, the Direct Perception View, which states that we know an object exists by directly perceiving the external object, conflicts with Locke's definition of knowledge, which states that we have knowledge by perceiving a relation between ideas. For these reasons the Direct Perception View is widely thought to be mistaken.

The Ideas-Only View holds that the *one and only* requirement for knowledge that an object exists is the perception of a relation between ideas. This interpretation makes knowledge of external objects consistent with Locke's definition of knowledge. But on such an account it seems possible for us to "know" that an object exists (by perceiving a relation between ideas) even when that object does not actually exist. For perceiving the idea of a thing does not guarantee that the object actually exists (E IV.xi.1, 630). Also, Locke introduces his account of real knowledge in order to explain how we can have knowledge of the actual world, yet the Ideas-Only View ignores Locke's account of real knowledge. For these reasons the Ideas-Only View fails to explain how, according to Locke, we can know that external objects actually exist.

Lex Newman develops a more promising interpretation which takes there to be two requirements for sensitive knowledge that a material object exists (Newman 2007). Newman recognizes that Locke introduces real knowledge in order to account for our knowledge of the actual world. He also recognizes that there are two requirements for real knowledge. The first is the perception of a relation between ideas. The second requirement, according to Newman, is that we make a probable judgment that our ideas correspond to reality. Newman then takes sensitive knowledge to be a kind of real knowledge, and the inclusion of the probable judgment that our sensation corresponds to an external object explains why sensitive knowledge is less certain than intuitive and demonstrative knowledge. However, this interpretation limits the scope of real knowledge. Because real knowledge includes a probable judgment which, *ipso facto*, makes the knowledge less certain, nothing intuitively or demonstratively known can also be real knowledge. Yet Locke indicates that intuitive knowledge of our own existence and demonstrative knowledge of God also count as real knowledge. Thus Newman's interpretation cannot explain how we can have real knowledge that we exist or that God exists.

Given the failure of these interpretations, there is need for an alternative explanation for how, according to Locke, we can have knowledge of the actual world. In my dissertation I argue that knowledge of the existence of ourselves, of God, and of material objects, as well as knowledge of morality, all count as real knowledge. This is a much more expansive role than previously assigned to real knowledge. Newman, for example, restricts real knowledge to sensitive knowledge. But for this very reason his position turns out to be problematic. Keith Allen, as another example, restricts real knowledge to general propositions, and on this view real knowledge cannot be knowledge concerning the existence of specific external objects (Allen 2013). This is problematic, though, since Locke indicates that knowledge. Hence on Locke's view it is possible to have real knowledge of the existence of particular things. My interpretation seems promising precisely because it provides a broad explanation for how, in general, Locke thinks that we can have knowledge of particular objects in the actual world.

In this dissertation I argue that Locke holds the Dual Relation View. On this view, Locke's account of real knowledge of the actual world requires, in addition to the perception of a relation between ideas, that there be a necessary connection between those ideas and reality. This proposal builds on Newman's suggestion that Locke takes his account of real knowledge to bridge the idea-reality gap by introducing a second requirement for real knowledge. But I take that second requirement to be the *relation*

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between ideas and reality, whereas Newman holds that it is the *judgment* of that relation. This allows an item of knowledge to satisfy the second condition for real knowledge without making it any less certain. So my interpretation can explain how it is that we have real knowledge that we exist and that God exists. For this reason my interpretation is a significant advance over Newman's interpretation.

As I interpret Locke, the general structure of real knowledge includes *both* the perception of a necessary connection between ideas and a necessary connection between an idea and reality. I argue, for example, that in real knowledge of our own existence we perceive a necessary connection between the *idea* of ourselves thinking and the *idea* of our actual existence. Because the relation between these ideas is necessary, the same relation must hold between any actual act of thinking and our actual existence. Moreover, the *idea* of thinking is necessarily connected to our *actually* thinking (for to have an idea is itself an act of thinking). So on this view, if we perceive a necessary connection between the idea of ourselves thinking and the idea of our existence, then it necessarily follows that we actually exist. In this way Locke thinks that perceiving relations between our ideas can give us knowledge of the actual world. I also show how knowledge of our own existence, God's existence, and the existence of material objects and their qualities has this same structure. Thus knowledge of existence and knowledge of the qualities of material objects count as real knowledge that corresponds to the actual world. I also show how we can have real knowledge of morality when our ideas in moral knowledge correspond to God's actual commands. So this interpretation shows that there is a general structure to knowledge about the actual world, from knowledge that an object exists to knowledge of an objective morality. Moreover, the second requirement for real knowledge, that there be a necessary connection between our ideas and reality, explains how Locke intends his theory to account for knowledge of the actual world.

In short, in this dissertation I present an original, consistent, complete, and integrated reconstruction of Locke's theory of real knowledge that explains how we have knowledge of the actual world.

CHAPTER 2:

Real Knowledge of Existence

§1 An Apparent Inconsistency

Locke's representationalist theory of perception and empiricist epistemology seem to be woefully inadequate for securing knowledge of the actual world. We can directly perceive only the *idea* of external objects (and not the objects themselves), which inevitably raises doubts about whether there exist any external objects corresponding to our ideas.¹ To make matters worse, Locke defines knowledge as the perception of a relation *between ideas*. This seems to make it impossible to have knowledge of anything *beyond our ideas*. Yet Locke also insists that we can have knowledge that external objects exist, and we can have some knowledge about what properties those objects have. The combination of these views seems problematic. On the one hand, Locke's representationalist theory of perception and empiricist epistemology seem to limit knowledge to only our ideas. On the other hand, he insists that we can have knowledge of external objects. Thus Locke's account of knowledge of existence seems to be hopelessly inconsistent with his representative theory of perception and definition of knowledge.²

There are a few ways to try to resolve the inconsistency. One way to make Locke consistent is to deny that, for Locke, all knowledge is the perception of a relation between

¹ For purposes of this dissertation "external object" will be any object outside of our ideas (including ourselves, God, and material objects).

² Aaron 1971, p. 240; Ayers 1991: I, p. 159; Gibson 1917, p. 166; Jolley 1999, p. 187; Loeb 1981, p. 58; Pappas 1998, p. 288; Whoolhouse 1994, p. 154, 156; and Yolton 1970, p. 109ff.

ideas. On this interpretation knowledge is *either* the perception of a relation between ideas or the perception of a relation between an idea and an external object (Yolton 1970). But, as I will argue, Locke clearly takes all knowledge to include the perception of a relation between ideas, and so a disjunctive interpretation of Locke must be rejected. Another way to resolve the difficulty is to insist that all knowledge consists solely in the perception of a relation between ideas (Owen 2008; Allen 2013; Nagel, forthcoming), but this inevitably leads to skepticism and does not fit Locke's own description of the relation involved in knowledge of existence, which is a relation between an idea and an external object. A more promising proposal takes sensitive knowledge (i.e. knowledge from sense perception) that an external object exists to include two cognitive relations: one is the perception of a relation between ideas, which makes it knowledge, and the other is a fallible judgment that our ideas correspond to an external object, which makes it less certain than other forms of knowledge (Newman 2007). However, this model cannot be extended to all three kinds of knowledge of existence, for Locke denies that knowledge of our own existence and knowledge of God's existence are in any way uncertain. None of these proposals, then, explains how on Locke's view we can consistently have knowledge of existence.

I have another suggestion. Below I argue that on Locke's account there are two conditions for knowledge that an external object exists. First, Locke defines knowledge as the perception of a relation between ideas (E IV.i.2, 525), so knowledge of existence must include the perception of a relation between ideas. Second, Locke says we have "real knowledge" when "there is a conformity between our *Ideas* and the reality of

Things" (E IV.iv.3, 563). I call this interpretation the Dual Relation View, since (on this view) knowledge of existence includes *both* the perception of one relation between ideas *and* a second relation between an idea and an external object. In this chapter I argue that the Dual Relation View captures Locke's view on the general structure of knowledge of existence. (In later chapters I show how the Dual Relation View applies to specific instances of knowledge of existence.)

The Dual Relation View I am proposing is similar to Lex Newman's Dual Cognitive Model, which takes sensitive knowledge to include both the perception of a relation between ideas and a *judgment* that an idea corresponds to an external object. The main advantage of my interpretation over the Dual Cognitive Model is that the Dual Relation View can be extended to all three kinds of knowledge of existence, whereas Newman's Dual Cognitive Model applies only to sensitive knowledge. That is, the advantage of the Dual Relation View is that it captures the general structure of knowledge of existence, whereas Newman's interpretation leaves knowledge of existence in general unexplained.

The Dual Relation View provides Locke with a solution to the apparent inconsistency stated above. This account of knowledge of existence is consistent with his representationalist theory of perception since we directly perceive only our ideas, and it is consistent with his definition of knowledge since it includes as a condition for knowledge the perception of a relation between ideas. Yet Locke can claim that we have knowledge about the actual world. For, as I will explain below, the second condition for knowledge is a necessary connection between an idea and an external object. So if we have that idea, it necessarily follows that the object actually exists. This view allows Locke to maintain that we directly perceive only our ideas, and yet also claim that we can have knowledge of the existence of actual objects in the world. Thus, contrary to what is often claimed, Locke's epistemology does not inevitably lead to skepticism about the external world.

§2 The Direct Perception View

The problem of how Locke can claim to know anything about external objects arises from Locke's official definition of knowledge:

Knowledge then seems to me to be nothing but *the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas.* (E IV.i.2, 525)

Locke seems to be saying that knowledge is the perception of a relation (either an agreement or a disagreement) between ideas. The next section is titled "This Agreement Fourfold" (E IV.i.3, 525). By "This Agreement" Locke means the perceived relation between ideas discussed in the prior section (E IV.i.2, 525). In order to "understand a little more distinctly, wherein this agreement or disagreement consists," he says, "I think we may reduce it all to these four sorts"; importantly, the fourth sort is "*Real Existence*" (E IV.i.3, 525). Since knowledge is defined as the perception of a relation between ideas, and "*Real Existence*" is listed as one of the perceived relations, we expect knowledge of real existence to be the perception of a relation between ideas.

But what Locke actually says defies our expectations. When he gets to the fourth sort of relation, he says:

The fourth and last sort is, that of actual real Existence agreeing to any Idea.

(E IV.i.7, 527, my emphasis)

The real-existence relation appears to be a relation between an idea and an external object (an "*actual real Existence*"). So, contrary to our expectations, the fourth sort of relation is not a perceived relation between ideas.

One interpretation of the passage (E IV.i.7) concedes that the real-existence relation is between an idea and an external object (rather than a relation between ideas), yet insists that the real-existence relation is perceived. For Locke first defines knowledge as the perception of a relation, and then he lists "*Real Existence*" as one of the perceived relations. So Locke appears to be taking knowledge of existence to consist in the perception of a relation between an idea and an external object. John Yolton attributes to Locke a disjunctive view where knowledge is *either* the perception of a relation between ideas *or* the perception of a relation between an idea and an external object (Yolton 1970, p. 110). On this view the perception of the real-existence relation (which holds between an idea and an external object) is perfectly consistent with Locke's definition of knowledge. Call this the Direct Perception View, since perceiving a relation between an idea and an external object requires that we directly perceive an external object.

However, Locke cannot consistently hold that the real-existence relation is perceived and that the real-existence relation is between an idea and an external object. First, Locke clearly holds a representationalist theory of sense perception, and so it would be impossible to perceive a relation between an idea and an external material object. Indeed, many commentators take Locke to be inconsistent precisely because he both holds a representationalist theory of perception and seems to affirm that we can perceive
the real-existence relation (cf. footnote 2). Second, even if we could directly perceive our own existence and the existence of material objects, on Locke's view we cannot directly perceive God (Newman 2004, pp. 278-279). Since Locke thinks we can have knowledge of God's existence, he must deny that all knowledge of existence is the perception of the real-existence relation, where that relation is between an idea and an external object.

The Direct Perception View fails in an instructive way. Nearly everyone takes the real-existence relation described in E IV.i.7 to be a perceived relation. But Locke cannot consistently claim both that the real-existence relation is perceived and that it holds between an idea and an external object. There remain two options. One option is to reinterpret Locke's phrase "*actual real Existence* agreeing to any *Idea*" to be a claim about a relation between ideas. In the next section I argue that this strategy will not work. The only way for Locke's account of knowledge of existence to be consistent, then, is to deny that the real-existence relation is perceived. This supports the Dual Relation View, since on this view knowledge of existence includes an unperceived relation between idea and an external object. I will return to this point below.

§3 The Ideas-Only View

Another way to resolve the tension between Locke's definition of knowledge and his description of the real-existence relation is to deny that the real-existence relation is between an idea and an external object. In order for the real-existence relation to be perceived, it must be a relation between ideas. So when Locke describes the realexistence relation as "*actual real Existence* agreeing to any *Idea*" (E IV.i.7, 527), he might mean to say that the real-existence relation is between "the *idea* of real existence and the *idea* of any thing" (Owen 2008, part 2, my emphasis; cf. Allen 2013, p. 256; Nagel, forthcoming).³ Call this the Ideas-Only View, since knowledge of existence consists solely in perceiving a relation between ideas.

The motivation for the Ideas-Only View comes from three considerations. First, knowledge is the perception of a relation. Second, the perceived relation cannot be between an idea and an external object. So, goes the argument, consistency requires that the perceived relation be between two ideas. Given what Locke says in E IV.i.7, the relation must be between the idea of an object and the idea of existence. Third, as confirmation of this reading of E IV.i.7, Locke elsewhere says that in sensitive knowledge (one kind of knowledge of existence) we perceive a relation between "the *idea* of actual sensation...and the *idea* of actual existence" (Stillingfleet, W4: 360, my emphasis; cf. Newman 2007, pp. 331-332). Thus knowledge of existence seems to be the perception of a relation between an idea of an object and the idea of existence.

However, even the proponents of the Ideas-Only View concede that the phrase "*actual real Existence* agreeing to any *Idea*" (E IV.i.7, 527) seems to be describing a relation between an idea and an external object. David Owen says, "The natural way to understand this is as the agreement between the thing itself (the actual real existent) and the idea of the thing" (Owen 2008, part 2). Nagel likewise acknowledges that Locke's emphasis on "actual" and "real" suggests that "actual real existence" refers to an external

³ Newman also holds that the real-existence relation described in E IV.i.7 is between two ideas (Newman 2007, p. 331), but he does not hold the Ideas-Only View since he thinks there is a second condition for sensitive knowledge (cf. section and §4).

object rather than the idea of existence (Nagel, forthcoming). Newman reports that it is "widespread opinion" that the relation is "not between two ideas, but between an idea and an *actual real existence* [i.e. external object]" (Newman 2007, p. 331). So they acknowledge that the most straightforward interpretation of the passage is that the realexistence relation is between an idea and an external object.

Indeed, Locke uses similar language elsewhere to describe a relation between an idea and an external object. For instance, real ideas "have a Conformity" with external objects (E II.xxx.1, 372), and Locke argues that all simple ideas are real because they "all agree to the reality of things" (E II.xxx.2, 372). In other passages Locke uses phrases such as "agree to real Existence" (E II.xxxii.22, section heading, 392) and "agree with the Existence of Things" (E II.xxx.5, section heading, 374).⁴ All these passages refer to a relation between an idea and an external object. The similarity of these passages with the description of the real-existence relation as "actual real Existence agreeing to any *Idea*" suggests that, as in those other passages, Locke is here describing a relation between an idea and an external object.

Similarly, there are other passages where Locke uses "real existence" to refer to an external object.⁵ For example, he argues that nothing could not "ever produce any *real Existence*" (E IV.x.8, 622, my emphasis). Also, he says that ideas of modes are "made by the Mind...without Patterns, or reference to any *real Existence*" (E III.v.3, 429, my emphasis), and they are "not Copies, nor made after the Pattern of any *real Existence*, to

⁴ cf. E II.xxxii.22, 392; III.ix.12, 482; IV.iv.3, 563; and IV.iv.18, 573.

⁵ Sometimes Locke uses "real existence" as the label for the relation in the fourth sort of knowledge (e.g. E IV.i.3, 525 and IV.i.7, 527). At other times Locke uses "real existence" to refer to an external object.

which the mind intends them to be conformable, and exactly to answer" (E II.xxxi.14, 384, my emphasis). Each of these instances of "real existence" refers to an external object. This provides further evidence that Locke intends "*actual real Existence*" to refer to an external object rather than the *idea* of existence. So there are close textual parallels showing that "*actual real Existence* agreeing to any *Idea*" describes a relation between an idea and an external object.

Locke's description of the real-existence relation in E IV.i.7 poses a problem for the Ideas-Only View. Proponents of this view insist that, to make Locke consistent, we should interpret the real-existence relation as a relation between ideas. But "*actual real Existence* agreeing to any *Idea*" simply does not describe a relation between ideas; the real-existence relation is between an idea and an external object. Knowledge of existence, then, cannot consist in the perception of the real-existence relation described in E IV.i.7.

Further, the Ideas-Only View is a deeply unsatisfying account of knowledge of existence. This view takes knowledge of existence to consist solely in the perception of a relation between ideas. But insofar as knowledge of an external object consists solely in the perception of relation between ideas, there is no requirement that our ideas correspond to any actual object in the world. So it seems that we could easily satisfy the conditions for knowing that an external object exists (by perceiving a relation between our ideas) even though that object does not actually exist. Suppose, for example, that Locke's proof for the existence of God merely shows that there is a relation between our *idea* of God and our *idea* of existence. According to the Ideas-Only View, we "know" that God exists by perceiving the relation between these ideas; so "knowing" that God exists

doesn't even require that God exist! This is problematic: it is wildly implausible to claim that we "know" that an external object exists when, in fact, that object does not actually exist.

The Ideas-Only View fails in an instructive way. One problem for the Ideas-Only View is that the real-existence relation described in E IV.i.7 as "*actual real Existence* agreeing to any *Idea*" does not describe a relation between ideas; instead, it describes a relation between an idea and an external object. A second problem for the Ideas-Only View is that it is wildly implausible to claim that knowledge of existence consists solely in the perception of a relation between an idea of an object and an actual external object in the world. Fortunately, both of these problems can be solved together by taking the real-existence relation to hold between an idea and an external object. The Dual Relation View holds that one of the conditions for knowledge of existence is the real-existence relation, interpreted as a relation between an idea and an external object. This retains the most plausible interpretation of "*actual real Existence* agreeing to any *Idea*" as a relation between an idea and an external object. This retains the most plausible interpretation of "*actual real Existence* agreeing to any *Idea*" as a relation between an idea and an external object. This retains the most plausible interpretation of "*actual real Existence* agreeing to any *Idea*" as a relation between an idea and an external object.

The Ideas-Only View also gets something important right. The definition of knowledge entails that in knowledge of existence we perceive *some relation* between ideas. Locke elsewhere identifies the two ideas that we perceive to be related, which again shows that knowledge of existence includes the perception of *some relation* between ideas. So the Ideas-Only View is right that Locke takes knowledge of existence

to include the perception of *some relation* between ideas. But the real-existence relation described in E IV.i.7 is not *that perceived relation*. The Ideas-Only View goes wrong in assuming that there is only one condition for knowledge of existence, which leads to the implausible interpretation of "*actual real Existence* agreeing to any *Idea*" as a relation between ideas. The important thing to learn here, I suggest, is that Locke's account of knowledge of existence includes two relations.

§4 The Dual Cognitive Model

Although Newman agrees with the Ideas-Only View that the real-existence relation holds between ideas (Newman 2007, p. 331), he recognizes that for Locke's view to be at all plausible Locke needs some way to bridge the gap between our ideas and the actual world. Newman proposes the Dual Cognitive Model of sensitive knowledge (one kind of knowledge of existence), which takes there to be two requirements for sensitive knowledge: one requirement is the perception of a relation between ideas, and the second requirement is a judgment that one of those ideas is being caused by an external cause (Newman 2007, p. 325). On Newman's proposal the way to close the gap between ideas and the actual world is by our making a fallible judgment that sensation is caused by an external object.

The Dual Cognitive Model is attractive for several reasons. Most importantly, this model shows how there can be a consistent interpretation of Locke's account of sensitive knowledge. The Dual Cognitive Model is consistent with Locke's definition of knowledge because it includes the perception of a relation between ideas. Yet Newman also acknowledges that the Ideas-Only View is insufficient for knowledge of existence, so he introduces a second condition for knowledge of existence. It is by recognizing that Locke's account includes two conditions for sensitive knowledge that Newman is able to show that Locke's view is consistent.

Locke's account of real knowledge supports Newman's contention that there are two requirements for sensitive knowledge. Locke takes real knowledge to be knowledge where "there is a conformity between our *Ideas* and the reality of Things" (E IV.iv.3, 563). Newman points out that Locke uses the term "assurance" and its cognate "sure" to describe our epistemic status to this conformity with reality: Locke says, "we may be *assured* [our ideas], agree with Things" (E IV.iv.3, 563, my emphasis), and "where-ever we are *sure* those Ideas agree with the reality of Things, there is certain real Knowledge" (E IV.iv.18, 573, my emphasis). For Locke the term "assurance" sometimes refers to a kind of probable judgment (e.g. E IV.xvi.6, 662).⁶ So, Newman suggests, these passages suggest that real knowledge includes a judgment that our ideas correspond to reality. This supports the Dual Cognitive Model since on that model sensitive knowledge includes both the perception of a relation between ideas and a *judgment* that our sensation corresponds to an external object.

Another attractive feature of the Dual Cognitive Model is that it explains why Locke takes sensitive knowledge to be less certain than intuitive and demonstrative knowledge. On this model, sensitive knowledge is a kind of knowledge because it includes the perception of a relation between ideas, yet it is less certain than other forms

⁶ For exceptions, see E IV.i.9, 528; IV.ii.6, 533; IV.vi.10, 584; IV.x.2, 618 (cf. Owen 2008, part 3).

of knowledge because sensitive knowledge includes a fallible judgment that our sensation is caused by an external object (Newman 2007, p. 325). So the Dual Cognitive Model can simultaneously explain why sensitive knowledge counts as knowledge and also why it is less certain than other forms of knowledge.

But this attractive feature also prevents the Dual Cognitive Model from extending to other kinds of knowledge of existence (cf. Allen 2013, p. 255). The Dual Cognitive Model includes a fallible judgment that an idea corresponds to an external object, and this fallible judgment is what makes sensitive knowledge less certain than intuitive and demonstrative knowledge. If this model were extended to knowledge of our own existence and knowledge of God's existence, then these items of knowledge would be less certain than other intuitively and demonstratively known propositions. This is surely not Locke's intent: he insists that "nothing can be more evident to us, than our own Existence" (E IV.ix.3, 618), and God's existence is "the most obvious Truth that Reason discovers" (E IV.x.1, 619). So the Dual Cognitive Model cannot plausibly apply to all three kinds of knowledge of existence.

It should be noted that Newman does not attempt to extend the Dual Cognitive Model to other kinds of knowledge of existence. But presumably Locke would want to do so. The Ideas-Only account of knowledge of existence was found wanting precisely because the "knowledge" that God exists has no relation whatever to God's actual existence. Locke introduces real knowledge as a way to show that his conception of knowledge as the perception of a relation between ideas is not merely "building a Castle in the air" but instead gives us knowledge of the way the world actually is (E IV.iv.1-3, 562-563). Surely Locke would want knowledge of God's existence to conform to the reality of things, and thereby count as real knowledge. Yet on Newman's interpretation real knowledge that an object exists includes a fallible judgment, making it less certain, and so knowledge of God's existence cannot be real knowledge (Newman 2007, pp. 348-349).

This is where my Dual Relation View has an interpretive advantage over Newman's Dual Cognitive Model. According to Newman, the "real-making" requirement for knowledge of existence is "being sure", "having an assurance", or (what is the same) making a judgment that an idea corresponds to reality (Newman 2007, pp. 348-349). But, contra Newman, it is the *relation* (not the *judgment* of the relation) that makes an item of knowledge count as real knowledge. Locke says, "Our knowledge therefore is real only so far as there is a conformity between our Ideas and the reality of Things" (E IV.iv.3, 563, my emphasis). Similarly, Locke says that "this conformity between our simple Ideas, and the existence of Things, is sufficient for real Knowledge" (E IV.iv.4, 564, my emphasis). It is the relation between the idea and the external object (not the judgment of the relation) that is sufficient to make it real knowledge. While we may make a judgment that there is a relation between our ideas and reality (which explains Locke's use of "assurance" and its cognates), real knowledge does not consist in making this judgment. As I read Locke, real knowledge requires that there be a relation between an idea and an external object.

Once we take the condition for real knowledge to be the *relation* between an idea and an external object (rather than the *judgment* that this relation holds), Locke's account

of real knowledge can extend to all three kinds of knowledge of existence. The fact that our idea of God corresponds to God's actual existence doesn't make our knowledge of God's existence any less certain. (Such a relation would do quite the opposite.) Therefore, our knowledge of God's existence can be an item of real knowledge without making it any less certain. The same can be said for knowledge of our own existence. So the Dual Relation View, which takes the requirement for real knowledge to be a relation between an idea and an external object, can extend to all three kinds of knowledge of existence.

The Dual Relation View can also provide a more plausible explanation of the realexistence relation described in E IV.i.7 as "*actual real Existence* agreeing to any *Idea*". Newman takes this relation to be a relation between the *idea* of an object and an *idea* of existence (Newman 2007, p. 331), but I have already argued that this is implausible (cf. section §3). As I interpret Locke, the real-existence relation described in E IV.i.7 is a relation between an idea and an external object. This interpretation is confirmed by Locke's account of real knowledge. For real knowledge also requires that there be a conformity between our ideas and reality. Thus we find the same requirement for a relation between an idea and an external object in both Locke's account of real knowledge and his account of knowledge of existence. Moreover, this is just what we want in an account of knowledge of existence. We want our "knowledge" that God exists to require that there be some relation between our ideas and God's actual existence. This relation is what Locke's account of real knowledge provides, and the real-existence relation described in E IV.i.7 appears to be an expression of this real-making condition for knowledge of real existence. For these reasons the Dual Relation View is a significant improvement on Newman's Dual Cognitive Model.

§5 The Dual Relation View

The textual evidence from the previous sections support my interpretation that, according to Locke, knowledge of existence is a kind of real knowledge which includes both the perception of a relation between ideas and a relation between an idea and an external object. In section §3 I argued that knowledge includes the perception of a relation between ideas. But the real-existence relation described in E IV.i.7 as "*actual real Existence* agreeing to any *Idea*" is not that perceived relation. For that real-existence relation is between an idea and an external object, and in section §2 I argued that such a relation between an idea and an external object. The lesson from these earlier sections, I suggest, is that knowledge of existence, in addition to the perception of a relation between an idea and an external object. The lesson from these earlier sections, I suggest, is that knowledge of existence, in addition to the perception of a relation between an idea and an external object. The lesson from these earlier sections, I suggest, is that knowledge of existence, in addition to the perception of a relation between an idea and an external object. The lesson from these earlier sections, I suggest, is that knowledge of existence, in addition to the perception of a relation between an idea and an external object. This makes knowledge of existence a kind of real knowledge.

Keith Allen, however, argues against the view that knowledge of real existence is a kind of real knowledge. On his interpretation, "real knowledge concerns the *nature* of things," while knowledge of real existence "concerns their *existence*". He contends that Locke's chapter on real knowledge "specifically concerns abstract general knowledge, and not particular knowledge of existence" (Allen 2013, p. 253). Much of the chapter concerns mathematical and moral knowledge (E IV.iv.5-10, 564-568), which consists in the perception of relations between abstract ideas rather than about particular existences. Similarly, much of Locke's discussion of substance is spent debating about how to categorize changelings and monsters (E IV.iv.14-17, 569-573), indicating that in this chapter Locke is interested in *types* of substances. Finally, when Locke later discusses knowledge of existence he says,

Hitherto we have only considered the Essences of Things, which being only abstract *Ideas*, and thereby removed in our Thoughts from particular Existence...gives us no Knowledge of real Existence at all. (E IV.ix.1, 618)

Hence, Allen concludes, knowledge of existence does not appear to be a kind of real knowledge (Allen 2013, p. 253).

But in reply to Allen, there are two kinds of real knowledge. As argued above, the real-making requirement is conformity with reality. For Locke, ideas can conform to reality in two ways: "by *real Ideas*, I mean...such as have a Conformity with real Being, and Existence of other Things, or with their Archetypes" (E II.xxx.1, 372). Some ideas represent external objects, and these ideas conform to reality by conforming to the external objects they represent. Other ideas are "*Archetypes* of the Mind's own making, not intended to be the Copies of any thing, nor referred to the existence of any thing"; such an idea does not "represent any thing but it self" (E IV.iv.5, 564). As Locke elsewhere put it, "These *Ideas*, being themselves Archetypes, cannot differ from their Archetypes" (E II.xxx.4, 373). Because these ideas represent themselves, knowledge of these ideas is "conformable to our *Ideas*" and "we cannot but be infallibly certain, that all the Knowledge we attain concerning these Ideas is real" (E IV.iv.5, 564). Thus our

knowledge of some ideas is real because the ideas conform to themselves. Allen is right that this latter kind of real knowledge does not concern knowledge of existence, but the former kind of real knowledge (which requires a conformity between an idea and an external object) is relevant to knowledge of existence.

Contra Allen, we can have real knowledge of particular substances. The first thing to point out is that knowledge of existence conforms to the external objects they represent. We know that God exists and has certain attributes and, according to Locke, God really does exist and has those attributes. Similarly, from sense perception we know that particular substances exist and that our ideas of those substances conform to actual external objects. So knowledge of existence meets the requirement for being real knowledge, and thus should count as real knowledge.⁷ Furthermore, in the course of debating with Stillingfleet the grounds for certain knowledge of God's existence, Locke cites his account of real knowledge, which in the *Essay* he "delivered in these words":

Wherever we perceive the agreement or disagreement of any of our ideas, there is certain knowledge; and wherever we are sure those ideas agree with the reality of things, there is certain *real knowledge*. (Stillingfleet, W4: 50, my emphasis; cf. E IV.iv.18, 573)

Locke is here claiming, then, that the grounds for our knowledge of God's existence is the two requirements for real knowledge. Therefore, Locke seems to take knowledge of existence to be a kind of real knowledge.

⁷ If Allen wants to insist that abstract knowledge of substances counts as real knowledge but that knowledge of particular substances does not, then he will need to find an alternative interpretation of what Locke takes the real-making requirement for real knowledge to be. I am skeptical that an alternative interpretation is available (other than Newman's, which will not help Allen), since Locke clearly states that "Knowledge is therefore *real*, only so far as there is a conformity between our *Ideas* and the reality of Things" (E IV.iv.3, 563) and this condition can be met by both abstract knowledge of substances and knowledge of particular substances.

Locke's account of real knowledge provides corroborating evidence for the Dual Relation View. As I have argued, there are two requirements for real knowledge of substances, the perception of a relation between ideas and a conformity between ideas and external objects. The significance of this account of real knowledge is that for Locke some kinds of knowledge require a relation between our ideas and external objects. That Locke takes this to be a requirement for real knowledge thus supports the view that Locke also takes this relation between an idea and an external object to be a requirement for knowledge of existence.

It might be argued that Locke has only one condition for knowledge (cf. Soles 1985, p. 353). For he defines knowledge as the perception of a relation between ideas, and then he says: "Where this Perception is, there is Knowledge; and where it is not...we always come short of Knowledge" (E IV.i.2, 525). The perception of a relation between ideas is necessary and sufficient for knowledge. It is necessary because where we do not perceive a relation between ideas "we always come short of knowledge"; it is sufficient because where we do perceive a relation between ideas "there is knowledge". Yet on the Dual Relation View Locke has two conditions for knowledge of existence: the perception of a relation between ideas AND a relation between an idea and an external object. One objection to this interpretation is that Locke takes the first condition alone to be sufficient for knowledge, and if perceiving a relation between ideas is sufficient for knowledge then the second condition cannot be necessary for knowledge of existence.

In reply, I concede that the perception of a relation between ideas is sufficient for knowledge. Satisfying this (first) condition is precisely what makes knowledge of

existence count as knowledge. Yet not all perception of a relation between ideas is knowledge of existence, so there must be some further requirement that makes an item of knowledge an instance of knowledge of existence (rather than some other sort of knowledge). This further condition, I contend, is that there be a relation between an idea and an external object. Thus in order to be knowledge of existence an item of knowledge must meet both the general condition for knowledge (i.e. the perception of a relation between ideas) and the domain-specific condition for knowledge of existence (i.e. include a relation between an idea and an external object). It is perfectly consistent for Locke to have one condition that is sufficient for knowledge in general, and yet meeting that one condition is insufficient for being a particular kind of knowledge; to be knowledge of a particular kind, Locke requires that a further condition be met. Moreover, as we have seen, Locke's account of real knowledge requires that a second condition be met, and this second condition is a conformity relation between an idea and an external object. So if knowledge of existence is to be real knowledge, then it will require both the perception of a relation between ideas and a relation between an idea and an external object.

Once Locke introduces this second condition for real knowledge, the question naturally arises: "How shall the Mind, when it perceives nothing but its own *Ideas*, know that [those ideas] agree with things themselves?" (E IV.iv.3, 563). That is, how can we know that the second condition for real knowledge is met? Importantly, we do not need to know (in Locke's sense) that we satisfy the second condition in order to have real knowledge. Simply meeting the two conditions is sufficient. The skeptic (or an epistemic internalist) might object that we cannot be certain that there actually exists an external object without knowing that the second condition is satisfied. While Locke cannot say that we *know* (in Locke's sense) the second condition is satisfied, in some cases he thinks "we may be assured [our ideas], agree with Things" (E IV.iv.3, 563). For, I will argue below, he thinks that the perception of a relation between the relevant ideas *necessarily entails* the existence of an external object.

The first condition for real knowledge comes from the definition of knowledge as the perception a relation between our ideas. To count as knowledge, the perceived relation must be either a "*connexion and agreement, or disagreement and repugnancy*" (E IV.i.2, 525). A repugnancy is an incompatibility, which is a necessary relation. Similarly, Locke seems to take the perceived agreement to be a necessary connection. His examples immediately following the definition of knowledge are of ideas which "necessarily agree" and are "inseparable" (E IV.i.2, 525). Elsewhere he indicates that only the perception of necessary relations counts as knowledge:

In some of our Ideas there are certain Relations, Habitudes, and Connexions, so visibly included in the Nature of the Ideas themselves, that we cannot conceive them [i.e. the connexions] separable from them [i.e. the ideas], by any power whatsoever. And *in these only we are capable of certain and universal Knowledge*. (E IV.iii.29, 559, my emphasis)

In order for us to have knowledge, we must perceive a necessary relation (either a necessary connection or an incompatibility) between our ideas.

That knowledge is the perception of a necessary relation (rather than some contingent relation) between ideas has important implications. For if we perceive a necessary relation between our ideas, and one of those ideas corresponds to an external object, then that necessary relation will also hold for that external object. For example: Is it true of the *Idea* of a Triangle, that its three Angles are equal to two right ones? It is true also of a Triangle, where-ever it really exists... [So] he is sure what he knows concerning those Figures, when they have barely an Ideal Existence in his Mind, *will hold true of them also when they have a real existence in Matter* (E IV.iv.6, 565 my emphasis)

There is a necessary connection between the idea of triangle and the idea of the properties of a triangle. And since this connection is necessary, if there is an actual triangle then that actual triangle must have these properties. In general, when there is a necessary relation between ideas, because it is necessary, that same relation must also hold for things corresponding to those ideas.

Now suppose that our idea of ourselves thinking is necessarily connected to the idea of existence. Because this relation between our ideas is necessary, it must also hold between the things corresponding to our ideas. That is, there is a necessary relation between our actual thinking and our actual existence. Of course, to have an idea of thinking is to actually be thinking. So if we have an idea of ourselves thinking then we must actually exist.

This example illustrates how the perception of a necessary connection between our ideas can necessarily entail the actual existence of an object. In the next section I will show how the other instances of knowledge of real existence have this same structure. Thus when the skeptic points out that we cannot (in Locke's sense) know that our ideas correspond to an actual object, Locke can reply that the perception of a necessary connection between relevant ideas necessarily entails the existence of an external object (such as ourselves, God, and sensible objects). In this way Locke can "hope" to show that "this way of certainty, by the Knowledge of our own *Ideas*, goes a little farther than bare Imagination" (E IV.iv.2, 563). The perception of a relation between ideas can, on Locke's view, entail the existence of objects in the actual world. Our knowledge of existence therefore satisfies both the conditions for being real knowledge: it includes the perception of a relation between ideas and the idea of an external object conforms to reality.

To summarize the case I have been making for the Dual Relation View, I find three compelling sources of textual evidence for the view that Locke takes knowledge of existence to require a relation between an idea and an external object. First, Locke describes the real-existence relation in E IV.i.7 as a relation between an idea and an external object. Rather than seeing this as inconsistent with his theory of perception or definition of knowledge, I take it that Locke is expressing the second condition for knowledge of existence. Second, Locke seems to take knowledge of existence as a kind of real knowledge, which requires that there be a conformity between an idea and an external object. Third, in his account of knowledge of existence, the perception of the relevant ideas necessarily entails that there exists an external object, which shows that in his view there is a relation between certain ideas and the actual existence of external objects. Further, beyond these specific texts there is the philosophical point that knowledge of existence *should* include a relation between our ideas and the existence of the object, otherwise our knowledge of God's existence would bear no relation whatever to God's actual existence, which seems seriously problematic. So there is strong evidence that, in addition to the perception of a relation between ideas, Locke takes knowledge of existence to include a relation between an idea and an external object.

§6 Knowledge of Existence

I have presented what I take to be persuasive evidence that the general structure of knowledge of existence includes both the perception of a relation between ideas and a relation between an idea and an external object. But all this would be for naught if Locke's description of knowledge of our own existence, of God's existence, and the existence of sensible objects does not actually fit into this general structure. Locke's actual views on knowledge of existence, we might think, are best revealed in his actual discussion of how we come to know that an object exists. Although Locke's accounts of knowledge of our own existence, and careful treatment, my aim here is to provide just enough textual evidence to show that in each case Locke follows the general structure of knowledge of existence outlined in the Dual Relation View.

Locke's comments in the *Essay* on knowledge of our own existence are brief. He says, "In every Act of Sensation, Reasoning, or Thinking, we are conscious to our selves of our own Being" (E IV.ix.3, 619). Whenever the mind acts, we perceive that the mind is acting. And if the mind is acting, then we exist. Locke recapitulates this argument to Stillingfleet, who had objected that Locke cannot prove that "spiritual substance" exists (Stillingfleet, W4: 32). Locke replies:

I think it may be proved from my principles, and I think I have done it; and the proof in my book stands thus: First, we experiment in ourselves thinking. The *idea* of this action or mode of thinking is inconsistent with the *idea* of self-subsistence, and therefore has a *necessary connexion with a support or subject of inhesion*: the idea of that support is what we call substance; and so from thinking experimented in us, we have proof of a thinking substance in us... (Stillingfleet, W4: 32-33, my emphasis)

We perceive that the idea of the mind acting is inconsistent with the idea of our nonexistence, or in other words we perceive a necessary connection between the idea of the mind acting and the idea of our existence. Locke adds that the idea of the mind acting "therefore has a necessary connexion with a support or subject of inhesion". So in his view there is a necessary connection between the idea of thinking and our actual existence. Locke's account of knowledge of our own existence, then, satisfies both the conditions for knowledge on the Dual Relation View.

Locke also takes his proof for the existence of God to include both the perception of a relation between ideas and a necessary connection between the idea of thinking and God's actual existence. Locke explains that on reflection we can perceive a "necessary agreement and connexion" between the "*idea* of thinking" and "the *idea* of the existence of an external, thinking Being" (Stillingfleet, W4: 60). Yet Locke also holds that an argument for God's existence should not merely express a relation between ideas. Descartes, for example, argues that there is a necessary connection between the idea of God and the idea of existence, and from this he concludes that God actually exists. But on Locke's view, even if the idea of God necessarily contains the idea of existence that still would not prove that God actually exists:

Though the complex idea for which the sound God stands (whether containing in it the idea of necessary existence or no, for the case is the same) will not prove the real existence of a being answering to that idea, any more than any other idea in any one's mind will prove the existence of any real being answering that idea; (Stillingfleet, W4: 55)

Showing that the *idea* of God has a necessary connection to the *idea* of existence does not prove that God actually exists. Presumably, then, Locke thinks his argument can do

better. His proof should show not merely that there is a relation between ideas, but that there is a relation between an idea and God's *actual existence*. Locke appears to say just this when he argues in the *Essay* that the idea of ourselves as rational beings shows "that *there is* an eternal, most powerful, and most knowing Being" (E IV.x.6, 621, my emphasis); this is not a claim about a relation between ideas, but a claim about the relation between an idea and God's actual existence.

Finally, Locke's account of sensitive knowledge also includes both the perception of a relation between ideas and a relation between an idea and an external object. In response to an objection from Stillingfleet, Locke specifies the two ideas that we perceive to agree:

Now the two ideas, that in this case are perceived to agree, and do thereby produce knowledge, are the *idea* of actual sensation...and the *idea* of actual existence of something without me that causes that sensation. (Stillingfleet, W4: 360, my emphasis)

We perceive a relation between the idea of sensation and the idea of an external cause of that sensation. Yet Locke also thinks that there is a necessary connection between an idea of sensation and the actual existence of an external cause. He argues that "simple *Ideas*, which since the Mind...can by no means make to it self, must necessarily be the product of Things" external to the mind (IV.iv.4, 563-564). Elsewhere, Locke argues that "I cannot avoid having" ideas of sensation, "and therefore it must needs be some exterior cause...that produces those *Ideas* in my Mind" (E IV.xi.5, 632). Here again Locke affirms that there is a necessary connection between our idea of sensation and the actual existence of an external object causing that sensation. So sensitive knowledge of external

objects includes both the perception of a relation between ideas and a relation between an idea and an external object.

It appears, then, that all three kinds of knowledge of existence share the same general structure. We perceive a relation between the idea of the mind acting (thinking or perceiving) and the idea of an external object. The idea of the mind acting corresponds to an actual act of the mind (either thinking or perceiving), which entails the actual existence of the external object. So, for Locke, the perception of a relation between the relevant ideas entails the actual existence of an external object. This would help explain why Locke slides from talking about knowledge of real existence as the perception of a relation as a relation between ideas (in E IV.i.2-3) to talking about the real-existence relation as a relation between an idea and an external object (in E IV.i.7). For he takes the the perception of the relation between ideas to entail that there is also a relation between those ideas and the existence of an actual external object. Further, he takes both to be conditions for knowledge of existence, which explains why he would describe the real-existence relation as "actual real Existence agreeing to any *Idea*".

This interpretation shows how Locke's account of knowledge of the existence of objects is consistent with his representationalist theory of perception as well as his definition of knowledge. The Dual Relation View is consistent with his commitment to a representationalist theory of perception since all we ever immediately perceive are ideas. This view is also consistent with his definition of knowledge, since it includes the perception of a relation between ideas. Yet Locke can also claim to have knowledge of the actual world. For even though we do not immediately perceive the real-existence relation between an idea and an external object, the perception of a relation between the relevant ideas necessarily entails that this real-existence relation obtains, guaranteeing that the external object actually exists.

So, contrary to what is often claimed, Locke can retain his representationalist theory of perception and definition of knowledge, yet consistently maintain that we can have certain knowledge that external objects exist.

CHAPTER 3:

Intuitive Knowledge of the Self

§1 A Dilemma for Locke

For Locke, as indeed it should be for all of us, knowledge that we exist is one of the most fundamental and obvious truths that we know. Our own existence also serves as the first premise in Locke's argument for the existence of God. So it is important for Locke that he provide an adequate account of how we come to know that we exist. Locke claims that we know that we exist by perceiving our own existence (E IV.ix.3, 618). But it is not obvious whether he thinks we directly perceive ourselves (call this the Direct Perception View) or whether he holds that we directly perceive only the *idea* of ourselves (call this the Representationalist View). Either way Locke's account seems to run into problems. On the one hand, on the Direct Perception View we know that we exist by directly perceiving our own existence. While this view would secure knowledge of our actual existence, it seems to conflict with Locke's definition of knowledge as the perception of a relation between ideas. For perceiving our own existence (a non-idea) is not the perception of a relation between ideas. On the other hand, on the Representationalist View we directly perceive only the idea of ourselves. While this view is consistent with Locke's definition of knowledge as the perception of a relation between ideas, it seems that this view would fail to give us knowledge of our actual existence. For merely having the idea of something cannot make us certain that it actually exists. So we seemed forced to interpret Locke's account as being inconsistent (the Direct Perception

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View) or as failing to secure knowledge of our actual existence (the Representationalist View).

In this chapter I show how Locke's Dual Relation View of knowledge of real existence allows us to secure knowledge of our actual existence by perceiving only the idea of our existence. According to the Dual Relation View, real knowledge of existence includes *both* the perception of a necessary relation between ideas *and* a necessary relation between an idea and an external object. In this case, we directly perceive only the idea of ourselves thinking; yet on Locke's view this idea is necessarily connected to our actual existence. So the perception of the idea of ourselves thinking necessarily entails that we actually exist. Further, we perceive a necessary relation between the idea of ourselves thinking and our actual existence. Thus Locke's account of the knowledge of our existence includes the perception of a relation between ideas, making it consistent with the Representationalist View and his definition of knowledge, and the perception of that relation entails that we actually exist, ensuring that our knowledge of our existence corresponds to our actual existence.

§2 The Direct Perception View

One source of evidence for the Direct Perception View are texts where Locke describes how we perceive the mind acting. The proponents of the Direct Perception View point out that (in the passages they cite) Locke does not appeal to intermediary ideas which represent the mind acting; instead, Locke just speaks of the perception of the mind acting. For example, Locke describes knowledge of our own existence as perceiving our

own existence:

If I doubt all other Things, that very doubt makes me *perceive my own Existence*... (E IV.ix.3, 618, my emphasis)

we have...an internal infallible *Perception that we are*. (E IV.ix.3, 618-619, my emphasis)

In every Act of Sensation, Reasoning, or Thinking, we are *conscious to our* selves of our own Being; (E IV.ix.3, 619, my emphasis)

I think it is beyond Question, that Man has a clear *Perception of his own Being*; he knows certainly, that he exists, and that he is something. (E IV.x.2, 619, my emphasis)

Locke repeatedly states that we can perceive our own existence.

Robert Roth notices that in "the text on the intuition of the self [E IV.ix.3], the word *idea* does not appear at all. Rather, Locke speaks about the perception of our own existence in the very act of thinking, reasoning, [or] doubting" (Roth 1988, p. 167, my emphasis). The absence of the term "idea" suggests that Locke holds that we perceive our actual existence, rather than merely perceiving the idea of our existence. Moreover, Locke says we perceive our "own Being" (E IV.ix.3, 619; E IV.x.2, 619), suggesting that we directly perceive the self. Roth concludes from these considerations that, on Locke's account, "the self grasps itself without the intermediary of an idea by a process of self-awareness" (Roth 1988, p. 168). That is, we come to have knowledge of our own existence by directly perceiving the self.

A. D. Woozley likewise argues that, on Locke's view, we directly perceive ourselves. "[Locke] always talks of directly observing 'the acts of our own minds' [E IV.xvii.4, 670], 'its own actions about these ideas it has' [E II.vi.1, 127] etc." By contrast,

Locke nowhere suggests, and has not been taken to suggest, a similarly crude representationalism...according to which we would be only indirectly acquainted with the operations of our minds through the intervention of ideas representing these operations. (Woozley 1964, p. 28)

Since Locke talks of perceiving acts of our minds and he "nowhere" speaks of being "only indirectly acquainted with the operations of our minds", Woozley concludes that Locke holds the Direct Perception View according to which we directly perceive ourselves.

Yet the best case for the Direct Perception View does not come from the absence of descriptions of intermediary ideas which represent the mind; it comes from a direct quote. James Gibson points out that for the most part Locke holds a representationalist theory of perception, but Locke seems to make an exception in the case of the mind:

For, since the Things, the Mind contemplates, are none of them, *besides it self*, present to the Understanding, 'tis necessary that something else, as a Sign or Representation of the thing it considers, should be present to it: And these are Ideas. (E IV.xxi.4, 720-721, my emphasis)

Locke makes ideas ontologically distinct from the external objects they represent: ideas are "something else" that act "as a Sign or Representation of the thing" itself. We perceive an idea or mental representation of a thing, rather than directly perceiving the thing itself. But he seems to make an exception for the mind, saying that everything the mind contemplates "*besides it self*" are ideas, which suggests that the mind can contemplate itself without an intermediary idea representing it (Gibson 1917, p. 171).

It is worth emphasizing that even the proponents of this interpretation

acknowledge that the Direct Perception View is an exception to Locke's general theory of perception. Citing the passage above, Gibson says, "in this one case, no idea is needed to serve as a sign or representation of the real being which is known", for "besides ideas, the mind, and the mind alone, is 'present to the understanding'" (Gibson 1917, p. 171). Similarly, Roth concedes that in every other case Locke holds a "decidedly...representationalist" theory of perception (Roth 1988, p. 168; cf. pp. 163-164), but the perception of ourselves is the one "notable exception" (Roth 1988, p. 168). So the Direct Perception View conflicts with Locke's more general account of perception.¹

Moreover, Locke's account of reflection shows that we perceive *ideas* of the mind acting. Reflection "is the Perception of the Operations of our own Minds within us", and in reflection we perceive the "*distinct Ideas*" of "Perception, Thinking, Doubting, Believing, Reasoning, Knowing, Willing, and all the different actings of our own Minds" (E II.i.4, 105, my emphasis). So in addition to holding a representationalist theory of sense perception, Locke also holds a representationalist theory of "*REFLECTION*" or "internal Sense", which is the perception of the ideas of our mind acting (E II.i.4, 105).

Locke's representationalist theory of reflection poses a serious challenge to the Direct Perception View. Gibson argues that because, on his interpretation of Locke, we directly perceive ourselves, "in this case alone, reality and idea are so entirely at one, that

¹ Woozley interprets Locke as holding a direct perception view for both sensation and reflection (Woozley 1964, pp. 28-29). On this interpretation direct perception of the self would not be an exception to Locke's general account of perception and reflection.

any passage or transition from the one to the other is not only *impossible* but unnecessary" (Gibson 1917, p. 171, my emphasis). But an inference from an idea to the act of the mind *is possible*. For through reflection we have ideas of the mind acting. Indeed, the very ideas Locke specifies in describing his account of reflection are the same ideas that he appeals to in his description of the knowledge of our own existence: through reflection we receive the ideas of "Perception, Thinking, Doubting, Believing, Reasoning, [and] *Knowing*" (E II.i.4, 105), and knowledge of our own existence comes from "every Act of Sensation, Reasoning, or Thinking," or from knowing, doubting or feeling (E IV.ix.3, 618-619). Since we perceive ideas of the mind acting, it is possible for us to infer from these ideas that the mind is actually acting and hence actually exists. Whether such an inference is *necessary* depends on whether we (in addition to perceiving these ideas of reflection) also directly perceive the mind acting. But given that he already has a representationalist account of the perception of the ideas of the mind acting, the further assertion that we can also directly perceive the mind would be both redundant and out of place within his theory of perception. These are compelling reasons to doubt that Locke holds the Direct Perception View.

The Direct Perception View is also inconsistent with Locke's definition of knowledge. According to Locke, knowledge is the perception of a relation *between ideas* (E IV.i.2, 525). But according to the Direct Perception View, we have knowledge of our own existence by directly perceiving *the mind acting*. Roth acknowledges that on this interpretation the knowledge of our own existence "falls entirely outside the definition of knowledge" (Roth 1988, p. 166). For, on the one hand, if all knowledge is the perception

of a relation between ideas, then the direct perception of ourselves is not knowledge; on the other hand, if the direct perception of ourselves is knowledge, then not all knowledge is the perception of a relation between ideas. Gibson likewise concedes that, on this view, "the recognition of a knowledge of [our own] real existence stands in formal contradiction to [Locke's] general definition of knowledge" (Gibson 1917, p. 166).

Further, Locke repeatedly claims that we have intuitive knowledge that we exist (E IV.iii.21, 552-553; IV.ix.2, 618; IV.xi.1, 630), and intuitive knowledge is defined as the immediate perception of a relation *between ideas* (E IV.ii.1, 530-531; IV.iii.2, 539). Again, knowledge that we exist by direct perception of ourselves is inconsistent with knowledge by the perception of a relation between ideas. Gibson, though, argues that there are two senses of "intuition" in Locke's epistemology:

In [one] case the immediacy of the perception signifies that it is independent of the 'intervention of any other ideas'; in the special case [of intuition]...we have an apprehension of real existence which is immediate in the sense that the real existence is itself directly known, and does not stand in need of any idea, as a *tertium quid* [third thing] to connect it with the knowing mind. (Gibson 1917, pp. 170-171)

So not only is the Direct Perception View inconsistent with his definition of knowledge, it also requires positing a special meaning of "intuition" which Locke never clearly articulates.

Contra Gibson, Locke seems to take our knowledge of existence to fit within his standard account of intuitive knowledge. For there are three kinds of existential knowledge which correspond to the three degrees of knowledge: we have intuitive knowledge of our our existence, demonstrative knowledge of God's existence, and sensitive knowledge of the existence of material objects (E IV.iii.21, 552-553; IV.ix.2, 618; IV.xi.1, 630). This suggests that Locke takes intuitive knowledge of our own existence to correspond to his account of intuitive knowledge as the first degree of knowledge. Indeed, he says that intuitive knowledge of our own existence "come[s] not short of the highest degree of *Certainty*" (E IV.ix.619), which seems to place knowledge of our existence that knowledge of our existence is intuitive knowledge provides further evidence that he takes knowledge of our existence to satisfy the definition of knowledge as the perception of a relation between ideas.

So there are compelling reasons to reject the Direct Perception View. The first is that Locke holds a representationalist theory of perception, including a representationalist account of reflection (i.e. the perception of the acts of the mind). Positing that we also directly perceive ourselves would be redundant and conflict with his general representationalist view. It therefore seems more likely that his representationalist theory of reflection is his one and only account of the perception of the mind's actions. A second objection is that the Direct Perception View is inconsistent with Locke's definition of knowledge and his account of intuitive knowledge. Consistency requires that intuitive knowledge of our own existence include the perception of a relation between ideas. That gives us reason to doubt that he holds the Direct Perception View. A third reason to reject the Direct Perception View is strong textual support for the Representationalist View. I will turn to this text in the next section. However, there remains the one passage where Locke seems to say that we can directly perceive the mind acting. He says that everything the mind contemplates *"besides it self"* are ideas, which suggests that we can directly perceive the mind (E IV.xxi.4, 720-721, my emphasis). Now, there are two possibilities. One option is to interpret this passage in a way that does not commit Locke to the view that we directly perceive the mind, but directly perceive only ideas of the mind. It is unclear to me whether there is a plausible interpretation of this kind. The other option is to interpret this passage as Locke saying that the mind directly perceives the mind. But even granting this latter interpretation does not necessarily support the Direct Perception View.

When two claims are inconsistent, pointing out the inconsistency does not tell us which one we should give up. Gibson acknowledges that the direct perception of the mind would be an exception to Locke's general theory of perception and inconsistent with his definition of knowledge. Yet he takes this passage to be evidence that Locke holds the Direct Perception View anyway (Gibson 1917, p. 171). But the argument can go in the other direction: since Locke's other commitments and other statements support the Representationalist View, we should not take this one statement as decisive evidence that he holds the Direct Perception View. Perhaps the best interpretation is to recognize that Locke was conflicted about whether we can directly perceive the mind acting or we directly perceive only ideas of the mind acting.

If Locke is conflicted then the issue now becomes what Locke does or should take to be his considered view. Suppose we presented the inconsistency to Locke, and he were forced to choose between asserting that we can directly perceive the mind acting or affirming that we can directly perceive only our ideas of the mind acting. Which would he choose? I take it that he would commit to the claim that best cohered with his overall epistemology, and reject the claim that would require the most changes (or at least the most important changes). The view that best coheres with his overall epistemology is clearly that we directly perceive only ideas of the mind acting. This claim fits into Locke's general representationalist theory of perception and reflection, whereas the claim that we can directly perceive the mind would be a notable exception to Locke's representationalism. The Direct Perception View is also inconsistent with Locke's definition of knowledge and account of intuitive knowledge. Claiming that we can know that we exist by directly perceiving the mind would therefore require significant changes to Locke's basic conception of knowledge. The claim that we directly perceive only the idea of the mind acting, though, is consistent with the claim that we know we exist by perceiving a relation between ideas. So, when pressed, it seems likely that Locke would reject the Direct Perception View.

§3 The Representationalist View

In this section I argue that Locke holds the Representationalist View. I show how Locke describes knowledge of our existence in terms of perceiving an immediate, necessary connection between two ideas. On such a view we directly perceive only our ideas, yet it satisfies Locke's definition for knowledge. Thus the Representationalist View is supported by Locke's description of knowledge of our existence. For Locke knowledge is the perception of a necessary relation between two ideas, and in intuitive knowledge the perception of this relation is immediate (i.e. not mediated by another idea). As I interpret Locke, the two ideas are (i) an idea of the mind acting, and (ii) the idea of our own existence. Because the relation between these ideas is immediate and necessary, whenever we perceive these two ideas together we also perceive the necessary connection between them (cf. E IV.ii.1, 531). So, for example, if we perceive the idea of our existence. Locke can claim that the perception of the mind doubting can give us knowledge that we exist, for we perceive that it is necessary that we exist while we are doubting. The perception of the necessary connection between these ideas also satisfies Locke's definition of knowledge.

The above interpretation illuminates the brief description in the *Essay* that Locke gives to knowledge of our own existence. Locke says, for example, "If I doubt all other Things, that very doubt makes me perceive my own *Existence*", and "if I know I *doubt*, I have as certain a Perception of the Existence of the thing doubting, as of that Thought, which I call *doubt*" (E IV.ix.3, 618). Here Locke describes the perception that we doubt as being necessarily connected to the perception of our own existence. Given his representationalist theory of reflection, he must mean that we perceive the *idea* of ourselves doubting and the *idea* of our own existence. Locke rightly takes there to be a necessary connection between our doubting and our existence: it is necessary that we exist while we are doubting. He makes the same point with respect to feeling pain (E IV.ix.3, 618), and then he generalizes this account to the perception of any mental action:

"In every Act of Sensation, Reasoning, or Thinking, we are conscious of our own Being" (E IV.ix.3, 619). The reason that Locke holds that the perception of a mental action gives us knowledge of our existence, then, is that whenever we perceive the idea of the mind acting we also perceive its necessary connection to the idea of our existence.

Elsewhere, Locke recapitulates his argument for our own existence, and his description of the argument in the *Essay* confirms that he takes knowledge of our existence to come from the perception of a relation between ideas. Stillingfleet objects that Locke cannot prove that "spiritual substance" exists (Stillingfleet, W4: 32). Locke replies:

I think it may be proved from my principles, and I think I have done it; and the proof in my book stands thus: First, we experiment in ourselves thinking. The *idea* of this action or mode of thinking is inconsistent with the *idea* of self-subsistence, and therefore has a necessary connexion with a support or subject of inhesion: the *idea* of that support is what we call substance; and so from thinking experimented in us, we have proof of a thinking substance in us... (Stillingfleet, W4: 32-33, my emphasis)

I suggest that an underlying assumption in this passage is that we perceive a necessary connection between the idea of ourselves thinking and the idea of our existence. This necessary connection also entails that the idea of ourselves thinking is inconsistent with the idea that thinking can existing on its own (i.e. without a subject doing the thinking). These are two descriptions of the perception of the same relation: perceiving that the idea of ourselves thinking is necessarily connected to the idea of our existence is one and the same as perceiving that the idea of ourselves thinking is inconsistent with the idea of our existence. So Locke here seems to be arguing that from the perception of a relation

between the idea of ourselves thinking and the idea of our existence we can conclude that it is necessary for us to exist while we are thinking.

The Stillingfleet passage also raises important issues concerning the relationship between knowledge of our existence and his account of personal identity. Is knowledge of our own existence knowledge that a *substance* exists, or is it knowledge that a *person* exists? Locke famously denies that a person is identical to a substance, so a proof for the existence of one may not be a proof for the existence of the other. However, the two concepts are closely related. Locke defines a person as "a thinking intelligent Being, that has reason and reflection, and can consider it self as it self, *the same thinking thing* in different times and places" (E II.xxvii.9, 335, my emphasis). As I interpret Locke, he holds that a person is *at any one time* a substance that can consider itself as itself. What he denies, though, is that a person must be the same substance over time. He imagines cases where the ability of a person to consider itself as itself changes from one substance to another, in which case Locke holds that it is the same person even though the person is different substances at different times (e.g. E II.xxvii.15, 340). The upshot of this interpretation for purposes of the present discussion is that if we prove that we exist as persons (i.e. thinking things that can consider themselves as themselves), then we know that we also exist as substances (i.e. the thing doing the thinking). It is then a separate question as to whether we know that we are the same person over time, or whether we are the same substance over time.

The primary interest of the Stillingfleet passage, though, is that it provides strong textual evidence for the Representationalist View. For, according to that passage, we
know that we exist by perceiving a necessary relation between ideas. This view is consistent with Locke's representationalist theory of reflection, since we directly perceive only the ideas of the mind acting. It is also consistent with Locke's definition of knowledge, since we have knowledge of our existence by perceiving a necessary relation between ideas. The Representationalist View, then, is supported by direct textual evidence (Stillingfleet, W4: 32-33), fits well with the description Locke gives of knowledge of our existence in the *Essay* (E IV.ix.3, 618-619), and is consistent with Locke's other commitments. So there are good reasons for attributing to Locke the Representationalist View concerning knowledge of our own existence.

However, as Gibson points out, Locke does not think that we can have knowledge of existence merely by perceiving ideas (Gibson 1917, p. 168). For Locke himself acknowledges that

the having the *Idea* of any thing in our Mind, no more proves the Existence of that Thing, than the picture of a Man evidences his being in the World, or the Visions of a Dream make thereby a true History. (E IV.xi.1, 630)

Even if we have an idea representing an object, that idea does not guarantee that the object actually exists.

Many have objected that because Locke holds a representationalist theory of sense perception we cannot on his view know that external material objects exist. As Berkeley famously put the objection:

But, though it were possible that solid, figured, movable substances may exist without the mind, corresponding to the ideas we have of bodies, yet how is it possible for us to know this? Either we must know it by sense or by reason. As for our senses, by them we have the knowledge only of our sensations, ideas, or those things that are immediately perceived by sense, call them what you will:

but they do not inform us that things exist without the mind, or unperceived, like to those which are perceived. This the materialists themselves acknowledge. It remains therefore that if we have any knowledge at all of external things, it must be by reason, inferring their existence from what is immediately perceived by sense. But what reason can induce us to believe the existence of bodies without the mind, from what we perceive, since the very patrons of matter themselves do not pretend there is any necessary connexion betwixt them and our ideas? I say it is granted on all hands (and what happens in dreams, frenzies, and the like, puts it beyond dispute) that it is possible we might be affected with all the ideas we have now, though there were no bodies existing without resembling them. (Berkeley, *Principles* Part I, §18)

An idea of a physical object does not have a "necessary connexion" to an actual physical object. So, goes the objection, if in sense perception all we perceive is an idea, that idea cannot guarantee that a physical object actually exists (cf. Woozley 1964, p. 25-29).²

A similar objection can be made against Locke's account of knowledge of our own existence. Woozley argues that, just as ideas of sensation cannot guarantee the actual existence of physical objects, the same argument "would similarly apply to claims of knowledge of mental operations" (Woozley 1964, p. 29). On Locke's representationalist theory of reflection all we ever perceive is our *idea* of the mind acting. Just as it is possible to have an idea of a physical object without there existing an actual physical object corresponding to that idea, it seems possible that we could perceive the idea of the mind acting without the mind actually acting. We might, for example, perceive the idea of having a sensation when we are not in fact having a sensation, or we might perceive the idea of remembering when we are not in fact remembering. This seems to undermine the evidence that our ideas of the mind acting correspond to actual acts of the mind, and

² For an answer to this objection, see chapter 5 of the present dissertation.

hence undermines the evidence that the mind actually exist. So, goes the argument, the Representationalist View cannot secure knowledge of our actual existence.

But Locke holds that we perceive the mind acting if and only if the mind is actually acting. Call this the Mental Transparency Thesis. On this view, whenever the mind acts, we perceive an idea of the mind doing so:

It being impossible for any one to perceive, without perceiving, that he does perceive. When we see, hear, smell, taste, feel, meditate, or will any thing, we know that we do so. (E II.xxvii.9, 335; cf. II.i.19, 115)

When we have the sensation of seeing, we perceive that we do so. The same is true for the other operations of the mind:

he that contemplates the Operations of his Mind, cannot but have plain and clear *Ideas* of them (E II.i.7, 107)

If we are paying attention to the operations of the mind, we will clearly perceive the idea of the mind performing that operation.

Furthermore, whenever the mind does *not* perform some action, we do *not* perceive the mind performing that action. For example, Locke's view is that we will not perceive the mind engaging in sense perception when it is not engaging in sense perception. For, on the one hand, if the mind is not performing any action at all, then the mind will not be perceiving any thing at all (for perceiving something would be an action, and if the mind performed this action then it would perceive itself doing so). On the other hand, if the mind is performing that other action. When the mind is remembering, for example, it will perceive itself remembering and therefore it will not perceive itself

engaging in sense perception, and so on for all the other acts of the mind. Whatever act the mind is currently performing, we perceive the mind performing that act and no other. Hence, on Locke's view, we perceive the mind performing all and only those acts which the mind is actually performing.

Woozley worries that ideas of reflection may not correspond to actual actions of the mind. He argues that Locke would have recognized this fact, and thus there is reason for doubting that Locke holds the Representationalist View (Woozley 1964, pp. 28-29). However, Locke's Mental Transparency Thesis guarantees that our ideas of reflection correspond to actual actions of the mind. Ideas of reflection, on this view, turn out to be importantly different from mere ideas of objects. Although it is possible for us to have an idea of an object without there actually being an external object corresponding to that idea, it is *not* possible for us (when we are paying sufficient attention) to have an idea of reflection without there being an actual act of the mind corresponding to that idea. Therefore, when we perceive the idea of ourselves thinking, it must actually be the case that we are thinking. And if we are thinking, then we must exist.

Woozley objects that Locke cannot justifiably take ideas of reflection to necessarily correspond to acts of the mind while conceding that ideas of physical objects do not necessarily correspond to external objects. According to Woozley, Locke recognizes that on a representational theory of sense perception we cannot ever be certain that there are external objects corresponding to our sensations (Woozley 1964, pp. 26-27). He then argues: It does not seem to have occurred to [Locke] that, if this is an insurmountable obstacle to knowledge of material objects as they really are, it would similarly apply to claims to knowledge of mental operations; he just assumed that in this case the observer is privileged, because it is himself that he is observing. (Woozley 1964, p. 29)

The Mental Transparency Thesis, goes the objection, arbitrarily privileges reflection over sensation. If a representation cannot guarantee that material objects correspond to our ideas of sensible objects, then for the same reasons a representation should not be able to guarantee that mental acts correspond to our ideas of reflection.

Contra Woozley, though, Locke does think that ideas of sensation have a necessary connection to an external object. He argues that "simple *Ideas*, which since the Mind...can by no means make [by] it self," and so are received by sensation, "must necessarily be the product of Things" external to the mind (IV.iv.4, 563-564). There is a necessary causal connection between the sensation of simple ideas and the external objects that cause those sensations. Elsewhere, Locke argues that "I cannot avoid having" ideas of sensation, "and therefore it must needs be some exterior cause...that produces those *Ideas* in my mind" (E IV.xi.5, 632). Here again Locke affirms that there is a necessary connection between sensation and the actual existence of an external object causing that sensation. So Locke is not arbitrarily privileging reflection over sense perception; instead, he thinks that *both* are necessarily connected to the object they represent. (For a more detailed treatment of Locke's views on sense perception, see chapter 5 of this dissertation.)

The response to Woozley's objection reveals an important feature of Locke's account of knowledge of our own existence. Locke takes there to be a necessary

connection between the idea of thinking and an actual act of thinking. For to have an idea of thinking is itself an act of thinking. So whenever we have an idea of ourselves thinking it necessarily follows that we exist. It is because of this necessary connection that the perception of a relation between ideas necessarily entails our actual existence.

§4 The Dual Relation View

In the previous sections I argued that Locke holds the Representationalist View, which is the view that we come to know that we exist by perceiving the idea of the mind acting (rather than directly perceiving the mind). In this section I show how the Representationalist View is supported by the Dual Relation View, the view that real knowledge of existence includes *both* the perception of a relation between ideas *and* a relation between an idea and reality.

As mentioned above, Locke recognizes that merely having the idea of an object does not have a necessary connection to that object's actual existence: "For the having the *Idea* of any thing in the Mind, no more proves the Existence of that Thing, than the picture of a Man evidences his being in the World" (E IV.x.1, 630). Gibson comments:

To the truth of this general contention a single exception had been alleged in the ontological argument for the existence of God, which had recently been revived and given an extended currency by Descartes. (Gibson 1917, p. 168)

Locke portrays Descartes as arguing that "the idea of God includes necessary existence, and so God has a necessary existence" (*Life and Letters*, p. 315). But merely having the idea of God does not prove that God actually exists, even if our idea of God includes the idea of existence:

Though the complex idea for which the sound God stands (whether containing in it the necessary existence or no, for the case is the same) will not prove the real existence of a being answering that idea, any more than *any other idea* in any one's mind will prove the existence of *any real being* answering that idea; (Stillingfleet, W4: 55, my emphasis)

In a similar passage Locke argues that "*any idea*, simple or complex, barely by being in our minds, is no evidence of the real existence of anything out of our minds, answering that idea." He continues, "Real existence can be proved *only by real existence*; and, therefore, the real existence of a God can only be proved by the real existence of other things" (*Life and Letters*, p. 316). So Locke claims that having the idea of an object does not prove the actual existence of that object, even if the idea of that object includes the idea of existence.

Gibson takes this critique of the ontological argument to support the Direct Perception View. He argues that, given Locke's criticisms explained above, "the possibility of such a proof [of the existence of an object] must rest upon a *direct apprehension of real existence*, which itself does not stand in mediation. Such an immediate certainty of existence Locke...finds, and...finds only, in the existence of the conscious subject" (Gibson 1917, p. 169, my emphasis). Locke then uses our actual existence to prove the actual existence of God.

However, there are important exceptions to Locke's general principle that an idea in the mind does not prove the actual existence of a thing. In the previous section I argued that, according to Locke, there is a connection between our idea of ourselves thinking and our actually thinking. For to have an idea is itself an act of thinking. So this is a case where the idea can necessarily entail the actual existence of the thing corresponding to the idea. This interpretation is confirmed when Locke says:

real Existence...has no connexion with *any other* of our Ideas, but that of our selves, and of a First Being, we have in that, concerning the real existence of *all other Beings*, not so much demonstrative, much less a self-evident Knowledge (E IV.vii.7, 594, my emphasis)

Locke qualifies the claim that the idea of an object does not have a connection to the actual existence of the object; here he claims that this principle holds *except for* our idea of ourselves and our idea of God. So Locke takes there to be a necessary connection between the idea of ourselves thinking and our actual existence.

Locke's allowing that some ideas have a necessary connection to the actual existence of an object may appear to conflict with his critique of the ontological argument. For there he claims that "*any idea*...is *no evidence* of the real existence of [an object] outside our minds, answering that idea", and that "the real existence of a God can only be proved by the real existence of other things" (*Life and Letters*, p. 316, my emphasis). The latter comment can be explained by Locke's preference for the cosmological argument for God, which argues from the actual existence of some object to the actual existence of God. The cosmological argument, though, does not commit Locke to the Direct Perception View. For if the perception of ideas can give us knowledge of our actual existence, Locke can then use our actual existence as the "real existence" needed to prove that God actually exists. So if the Representationalist View can give us knowledge of our own existence, then it can also give us knowledge of God's existence.

Locke's other point in his critique of the ontological argument is that the *idea of an existing object*, by itself, cannot prove the existence of that object. The ontological argument shows us that the idea of God includes the idea of existence, and so we have an idea of God's existence, but according to Locke we have not yet proven that God actually exists. However, immediately following his critique of the ontological argument, Locke adds that "it does not follow, but that there may be *other ideas* by which the being of a God may be proved"

(Stillingfleet, W4: 55, my emphasis). So Locke allows that we can prove God's existence from the perception of a relation between our ideas.

We can turn to Locke's proof for God's existence to see what else he thinks is needed to prove God's actual existence. Locke starts the proof with an idea of ourselves thinking,³ and then shows a chain of connections that eventually terminate in the idea of God's actual existence (E IV.x.2-6, 619-621; Stillingfleet W4: 63). So the mediate perception of the relation between ideas is between (i) the idea of ourselves thinking, and (ii) God's actual existence. Importantly, Locke thinks that God's actual existence follows from the perception of the relation between these ideas, but not from the perception of the relation between the idea of God and the idea of existence alone. There must, therefore, be something about perceiving the idea of ourselves thinking that is significantly different from perceiving only the connection between the idea of God and the idea of existence. I

³ We know that we exist by perceiving the idea of ourselves thinking, and then Locke uses knowledge of our existence to argue that God must be the cause of our existence. So the demonstration that God exists begins with the idea of our own existence. Further, it is clear that the idea of ourselves from which Locke begins the proof is of a perceptive and knowing being, since he argues that we could not "find in [ourselves] *Perception*, and *Knowledge*" unless the cause of our existence also has those powers (E IV.x.5, 620); for this reason he concludes that God is a "*most knowing Being*" (E IV.x.6, 621).

suggest that the reason the idea of ourselves thinking is needed is that having this idea is necessarily connected to our actual existence, whereas the idea of God existing is not necessarily connected to God's actual existence.

In the previous section I argued that, according to the Mental Transparency Thesis, we have an idea of the mind acting if and only if the mind is actually doing that action. So there is a necessary connection between the idea of ourselves thinking and our actually thinking. This interpretation is confirmed when Locke says that "real Existence...has no connexion with *any other* of our Ideas," but there is such a connection between our actual existence and the idea of ourselves (E IV.vii.7, 594). Similarly, when explaining his argument for God's existence, Locke says:

I perceive in myself thought and perception; the *idea* of actual perception has an evident connexion with *an actual being* that doth perceive and think: the idea of an actual thinking being hath a perceivable connexion with the eternal existence of some knowing being (Stillingfleet, W4: 63)

Locke indicates that we perceive a necessary connection between the *idea* of ourselves thinking and the *idea* of God's existence. Yet he also asserts that there is a necessary connection between the *idea* of ourselves thinking and *our actual existence*. Given this necessary relation, the perception of the idea of ourselves thinking necessarily entails that we actually exist. Further, according to the cosmological argument, it necessarily follows from our actual existence that God actually exists. So the necessary connection between the idea of ourselves thinking and our actual existence of the idea of ourselves the necessary connection between the idea of ourselves thinking and our actual existence explains how the perception of ideas can guarantee our actual existence and God's actual existence.

The interpretation that I have presented in this chapter fits well with the Dual Relation View presented in the previous chapter. Above I argued that in knowledge of our own existence we perceive a necessary connection between an idea of the mind acting and the idea of our own existence. This satisfies the first requirement for real knowledge, namely that we perceive a necessary relation between ideas. I have also argued that there is a necessary connection between the idea of the mind acting and our actual existence. For, according to the Mental Transparency Thesis, we have an idea of the mind acting if and only if the mind is actually doing that action. Moreover, if the mind is actually acting then we must actually exist. So the necessary connection between the idea of the mind acting and our actual existence satisfies the second requirement for the Dual Relation View, namely that there be a necessary connection between an idea and the actual existence of an object.

The Dual Relation View supports the Representationalist View in an important way. For the Dual Relation View makes it possible to have knowledge of our own existence even though we never directly perceive ourselves. We perceive our idea of the mind acting, and we perceive a necessary connection between this idea and the idea of ourselves. The perception of this relation between ideas thus satisfies Locke's definition for knowledge. Yet we want knowledge of our existence to bear some relation to the actual world, and the Dual Relation View includes this relation also. The second condition for real knowledge, namely that there be a relation between an idea and an external object, is satisfied since Locke thinks there is a necessary connection between our idea of the mind acting and the actual acting of the mind. So even though we do not directly perceive our actual existence, the perception of our idea of the mind thinking gives us real knowledge that we exist, and this knowledge necessarily entails that we actually exist.

From this discussion we can see that Locke's account of real knowledge bears an important relation to the actual world. We cannot have real knowledge without the conformity between our ideas and the real world. Moreover, in some cases Locke thinks that the perception of a relation between our ideas entails facts about the actual world, facts such as our own existence.

§5 Intuitive Knowledge of Our Existence

While the Representationalist View is consistent with Locke's definition of knowledge, the Representationalist View still might pose a problem for Locke's claim that we have *intuitive* knowledge of our own existence. For intuitive knowledge is supposed to be a non-inferential, immediate perceiving of a relation between two ideas. Yet the Representationalist View seems to require that we infer our existence from an idea, and such an inference cannot count as intuitive knowledge.

"Intuitive Knowledge, is the perception of the certain Agreement or Disagreement of two Ideas *immediately compared together*" (E IV.xvii.17, 685, my emphasis). For example, when presented with the idea of white and the idea of black, we perceive that white is not black. We do not need some third idea in order for us to perceive the relation between the idea of white and the idea of black; in this sense the relation is perceived immediately. By contrast, demonstrative knowledge is the perception of a relation between two ideas "by the Intervention of other Ideas (one or more...)" (E IV.ii.2, 532, my emphasis). We might, for example, perceive an idea of x and an idea of z. Even if x entails y, and y entails z, we do not perceive the relation between the idea of x and the idea of z without also perceiving the idea of y. Thus the perception of the relation between the idea of x and the idea of z is mediated by the perception of another idea (namely, the idea of y). It is in this sense that a relation between two ideas is perceived mediately. Note that while the relation between x and z needs to be demonstratively inferred, in intuitive knowledge the relation is immediately perceived and so is non-inferential.

Locke repeatedly claims that "we have an intuitive Knowledge of our own *Existence*" (E IV.iii.21, 552-553 and IV.ix.3, 618). Since intuitive knowledge is non-inferential, in order for the knowledge of our own existence to be intuitive this knowledge must be non-inferential. This presents a problem for the Representationalist View.

George Pappas argues that "ideas do not make up the evidence on the basis of which we have self-knowledge. If they did, self knowledge would not be intuitive" (Pappas 1997, p. 293). The objection seems to be that since, on the Representationalist View, we do not directly perceive our existence, if we are to have knowledge of our existence then it must be inferred from our ideas. But intuitive knowledge is non-inferential. Hence, on the Representationalist View knowledge of our existence cannot be intuitive. For example, I have argued that on Locke's view there is a necessary connection between our idea of thinking and our actual existence. I have said that "it necessarily follows from" our having an idea that we actually exist. This interpretation suggests that we infer our actual existence from an idea. Thus my interpretation seems inconsistent with Locke's claim that we have intuitive knowledge of our existence.

However, although the Dual Relation View includes a relation between our idea of thinking and our actual existence, this is not an *inferential* relation. The claim that there is a necessary connection between our idea of thinking and our actual existence is a metaphysical claim. Now, given this metaphysical connection, we can of course make an inference from our ideas to our existence. But knowledge of our existence, on Locke's view, does not consist in making this inference. Rather, what makes it knowledge is that we perceive a relation between ideas. What makes it real knowledge is that there is also a relation between our idea of thinking and our actual existence.

Pappas argues that knowledge of our existence cannot be "evidentially based" on ideas, because we would be inferring our actual existence from an idea (Pappas 1997, p. 294). But Locke denies that *any* knowledge consists in inferring something about reality from ideas. Instead, knowledge is defined as the perception of a relation between ideas. If we accept this definition, then we can "know" that we exist (i.e. perceive a relation between ideas) without *inferring* our actual existence. Pappas might object that merely perceiving a relation between ideas cannot give us knowledge that we actually exist because this "knowing" that we exist bears no relation to our actual existence. But this objection has already been answered. Real knowledge of our existence requires both that we perceive a relation between our idea of thinking and the idea of our existence and that

there be a relation between our idea of thinking and our actual existence. Thus we cannot have real knowledge that we exist unless we actually exist. Nowhere in this account of knowledge is there a requirement that we *infer* our existence from our ideas. Thus Pappas simply assumes that on the Representationalist View we must infer our own existence, but this is precisely what Locke's account denies.

If the Representationalist View required that we infer our existence from our ideas, then this could be evidence against the Representationalist View. For Locke claims that we can have intuitive (so non-inferential) knowledge of our existence, and according to Pappas the Representationalist View does not allow us to have non-inferential knowledge of our existence. But Locke's Representationalist View does *not* require that we infer our existence from our ideas. Instead, if we satisfy the two conditions specified in the Dual Relation View then we have real knowledge that we exist. So Locke has a coherent theory on which he can both hold the Representationalist View and also insist that we can know that we have non-inferential knowledge of our existence.

Locke says that "we have an intuitive Knowledge of our own Existence, and an internal infallible Perception that we are" (E IV.ix.3, 618). I have argued that Locke holds the Representationalist View where we directly perceive only the *idea* of the mind acting (rather than directly perceiving the action of the mind). I have also argued that Locke claims that we know that we exist even though we directly perceive only our idea of the mind acting. For Locke defines intuitive knowledge as the immediate perception of a relation between ideas. On the Representationalist View, we perceive our idea of the mind acting, which allows us to perceive a relation between that idea and the idea of our existence. The perception of this relation between our ideas makes it knowledge. Woozley objects that this conception of knowledge bears no relation to our actual existence, and Pappas objects that we would have to infer our actual existence from an idea and so such knowledge could not be intuitive. But Locke holds that there is a second condition for real knowledge, namely that there be a relation between an idea and reality. He also thinks that there is a necessary connection between our idea of the mind acting and our actual existence, for to have an idea is itself an act of thinking, which entails our actual existence. Satisfying this second condition makes our intuitive knowledge of our existence a kind of real knowledge, which entails that we actually exist.

So, I conclude, Locke can hold the Representationalist View and yet consistently maintain that we have real knowledge that we actually exist.

CHAPTER 4:

Sensitive Knowledge as Knowledge

§1 Two Views on Sensitive Knowledge

Locke thinks that sense perception can give us justified beliefs about the existence of material objects. Since these justified beliefs come from sense perception, Locke calls such justified beliefs "sensitive knowledge". Now, given its name, it might seem obvious that Locke takes sensitive knowledge to be a kind of knowledge. However, Samuel Rickless has made a surprisingly strong case that sensitive knowledge "is *not*, strictly speaking, a kind of knowledge" (Rickless 2008, p. 93, my emphasis).¹ He gives some compelling reasons for thinking that sensitive knowledge is instead an "assurance", a kind of probable judgment that falls short of certain knowledge. Rickless's interpretation is surprising, provocative, well defended, and has garnered the interest of other Locke scholars.² But, I will argue, it is wrong.

When Locke calls sensitive knowledge "sensitive knowledge", it is because he thinks it is a kind of knowledge. I will argue that Locke takes sensitive knowledge to be certain, which means that sensitive knowledge is a genuine kind of knowledge. Further, Locke defines knowledge as the perception of a relation between ideas, and I will argue

¹ Others have made similar claims in passing, but Rickless is the first to give a strong defense of this interpretation. For example, in his influential book, *Locke's Theory of Knowledge and its Historical Relations*, James Gibson writes: "Locke does not claim that the conviction of external existence which is thus obtained satisfies, to the full, the theoretical requirements of knowledge" (Gibson 1960, pp. 174). More recently, Silvio Seno Chibeni claims that "Locke acknowledges that we do not strictly *know* the existence of bodies" (Chibeni 2005, p. 23).

² Owen 2008; Allen 2013; Nagel, forthcoming.

that sensitive knowledge is the perception of a relation between ideas. Since sensitive knowledge is certain, it meets the definition of knowledge, and Locke calls it knowledge, I conclude that sensitive knowledge is genuine knowledge. (What the thesis lacks for in originality it makes up for in truth.)

Rickless helpfully labels the two views at issue the Knowledge View and the Assurance View (Rickless, forthcoming). The Knowledge View maintains that sensitive knowledge is genuine knowledge. The Assurance View maintains that sensitive knowledge is highly probable judgment which Locke calls an "*Assurance*" (E IV.xvi.6, 662). In this essay I will first explain Rickless's arguments for the Assurance View, and then I will argue that none of these arguments are ultimately persuasive. Finally, I will make a positive case for the Knowledge View.

§2 The Case For the Assurance View

The best textual support that Rickless provides for the Assurance View comes from the following passage:

The notice we have by our Senses, of the existing of Things without us, *though it be not altogether so certain*, as our intuitive Knowledge, or the Deductions of our Reason employ'd about the clear abstract *Ideas* of our own Minds; yet *it is an assurance* that *deserves the name* of Knowledge. (E IV.xi.3, 631, my emphasis)

Rickless develops three lines of argument from this passage. First, sensitive knowledge is "not altogether so certain" as intuitive and demonstrative knowledge. And if sensitive knowledge is not certain, then it is not knowledge. Second, Locke describes sensitive knowledge as an "assurance" and, Rickless argues, "Locke uses the term 'assurance' in a

very specific, technical sense" to mean a highly probable judgment (Rickless 2008, p. 92). Highly probable judgments fall short of certainty, and so Locke's calling sensitive knowledge an assurance indicates that it is meant to be only a highly probable judgment rather than certain knowledge. Third, Locke says sensitive knowledge merely "*deserves the name* knowledge", which may imply that sensitive knowledge is called "sensitive knowledge" even though it is *not actually* knowledge. I will take up each of these arguments.

Rickless argues that sensitive knowledge is not certain, and so cannot be knowledge (Rickless, forthcoming). Locke says that sensitive knowledge is "not altogether so certain" as intuitive or demonstrative knowledge (E IV.xi.3, 631), nor does sensitive knowledge reach "either of the foregoing degrees of certainty" (E IV.ii.14, 537). So sensitive knowledge is less certain than intuitive and demonstrative knowledge. Further, Locke defends sensitive knowledge on practical grounds that fall short of theoretical certainty. In reply to the persistent skeptic who insists that all perception might be a dream, Locke concedes that sensitive knowledge does not seem to be completely certain. Instead, Locke defends sensitive knowledge by appealing to practical considerations: we have as much certainty "as our frame can attain to" and as much as "*our Condition needs*" for practical purposes (E IV.xi.8, 634). He makes a similar defense of sensitive knowledge elsewhere, arguing that "no Man requires greater certainty *to govern his Actions by*" than sensitive knowledge (E IV.xi.8, 634-635, my emphasis). All this

suggests that Locke takes sensitive knowledge to be practically certain (i.e. certain enough for our practical purposes) but not theoretically certain.

If sensitive knowledge is not completely certain (but is instead merely certain enough for our practical purposes), then it is not knowledge. Locke says that "to know and be certain, is the same thing" (Stillingfleet, W4: 145), and that "all along in my Essay I use certainty for knowledge" (Stillingfleet, W4: 273). So if Rickless is right that sensitive knowledge is a probabilistic judgment that falls short of certainty, then sensitive knowledge cannot be genuine knowledge. For "the highest Probability, amounts not to Certainty; without which there can be no true Knowledge" (E IV.iii.14, 546).

The suggestion that sensitive knowledge is not completely certain, but it is certain enough for our practical purposes, leads nicely into Rickless's second argument for the Assurance View. Rickless takes "assurance" to be a technical term referring to highly probable judgment that is indistinguishable from knowledge in its practical effects (Rickless 2008, pp. 92-93). Locke says,

These Probabilities rise *so near to certainty*, that they govern our Thoughts as absolutely, and influence all our Actions as fully, as the most evident demonstration: and in what concerns us we make little or no difference between them and certain Knowledge: our Belief, thus grounded, rises to *Assurance*. (E IV.xvi.6, 662, my emphasis)

Some highly probable beliefs are "*near to certainty*", but they fall short of certain knowledge. Yet these beliefs are so likely to be true that, from a practical point of view, it makes no difference whether they are certain knowledge or not. For example, Rickless would argue, even though my highly justified belief in external objects is not certain knowledge, it is so likely to be true that I am going to act *as if* I were certain that external

objects exist. Whether it is certain or merely highly probable that external objects makes no difference in how I act. Rickless takes "assurance" to be a technical term referring to these highly probable beliefs where the practical effects are indistinguishable from knowledge.

Rickless's argument that sensitive knowledge is an assurance (in the technical sense) is perhaps the strongest argument in favor of the Assurance View. For while conceding that sensitive knowledge is "not altogether so certain" as intuitive and demonstrative knowledge, Locke says that sensitive knowledge is "an *assurance* that deserves the name Knowledge" (E IV.xi.3, 631, my emphasis). He goes on to say in the same section that "I think GOD has given me *assurance* enough of the Existence of Things without me", and that sensitive knowledge is "the *greatest assurance* we are capable of concerning the Existence of material Beings" (E IV.xi.3, 631, my emphasis). Elsewhere he repeatedly describes sensitive knowledge as an assurance.³ Since sensitive knowledge is less certain that intuitive and demonstrative knowledge, and Locke describes it as an assurance, which is a highly probable judgment (but not certain), this suggests that Locke takes sensitive knowledge to be highly probable judgment and not certain knowledge.

Rickless's third line of argument is that Locke applies the honorific title "knowledge" to sensitive knowledge merely because its practical effects are indistinguishable from genuine knowledge. Sensitive knowledge is merely an assurance, yet Locke still has a reason to call it "knowledge" because sensitive knowledge is

³ cf. E IV.ii.14, 536-537; IV.xi.2, 631; IV.xi.8, 634-635; IV.xi.11, 636.

practically indistinguishable from certain knowledge (Rickless 2008, pp. 93, 98). Further, at several points Locke stops short of saying that sensitive knowledge *is knowledge*. Instead, he merely says that it is "an assurance that *deserves the name* Knowledge" (E IV.xi.3, 631, my emphasis). Similarly, he says that sensitive knowledge "*passes under the name* of Knowledge" (E IV.ii.14, 537, my emphasis). Rickless argues that "to pass under" most likely means "to be taken for...with the implication of being something else" (Rickless 2008, p. 95; cf. *Oxford English Dictionary*, "to pass for", definition (5a)). So, saying that sensitive knowledge "deserves" and "passes under" the name of knowledge is *called* knowledge even though it is *not actually* knowledge.

Rickless concludes that sensitive knowledge is not certain knowledge. Sensitive knowledge is less certain than genuine knowledge; Locke repeatedly describes it as an assurance, which is merely a highly probable belief; and Locke seems to imply that sensitive knowledge deserves to be *called* knowledge even though it is *not actually* knowledge. All this suggests that sensitive knowledge is an assurance, and not genuine knowledge.

§3 The Case Against the Assurance View

Although Rickless finds some initially compelling text to support the Assurance View, in this section I will argue that all three textual arguments are ultimately unconvincing. Rickless argues that the phrase "x passes under F" implies that x is not F, and since Locke says sensitive knowledge "passes under the name of knowledge" we

should think that sensitive knowledge is not actually knowledge (Rickless 2008, p. 95; Rickless, forthcoming). However, Locke sometimes uses the phrase "*x* passes for F" when *x* actually is F.⁴ For example, Locke explains, "if the Point of the Sword first enter the Body, it *passes for* a distinct Species [of action], where it has a distinct Name, as in England, in whose Language it is called Stabbing" (E III.v.11, 435, my emphasis). Pushing a sword into another's body "passes for" stabbing, and it *really is* stabbing. There are other examples.⁵ Since Locke sometimes uses the phrase "*x* passes for F" when *x* actually is F, it is reasonable to think that Locke says sensitive knowledge "passes under the name of knowledge" *because it really is knowledge*. Likewise, Locke might say that sensitive knowledge "deserves the name of knowledge" because it is knowledge (cf. Allen 2013, p. 251). So Locke's saying that sensitive knowledge "deserves" and "passes under" the name of knowledge does not provide much textual support for the Assurance View.

The strongest argument for the Assurance View, in my mind, is Rickless's argument that "assurance" is a technical term for highly probable judgment that is indistinguishable from certain knowledge in its practical effects. However, Locke's use of "assurance" is not as restrictive as Rickless originally had supposed. David Owen points

⁴ Rickless notes that "passes under" is a stylistic variant of the more common "passes for" (Rickless, forthcoming), so any argument about what "passes for" means will *ipso facto* apply to "passes under".

⁵ There are other examples. The passive power of iron to be drawn by loadstone passes for an inherent quality, and it really is an inherent quality (E II.xxiii.7, 299). Locke quotes a passage where Prince Maurice "passed for a very honest and pious man", and Locke affirms that the author thinks the Prince really is honest and pious (E II.xxvii.8, 334). Parrots who could talk and answer questions would "have passed for a race of rational animals", and Locke thinks they really would be rational animals; however, they would *not* pass for men (E II.xxvii.8, 335). Similarly, if Baalam's ass (i.e. a donkey in the Bible who miraculously talks to his master) talked its whole life, although it would be a rational animal, "it would hardly pass for a man, how much soever it were animal rationale" (E III.vi.29, 456). These last two examples show that the phrase "x pass for F" can sometimes *require x* to be an F.

out that assurance applies to both certain knowledge and to probable judgment (Owen 2008, part 3).⁶ Locke says, for example, that a *"full assurance...*always accompan[ies] that which I call intuitive [knowledge]" (E IV.ii.6, 533, my emphasis). Also, Locke thinks "every ones *certain Knowledge assures* him of, beyond the liberty of doubting, *viz.* that he is something that actually exists" (E IV.x.2, 620, my emphasis). These passages show that we can be certain and assured of the very same truths, or as Locke put it at one point, we can be *"certainly assured*" of "certain and undoubted Knowledge" (E IV.vi.10, 584, my emphasis). Pointing out that sensitive knowledge is described as an "assurance", then, does not undermine its claim to be certain knowledge.

In a more recent paper, Rickless concedes that there is a non-technical sense of assurance, but he insists that Locke is using "assurance" as a technical term when describing sensitive knowledge (Rickless, forthcoming). Assurance in the technical sense is a belief which, though not certain, is so likely to be true that we can act *as if* it were certain knowledge. Locke seems to be making this very claim in behalf of sensitive knowledge: he argues that sense perception is "assurance enough" for me to "produce in myself both Pleasure and Pain, which is one great Concernment of this present state" (E IV.xi.3, 631). Since sensitive knowledge is good enough for our practical purposes, Locke may be suggesting that sensitive knowledge is an assurance rather than knowledge.

It should be pointed out, though, that certain knowledge is also good enough for our practical purposes. The advantage of having an assurance is that we can act *as if* it

⁶ Owen cites E IV.i.9, 528, and E IV.ii.6, 533.

were certain knowledge. Yet acting *as if* a claim were certain knowledge is advantageous only because acting on certain knowledge is advantageous (otherwise it would not be advantageous for us to act *as if* a highly probable belief were certain knowledge). Locke identifies, for example, God's existence and morality (i.e. divine commands) as the "great Concernments" of this life (E I.i.5, 45), presumably because God is going to eternally reward us for following his commands or punish us for disobeying those commands (E II.xxviii.8, 352). For this reason acquiring certain knowledge of God's existence and of morality is one of the most practically useful things we can do. Since some knowledge is practically useful, yet still certain knowledge, Locke can appeal to the practical benefits of sensitive knowledge without undermining its status as knowledge. Moreover, certain knowledge that objects exist with particular properties seems to be just the kind of knowledge that would be useful for us to have.

Now, there still might be reason to think that Locke is using the technical sense of "assurance" when describing sensitive knowledge. For, Rickless argues, only the Assurance View can make sense of the claim that sensitive knowledge is less certain than intuitive and demonstrative knowledge (Rickless, forthcoming). On the Assurance View, intuitive and demonstrative knowledge are certain whereas sensitive knowledge is merely a highly probable judgment. So the Assurance View can easily explain why sensitive knowledge is less certain than intuitive and demonstrative knowledge are certain whereas sensitive knowledge.

On the Knowledge View, there are three degrees of certainty: intuitive knowledge is the most certain, demonstrative knowledge is less certain than intuitive knowledge but more certain than sensitive knowledge, and sensitive knowledge is the least certain kind of knowledge. Thus the Knowledge View can appeal to the relative uncertainty of demonstrative knowledge (with respect to intuitive knowledge) in order to explain the relative uncertainty of sensitive knowledge (with respect to both intuitive and demonstrative knowledge): just as demonstrative knowledge is less certain than intuitive knowledge and yet is still certain, sensitive knowledge can be less certain than demonstrative and yet still be certain. Rickless objects to this line of argument, though, because Locke does not ever explicitly say that demonstrative knowledge is 'less certain'' than intuitive knowledge. Locke says instead that demonstrative knowledge is less ''clear'', less ''bright'', and ''more imperfect'' (E IV.ii.1, 530; IV.ii.4, 532; IV.ii.6, 533; IV.ii.7, 534). Rickless argues:

What this means is that, for Locke, the degrees of knowledge are degrees of clarity or perfection, but *not degrees of certainty: intuitive and demonstrative knowledge are equally certain*, but not equally clear or perfect. (Rickless, forthcoming, my emphasis)

For Rickless, there is only one degree of certainty. "If this is so," he continues, "then one cannot appeal to whatever distinguishes the certainty of demonstrative knowledge from the certainty of intuitive knowledge to explain the lesser degree of certainty of sensitive knowledge" (Rickless, forthcoming).

But contrary to Rickless's claim that "intuitive and demonstrative knowledge are equally certain" (Rickless, forthcoming), demonstrative knowledge is less certain than intuitive knowledge. Locke says that intuitive knowledge is the "*most certain*" kind of knowledge (E IV.ii.1, 531, my emphasis), and that intuitive knowledge of our own existence "come[s] not short of the *highest degree* of Certainty" (E IV.ix.3, 619, my

emphasis). If intuitive knowledge is the "most certain" and the "highest degree of Certainty", then that means demonstrative knowledge must be less certain. After intuitive knowledge, Locke says "the *next degree* of Knowledge" is demonstrative knowledge (E IV.ii.1, 531, my emphasis). That demonstrative knowledge is the second degree of knowledge suggests that it is also the second degree of certainty. This is confirmed when Locke introduces sensitive knowledge: "These two, (viz.) Intuition and Demonstration, are the degrees of our Knowledge," and then he goes on to introduce sensitive knowledge saying that it does not reach "*either* of the fore-going *degrees of certainty*" (E IV.ii.14, 537). Intuitive and demonstrative knowledge are different "*degrees* of certainty" (in the plural). So on Locke's view, it is possible to be a lower degree of certainty (relative to another degree of knowledge) and yet still be certain.

The case for the Assurance View is based on three arguments which at first seem plausible, but on closer inspection each argument has significant problems. One argument is that sensitive knowledge merely "deserves" and "passes under" the name of knowledge. But Locke may be saying that sensitive knowledge "deserves" and "passes under" the name of knowledge because it is knowledge, which is consistent with his use of those phrases elsewhere. Another argument is that Locke uses the term "assurance" to describe sensitive knowledge, and "assurance" is sometimes used as a technical term to refer to highly probable judgment that falls short of certain knowledge. However, Locke elsewhere uses the term "assurance" to describe certain knowledge, and so Locke's use of that term does not undermine the status of sensitive knowledge as a kind of certain knowledge. Finally, Rickless argues that there is only one degree of certainty, and since sensitive knowledge is less certain that intuitive and demonstrative knowledge it follows that sensitive knowledge is not a kind of certain knowledge. In response, though, I have shown that for Locke there are degrees of certainty. Consequently, sensitive knowledge can be less certain than the other degrees of knowledge just as demonstrative knowledge is less certain than intuitive knowledge. The primary reasons for holding the Assurance View, therefore, are unpersuasive.

§4 The Case For the Knowledge View

The case for the Knowledge View is simple. Locke calls sensitive knowledge *because it is knowledge*. There are "*three degrees of Knowledge*, viz. *Intuitive*, *Demonstrative*, *and Sensitive*" (E IV.ii.14, 538). Although sensitive knowledge is the lowest degree of knowledge, it is still a degree of knowledge. That sensitive knowledge is genuine knowledge (and not merely given the honorific appellation "knowledge") is confirmed by the very next sentence where Locke says that "in *each*" degree of knowledge "there are different degrees and ways of Evidence and Certainty" (E IV.ii.14, 538). So sensitive knowledge is one degree of knowledge with its own evidence and certainty.

In Locke's view "to know and be certain, is the same thing" (Stillingfleet, W4: 145), and yet Locke repeatedly claims that sensitive knowledge is certain. There is a *"certainty of our Senses*" (E IV.xi.2, 630-631, my emphasis); sensitive knowledge *"is a Certainty*" (E IV.xi.2, 631, my emphasis); "nobody can, in earnest, be so skeptical as to be *uncertain* of the Existence of those Things which he sees and feels" (E IV.xi.3, 631,

my emphasis); we can have "*certain knowledge* that...[our] seeing hath a Cause without" (E IV.xi.5, 632, my emphasis); no one else has "as *certain* and clear a Knowledge of the Flood as Noah", for only Noah was there to actually see the flood (E IV.xviii.4, 691, my emphasis); finally, there are "three degrees of Knowledge", and "in each" there is "certainty" (E IV.ii.14, 538). While Locke acknowledges that sensitive knowledge is a lower degree of certainty, he also repeatedly insists that sensitive knowledge is certain. Therefore, sensitive knowledge must be genuine knowledge.

Sensitive knowledge also satisfies the definition for knowledge. Locke defines knowledge as the *perception* of a relation between ideas:

Knowledge then seems to me to be nothing but *the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas.* (E IV.i.2, 525)

Any perception of the relevant kind of relation between ideas counts as knowledge. As Locke says, "Where this Perception is, there is Knowledge, and where it is not...we always come short of Knowledge" (E IV.i.2, 525). By contrast, probable judgment is when the relation between ideas "is *not perceived*, but *presumed* to be so" (E IV.xiv.4, 653, my emphasis). The debate between the Knowledge View and the Assurance View, then, is whether Locke takes sensitive knowledge to be the perception or the presumption of a relation between ideas.

Perhaps the best evidence in the *Essay* that Locke takes sensitive knowledge to be the perception of a relation between ideas comes just after he restates his definition of knowledge: KNOWLEDGE, as has been said, lying in the Perception of the Agreement, or Disagreement, of any of our Ideas, it follows from hence, that... we can have no Knowledge farther, than we can have *Perception of that Agreement*, or disagreement: *Which Perception being*, 1. Either by Intuition... or, 2. By Reason [i.e. demonstration]... or, 3. *By Sensation*, perceiving the existence of particular things. (E IV.iii.1-2, 538-539, my emphasis)

Locke recapitulates his official definition of knowledge as the perception of a relation between ideas, and then says that *this perception* is either by intuition, by reason, *or by sense perception* (the three degrees of knowledge and certainty). This passage indicates, then, that Locke takes sensitive knowledge to be the perception of a relation between ideas.

Further, in his correspondence with Stillingfleet, Locke specifies what the two ideas in sensitive knowledge are that are perceived to agree:

Now the two ideas, that in this case *are perceived to agree*, and do thereby produce knowledge, are the *idea* of actual sensation...and the *idea* of actual existence of something without me that causes that sensation. (Stillingfleet, W4: 360, my emphasis)

Here Locke clearly indicates that sensitive knowledge is the perception of a relation between ideas and that this perception does "thereby produce knowledge". He even says that "the perceived connexion of those two ideas" produces the "utmost" certainty that we could have concerning this matter (Stillingfleet, W4: 360). Rickless is forced to acknowledge that this passage is "flatly irreconcilable" with the Assurance View (Rickless 2008, p. 98). Rickless suggests:

Perhaps under pressure from Stillingfleet, who worries explicitly about the fact that Locke's theory appears to leave room for external world skepticism, Locke backtracks, insisting he does not refuse the possibility of knowledge (as opposed

to mere judgment) of the existence of sensible extra-mental objects. (Rickless 2008, p. 98).

However, there is no need to interpret Locke as flatly contradicting himself, or buckling under pressure from Stillingfleet. Moreover, Locke characterizes sensitive knowledge as the perception of a relation between ideas even in the *Essay*. This passage in the Stillingfleet correspondence is just further evidence that Locke held this view all along (cf. Newman 2004, pp. 279-280).

Locke takes sensitive knowledge to meet the definition for knowledge. When Locke reiterates his definition of knowledge as the perception of a relation between ideas, he affirms that we can perceive this relation between ideas "By *Sensation*" (E IV.iii.1-2, 538-539). He also identifies "the two ideas, that in this case are perceived to agree" as the idea of sensation and the idea of an external object causing that sensation, and he affirms that the perception of the relation between these ideas does "thereby produce knowledge" (Stillingfleet, W4: 360). So Locke sees sensitive knowledge as the *perception* of a relation between ideas rather than as the *presumption* of a relation between ideas. Therefore, sensitive knowledge is genuine knowledge rather than mere probable judgment.

Rickless argues, though, that the perception of this relation must be either immediate or mediate. If the perception of the relation is immediate (i.e. done in one step), then it is intuitive knowledge (E IV.ii.1, 530-531). If the perception of the relation is mediated by other ideas (i.e. done in multiple steps), then it is demonstrative knowledge (E IV.ii.2-3, 531). These appear to be mutually exclusive options. There is no logical space, then, for sensitive knowledge to be a third kind of knowledge (Rickless 2008, p. 97; Rickless, forthcoming). If sensitive knowledge were genuine knowledge, then it would have to collapse back into either the immediate perception or mediate perception of ideas, and so collapse into either intuitive or demonstrative knowledge. Since sensitive knowledge is meant to be distinct from intuitive and demonstrative knowledge, knowledge, sensitive knowledge must not be the perception of a relation between ideas.

Rickless pushes the proponents of the Knowledge View to state what this third kind of perception of a relation between ideas is supposed to be. But if proponents of the Knowledge View have not yet clearly articulated how sensitive knowledge is supposed to be a third kind of perception of a relation between ideas, it is because Locke did not clearly articulate it either. However, Locke does commit himself to the view that sensitive knowledge is the perception of a relation between ideas. So even if Locke *should not* think that sensitive knowledge is a third kind of perception of a relation between ideas, he *does* think this.

Furthermore, I think it is possible for there to be (in some sense) a third category of perceiving a relation between ideas. Rickless is right that any perception of a relation between ideas must be immediate or mediate. Suppose that in sensitive knowledge we mediately perceive a relation between the idea of sensation and the idea of an existing object, and so sensitive knowledge counts as a kind of demonstrative knowledge. Locke still might want to distinguish sensitive knowledge from all other instances of demonstrative knowledge. He can make such a distinction by appealing to the content of the demonstration: the mediate perception of a relation between the idea of sensation and the idea of an existing object will count as sensitive knowledge, whereas the mediate perception of a relation between any other two ideas will count as a demonstration. So sensitive knowledge might be a kind of demonstration that is important enough to merit its own category.

This suggestion that sensitive knowledge is a specific kind of demonstration comes with a caution, however. For Rickless rightly objects that if sensitive knowledge is a special kind of demonstration then we need a good explanation for why sensitive knowledge is less certain demonstrative knowledge (Rickless, forthcoming). If sensitive knowledge is just another demonstration, then it seems that sensitive knowledge and demonstrative knowledge would be equally certain. Moreover, there are probably longer and more complicated demonstrations than the proof for external objects, and so it would seem that those demonstrations would be less certain than sensitive knowledge (Rickless, forthcoming). Yet Locke insists that sensitive knowledge is less certain than demonstrative knowledge. Rickless doubts that any satisfactory explanation can be given.

I am more optimistic. Lex Newman, for example, argues that sensitive knowledge includes both the perception of a relation between ideas and a probabilistic judgment that our ideas correspond to external objects (Newman 2004, pp. 283, 285; Newman 2007, p. 325). Sensitive knowledge counts as knowledge because it includes the perception of a relation between ideas. Yet, on Newman's interpretation, sensitive knowledge also includes a probabilistic judgment that our ideas correspond to external objects, and this judgment might be wrong. The fallibility of this judgment, then, explains why Locke takes sensitive knowledge to be less certain than the other degrees of knowledge.

Although I am not here endorsing Newman's view, it does serve as an example of how we could take sensitive knowledge to be a kind of demonstrative knowledge (a perception of an agreement between ideas) and still have an explanation for why sensitive knowledge is less certain than demonstrative knowledge (namely, because it also includes a probabilistic judgment that an external object corresponds to an external object).

Further, even if we do not have a satisfactory explanation for *why* Locke thinks that sensitive knowledge is less certain than demonstrative knowledge, it is clear *that* Locke thinks that sensitive knowledge is less certain than demonstrative knowledge. It is also clear *that* Locke takes sensitive knowledge to be the perception of a relation between ideas. These commitments together entail *that* Locke thinks that sensitive knowledge is (somehow) a third kind of perception of a relation between ideas. Again, perhaps Locke *should not* think this, but he *does* think this.

I have argued that, according to Locke, sensitive knowledge is certain and that it satisfies the definition of knowledge. And then there is the fact that Locke calls it knowledge. I conclude, then, that according to Locke sensitive knowledge is genuine knowledge.

Chapter 4, in full, is a reprint of the material as it appears in "Is Sensitive Knowledge 'Knowledge'?" from *Locke Studies* v. 13 (2013).

CHAPTER 5:

Sensitive Knowledge of Material Objects

§1 The Problem for Sensitive Knowledge

Locke claims that sense perception can give us knowledge that external material objects exist, but his view faces two significant objections. First, Locke holds a representationalist theory of perception, and many have thought that a representationalist theory of perception inevitably leads to skepticism about the existence of external objects. Second, Locke defines knowledge as the perception of a relation between ideas, which seems to limit knowledge to our ideas. Thus it seems that on Locke's account sense perception cannot give us knowledge that external objects actually exist.

In this chapter I argue that on Locke's view there are two conditions for knowledge that material objects exist. First, Locke's conception of knowledge requires that we perceive a relation between ideas. In the case of sensitive knowledge, we perceive that the idea of an occurrent sense perception is necessarily connected to the idea of an existing object causing that sensation. Second, I argue that Locke takes sensitive knowledge to be a kind of real knowledge where there is a necessary connection between our idea of sensation and the actual existence of an external object. This account entails that when we perceive a relation between the idea of sensation and the idea of existence then there must actually exist an external object. I call this the Dual Relation View since sensitive knowledge includes *both* the perception of a relation between ideas *and* a relation between an idea and an external object.

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There are two main competitors to the Dual Relation View that I am advancing here. One alternative interpretation I call the Ideas-Only View, which takes the perception of a relation between ideas to be the one and only requirement for sensitive knowledge. I argue below that the perception of a relation between ideas does not guarantee the actual existence of the object, and Locke recognizes this and for that reason rejects the Ideas-Only View. The other alternative interpretation is the Dual Cognitive Model, which takes sensitive knowledge to include both the perception of a relation between ideas and a *judgment* that there is a relation between an idea of sensation and an external object causing that sensation. I argue below that the Dual Cognitive Model mischaracterizes Locke's account of real knowledge and cannot apply to all instances of knowledge of existence.

The Dual Relation View has advantages over the competing interpretations. The Ideas-Only View fails because Locke does not think that our knowledge of existence consists solely in the perception of a relation between ideas. The Dual Relation View avoids this problem by including a second relation, a relation between our ideas and the actual external object. This second relation ensures that our knowledge that an object exists corresponds to reality. Also, the Dual Cognitive Model fails because the second condition for real knowledge is a *relation* between an idea and an external object (not the *judgment* of this relation). By taking the second condition for real knowledge to be the *relation* between an idea and an external object, the Dual Relation View adheres to Locke's actual account of real knowledge and can also apply to all instances of
knowledge of existence. So, I will argue, there are good reasons for preferring the Dual Relation View to other interpretations.

§2 The Two Ideas

Locke defines knowledge as the perception of a relation (an agreement or disagreement) between two ideas:

Knowledge then seems to me to be nothing but *the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas.* (E IV.i.2, 525).

As a kind of knowledge, then, sensitive knowledge must satisfy this definition of knowledge by including the perception of a relation between two ideas. In this section I clarify what these two ideas are.

Commentators have appealed to two different passages in order to identify which two ideas are perceived to agree in sensitive knowledge. After defining knowledge as the perception of a relation between ideas, he lists "four sorts" of perceived relations which give us knowledge, the fourth of which he calls "*Real Existence*" (E IV.i.2-3, 525). This entails that sensitive knowledge (one kind knowledge of existence) requires that there be the perception of a relation between two ideas. Indeed, many assume that this is the *only* requirement for sensitive knowledge. Call this the Ideas-Only View. Such a view is antecedently committed to interpreting any description of the real-existence relation as a relation between two ideas. So when Locke describes the real-existence relation as "that of *actual real existence* agreeing to any *Idea*" (E IV.i.7, 527), the Ideas-Only View must interpret "*actual real existence*" to tacitly refer to the *idea* of existence. However, E IV.i.7 does not specify the two ideas that agree in knowledge of existence. The phrase "*actual real existence* agreeing to any *Idea*" seems to describe a relation between an idea and an external object. But setting this worry aside, on the Ideas-Only View "actual real existence" must refer to an idea of existence. The idea being described in E IV.i.7 might be the simple idea of existence (Owen 2008, part 2; cf. Newman 2007, p. 331), or it might be the complex idea of an existing object (cf. Allen 2013, p. 257; Nagel, forthcoming). In addition to this ambiguity about the idea of existence, Locke describes the other idea as "any *Idea*" that agrees with "*actual real existence*". This passage leaves wide open what the "any *Idea*" is in this perceived relation. So even if we take the real-existence relation described in E IV.i.7 to be between ideas, this passage does not say what the two ideas are that agree in sensitive knowledge.

A second passage is much clearer. In his correspondence with Stillingfleet, Locke specifies what the two ideas are that are perceived to agree:

Now the two ideas, that in this case are perceived to agree, and do thereby produce knowledge, are the *idea* of actual sensation...and the *idea* of actual existence of something without me that causes that sensation. (Stillingfleet, W4: 360, my emphasis)

It is not the simple idea of existence that we perceive to agree with another idea; rather, it is "the idea of actual existence *of something without me that causes that sensation*" (Stillingfleet, W4: 360, my emphasis). So one of the ideas perceived to agree is the complex idea *of an existing object* (namely, the existing object causing the sensation).¹

¹ One version of the Ideas-Only View holds that the perceived relation is between the idea of an object and the idea of existence (Owen 2008, part 2; cf. Newman 2007, p. 331). This view cannot be right, however, since *one* of the perceived ideas (namely, the idea of an existing object) is a complex idea which contains *both* the idea of existence and the idea of an object.

The other idea in the agreement is "the idea of actual sensation" (Stillingfleet, W4: 360). The ontology of Locke's theory of sense perception includes an external object which causes our sensation, the idea or representation of that object, and the mental act of perceiving the idea of the object. The mental act of sensation takes as its object the idea or representation of the object. Now, it is not the content of the sensation (i.e. the object) that is perceived to agree with the idea of an existing object, nor is the sensation itself perceived to agree with the idea of an existing object. Rather, Locke says it is "the *idea* of actual sensation" that is perceived to agree with the idea of an existing object. On Locke's theory of mind, whenever we are having a sensation, we perceive that we are having a sensation (cf. E II.i.7, 107; II.i.19, 115; II.xxvii.9, 335). The idea of a sensation, then, is an idea of the mental act of having a sense perception.

Thus the two ideas that are perceived to agree in sensitive knowledge are (i) the idea of a sensation and (ii) the idea of an existing object causing that sensation (cf. Allen 2013, p. 257; Nagel, forthcoming). As we have seen, Locke's definition of knowledge entails that sensitive knowledge includes such a condition, and he even identifies these two ideas as those which "are perceived to agree, and thereby produce [sensitive] knowledge" (Stillingfleet, W4: 360).

§3 The Perceived Relation

Sensitive knowledge includes "the perceived connexion of those two ideas", namely between the idea of a sensation and the idea of an existing object causing that sensation (Stillingfleet, W4: 306). It is not yet clear, though, what this perceived connection is. Below I argue that Locke's general account of knowledge is that knowledge consists in the perception of a *necessary* relation between ideas. Also, there is evidence that the more specific category of knowledge of real existence is the perception of a necessary connection between an idea of the mind acting and the idea of an existing object (either ourselves, God, or material objects).

Locke defines knowledge as "*the perception of the connexion and agreement, or disagreement and repugnancy*" between ideas (E IV.i.2, 525). Thus knowledge is the perception of one of two relations. One of the relations is a "disagreement or repugnancy", and "repugnancy" is a term Locke and others use to refer to an inconsistency.² So we have knowledge when we perceive an inconsistency between ideas; for example, we know that "white is not black" when we perceive that the idea of white necessarily excludes the idea of black (cf. E IV.i.4, 526). Locke contrasts "disagreement and repugnancy" with "agreement and connexion", which suggests that the connection-relation is opposite to the repugnancy-relation. This would make the other perceived relation a necessary connection. Indeed, the example immediately following the definition of knowledge is of ideas that "*necessarily agree*" and are "inseparable" (E IV.i.2, 525, my emphasis). So we have knowledge when we perceive a necessary connection between ideas; for example, we know that the interior angles of a triangle are equal to two right angles when we perceive a necessary connection between these ideas

² Locke uses the "or" of equivalence, for instance, when he says, "As to incompatibility or repugnancy..." (E IV.iii.15, 546). In other cases Locke contrasts necessary connection with repugnancy, implying that repugnancy is conceptual inconsistency or perhaps metaphysical incompatibility (cf. E IV.iii. 16, 548; E IV.vi.15, 590; IV.ix.1, 618). Twenty years later Berkeley uses the term in the same way (*Principles* Part 1, §4 and §76; cf. OED "repugnancy" definition 2a).

(E IV.i.2, 525). All this suggests that Locke's official definition of knowledge is the perception of a necessary relation between two ideas, either a necessary connection or a necessary incompatibility. It seems to follow from Locke's conception of knowledge, then, that sensitive knowledge is the perception of a necessary connection between ideas.

There is some reason to think, though, that only knowledge of *universal* propositions requires the perception of a necessary relation. Locke says that in "some of our *Ideas* there are certain Relations...and Connexions" that cannot be changed "by any Power whatsoever" (i.e. the relations are necessary), and "in these only, we are capable of certain and universal Knowledge" (E IV.iii.29, 559, my emphasis). For example, we cannot know that "all gold is malleable" without perceiving a necessary connection between the idea of gold and the idea of malleability. Yet Locke does allow us to know that contingently related qualities exist in the same *particular* body. Because "*Malleability*, hath no visible connexion" with gold, " 'tis by trying alone, that I can certainly know...whether that *yellow*, *heavy*, *fusible* Body, I call gold is malleable, even though we do not perceive a necessary connection between gold and malleability. This opens up the possibility that knowledge of particular substances can be the perception of a contingent relation.

In particular, some commentators have proposed that the perceived relation in sensitive knowledge is a psychological association (Owen 2008, part 3; Stapleford 2009, p. 224; Nagel, forthcoming). On this interpretation, there is nothing about the content of the sensation that is connected to the idea of existence; these ideas are perceived to go

together only through a psychological association. A motivation for this interpretation is that there is no way to intuit or demonstrate the existence of a sensible object simply from the content of an idea:

For having the *Idea* of any thing in the Mind, no more proves the Existence of that Thing, than the picture of a Man evidences his being in the World, or the Visions of a Dream make thereby true History. (E IV.xi.1, 630)

Since the content of an idea of an object cannot prove "the Existence of that Thing", the connection between the content of the sensation and the idea of existence may be made by psychological association.

Locke's standards for knowledge, though, go well beyond a mere psychological association. Our past experience, for example, has formed a psychological association between gold and the quality of malleability. Yet Locke holds that past experience "makes [us] not certain" that "all, or *any other*" gold is malleable (E IV.xii.9, 644, my emphasis). We cannot know that a particular piece of gold is malleable just by perceiving a psychological association between gold and malleability. (Note also that the psychological association holds for all gold just as much as it does for any one piece of gold, yet Locke denies that past experience can give us knowledge that all gold is malleable.)

Knowledge that a particular piece of gold is malleable must come from experience and observation, which makes it sensitive knowledge. Locke says, it is "*by trying alone*, that I can certainly know...whether...*Gold*, be *malleable*, or no" (E IV.xii.9, 644, my emphasis), and "The Knowledge of Bodies we must get by our Senses" (E IV.xxii.12, 647). Once we recognize that the knowledge of the malleability of gold is sensitive knowledge, it becomes clear that we cannot appeal to this example in order to show that sensitive knowledge is the perception of a contingent relation. For whether sensitive knowledge is the perception of a contingent or a necessary relation is precisely what is at issue. For if sensitive knowledge is the perception of a necessary connection between ideas then we will know that a particular piece of gold is malleable by perceiving a necessary connection between ideas.

Elsewhere Locke indicates that knowledge of the existence of other particular objects includes the perception of a necessary connection. With respect to knowledge of our own existence, Locke says that we perceive that the idea of thinking "is *inconsistent* with the idea of self-subsistence" (Stillingfleet, W4: 33, my emphasis); or, what is the same, we perceive a necessary connection between the idea of thinking and the idea of our existence. With respect to the existence of God, Locke says we perceive a "*necessary* agreement and connexion" between the "idea of thinking" and "the idea of the existence of an external, thinking Being" (Stillingfleet, W4: 60, my emphasis). So both Locke's general definition of knowledge and his account of knowledge of existence, of which sensitive knowledge is one kind, suggest that sensitive knowledge includes the perception of a necessary connection between ideas. And the knowledge of our own existence and of God's existence is not knowledge of universals, which suggests that the perception of a necessary connection is required in knowledge of particular objects just as much as it is in the knowledge of universal propositions.

There is even evidence that sensitive knowledge in particular requires the perception of a necessary connection between ideas. Locke contrasts sensitive knowledge

that a man existed at *t* with the mere probable conjecture that the man existed when we were not perceiving him:

For if I saw...[a] Man, existing...one minute since, and [I] am now alone, I cannot be certain that the same Man exists now, since *there is no necessary connexion* of his Existence a minute since with his Existence now: by a thousand ways he may cease to be, since I had the Testimony of my Senses for his Existence. (E IV.xi.9, 635, my emphasis)

We can know, while we are perceiving the man, that he exists. But when we are not currently perceiving him we cannot know that he exists. This is because "there is no necessary connexion" between our original perception of him and his existence later, when we are not perceiving him. Locke may be implying, then, that the reason we know the man exists while we are perceiving him is that we perceive a necessary connection between the idea of our occurrent perception of him and the idea of his existence. So it appears that even in sensitive knowledge we perceive a necessary connection between our ideas.

There should be considerable agreement concerning the interpretation of Locke I have presented thus far. As a kind of knowledge, sensitive knowledge must include the perception of a relation between ideas. He identifies those ideas as (i) the idea of sensation and (ii) the idea of an existing object causing that sensation. The relation between those ideas is a necessary connection.

But after this point important differences begin to emerge. The Ideas-Only View takes the perception of a relation between the idea of sensation and the idea of an existing object to be the *only* requirement for sensitive knowledge. By contrast, Newman and I both take there to be a second requirement for sensitive knowledge. Newman's Dual

Cognitive Model takes the second condition to be a probable judgment that our ideas correspond to actual objects, whereas my Dual Relation View takes the second condition to be a necessary connection between an idea and an actual external object. I will take up each of these views in turn.

§4 The Ideas-Only View

The primary motivation for the Ideas-Only View comes from two considerations. First, Locke says that in sensitive knowledge we perceive the relation between "the *idea* of actual sensation...and the *idea* of actual existence" (Stillingfleet, W4: 360, my emphasis). The perception of this relation between these ideas "thereby produce[s] knowledge" (Stillingfleet, W4: 360). Second, Locke defines knowledge as the perception of a relation between ideas, and then he says, "Where this Perception is, there is Knowledge; and where it is not...we always come short of Knowledge" (E IV.i.2, 525). So, goes the argument, the perception of a relation between ideas is necessary for sensitive knowledge because where we do not perceive a relation between ideas "we always come short of Knowledge"; and the perception of a relation between ideas is sufficient for sensitive knowledge because where we do perceive a relation between ideas is "there is Knowledge" (cf. Soles 1985, p. 353). The perception of a relation between ideas, then, is the one and only condition for sensitive knowledge.

Because the Ideas-Only View holds that there is only one condition for sensitive knowledge, this view is antecedently committed to interpreting any description of sensitive knowledge as the perception of a relation between ideas. I think it is a mistake

to force this interpretation. Sensitive knowledge is one kind of knowledge of real existence (E IV.iii.21, 552-553), and in E IV.i.7 Locke describes the real-existence relation as "*actual real existence* agreeing to any *Idea*". The phrase "*actual real existence* agreeing to any *Idea*" describes a relation between an idea and an external object, not a relation between ideas. Locke uses similar language elsewhere to describe a relation between an idea and an external object,³ and he elsewhere uses "real existence" to refer to an external object.⁴ So there are close textual parallels showing that "*actual real existence* agreeing to any *Idea*" describes a relation between an idea and an external object. For this reason I do not think that E IV.i.7 is describing the two ideas that we perceive to agree in sensitive knowledge. (The lesson to be learned here, I suggest, is that sensitive knowledge includes an unperceived relation between an idea and an external object; more on this in section §6 below.) So the Ideas-Only View appears to force an implausible interpretation of Locke's description of the real-existence relation in E IV.i.7.

The Ideas-Only View is also a implausible philosophical position. We want an account of knowledge of existence that depends on whether that object actually exists or not, so that we can know that an object exists only if it actually exists. But the Ideas-Only View does not make our knowledge of the existence of objects dependent on their actual existence. Insofar as sensitive knowledge consists solely in the perception of a relation between ideas, there is no requirement that our sensation correspond to any actual object in the world. So it appears we could "know" that an external object exists (by perceiving

³ e.g. II.xxx.1, 372; E II.xxx.2, 372; and II.xxx.5, section heading, 374.

⁴ e.g. E IV.x.8, 622; III.v.3, 429; and II.xxxi.14, 384.

a relation between our ideas) even when the external object does not actually exist. Further, even if the external object does exist, our "knowing" that it exists would bear no relation whatever to the actual existence of the external object. For our knowledge consists in the perception of a relation between ideas, regardless of whether there actually exists an external object or not. The Ideas-Only View is therefore a deeply unsatisfying account of knowledge of the existence of external objects.

Moreover, Locke recognizes that the Ideas-Only View is an inadequate account of knowledge of existence. He criticizes Descartes' argument for the existence of God because, on Locke's view, it shows that the idea of existence is contained in the idea of God, but it does not show that God actually exists:

Though the complex idea for which the sound God stands (whether containing in it the idea of necessary existence or no, for the case is the same) will not prove the real existence of a being answering to that idea, any more than any other idea in any one's mind will prove the existence of any real being answering that idea (Stillingfleet, W4: 55)

Merely perceiving the connection between the *idea* of God and the *idea* of existence is insufficient for knowledge that God actually exists. Presumably, then, sensitive knowledge should not merely be the perception of a relation between ideas either. Thus it appears that Locke rejects the Ideas-Only View as an account for sensitive knowledge.

But if Locke denies that the perception of a relation between ideas is the only requirement for sensitive knowledge, then what else is required? Again Locke's discussion with Stillingfleet on his argument for God provides a suggestion. While debating with Stillingfleet about "the certainty in my proof of a Deity" and "the grounds of certainty of our own existence", Locke says he "place[s] certainty" in "my own plain way, by ideas, delivered in these words" (Stillingfleet W4: 50), and then he quotes his account of real knowledge from Book IV chapter iv of the *Essay*:

Where-ever we perceive the Agreement or Disagreement of any of our Ideas, there is certain Knowledge; and where-ever we are sure those Ideas agree with the reality of Things, there is certain *real Knowledge*. Of which Agreement of our Ideas with the reality of Things, I think I have shewn wherein it is that Certainty, *real Certainty*, consists. (E IV.iv.18, 573, my emphasis; cf. W4: 50)

Locke cites his account of real knowledge as his grounds for our knowledge that we exist and that God exists. It would seem that sensitive knowledge (another kind of knowledge of existence) is also a kind of real knowledge. Further, the perception of a relation between ideas is *not sufficient* for real knowledge. To know what else is required for sensitive knowledge, then, we turn now to Locke's account of real knowledge.

§5 The Dual Cognitive Model

In order to have knowledge of the actual world, Locke needs some way to bridge the gap between our ideas and reality. Newman points out that Locke introduces the category of "real knowledge" to ensure that our knowledge of the world corresponds to the way the world actually is (Newman 2007, p. 333). Locke imagines a hypothetical objector saying:

If it be true, that all Knowledge lies only in the perception of the agreement or disagreement of our own Ideas, the Visions of an Enthusiast, and the Reasoning of a sober Man, will be equally certain. '*Tis no matter how Things are*: so [long as] a Man observe but the agreement of his own Imaginations...it is all Truth, all Certainty. (E IV.iv.1, 563, my emphasis)

Locke answers:

Our Knowledge therefore is *real*, only so far as there is a *conformity between our Ideas and the reality of Things* (E IV.iv.3, 563, my emphasis)

When we perceive a relation between ideas we have knowledge, and Locke seems to be saying that when those ideas conform to reality we have real knowledge.

There is a problem, though, for knowing that our ideas conform to reality. In Locke's words: "How shall the Mind, when it perceives nothing but its own *Ideas*, know that they agree with Things themselves?" (E IV.iv.3, 563). On Locke's representational theory of perception we cannot directly perceive an external object, and thus we cannot perceive that our ideas correspond to external objects. Thus we cannot *know* that our ideas conform to reality.

Newman argues that Locke recognizes that we cannot know our ideas conform to reality and so he consciously describes real knowledge in terms of probable judgment. "It is no mistake...that in characterizing the *real*-making requirement, Locke employs weaker epistemic language" (Newman 2007, p. 348). For example, Locke says there are "two sorts of ideas, that, we may be *assured*, agree with things (E IV.iv.3, 563, my emphasis), and in recapitulating his position he says that "where-ever *we are sure* those Ideas agree with the reality of Things, there is certain real Knowledge" (E IV.iv.18, 573, my emphasis). Newman argues, "Importantly, being *sure* – having *assurances* – does not entail having perceptual certainty" and "Locke regularly uses assurance-talk in contexts of mere probable judgment" (Newman 2007, p. 349). So it appears that Locke consciously refrains from saying we *know* that our ideas conform to reality; instead, the

second requirement for real knowledge is a *probabilistic judgment* that our ideas conform to reality.

Newman takes sensitive knowledge to be a kind of real knowledge. Locke holds that in sensitive knowledge we perceive a relation between ideas, which satisfies the first condition for real knowledge. Newman then argues:

Insofar as sensitive knowledge extends beyond the mind's ideas, we should expect that Locke would support cognition of this further relation by appeal to probable judgment. It is no surprise, then, that he puts forward, in E IV.xi, a series of *probabilistic proofs* in support of sensitive knowledge. The point of the proofs is to help *assure* us that the ideas we take as veridical sensations *are* veridical... (Newman 2007, pp. 350-351)

According to Newman, Locke argues in E IV.xi that we should make a *probabilistic judgment* that an idea of sensation corresponds to an external object causing that sensation. Thus sensitive knowledge also meets the second condition for real knowledge. Newman calls this the Dual Cognitive Model since sensitive knowledge includes both the perception of a relation between ideas and a probabilistic judgment that the ideas correspond to reality (Newman 2007, p. 350).

Newman's Dual Cognitive Model presents a consistent and attractive interpretation of Locke's account of sensitive knowledge. Since sensitive knowledge includes the perception of a relation between ideas, it satisfies Locke's definition of knowledge and thus counts as knowledge. Yet sensitive knowledge also includes the probabilistic judgment that our ideas are caused by external objects. This second aspect of sensitive knowledge explains why Locke takes sensitive knowledge to be less certain than intuitive and demonstrative knowledge. For our judgment that a sensation is caused by an external object is fallible; we might be wrong that our sensation of an object corresponds to an actual external object. So the Dual Cognitive Model can simultaneously explain why sensitive knowledge counts as knowledge and also why it is less certain than other degrees of knowledge (Newman 2007, p. 325).

Yet this ability to explain why sensitive knowledge is less certain also shows us why real knowledge in general cannot include a probabilistic judgment. For Locke indicates that intuitive knowledge of our own existence and demonstrative knowledge of God are also real knowledge (Stillingfleet W4: 50; cf. p. 12 above). But in the Dual Cognitive Model the second condition for real knowledge is a probabilistic judgment, and the inclusion of that judgment makes that item of knowledge less certain. This would make knowledge of our own existence and of God's existence less certain than other forms of knowledge. But Locke claims that the contrary is the case: he insists that "nothing can be more evident to us, than our own Existence" (E IV.ix.3, 618), and God's existence is "the most obvious Truth that Reason discovers" (E IV.x.1, 619). The second condition for real knowledge, then, cannot be a probable judgment.

Fortunately, a more careful analysis of Locke's account of real knowledge reveals that the second condition for knowledge is *not* a probabilistic judgment. Contra Newman, it is the *relation* (not the *judgment* of the relation) that makes an item of knowledge count as real knowledge. Locke says, "Our Knowledge therefore is real, *only so far as* there is a conformity between our Ideas and the reality of Things" (E IV.iv.3, 563, my emphasis). Similarly, Locke says that "this conformity between our simple Ideas, and the existence of Things, *is sufficient* for real Knowledge" (E IV.iv.4, 564, my emphasis). It is the relation between the idea and the external object (not the judgment of the relation) that is sufficient to make it real knowledge. While we may make a judgment that there is a relation between our ideas and reality (which explains Locke's use of "assurance" and its cognates), real knowledge does not consist in making this judgment. As I read Locke, the second requirement for real knowledge is that our ideas conform to reality.

There are two problems, then, for the Dual Cognitive Model. One problem for the Dual Cognitive Model is that the second requirement for real knowledge is the relation between our ideas and reality (as the Dual Relation View has it), rather than the *judgment* of that relation between our ideas and reality (as the Dual Cognitive View has it). Another problem is that the Dual Cognitive Model can only apply to Locke's account of sensitive knowledge. Conveniently, both of these problems can be fixed by taking the second requirement for real knowledge to be the relation between our ideas (rather than the *judgment* of such a relation). This interpretation fits better with Locke's statements about the second requirement for real knowledge. And once we take the condition for real knowledge to be the *relation* between an idea and an external object (rather than the *judgment* that this relation holds), Locke's account of real knowledge can extend to all three kinds of knowledge of existence. For example, the fact that our idea of God corresponds to God's actual existence doesn't make our knowledge of God's existence any less certain. (Such a relation would do quite the opposite.) The same can be said for knowledge of our own existence. So the Dual Relation View can, but Newman's Dual Cognitive Model cannot, extend to all three kinds of knowledge of existence. For these

reasons my Dual Relation View has significant interpretive advantages over Newman's Dual Cognitive Model.

§6 The Dual Relation View

On the Dual Relation View that I attribute to Locke, sensitive knowledge includes *both* the perception of a necessary connection between the idea of sensation and the idea of an existing object *and* a necessary connection between the idea of sensation and the actual existence of an external object causing that sensation. I take it that sections §2-3 above sufficiently establish that sensitive knowledge includes the perception of a relation between ideas, and that this relation is a necessary connection. In sections §4-5 we saw that Locke recognizes a need to bridge the gap between our ideas and reality, and he does that by introducing real knowledge. In this section I will argue that on Locke's view there is a necessary connection between our idea of sensation and the actual existence of an external object causing that sensation, and that it is because of this necessary connection that we can have real knowledge that material objects exist.

I have argued that sensitive knowledge includes the perception of a necessary connection between the idea of a sensation and the idea of an external object causing that sensation. Now I want to show that there is a big payoff for requiring knowledge to be the perception of a necessary relation between ideas (rather than a contingent relation): namely, if a relation between ideas is necessary then the same relation must also hold for things corresponding to those ideas. For example: Is it true of the *Idea* of a Triangle, that its three Angles are equal to two right ones? It is true also of a Triangle, where-ever it really exists... [so] he is sure what he knows concerning those Figures, when they have barely an Ideal Existence in his Mind, *will hold true of them also when they have a real existence in Matter* (E IV.iv.6, 565 my emphasis)

There is a necessary connection between the idea of triangle and the idea of the properties of a triangle. And since this connection is necessary, if there is an actual triangle in the world then that actual triangle must have these properties. In general, when there is a necessary relation between ideas, because it is necessary, that same relation must also hold for things corresponding to those ideas.

In particular, on Locke's account of sensitive knowledge we perceive a necessary connection between the idea of sensation and the idea of an existing object causing that sensation. Because this relation is necessary, any actual sensation is necessarily connected to the actual existence of an external object. Further, Locke's comments on sensation confirm that he takes there to be a necessary connection between sensation and an external object causing that sensation. In his chapter "Of Our Knowledge of the Existence of Other Things", for example, he argues that "I cannot avoid having" ideas of sensation, "and therefore it *must needs be* some exterior cause...that produces those Ideas in my Mind" (E IV.xi.5, 632, my emphasis). Since sensations are involuntary, our sensations *must* be caused by objects outside the mind.⁵ Similarly, he argues that "simple Ideas, which since the Mind...can by no means make to it self, *must necessarily* be the product of Things" external to the mind (IV.iv.4, 563-564, my emphasis). Here again

⁵ Contra Newman, Locke seems to take this as a necessary demonstration rather than a probabilistic inference (Newman 2007, p. 350-351).

Locke affirms that there is a necessary connection between sensation and the actual existence of an external object causing that sensation. Given this necessary connection between sensation and the actual existence of an external object, if Locke can establish that we are having an actual sensation, then he will have shown that there actually exists an object external to the mind.

Sensitive knowledge requires that we pay attention to the source of our ideas (cf. Allen 2013, pp. 264-265; Nagel, forthcoming). Locke begins the chapter "Of Our Knowledge of the Existence of Other Things" by stating that merely having an idea of an object is not necessarily connected to the actual existence of the object, and so merely perceiving an idea does not give us knowledge that the object exists (E IV.xi.1, 630). He then says:

'Tis therefore the actual *receiving of Ideas from without*, that gives us notice of the Existence of other Things, and makes us know, that something doth exist at that time without us, which causes that Idea in us... (E IV.xi.2, 630, my emphasis)

Locke thinks it is the *receiving* of the idea from an external cause that gives us knowledge that there exists an external object. Referring to the opening passage of this chapter, Stillingfleet objects that if ideas do not have any necessary connection to the existence of things then the perception of a relation between ideas cannot give us knowledge that an object actually exists. Locke replies by saying that Stillingfleet "mistake[s] one thing for another; viz. the idea that has by a former sensation been lodged in the mind, for *actually receiving any idea*, i.e. actual sensation" (Stillingfleet, W4: 360, my emphasis). So Locke thinks that sensitive knowledge requires that we identify when we are actually having a sensation.

Locke holds the Mental Transparency Thesis, which is the view that (when we are paying attention) the mind is distinctly aware of all its actions. Whenever the mind acts, we perceive an idea of the mind doing so:

he that contemplates the Operations of his Mind, cannot but have plain and clear *Ideas* of them. (E II.i.7, 107)

It being impossible for any one to perceive, without perceiving, that he does perceive. When we see, hear, smell, taste, feel, meditate, or will anything, we know that we do so. (E II.xxvii.9, 335; cf. II.i.19, 115)

When we are having a sense perception, we perceive the idea of ourselves having that sensation; when we are remembering a past sensation, we perceive the idea of ourselves remembering.⁶ So (if we are paying attention) we are aware of the kind of action the mind is currently performing.

The Mental Transparency Thesis also entails that (if we are paying attention) we will have an idea of sensation when and only when we are actually having a sensation. On the one hand, the Mental Transparency Thesis states that when the mind is actually engaging in sense perception, we perceive that the mind is having that sense perception. On the other hand, when the mind is not actually engaging in sense perception we do not have an (occurrent) idea of sensation. If the mind is not sensing it is either not acting at

⁶ There is some debate about whether the perception that we are perceiving is a second-order perception or not. If for every act of the mind we perceive that act of the mind, then (because the perceiving that the mind is acting is itself an action) Locke would be committed to an infinite regress of perceiving that we are perceiving, *ad infinitum* (Coventry and Kriegel 2008, pp. 222-226; Weinberg 2008, p. 25). Some have argued that the perceiving that the mind is perceiving is *not* a separate, second order perception; rather, every act of the mind has built within it an awareness of itself (Coventry and Kriegel 2008). Settling this issue lies outside the scope of this paper.

all or it is doing some other action. If the mind is not acting at all, then we are not having any perception (for perception is itself a mental action). But if the mind is performing any action other than sense perception then (when we are paying attention) we will perceive the mind performing that other action. For example, if the mind is remembering an idea of sensation then we will know that we are remembering rather than sensing. Thus (when we are paying attention) we will know that we have an idea of sensation when and only when we are actually sensing. In Locke's words, there is a "manifest difference" between sensations and other ideas, and so we are "invincibly conscious" of when we are having a sensation (E IV.ii.14, 537).

From the above account it follows that the idea of sensation is necessarily connected to the actual existence of an external object. We perceive a necessary connection between the idea of sensation and the idea of the existence of an external object. Because this relation is necessary, any actual sensation must be necessarily connected to an actual external object. Further, we have the idea of sensation when and only when we are actually having a sensation. So when we have the idea of sensation then, necessarily, we are having an actual sensation, and actual sensation is necessarily connected to the actual existence of an external object. This makes the idea of sensation a necessary connection between the idea of sensation and the idea of an external object, it necessarily follows that there actually exists an external object.⁷

Locke argues that sense perception provides us with the conformity we need to have real knowledge. He argues that sensations of simple ideas are necessarily connected to external objects which cause those sensations, and for that reason our simple ideas can give us real knowledge:

simple Ideas, which since the Mind...can by no means make to it self, *must necessarily* be the product of [external] Things operating on the Mind... From whence it follows, that simple Ideas...carry with them all the conformity...[they] can, or ought to have, with Things without us. And this conformity between our simple Ideas, and the existence of Things, is sufficient for real Knowledge. (E IV.iv.4, 563-564, my emphasis).

The necessary connection between sensation and the external object causing that sensation ensures that our sensations conform to reality. Because our sensations conform to reality, sensations can give us real knowledge concerning external objects.

From the above discussion we can see several good reasons for attributing the Dual Relation View to Locke. We saw in section §4 that Locke criticizes the Ideas-Only View as an account of knowledge of existence because merely perceiving a relation between ideas does not prove the actual existence of any object. By contrast, as I have shown, knowledge of existence is a kind of real knowledge which (in addition to the perception of a relation between ideas) includes a relation between our ideas and the

⁷ Jennifer Nagel and Keith Allen rightly emphasize that sensitive knowledge requires that we identify the source of our idea as a sensation (Allen 2013, p. 257; Nagel, forthcoming). However, they do not take this thought far enough. In Locke's view there is a necessary connection between the idea of sensation and an external object, and I have argued that Locke takes this necessary connection between our idea and an external object to be a requirement for sensitive knowledge. (Allen acknowledges that there might be a necessary connection between sensation and an external object (Allen 2013, p. 264-265), but as a proponent of the Ideas-Only View he does not make this connection a requirement for sensitive knowledge (Allen 2013, p. 257).)

reality of things. On Locke's view the idea of sensation is necessarily connected to the actual existence of an external object. Thus sensitive knowledge seems to be a kind of real knowledge that external material objects exist.

The Dual Relation View also solves a long standing problem in Locke scholarship. Locke defines knowledge as the perception of a relation between ideas, and then he lists "*Real Existence*" as one of the perceived relations (E IV.i.2-3, 525). However, he then describes the real-existence relation as "actual real existence agreeing to any Idea" (E IV.i.7, 527), which describes a relation between an idea and an external object (rather than a relation between ideas). There have been two kinds of responses in the literature. Some interpret Locke as saying that we perceive the real-existence relation which holds between an idea and an external object, and therefore Locke's account of sensitive knowledge is inconsistent with his definition of knowledge.⁸ As another response, the Ideas-Only View insists the real-existence relation holds between ideas. Because this view takes the sole condition for sensitive knowledge to be perception of a relation between ideas, the Ideas-Only View is forced to take "actual real existence agreeing to any Idea" to be a relation between ideas. But "actual real existence agreeing to any *Idea*" describes a relation between an idea and an object rather than a relation between ideas.

The Dual Relation View, though, easily solves this problem. I have argued that according to Locke there are two conditions for sensitive knowledge. The second

⁸ Aaron 1973, p. 240; Ayers 1991: I, p. 159; Gibson 1960, p. 166; Jolley 1999, p. 187; Loeb 1981, p. 58; Pappas 1998, p. 288; Whoolhouse 1994, p. 154, 156; and Yolton 1970, p. 109ff.

requirement is that there be a necessary connection between the idea of sensation and the actual existence of an external object. So when Locke describes the real-existence as *"actual real existence* agreeing to any *Idea"* he seems to be stating the second condition for knowledge of existence. Just as Locke argues in E IV.iv that (in addition to the perception of a relation between ideas) real knowledge requires that our ideas conform to reality, in E IV.i.7 Locke seems to be stating that (in addition to the perception of a relation between ideas) knowledge of existence requires that the perception of our ideas agree with the actual existence of an external object. The Dual Relation View solves the problem that the phrase *"actual real existence* agreeing to any *Idea"* raises by making it an expression of the second condition for knowledge of existence.

Attributing the Dual Relation View to Locke shows how his account of sensitive knowledge is a consistent and plausible account of the knowledge that external object exists. Since on the Dual Relation View sensitive knowledge includes the perception of one relation between ideas, this view is consistent with Locke's definition of knowledge. And since on the Dual Relation View sensitive knowledge includes a necessary connection between an idea and the actual existence of an external object, this view is consistent with Locke's account of real knowledge. Moreover, this necessary connection entails that whenever we perceive a necessary connection between the idea of sensation and the idea of an existing object, there actually exists an external object. So Locke can plausibly claim that the perception of a relation between the relevant ideas can give us knowledge that an external object actually exists.

§7 Sensitive Knowledge as Knowledge

In this section I consider two serious objections to the Dual Relation View, both of which challenge the status of sensitive knowledge as knowledge. The first objection is that on the Dual Relation View sensitive knowledge will collapse into either intuitive and demonstrative knowledge, and therefore cannot be a third degree of knowledge. The other objection is that we cannot ever know that the second requirement for sensitive knowledge is met, and therefore we cannot ever know that external material objects exist. I will take these objections up in turn.

Samuel Rickless argues that sensitive knowledge cannot be the perception of a relation between two ideas. The perception of a relation between ideas is either immediate (if the relation is directly between two ideas) or mediate (if the relation is mediated by an intervening idea). Suppose there is a necessary connexion between the idea of A and the idea of B, and a necessary connexion between the idea of B and the idea of C. In this case we would immediately perceive the relation between the ideas of A and B, and also between B and C, but we would mediately perceive a relation between the ideas of A and C.⁹ The perception of an immediate relation between two ideas is intuitive knowledge (E IV.ii.1, 530-531). The perception of a mediate relation between two ideas is demonstrative knowledge (E IV.ii.2-3, 531-532). These appear to be mutually exclusive options. So, Rickless argues, there is no logical space for sensitive knowledge to be a third kind of perception between ideas (Rickless 2008, p. 97; Rickless, forthcoming). The solution to this problem, he suggests, is that Locke honorifically calls sensitive

⁹ See also chapter 1, pp. 8-9.

knowledge "knowledge", but since it is not the perception of a relation between ideas sensitive knowledge "is not, strictly speaking, a kind of knowledge" (Rickless 2008, p.93). Sensitive knowledge is instead a probabilistic judgment that an object exists.

Rickless is right that any perception of a relation between ideas must be immediate or mediate, and so the first condition for sensitive knowledge must ultimately reduce to either intuitive or demonstrative knowledge. Perhaps the perception of a relation between ideas in sensitive knowledge reduces to a demonstration. Yet this specific kind of demonstration might still be considered a separate category of knowledge since it always has the idea of sensation as the starting point and the existence of an object as the conclusion. Note that knowledge of identity and knowledge of co-existence are both just kinds of knowledge of relation, yet Locke thinks that these specific kinds of relations are important enough to merit their own categories of knowledge (E IV.i.7, 527). Similarly, sensitive knowledge might be a kind of demonstration that is important enough to merit its own category.

But if sensitive knowledge reduces to a notable instance of a demonstration, then we need some explanation for why sensitive knowledge is less certain than demonstrative knowledge (cf. Rickless, forthcoming). It might be tempting to use the second requirement for sensitive knowledge to explain why it is less certain. But I have already shown why this will not work. Intuitive knowledge of our own existence and demonstrative knowledge of God's existence are also instances of real knowledge, and thus they also meet the second requirement of there being a necessary connection between our ideas and reality. Yet such knowledge is not in any way less certain. So the relatively lower degree of certainty of sensitive knowledge cannot be explained by appealing to the second requirement for sensitive knowledge. This puts pressure on the Dual Relation View to state why it is that sensitive knowledge is in some way less certain than demonstrative knowledge, even though the first condition for sensitive knowledge reduces to a demonstration.

In order to explain why sensitive knowledge is the least certain of the three degrees of knowledge, it will be helpful to first clarify what in general makes one degree of knowledge more certain than another. The defining contrast between intuitive and demonstrative knowledge is that intuition is the immediate perception of a relation between two ideas whereas demonstration is the mediate perception of a relation between two ideas (i.e. the two ideas are related by intervention of one or more intermediate ideas). The mediate-immediate distinction cannot by itself explain the relative degrees of certainty, for this is a bimodal distinction and there are three degrees of certainty. So there must be some further fact, perhaps related to the mediate-immediate distinction, which explains the degrees of certainty for each degree of knowledge.

Locke contrasts intuitive and demonstrative knowledge in many ways, but I suggest the most fundamental (besides the mediate-immediate distinction) concerns the visibility of the connection between ideas. In the immediate perception of a relation between ideas, the relation is instantly visible: "the Mind perceives [the agreement] *at the first sight* of the Ideas together"; "This part of Knowledge...forces itself *immediately* to be perceived, as soon as ever the Mind turns its view that way; and leaves *no room for Hesitation*" (E IV.ii.1, 531, my emphasis). It is not possible for us to perceive the two

related ideas without also perceiving the connection. By contrast, in the mediate perception of a relation between ideas, the relation between the two ideas is less visible: such relations are "*not at first Sight so knowable*" (E IV.ii.6, 533, my emphasis); "in Demonstration, the Mind does *at last* perceive the Agreement or Disagreement of the Ideas it considers" (E IV.ii.4, 532)"; and "it does not always happen, that the Mind sees that Agreement or Disagreement, which there is between them, even where it is discoverable" (E IV.ii.2, 531). Further, we do not have certain knowledge where there is "no discoverable connexion" and "no visible necessary connexion" between two ideas (E IV.iii.12, 545; E IV.xi.9, 635). On this account, the immediate perception of a relation between two ideas is less visible and most certain, and where there is no visible connection we have no certainty. Thus there is a strong correlation between visibility of the connection and certainty.

The relative visibility of the connection can also explain the other ways Locke contrasts intuitive and demonstrative knowledge. For intuitive knowledge, "the Mind is at *no pains* of proving or examining, but perceives the Truth…only by being directed toward it" (E IV.ii.1, 531, my emphasis). The immediate relation between two ideas is so visible that it does not require attention or effort on our part to see the connection. Such an instantly visible connection also cannot leave room for doubt or error (E IV.ii.1, 531; IV.xvii.15, 684), because as soon as we perceive the immediately related ideas we perceive the connection between them. By contrast, it is "not without pains and attention" that we perceive a connection between mediately related ideas; "A *steady application* and

pursuit is required to this Discovery" (E IV.ii.4, 532, my emphasis). The mediate relation between ideas is not always visible, and so requires requires attention and effort on our part to see that connection. Further, because a mediate relation is not always perceived, "before the Demonstration" there can be "a doubt" about the connection, though once we do perceive the connection "all doubt [is] removed" (E IV.ii.5, 532-533). Similarly, because we do not always perceive the whole train of connected ideas at once, "there must be a Remembrance of the...intermediate Idea, with that we compared it with before, when we compare it with the other: and...there the danger of the mistake is greater" than in intuitive knowledge (E IV.xvii.15, 684). So the visibility of the connection appears to be explanatorily prior to the other contrasts between intuitive and demonstrative knowledge, such as the amount of mental effort required to perceive the connection or its susceptibility to doubt and error.

Locke seems to take the degrees of relative certainty to be determined by the relative visibility of the perceived relation. The degrees of certainty are not explained by the mediate-immediate contrast, and the degree of visibility is explanatorily prior to the other contrasts between intuitive and demonstrative knowledge. Moreover, there is a strong correlation between relative visibility and the degree of certainty: the more visible the connection the more certain we are of that connection, and vice versa.

The relative visibility of the connection can explain why sensitive knowledge is less certain than the other degrees of knowledge. For intuitive and demonstrative knowledge, the source of our ideas is not relevant to our knowledge. If we perceive a connection between two ideas, then that counts as knowledge regardless of whether the ideas are from memory, imagination, abstraction, or sensation. But sensitive knowledge requires that we perceive an idea of sensation, and this in turn requires that we pay attention to the source of our ideas. It is when and only when we are currently having a sensation that we have the idea of sensation (i.e. we perceive that we are currently having a sensation). By contrast to intuitive knowledge, which is instantly visible and "forces itself immediately to be perceived, as soon as ever the Mind turns its view that way" (E IV.ii.1, 531), sensitive knowledge requires paying careful attention to our ideas. As a kind of demonstration, sensitive knowledge inherits the relatively less visible connections between the ideas. In addition, the ideas in sensitive knowledge are relatively less visible than ideas in other demonstrations. Thus the perceived connection in sensitive knowledge is less visible than in intuitive and demonstrative knowledge.

The relatively less visible idea of sensation suggests that there is also greater room for error in sensitive knowledge. Locke thinks that, when we pay sufficient attention, we are "invincibly conscious" that the source of an idea is a sensation (E IV.ii. 14, 537). However, "though he that contemplates the Operations of his Mind, cannot but have plain and clear Ideas of them; yet, *unless he turn his Thoughts that way, and considers them attentively, he will...*[not] *have clear and distinct Ideas of all the Operations of his Mind*" (E II.i.7, 107, my emphasis). We will be invincibly conscious of the source of an idea, and thus have the idea of sensation, only when we are paying sufficient attention to the operations of the mind. Further, this suggests that if we are not paying sufficient attention we might mistake one kind of idea for another. We might mistake the "phantom" of fire for the sensation of fire. Just as we might err in a demonstration if we are not paying sufficient attention (E IV.ii.7, 534), we might err in identifying the source of our idea if we are not paying sufficient attention. Yet, just as when we do pay sufficient attention we cannot err, when we do pay sufficient attention to the source of our ideas we cannot err in identifying a sensation as a sensation (E IV.ii.14, 537; IV.xi.5, 632). Since we must also pay attention to the source of our ideas, this additional step makes sensitive knowledge less certain than demonstrative knowledge. There is a way, then, to explain how in sensitive knowledge we mediately perceive a connection between ideas, and yet the perception of this connection is less certain than other forms of demonstrative knowledge: namely, because it is a less visible connection.

The Dual Relation View faces another serious objection. On this view the second requirement for sensitive knowledge is that there be a necessary connection between the idea of sensation and the actual existence of an external object causing that sensation. But we cannot (in Locke's sense) *know* when this connection between the idea and reality is satisfied. We cannot perceive the relation, since the only immediate objects of experience are ideas (and so not external objects). And even if we did perceive such a connection it would not count as knowledge (in Locke's sense), since knowledge is the perception of a relation *between ideas*. Thus it is not possible, even in principle, to know that the second condition for sensitive knowledge is satisfied. The skeptic (or an epistemic internalist) might object that we cannot be certain that there actually exists an external object without knowing that the second condition is satisfied.

Sensitive knowledge does not require that we *know* (in Locke's sense) that we meet both conditions for sensitive knowledge. There are two requirements for sensitive

knowledge: (i) we must perceive a necessary connection between the idea of sensation and the idea of an existing object; and (ii) there must be a necessary connection between the idea of sensation and the actual existence of the external object. If those conditions are satisfied, then on Locke's view we have sensitive knowledge that an external object exists. Notably absent from the list of conditions for sensitive knowledge is: (iii) knowledge that the second condition is satisfied. Thus Locke's position resembles epistemic externalists who think we can have knowledge without knowing (or even being aware) that we satisfy the conditions for knowledge (cf. Goldman 1967).

Locke's position here is not an unreasonable one. On his theory there is a necessary connection between the idea of a sensation and the actual existence of an external object. So, given this theory, the perception of a relation between the idea of sensation and the idea of an existing object *necessarily entails* the actual existence of an external object. Since satisfying the first requirement for sensitive knowledge necessarily entails the actual existence of an object (and guarantees that the second requirement for knowledge is satisfied), the skeptic has little room to complain.

Further, requiring that we know that we meet the conditions for knowledge leads to an infinite regress: in order to know₁ that p, we would have to know₂ that we satisfy the conditions for knowing₁ p, and in order to know₂ that we satisfy the conditions for knowing₁ p we would have to know₃ that we satisfy the conditions for knowing₂ that we satisfy the conditions for knowing₁ p, and so forth *ad infinitum*. By contrast, Locke holds that when we satisfy the two conditions for real knowledge then we have real knowledge, even if we do not know₂ that we meet the second requirement for real knowledge. It

seems reasonable, then, to deny the starting assumption of the objection, namely that to have sensitive knowledge we must know (in Locke's sense) that we satisfy the second requirement for sensitive knowledge.

It appears that, contrary to these objections, Locke can consistently and plausibly take his account of sensitive knowledge to be an account of our knowledge of existence of material objects. In sensitive knowledge we mediately perceive a relation between ideas, which makes the perception of this relation a kind of demonstrative knowledge, and yet Locke can still explain how sensitive knowledge is less certain than other instances of demonstrative knowledge. Moreover, even though we do not know (in Locke's sense) that we meet the second condition for sensitive knowledge, Locke can plausibly deny that knowing we satisfy this condition is a requirement for sensitive knowledge.

§8 Sensitive Knowledge of External Objects

Locke did not see himself as a skeptic about knowledge of the existence of external objects; to the contrary, he took himself to have given an explanation for how we can have certain knowledge that external material objects exist. Yet Berkeley, Reid, and others have argued that Locke's theory of perception and knowledge lead inevitably to skepticism about the existence of the external world. Berkeley used this argument against Locke to show that there is in fact no external world. More moderately, the logical positivists following in this tradition of empiricism used this argument against Locke to show that metaphysical debates about the existence and nature of a mind-independent world are meaningless. Arguing in the opposite direction, Reid argued from the inevitable skepticism of Locke's position to a direct realist theory of perception and epistemology. So the perceived failure of Locke's account of knowledge of the external world has had significant implications.

Yet, if the interpretation I am advancing here is right, then Locke's theory does not inevitably lead to skepticism about the external world. I have shown how Locke can retain his representationalist theory of perception and definition of knowledge, yet consistently maintain that we can have certain knowledge of external objects. The Dual Relation View is consistent with Locke's representationalist theory of perception, since we directly perceive only ideas and relations between ideas. The Dual Relation View is also consistent with Locke's definition of knowledge, since it includes the perception of a relation between ideas. Contrary to Berkeley and Reid, however, the Dual Relation View does not inevitably lead to skepticism. For, I have argued, on Locke's view the perception of a necessary connection between the idea of sensation and the idea of existence necessarily entails the actual existence of an external object. Thus Locke can plausibly claim that "this way of certainty, by the Knowledge of our own *Ideas*, goes a little farther than bare Imagination" (E IV.iv.2, 563); it can give us real knowledge of the actual world.

CHAPTER 6:

Scientific Knowledge and Probable Judgment

§1 The Scientific Revolution

Locke develops his epistemology in the midst of the scientific revolution. Copernicus argued that the earth revolves around the sun, Bacon developed a forerunner to the modern scientific method, and Newton had just developed the three laws of motion which provided the basis for his physics. Locke saw himself as an "Under-Labourer" to those making these and other breakthroughs; his role was "in clearing the Ground a *little*" so that we can have "true Knowledge of Things" (Epistle to the Reader, p. 10). One of Locke's aims in writing the Essay, then, is to develop an epistemology that would account for our knowledge of the physical world. But contrary to what this introduction might lead us to expect, in the work itself Locke argues that "we are not capable of scientifical Knowledge; nor shall we ever be able to discover, general, instructive, unquestionable Truths concerning [bodies]" (E IV.iii.26, 557). Rather than providing epistemic support for the best science of his day, Locke's skepticism about scientific knowledge seems to undermine its epistemic justification. How, then, does Locke see himself as an "Under-Labourer" to natural philosophy? In this chapter I show how Locke's skeptical arguments concerning scientific knowledge push him towards a model of natural philosophy based on empirical observations and experience. While appealing to observation of particulars cannot give us certain knowledge of general propositions concerning bodies, Locke thinks this is the best we can do. Thus for Locke natural

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philosophy properly construed is empirical and cannot give us certain knowledge of general principles.

Locke's *Essay* is part of an important shift towards the modern conception of what we now call "science". The Latin word *scientia* means knowledge, and in scholasticism *scientia* was a technical term for a deductive system of knowledge. *Scientia* is a whole body of knowledge which includes principles, or starting premises known to be true, and further truths that are deduced from these principles. Thus a science, in the premodern sense of *scientia*, is an absolutely certain system of knowledge. Many before Locke, including the medieval scholastics and Descartes, thought that natural philosophy could be a science in the sense of *scientia*. By contrast, Locke argues that natural philosophy is inherently inductive and for that reason cannot give us certain knowledge of general propositions concerning bodies. Locke's *Essay*, then, is part of a movement towards the modern conception of "science" (as we call it), which takes science (in the modern sense) to present fallible and revisable theories that can be overturned by further empirical data.

Some of the work supporting this interpretation of Locke's role in the scientific revolution has been done by Peter Anstey in his book *John Locke and Natural Philosophy*. Anstey rightly argues that, on Locke's view, the skeptical arguments about the prospects for a deductive science of bodies force us to rely on empirical observation and experience. It is this feature of the new natural philosophy that Locke took himself to be supporting (Anstey 2011, pp. 10, 24). However, Anstey holds that Locke backed down from his skeptical view about the prospects of scientific knowledge. Anstey is part of a
recent trend of scholarship that argues that the success of Newton's *Principia* led Locke to revise his views on science. In particular, it is claimed that Locke comes to see Newton as employing a new method for doing natural philosophy, and this method is capable of providing us with certain knowledge of general principles (Winkler 2008, 246; Anstey 2011, pp. 222-223; cf. Domski 2012, 66).

In this chapter I argue that Locke could not and did not change his view about the prospects for scientific knowledge. He *could not* have changed his views since he continued to accept the premises of the argument to the conclusion that we cannot have demonstrative knowledge in natural philosophy. And he *did not* see Newton's *Principia* as demonstrative knowledge of natural philosophy since, even in his later works, he saw the law of gravitation as a mere empirical generalization that might be falsified by future experience. The very basis for Newton's natural philosophy is an uncertain generalization. This explains why even in his later work Locke writes, "all the knowledge we have, or possibly can have of [nature], *cannot be brought into a science*" (STCE §193, W9: 186, my emphasis). We simply are not capable of having scientific knowledge of bodies. Moreover, the developmental interpretation has Locke backsliding into the view of natural philosophy as *scientia*, or a demonstrative science from certain principles, whereas my interpretation shows how Locke's view is a step toward the modern view of science (in our sense) as a fallible and revisable enterprise.

§2 Two Methods for Natural Philosophy

In the seventeenth century there were two general methods for doing natural

philosophy. Speculative natural philosophy was an *a priori* method of deducing laws and phenomena from speculative principles or hypotheses. Descartes, for example, thinks he can deduce the laws of motion just by reflecting on the attributes of God and without making any recourse to experience (*Principles*, Part 2, §36-42). Experimental natural philosophy, by contrast, is an *a posteriori* method that relies on experience and observation of phenomena. Bacon's method of induction, for example, begins by collecting a "natural history" (i.e. a record of particular observations) and then derives general principles or hypotheses from those observations (*New Organon*, Book 1, aphorisms 101-115). Anstey contends that "the most important frame of reference for understanding" natural philosophy in the seventeenth century is this "distinction between speculative and experimental natural philosophy" (Anstey 2011, p. 3). So which method of doing natural philosophy does Locke endorse? The short answer is "both". The long answer is more complicated.

For Locke, "*scientifical Knowledge*" is of "general, instructive, unquestionable Truths concerning [bodies]" (E IV.iii.26, 557). Examples of general and instructive propositions include the claims that "hemlock kills" and "all gold is malleable" (cf. E IV.iii.25, 556; IV.vi.9, 583). Locke explains that we cannot have scientific knowledge of the general proposition "hemlock kills" because, although we have a distinct idea of hemlock plants, "we cannot tell what effects they will produce; Nor when we see those Effects, can we so much as guess, much less know, their manner of production" (E IV.iii. 26, 557). So scientific knowledge would include knowledge *that* the proposition is true, and an understanding as to *why* the proposition is true. One way to justify the general proposition "hemlock kills" is "by contemplating our *Ideas*" (E IV.xii.9, 644). Some ideas of bodies are such that, if we had them, "we should know *without Trial* several Operations one upon another". For example, "Did we know the Mechanical affections of the Particles of...Hemlock...whereby it performs its Operations," then "we should be able to tell *before Hand*, that...Hemlock [will] kill" (E IV.iii.25, 556, my emphasis). Locke is here describing the speculative method for doing natural philosophy. If we had the right kind of idea of hemlock, then we could just reflect on our idea and deduce, without any appeal to experience, that the general proposition "hemlock kills" is true. According to Locke, God and probably angels have this kind of *a priori* knowledge of bodies (E III.vi.3, 440). So Locke accepts that the speculative method can in principle produce knowledge in natural philosophy.

For both Locke and his predecessors the basis for speculative natural philosophy is the essences of things. An essence (in its "primary signification") is what makes a something the kind of thing that it is (E III.iii.15, 417). For example, an essence of a particular substance *x* makes it hemlock by making it have the observable qualities of hemlock.¹ So suppose that the essence of hemlock makes it have the quality that, when consumed by humans, kills them. (This is, of course, oversimplifying the matter. But the example will be useful anyway.) In this case, the essence of hemlock necessarily entails that hemlock kills *all* humans who consume it. Therefore, if we had the idea of the

¹ Locke's favorite example to illustrate this point is that the essence of gold makes a particular gold substance have the defining qualities of gold, such as being yellow, fusible, and having a certain weight (E III.vi.2, 439; III.vi.6, 442). The same principle applies *mutatis mutandis* to the essence of hemlock.

proposition "hemlock kills" is true. This account follows from Locke's more general account of knowledge according to which we have knowledge by perceiving necessary relations between ideas.² Knowledge that hemlock kills would thus require perceiving a necessary connection between the idea of hemlock and its power to kill. Such an account would also give us knowledge of *why* the proposition is true, namely because the very essence of hemlock is such that it is the kind of thing that kills humans who consume it. In this way the knowledge of essences could in principle provide a foundation for a speculative science of bodies.

However, being the mere mortals that we are, we do not have epistemic access to the kind of ideas that could give us *a priori* knowledge that hemlock kills. Unlike his predecessors, Locke distinguishes the *real* essences of things from the *nominal* essences of things. The real essence is what, ontologically, makes a substance have the qualities that it has: *"the real Essence*...is that, on which all the properties of the *Species* depend, and from which alone they all flow" (E III.v.14, 436-437). The nominal essence is what, epistemically, we use to distinguish one kind of thing from another (E III.iii.15, 417). Locke's ring, for example, has both a real essence and a nominal essence:

these two *Essences* are apparently different. For, it is the real Constitution [i.e. real essence] of its insensible Parts, on which depend all those Properties of Colour, Weight, Fusibility, Fixedness, etc., which are to be found in it. Which Constitution we know not; and so, having no particular *Idea* of, having no Name that is the Sign of it. But yet it is its Colour, Weight, Fusibility, Fixedness, etc., which makes it to be *Gold*, or gives it a right to that Name, which is therefore its nominal Essence. Since nothing can be call'd *Gold*, but what has a Conformity of Qualities to that abstract complex *Idea* to which that Name is annexed. (E III.iii.18, 419)

² For a discussion of this point see chapter 5, section §3 of this dissertation.

The real essence is what makes a substance have the observable qualities of yellow, heaviness, fusibility, and fixedness. Yet we do not know what the real essence of gold is, and so we cannot distinguish gold substances from non-gold substances by referring to their real essences. We must instead refer to their observable qualities. It is those observable qualities that "gives it a right to [the] name" of "gold". Anything with the qualities of yellow, of a certain weight, fusibility, and fixedness, is gold; anything without one of these qualities is not gold. The nominal essence is this collection of qualities which, if a substance has all of them, we call it by the name "gold".

Since we do not know what the real essence of bodies are, the speculative method of natural philosophy cannot give us scientific knowledge of general and instructive truths such as "hemlock kills". For without knowing the real essence of hemlock we cannot perceive a necessary connection between the real essence of hemlock and its power to kill, so we cannot know on the basis of real essences that hemlock kills. The nominal essence of hemlock cannot give us scientific knowledge that hemlock kills either. For the defining qualities of hemlock have to do with its shape, color, and its relation to other plants. Locke would concede that if we could perceive a necessary connection between these qualities of hemlock and the power to kill humans, then we could have scientific knowledge that hemlock kills (cf. E IV.iii.10, 544; IV.iii.14, 546). But none of the defining qualities of hemlock necessarily entails that it kills when humans consume it (E IV.iii.26, 557). Perhaps we could redefine hemlock in such a way that the power to kill is included as a defining quality of hemlock (cf. E III.vi.50, 470),

and then it would be certain that whatever is hemlock will kill humans. Even here, though, we still would not have scientific knowledge of the general proposition "hemlock kills". For scientific knowledge includes both knowledge *that* a proposition is true, and an understanding of *why* the proposition is true. Without knowing the real essences of things, and without being able to perceive necessary connections between the qualities of hemlock, the speculative method of natural philosophy cannot give us knowledge of *why* "hemlock kills" is true. Thus without knowledge of real essences we cannot have scientific knowledge.

So while Locke allows that the speculative method of natural philosophy can in principle be a science, he does not think that this method is open to us. For this reason we must rely instead on the experimental method of natural philosophy:

In our search after the Knowledge of Substances, our want of Ideas, that are suitable to such a way of proceeding obliges us to a *quite different method*. We advance not here...by contemplating our Ideas, and considering their Relations and Correspondences; that helps us very little, for the Reasons, that in another place we have at large set down... What, then, are we to do for the improvement of our Knowledge in substantial Beings? *Here we are to take a quite contrary Course*: the want of Ideas of their real Essences sends us from our own Thoughts, to the Things themselves, as they exist. *Experience here must teach me, what reason cannot* (E IV.xii.9, 644, my emphasis)

The speculative method cannot advance our knowledge of natural philosophy, so we are "to take a quite contrary Course" and rely on experience and observation. Locke goes on to say that it is "by trying alone" that we "can certainly know" a particular gold substance is malleable (E IV.xii.9, 644). Our knowledge of substances, then, depends on experience

and observation.³ By emphasizing trials and observation of particulars, Locke is here advocating for the experimental method for doing natural philosophy (Anstey 2011, 71).

The experimental method of natural philosophy provides another way to justify general and instructive propositions about bodies, such as "hemlock kills" or "all gold is malleable". We learn what the qualities of gold are not by the bare contemplation of our ideas but by actually looking at gold:

Where our Enquiry is concerning Co-existence [of qualities], or repugnancy [of qualities] to co-exist, which by Contemplation of our Ideas we cannot discover; *there Experience, Observation, and natural History,* must give us, *by our Senses, and by retrial,* an insight into corporeal Substances. The Knowledge of Bodies we must get by our Senses, warily employed in taking notice of their Qualities, and Operations on one another (E IV.xxii.12, 647, my emphasis)

We must rely on *repeated* experience ("by our Senses and by *retrial*") to gain "an insight into corporeal Substance". For example, if one piece of gold is malleable, then that might be an accidental property of that one piece of gold. But if we see *again and again* that gold is malleable then, even if we cannot perceive a necessary connection between gold and malleability, it seems likely that in general gold has the quality of malleability.

Locke repeatedly advocates that we record our observations in a "natural History" (E III.xi.24, 521; IV.xii.10, 645; IV.xii.12, 647). Anstey persuasively argues that Locke consciously follows Bacon in his conception of a natural history. There are more works by Bacon in Locke's library than any other author besides Boyle (Anstey 2011, p. 49), Locke read all of Boyle's works which contain numerous references to Bacon's natural histories (pp. 51-52), Locke himself participated in producing Baconian natural

³ In chapters 4 and 5 I argued that sense perception can give us certain knowledge of external objects, and here Locke is making the same claim.

histories (pp. 52-58), and Locke referred to Bacon's works in both published and unpublished manuscripts (pp. 48-49). Anstey explains Bacon's view: "Natural histories are vast collections of facts about particular objects or qualities," and these natural histories are then used as the basis for forming inductive generalizations (Anstey 2011, p. 50).⁴ As Anstey shows, Locke is an advocate for and a practitioner of the natural history method for doing natural philosophy.

For Locke, natural histories provide probable evidence for general propositions such as "all gold is malleable". There are two grounds of probability, one is "the conformity of any thing with our own Knowledge, Observation, and Experience" and the other is "the Testimony of others" (E IV.xvi.4, 656). Since the proposition "all gold is malleable" conforms with our repeated past experience, it is for that reason likely to be true. This proposition is even more likely to be true when we learn that this quality has been observed in gold by others throughout history. For the "*highest degree of Probability*, is, when the general consent of all Men, in all Ages, as far as it can be known, concurs with a Man's constant and never-failing Experience in like cases," such as in the case of "all the stated Constitutions and Properties of Bodies" (E IV.xvi.6, 661). Thus a carefully recorded natural history which reports that gold is malleable credits the proposition "all gold is malleable" with the highest degree of probability of being true.

However, natural histories cannot provide us with certain knowledge of universal truths concerning bodies. For "the highest Probability, amounts not to Certainty, without

⁴ Anstey notes that while Locke shares Bacon's view on forming natural histories, his view of induction differs from Bacon's idiosyncratic conception of induction (Anstey 2011, 46). I will not pursue a comparison between their views of induction here, but will instead confine myself to explicating Locke's view of induction on the basis of their shared conception of natural histories.

which, there can be no true Knowledge" (E IV.iii.14, 546). The problem is that natural histories are inherently inductive. Locke explains:

'tis by Trying alone, that I can certainly know, what other Qualities co-exist with those of my complex Idea, v.g. whether that yellow, heavy, fusible Body, I call Gold, be malleable, or no; which Experience (which way ever it prove in *that particular Body I examine*) makes me not certain, that it is so in *all*, or *any other* yellow, heavy, fusible Bodies, but that which I have tried. (E IV.xii.9, 644, my emphasis)

If we examine Locke's ring, we can know that this one particular substance is yellow, heavy, and fusible, and thus know that it is gold. By further observation we can also know that this particular gold ring is malleable. But the malleability of Locke's ring "makes [us] not certain" that *all* gold is malleable, or even that *any other* gold is malleable. This is because "the Necessity or Inconsistence of *Malleability*, hath no visible connexion with...the nominal Essence of *Gold*" (E IV.xii.9, 644; cf. IV.iii.14, 546). Without perceiving a necessary connection between gold and malleability, we cannot be certain that unobserved instances of gold are also malleable; for knowledge of substances, "I must apply my self to Experience; as far as that reaches, I may have certain knowledge, *but no farther*" (E IV.xii.9, 645, my emphasis).

In a related passage Locke again makes the point that induction from particular experiences cannot give us certain knowledge of universal generalizations. As we have seen, Locke argues that "whilst we are destitute of senses acute enough to discover" the real essences of things, we cannot have scientific knowledge of general propositions such as "all gold is malleable";

nor can we be assured about [bodies] *any further, than some few Trials we make, are able to reach*. But *whether they will succeed again another time, we cannot*

be certain. This hinders our certain Knowledge of universal Truths concerning natural bodies: and our Reason carries us herein very little beyond particular matter of Fact. (E IV.iii.25, 556, my emphasis)

We can know from the "few Trials we make" that *observed* gold substances are malleable. But we cannot certainly infer from this that *unobserved* gold substances are malleable. For whether gold will be malleable "*again another time, we cannot be certain*". Locke here is articulating the view that inductive inferences are inherently uncertain.

On Locke's view, then, natural philosophy can give us highly justified beliefs, but it cannot give us certain knowledge. As I have argued, natural histories provide probable evidence for general propositions such as "all gold is malleable". To have knowledge that "all gold is malleable", though, would require that we perceive a necessary connection between the idea of gold and the idea of malleability. But we perceive no such connection. We do not perceive this necessary connection by reflecting on our ideas, and hence the speculative method cannot give us scientific knowledge of bodies. And even a carefully recorded natural history which reports that every instance of observed gold is malleable still does not reveal to us a necessary connection between gold and malleability, and hence the natural history method cannot give us scientific knowledge of bodies either. Thus, while natural philosophy can provide highly justified belief, "we are not capable of *scientifical Knowledge*" (E IV.iii.26, 557). For us, a science of bodies is impossible.

§3 Newton's Mathematical Method

Anstey and other recent commentators argue that Locke changes his view over time, accepting the method of natural histories in the first edition of the *Essay* (published in 1690) and then coming to accept Newton's mathematical method in Locke's later works (beginning in 1693) and even incorporating it into the fourth edition of the *Essay* (published in 1700).⁵ These commentators see Newton's mathematical method as a third method for doing natural philosophy, distinct from the speculative method and natural history method. Moreover, they hold that, according to Locke, this mathematical method can give us certain knowledge of bodies and form the basis of scientific knowledge. In this section I discuss the basis for this interpretation, and explain why I think it is mistaken.

In order to evaluate whether Locke changes his position it will be helpful to first contrast the natural history method with the mathematical method. The natural history method begins with particular observations and then afterwards forms general propositions that are supported by those particular observations. A point which has been passed over by other commentators, but which should be made here, is that Locke's natural history method allows us to make inferences from general propositions to particular phenomena. If we find a piece of gold, for example, we can make a probabilistic inference that this piece of gold is malleable. We cannot be certain that it is malleable until we actually test it; but we can infer that it is most likely malleable.

⁵ Anstey 2011; Winkler 2008; Domski 2012.

<other hypothetico-deductive method people? \rightarrow rely on later works for evidence, but claim this was L.'s view all along; e.g. corpuscularian hypotheses>

Importantly, though, the justification for this inference from the general proposition "all gold is malleable" to the conclusion that "this gold is malleable" ultimately rests on the observation of past instances of gold. I will return to this point below, since I will argue that this is how Locke conceives of Newton's physics.

By contrast, the mathematical method does not take the epistemic justification to rest *solely* on the observation of particulars; Newton's mathematical models are also meant to provide justification for accepting his natural philosophy. The *Principia* includes mathematical proofs which take as their starting point general mathematical principles. Newton then argues that his mathematical models approximate observable phenomena. In this way Newton appears to take general principles as his starting point and then he deduces particular phenomena from those general principles. Moreover, Newton's mathematical proofs give us certain knowledge that the conclusion is true, and since these proofs approximate observable phenomena, these mathematical proofs seem to hold true also for bodies. Thus the mathematical method is supposed to give us certain knowledge of natural philosophy.

The mathematical method, then, is importantly different from the natural history method. While the natural history method begins with particulars and then moves to more general claims, the mathematical method begins with general principles and then deduces particular phenomena. Another important difference is that the natural history method uses induction and so cannot give us certainty, whereas the mathematical method uses mathematical proofs and thus seems to give us certain knowledge.

Anstey argues that "as Newton's achievement slowly dawned on [Locke], ...he became aware that mathematical reasoning from principles derived from experience could generate knowledge of nature" (Anstey 2011, p. 152). Anstey's claim is not that the mathematical method can demonstrate this one point here and this one point there; rather, his claim is that by using the mathematical method natural philosophy can become *scientia*, a deductive system of knowledge that begins with general principles known to be true and then deduces particular matters of fact from those principles: "Locke's position is not an outright rejection of natural philosophy as a form of *scientia*. It is, rather, that such a natural philosophy, such a science of nature, *will have to wait*" for Newton's method to be applied to other areas of natural philosophy. (Anstey 2011, p. 222, my emphasis). The claim, then, is that on Locke's view the mathematical method can give us demonstrative knowledge of a whole system of natural philosophy.⁶

The "first inkling" that Locke changes his mind occurs in *Some Thoughts Concerning Education*, published in 1693 (Anstey 2011, p. 149). After his usual disparagement of natural philosophy, namely that "the systems of physics that I have met with afford little encouragement to look for certainty," Locke then seems to reverse course when it comes to Newton's *Principia*:

the incomparable Mr. Newton, has shown, how far mathematics, applied to some parts of nature, may, upon *principles that matter of fact justify*, carry us in the knowledge of some, as I may so call them, particular provinces of the incomprehensible universe. And if others could give us so good and clear an account of other parts of nature, as he has of this our planetary world..., we might in time hope to be furnished with more true and certain knowledge in

⁶ Domski holds that, according to Locke, the mathematical method can give us certain knowledge of celestial bodies but not of terrestrial bodies (Domski 2011, p. 67).

several parts of this stupendous machine, than hitherto we could have expected. (STCE §194, W9: 186, my emphasis)

Newton bases his system on empirically justified principles, those "principles that *matter* of fact justify". Locke here has in mind Newton's mathematical formulas, such as the second law of motion (F = ma) and the inverse square law ($F = G[(m_1 \cdot m_2)/r^2]$. These mathematical principles "carry us in knowledge" of nature, which suggests that we can have certain knowledge of particular phenomena by deducing them from these mathematical principles (Winkler 2011, p. 244). Locke even suggests that Newton's mathematical method can be applied to "several other parts" of nature and thereby provide us with "more true and certain knowledge...than hitherto we could have expected".

Mary Domski argues that the above passage shows that "Locke himself recognized that Newton's [method] was not a natural-historical or straightforwardly 'empirical' project" (Domski 2013, p. 163). For Locke contrasts Newton's method with the systems of physics he has met with thus far, and then he picks out Newton's use of mathematical principles as giving us special insight into the motion of planets. This suggests that Locke sees Newton as doing something new. According to Domski, Locke sees that Newton appeals to non-empirical facts, namely mathematical principles, as justification for his system of natural philosophy.

In *Of the Conduct of the Understanding*, written at about the same time, Locke again accepts Newton's use of general principles:

There are fundamental truths that lie at the bottom, the basis upon which a great many others rest, and in which they have their consistency... Such is that

admirable discovery of Mr. Newton, that all bodies gravitate to one another, which may be counted as the basis of natural philosophy (*Conduct*, W3: 282)

Locke identifies the proposition "all bodies gravitate to one another" as a fundamental truth on which a great many other truths rest and which is the basis of natural philosophy. Elsewhere he says this proposition is "to be taken as a *principle* in natural philosophy" (*Elements*, W3: 305, my emphasis). On the natural history method, we start with particulars and then form generalizations. But here, Domski argues, "Locke presents universal gravitation as a *starting point* for understanding nature" and from which we deduce particular phenomena (Domski 2013, p. 164, my emphasis). These passages therefore suggest that Locke changes his view about the order of explanation in natural philosophy, which would be clear evidence that his position shifted from accepting the natural history method to accepting the mathematical method.

However, it is not entirely clear that Newton himself accepts the order of explanation prescribed by the mathematical method, and Locke might reasonably think that Newton did not do so. It is not as if Newton came up with his mathematical laws of motion while sitting in his armchair. Newton arrived at those mathematical laws by observing motion pendulums, falling bodies, and orbiting planets. He measured and calculated the motion of observed bodies until he came up with mathematical principles that fit the phenomena. As Newton would later say in the second edition of the *Principia*, "propositions are *deduced from the phenomena* and are made general by induction" (*Principia*, p. 943, my emphasis). For example, in the first edition, which Locke read, Newton says that the first two laws of motion are principles "accepted by mathematicians and *confirmed by experiments of many kinds*," and he then appeals to Galileo's calculations of falling bodies (*Principia*, p. 424, my emphasis). Similarly, he says, "*By these examples* [of the motion of pendulums] I wished only to show the wide range and certainty of the third law of motion" (*Principia*, p. 430, my emphasis). Locke might reasonably interpret the repeated appeal to observable phenomena as evidence that Newton derived his laws of motion from observation of particular bodies. In that case, the laws of motion are the result of an inductive generalization from particulars, which is consistent with the natural history method.

Proponents of the developmental interpretation, though, argue that Locke thinks these general principles provide justification for other claims, which they take as evidence that Locke accepted the mathematical method's order of explanation (Winkler 2008, pp. 241-242; Anstey 2011, p. 151; Domski 2013, p. 164). For the general proposition "all bodies gravitate to one another" is one of the "fundamental truths" from which other truths can be deduced, and it is "the basis of natural philosophy" (*Conduct*, W3: 282). Locke even uses this proposition to prove that the moon has a circular orbit around the earth (*Elements*, W3: 305). So Locke accepts that we can argue from general principles to particular phenomena.

But Locke's allowing us to make inferences from general principles to particular phenomena does not mark a shift in position. From the first edition of the *Essay* onward Locke concedes, "Not that we may not, to explain any phenomena of nature, make use of any probable hypothesis whatsoever", but "we should not take up any [hypothesis]...till we have very well examined the particulars, and made several experiments" (E IV.xii.13, 648). In consonance with the natural history method, Locke advises us to form general principles only after examining the particulars; but once we have done that, we can then make probabilistic inferences from a general principle to the particular phenomena we want to explain. He adds a caution, though, that "we take care, that the name of *principles* deceive us not...by making us receive that for an unquestionable truth, which is really at best a very doubtful conjecture, such as are most...of the hypotheses in natural philosophy" (E IV.xii.13, 648).

Locke can accept general principles, and he can accept that we argue from these general principles to particular phenomena. But what Locke cannot accept, if he is to hold on to the natural history method, is that we *begin* with general principles and then deduce particular phenomena. I argued above that Locke might reasonably take Newton's mathematical laws to be derived from the observation of particular bodies. On this interpretation, Locke does not see Newton *beginning* with general principles. So Locke can allow the proposition "all bodies gravitate to one another" to be the foundational principle of Newton's system of natural philosophy, while still taking Newton's physics to be consistent with the natural history method.

On a related point, Locke cannot accept that Newton's mathematical models provide justification for his physics independently from observed phenomena. Domski claims that Locke sees Newton appealing to principles in mathematics as non-empirical evidence for his theory (Domski 2013, p. 163).⁷ So even if Newton does not begin, *per se*, with general principles, his mathematical principles are thought to supply independent grounds for accepting Newton's physics. However, if Newton's mathematical principles did not approximate observable phenomena then his theory would be rejected. Moreover, Locke might take Newton's mathematical principles to provide evidence for his natural philosophy *only so far as* they correspond to observable phenomena. So it is not clear that Locke takes Newton's mathematical models to be evidence independent from observed phenomena for his theory.

Another source of evidence that Locke changed his view is that he claims Newton's *Principia* contains *demonstrations*. For example, Locke cites Newton's refutation of Descartes' vortices theory of planetary motion as a successful demonstration in natural philosophy (Stillingfleet, W4: 427; cf. *Principia*, pp. 786-790). Locke had explained this very argument in a review he wrote of the *Principia* in 1688. In that review Locke argues, following Newton, that Descartes' theory of planetary motion is inconsistent with observational evidence. Descartes' theory entails that at a specific point in the earth's orbit (i.e. in Virgo) the apparent motion of the sun should speed up, and at another specific point in the earth's orbit (i.e. in Pisces) the apparent motion of the sun should slow down. But "the observational evidence shows the opposite is the case" (Anstey 2011, p. 96). So, as Locke sees it, we know by observation that the earth's

⁷ Winkler and Anstey point to Locke's acceptance of mathematics in natural philosophy as evidence that he came to accept the mathematical method (Winkler 2008, p. 238; Anstey 2011, p. 110). But, as I point out above, these mathematical principles might be inferred from the observation of particular bodies. So Locke's acceptance of mathematical principles is evidence that he changes his view only if he takes those principles to provide independent evidence for the truth of Newton's theory.

actual orbit is inconsistent with Descartes' theory of planetary motion, and therefore the theory is to be rejected.⁸ Winkler argues that "Locke's example here is no throwaway; it is something he carefully considered. And he is willing, after such consideration, to describe Newton as having *demonstrated* that Descartes is mistaken". Further, he "calls upon the word ['demonstrated'] at the close of nearly seventy-five pages defending the *Essay*'s account of demonstration", so Locke "really does mean *demonstrated*" (Winkler 2008, pp. 236-237). That the *Principia* includes demonstrations of this kind is taken as evidence that Locke moved away from the natural history method towards the mathematical method which aims to provide demonstrative knowledge of natural philosophy.

This demonstration, though, is not evidence that Locke changed his view about the proper method for doing natural philosophy. Newton argues that (1) if Descartes' theory were true, then we would see the apparent motion of the sun increase and decrease at specific points in the earth's orbit. Accepting this conditional claim is consistent with the natural history method. It is merely stating a consequence of Descartes' theory. Next, Newton argues that (2) the observational evidence proves the opposite is the case. Again, accepting this claim is consistent with the natural history method, since this method allows us to have knowledge of observed particulars. It follows from (1) and (2) that Descartes' theory of planetary motion is false. Since accepting both the premises is consistent with the natural history method, and it straightway follows that Descartes'

⁸ Anstey gives some reasons to doubt the efficacy of this demonstration (Anstey 2011, p. 96), but what is important for our purposes is that Locke takes a particular set of observations as demonstrative proof against Descartes' theory.

theory is false, it appears that accepting this demonstration is consistent with the natural history method. Further, Locke wrote the review explicating this demonstration in 1688, before his supposed change in view (in 1693 forward) and before he published the first edition of the *Essay* (in 1690) in which he endorses the natural history method. This strongly suggests that Locke takes this demonstration to be consistent with the natural history method of natural philosophy.

Locke also takes Newton's law of gravitation to be a refutation of the mechanist claim that there can be no action at a distance. In the first three editions of the *Essay*, Locke denies that action at a distance is possible, saying that bodies "operate...*by impulse*, and nothing else" since it is "impossible to conceive, that Body should operate on what it does not touch" (E1-3 II.viii.11, 135n). Locke later confesses, "And so I thought when I writ it... But I am since convinced by the judicious Mr. Newton's incomparable book" that the "gravitation of matter towards matter" is a "demonstration" that God can and has in every "*visible instance*" "put into bodies powers and ways of operation above what can be derived from our idea of body" (Stillingfleet, W4: 467-468, my emphasis).⁹ So Locke comes to see Newton's law of gravitation as demonstrative proof that bodies can and do act at a distance. Note, though, that the premise for this demonstration is not that *all* bodies gravitate toward one another, but rather that in every "*visible instance*" bodies gravitate toward one another. So the knowledge here may be restricted to observed bodies, which is consistent with the natural history method.

⁹ Interestingly, although Locke does change the E II.viii.11 passage, he does not change another passage endorsing the same principle (E₄ II.viii.18, 138) and he even adds a passage reiterating his original view that denies action at a distance is possible (E₄ IV.x.19, 629; cf. Anstey 2011, 154).

These demonstrations above illustrate an important point. The natural history method is consistent with accepting *some* demonstrations in natural philosophy, namely those that depend on the observation of particular bodies. For example, we can falsify a theory, such as Descartes' vortices theory of planetary motion, by seeing that it is consistent with the observation of particulars. We may also be able to demonstrate that observed bodies conform to the same general principle. By carefully recording the times, weights, and positions of pendulums we can demonstrate that those observed bodies follow Newton's third law of motion. It would be an inductively leap to generalize this law to *all* bodies, but the acceptance of demonstrations concerning *observed* bodies is consistent with the natural history method.

The final source of evidence that Locke changes his view and comes to endorse the mathematical method are additions that he made to the fourth edition of the *Essay*. In one addition he says that "Mr. Newton, in his never enough to be admired Book, has *demonstrated several Propositions*, which are so many new Truths, before unknown to the World, and are further Advances in Mathematical Knowledge" (E₄ IV.vii.11, 599, my emphasis). Again we have Locke claiming that Newton's *Principia* contains demonstrations, though as Domski points out the claim here is restricted to "advances in *mathematical* knowledge" (cf. Domski 2012, p. 54). In another passage, though, he seems to broaden the scope to *all* the propositions in the *Principia*:

No Body, I think, can deny that Mr. Newton certainly knows *any Proposition* that he now at any time reads in his Book, to be true, though he has not in actual view that admirable Chain of intermediate Ideas whereby he at first discovered it to be true. (E₄ IV.i.9, 530, my emphasis)

Even conceding that this is hyperbole, Locke might at least be saying that Newton knows that the foundational principles such as the laws of motion and the inverse square law are true. This would be problematic since these principles are completely general, applying to every body, and yet Locke seems to suggest that Newton has certain knowledge of these principles.

If all knowledge of bodies must come from the observation of particular bodies, then we cannot know that *all* bodies (including unobserved ones) obey Newton's laws of motion and the inverse square law. The two possibilities, then, are that (a) Locke changes his view and now accepts that we can have knowledge of general propositions concerning bodies, or (b) Locke continues to hold that all knowledge of bodies must come from observation of particular bodies and thus we can have certain knowledge only that *observed* bodies obey the laws of motion and inverse square law. The apparent generality of Newton's principles suggests that Locke changes his view. There are other reasons, however, for thinking that on Locke's view we cannot know that *all* bodies obey these laws.

One obvious reason to think that Locke does not change his view is that in the fourth edition of the *Essay* he continues to assert that "*we are not capable of scientifical Knowledge*; nor shall ever be able to discover general, instructive, unquestionable Truths concerning [bodies]. Certainty and Demonstration, are Things we must not, in these matters, pretend to" (E IV.iii.26, 556-557, my emphasis). Locke made substantive changes to later editions of the *Essay* (most notably his account of freedom in E II.xxi). So if Locke came to think that we can have scientific knowledge of bodies, we would

expect to see him make changes to the numerous passages where he emphatically denies the possibility of our having scientific knowledge. Yet he doesn't make any such changes. Anstey is forced to acknowledge that, on his interpretation, "Locke was either unwilling or unable to make the requisite changes" to his theory of natural philosophy "to reflect this development" in changing his position from endorsing the natural history method to endorsing the mathematical method (Anstey 2011, p. 223). But as I read Locke, he does not make the "requisite" changes to later editions of the *Essay* because he does not change his position.

Furthermore, even in his later works Locke expresses deep skepticism about the prospects of making natural philosophy a science. He says that "the study of nature...*cannot be brought into a science*" (STCE §193, W9: 186, my emphasis). For, "The works of nature are contrived by a wisdom, and operate by ways, too far surpassing our faculties to discover, or capacities to conceive, for us ever to be able to reduce them into a science" (STCE §190, W9: 182). The incomprehensibility of the works of nature include "gravity, which I think impossible to be explained by any natural operation of matter, or any other law of motion" (STCE §192, W9: 184). So in the same stretch of argument (STCE §190-194) Locke affirms both that gravity surpasses our understanding and that natural philosophy cannot be made a science because the operations of bodies surpass our understanding. This suggests that Locke consciously includes Newton's natural philosophy among those that "cannot be brought into a science" or "taught a young man as a science" (STCE §193, W9: 186, 185).

The primary reason that Locke cannot and does not consider Newton's natural philosophy a science is that we cannot know that the fundamental principle "all bodies gravitate to one another" is true. Knowledge is the perception of a connection between ideas (E IV.i.2, 525), and one "cause of ignorance...is a want of a *discoverable Connection* between those Ideas which we have. For wherever we want that, we are utterly uncapable of universal and certain Knowledge" (E IV.iii.28, 558). So we cannot know that "all bodies gravitate to one another" without perceiving a connection between gravity and bodies. Yet Locke repeatedly denies that we perceive any such connection: the gravitation of one body to another is "inexplicable", "inconceivable", and "above what can be derived from our idea of body" (*Elements*, W3: 305; Stillingfleet, W4: 467-468). Because we do not perceive a connection between gravity and bodies, we cannot know that "all bodies gravitate to one another". Since we cannot have certainty concerning the fundamental principle of Newton's natural philosophy, that principle cannot be the basis for a system of demonstrative knowledge.

The natural history method would allow us to know that particular bodies gravitate to one another, but this knowledge extends only as far as our observation. As Locke says in the *Essay*, "I must apply myself to Experience; *as far as that reaches, I may have certain Knowledge*, but no farther" (E IV.xii.9, 645, my emphasis). In the *Elements of Natural Philosophy*, Locke makes a similar point with respect to gravity:

It appears, *as far as human observation reaches*, to be a settled law of nature, that all bodies have a tendency, attraction, or gravitation towards one another. (*Elements*, W3: 304, my emphasis)

Here Locke specifically qualifies our knowledge of the law of gravitation to observed bodies. So when Locke says that Newton "certainly knows" all the propositions in the *Principia* (E IV.i.9, 530), he may take the scope of Newton's knowledge to extend only to observed bodies. Similarly, when Locke claims that Newton's mathematical principles "carry us in knowledge"

(STCE §194, W9: 186), this may be a claim only about observed bodies.

Notice that Locke's claims about the law of gravitation are relevantly similar to his claims about the malleability of gold. We saw in the last section that we do not perceive a necessary connection between the nominal essence of gold and malleability and therefore we cannot know that "all gold is malleable", but we can know through experience and observation that particular instances of gold are malleable. Similarly, Locke thinks that we do not perceive a necessary connection between the nominal essence of body and gravity: gravity is "above what can be derived from our idea of body" (Stillingfleet, W4: 467-468). Consequently, we cannot know that "all bodies gravitate to one another". Yet "*as far as human observation reaches*" we can know that particular bodies gravitate to one another (*Elements*, W3: 304, my emphasis). The similarity between Locke's views on the malleability of gold and the gravitation of matter can easily be explained by his continued commitment to the natural history method, which entails that in both cases we can have knowledge of observed particulars but not of general propositions concerning bodies.

Furthermore, Locke continues to advocate for the natural history method in his later work. In *Of the Conduct of the Understanding* (which Locke began writing in 1697), Locke says that knowledge of nature is advanced by the work of "natural historians":

Particular matters of fact are the undoubted foundations on which our civil and natural knowledge is built: the benefit the understanding makes of them is to draw from them conclusions (*Conduct*, W3: 233, my emphasis)

Locke here articulates the natural history method: knowledge of natural philosophy is "built" on the foundations of *particular matters of fact* from which we draw general conclusions. Locke discusses two ways to go wrong in natural philosophy: either by learning particular matters of fact without forming generalizations or by drawing "general conclusions, and raise axioms from every particular they meet with" (*Conduct*, W3: 233-234). Locke then says:

Between these, those seem to do best, who taking material and useful hints...by what they shall find in [natural] *history*, to confirm or reverse these imperfect observations; which may be established into rules fit to be relied on, when *they are justified by a sufficient and wary induction of particulars*. (Conduct, W3: 234, my emphasis)

The "best" method of natural philosophy, then, is the "*wary induction of particulars*". This shows Locke's continued commitment both to the direction of explanation in the natural history method (i.e. from particulars to generalizations), and also the inherent uncertainty of this method (e.g. "*wary induction*"). Thus we can see that even in Locke's late work he continues to endorse the natural history method as the proper method for doing natural philosophy.

Locke cannot, must not, and does not change his view concerning scientific knowledge. Because we do not perceive any connection between bodies and gravity, we

cannot know that "all bodies gravitate to one another". It follows that Newton's natural philosophy cannot be a science: we cannot know that the fundamental principle in his system is true, and so that principle cannot give us certain knowledge of phenomena deduced from that principle. Moreover, Locke continues to endorse the natural history method both in later editions of the *Essay* and in *Of the Conduct of the Understanding* (after his supposed change in view), and he continues to deny that natural philosophy can be made a science in both later editions of the *Essay* and in *Some Thoughts Concerning Education* (again after his supposed change in view). There is strong evidence, then, that Locke continued to hold that from experience we can have knowledge of particular bodies, but that we cannot have scientific knowledge of general propositions concerning bodies. Even in his later works, Locke does not think that natural philosophy can be made into a science.

§4 Locke as an Under-Labourer

Locke describes himself as an "Under-Labourer" to the "Master-Builders" in natural philosophy. While the master-builders have made major advancements in their respective fields of natural philosophy, Locke's ambition for the *Essay* is "*in clearing Ground a little, and removing the Rubbish, that lies in the way of Knowledge*" (Epistle to the Reader, pp. 9-10). This passage indicates that Locke takes his epistemology to provide epistemic support for the new natural philosophy. It is less clear, though, what exactly Locke takes himself to be supporting and how his epistemology provides this support. Part of the mystery is that the master-builders appear to be a fairly heterogenous selection of natural philosophers: Boyle, Sydenham, Huygens, and Newton. Some have suggested that Locke sees his role as under-labourer as providing an epistemology that would justify specific natural theories such as mechanism (Davidson and Hornstein 1984, p. 281) or corpuscularianism (McCann 1994). But Sydenham "was definitely *not* a mechanical philosopher" or corpuscularian theorist (Anstey 2011, p. 24), and so Locke's aim must not be so specific as to support mechanism or corpuscularianism. Others have suggested that Locke's inclusion of Newton is evidence of Locke's support for the mathematical method of natural philosophy (Winkler 2008, p. 239; Domski 2012, 67-68). However, the Epistle to the Reader is the preface to the first edition, and I have argued that (at the very least) in the early editions of the *Essay* Locke is committed to the natural history method of natural philosophy. So Locke could not plausibly have had Newton's mathematical method in mind while writing the under-labourer passage.

As I interpret Locke, although the master-builders advance different sciences, they all do so by using the natural history method. Boyle clearly practiced natural histories, and Sydenham did also (Anstey 2011, p. 220). Huygens used the motion of pendulums to develop his mathematical theory of centrifugal force in his *Horologium Oscillatrium*, and so Locke may interpret Huygens in the same way I have argued that he interprets Newton, namely inferring general mathematical principles from the motion of particular bodies.¹⁰ Further, Anstey notes that "it is most likely" because of Huygens'

¹⁰ It should be noted, however, that Huygens does not describe his own method that way (preface to *Traite de la Lumiere*, quoted in Smith 2002, pp. 139-140).

"recommendation that the Parisian Academie developed a programme of Baconian natural history...in 1666" (Anstey 2011, p. 220). And, I have argued, Locke takes Newton to be following the natural history method. This interpretation gives us a way to find a common method among all the master-builders: according to Locke, they all employ the method of natural history. I suggest that Locke takes his epistemology to provide theoretical justification for the method of natural history, and this is why he claims to be an under-labourer to these master-builders.

Locke's further comments about his role as an under-labourer to natural philosophy have been largely (if not entirely) passed over. He identifies "unintelligible terms" as well as "Vague and insignificant forms of speech, and abuse of language...and misapplied words, with little or no meaning" as "the rubbish...that lies in the way of knowledge". To address this problem, Locke tells his readers, "I have in the Third Book dwelt long on this Subject" of the meaning of words (Epistle to the Reader, p. 10). Interestingly, then, Locke sees his contribution to natural philosophy rooted in his philosophy of language articulated in Book III of the *Essay*. But what in Book III is relevant to natural philosophy?

The topic in Book III most relevant to natural philosophy is Locke's distinction between real and nominal essences. We saw in section §2 above that if we knew the real essences of things then we could use the speculative method to make natural philosophy a demonstrative science. But Locke argues at length in Book III that we do not know the real essences of things; instead we are confined to the nominal essences of things (cf. E III.iii.12-20; III.vi.1-22, 48-50; III.x.17-22). So Locke's distinction between real and nominal essences leads Locke to deny that natural philosophy can be a demonstrative science.

Also, Locke takes his account of nominal essences to support the natural history method. Nominal essences of bodies are supposed to represent external objects, and so we must do careful natural histories if we are going to accurately define our terms for bodies:

For, since 'tis intended their Names should stand for such collections of simple Ideas, as do really exist in Things themselves... therefore, *to define their Names right, natural History is to be enquired into*; and their Properties are, with care and examination, to be found out. ...we must, by acquainting ourselves with the *History* of that sort of Things, rectify and settle our complex Idea, belonging to each specifick Name (E III.xi.24, 521, my emphasis)

If our names for substances (i.e. nominal essences) are to accurately represent the actual qualities of external objects, we must define nominal essences as including those qualities which we observe in our experience. Locke recommends "natural History" as the means for carefully identifying the qualities of bodies on which we should form nominal essences. Also, as I argued in section §2, because our ideas of bodies are of nominal essences (rather than of real essences), we must rely on "Experience, Observation, and *natural History*" in order to gain "insight into corporeal Substances" (E IV.xii.12, 647, my emphasis). Locke's account of nominal essences, then, provides theoretical justification for the natural history method of doing natural philosophy.

We are now in a position to answer the question asked at the beginning of this chapter. In the Epistle to the Reader Locke indicates that one of the roles for the *Essay* is to provide an epistemic support for natural philosophy. But then in the *Essay* itself Locke

goes on to argue that natural philosophy cannot be made into a demonstrable science. However, Locke does not see this result as a skeptical conclusion. By showing that we do not have knowledge of the real essences of bodies, Locke demonstrates how we must instead rely on experience and observation of particular bodies. As he sees it, the masterbuilders all employ the natural history method, and Locke's epistemology shows how this method can provide epistemic justification for general propositions concerning bodies. For the observation of particular bodies, along with the carefully recorded natural histories, can provide the highest degree of probable justification for general principles in natural philosophy. Thus Locke's aim is to redirect natural philosophy in a more productive direction. He recognizes, though, that induction from particular observations is inherently uncertain, and thus the natural history method cannot give us certain knowledge. Locke's philosophy of science, then, marks a step away from the conception of natural philosophy as *scientia* and takes a step towards the modern conception of science (in the modern sense) as a fallible enterprise which must be open to revision on the basis of further observation.

CHAPTER 7:

Real Knowledge of Morality

§1 A Problem for Moral Knowledge

Locke defines knowledge as the perception of a relation between ideas, which, as we have seen in previous chapters, raises questions about how we can have knowledge about the actual world. Given this definition of knowledge, for example, it is at first difficult to see how we can have knowledge that objects actually exist. A similar problem arises for morality. Locke holds a divine command theory according to which there are objective facts about what God has commanded us to do, and those facts determine which actions are morally good and which actions are morally bad. But if knowledge is the perception of a relation between ideas, which seems to limit our knowledge to our ideas, then how can we know what God has actually commanded?

The solution to the problem about moral knowledge, I suggest, is analogous to the solution to the problem of knowledge of existence. Locke introduces real knowledge as a way to ensure that our knowledge corresponds to the way the world actually is. Below I suggest that we have real knowledge of morality when the ideas we perceive to agree also correspond to God's actual commands.

§2 Moral Knowledge

Many have criticized Locke's account of moral knowledge as being merely knowledge by stipulation. In this section I describe the basis for this interpretation and explain why it is mistaken. I argue instead that for Locke moral knowledge consists in perceiving that the idea we have of an action conforms (or does not conform) to our idea of God's commands.

On his theory of language, words represent ideas (E III.ii.1, 405), and so the definition of a word specifies what idea the word stands for (E III.iv.6, 422).¹ Moral ideas such as courage and murder are complex ideas, which are ideas composed of several simple ideas. For example, the word "courage" stands for our complex idea of courage, and the definition of "courage" specifies the collection of simple ideas that are included in our complex idea of courage (cf. E II.xxxi.3, 377). Defining precisely what ideas a term such as "courage" stands for can help us see the connection between courage and other moral terms. Since, for Locke, knowledge is the perception of a relation between ideas, stating clearly what ideas moral terms stand for can help us acquire moral knowledge.

Locke repeatedly emphasizes that if we carefully define our terms then a demonstrative science of morality would be possible. Moral ideas are "arbitrarily put together, without reference to" anything else, and so we can "exactly know the *Ideas*, that go to each Composition, and so…perfectly declare…what they stand for" (E III.xi.15, 516). He then says:

Upon this ground it is, that I am bold to think, that Morality is capable of Demonstration, as well as Mathematicks: Since the precise real Essence of the Things moral Words stand for, may be perfectly known; and so the Congruity, or Incongruity of the Things themselves, be certainly discovered, in which consists perfect Knowledge. (E III.xi.16, 516, my emphasis)

¹ Locke makes an exception for particles (E III.vii.1-6, 471-473).

Perfectly knowing the definition of "moral Words" is what makes a demonstrative science of morality possible. Locke encourages us in "moral Discourses, to define [our] Words when there is Occasion: Since *thereby moral Knowledge may be brought, to so great Clearness and Certainty*" (E III.xi.17, 517, my emphasis). Elsewhere, he says, "we may have certain and demonstrative Knowledge...if we will carefully, as in Mathematicks, keep to the same precise *Ideas*, and trace them in their several Relations one to another" (E IV.iv.9, 567). Locke clearly and repeatedly claims that carefully defining moral words makes demonstrative moral knowledge possible.

Some of Locke's examples suggest that moral knowledge consists *solely* in perceiving the connections between the definitions of moral terms. In one example he claims that we can have demonstrative knowledge that "*Where there is no Property, there is no Injustice*":

for the *Idea* of Property, being a right to any thing; and the *Idea* to which the Name *Injustice* is given, being the Invasion or Violation of that right; it is evident, that these ideas, being thus established, and these Names annexed to them, I can...certainly know this Proposition to be true (E IV.iii.18, 549)

In a second example he claims that we can have demonstrative knowledge that "No

Government allows absolute Liberty":

The *Idea* of Government being the establishment of Society upon certain Rules or Laws, which require Conformity to them; and the *Idea* of absolute Liberty being for any one to do whatever he pleases; I am as capable of being certain of the Truth of this Proposition, as of any in the Mathematicks. (E IV.iii.18, 549)

John Colman observes of these arguments:

The necessary truth of these two propositions follows from the definition of 'property', 'injustice', 'government' and 'absolute liberty'. Locke does no more

than give definitions; there is no hint that anything more is needed to establish the truth of the propositions. (Colman 1983, p. 154)

Knowledge is the perception of a necessary relation between ideas, and in these examples we perceive a necessary connection between the idea of property and the idea of justice, and between the idea of government and the idea of restrictions to liberty. Thus just by reflecting on the definitions of these words (i.e. the ideas the words stand for) we can know that "where there is no property there is no injustice" and "no government allows absolute liberty".

However, merely perceiving the connection between the definition of moral terms is obviously an inadequate account of moral knowledge. Berkeley objects that on Locke's account:

To demonstrate morality it seems one need only make a dictionary of words and see which included which (Berkeley, *Philosophical Commentaries*, entry 690).

Hume likewise criticizes Locke:

to convince us of this proposition, that *where there is no property, there can be no injustice*, it is only necessary to define the terms, and explain injustice to be a violation of property. (Hume, *Enquiry Concerning Human Understanding* sect. XII, part. III, p. 209).

Merely stipulating the definitions of "property" and "injustice" does not give us knowledge of a substantive moral principle. Such definitional knowledge would be trivial, which has led to repeated complaints that Locke's examples of moral knowledge are of "trifling propositions"

(Berkeley, *Philosophical Commentaries*, entry 691; cf. Gibson 1917, p. 160; Carson 2002, p. 376).

Part of the complaint seems to be that merely stipulating definitions does not allow us to make any normative claims. We can define justice in such a way that an action is just so long as it does not violate the property right of another person. But we are not very interested in whether we *call* such an action "just". What we want to know is whether the action is *morally good*, or whether we have an *obligation* to perform it. Stipulating that such and such acts are called "just" does not make any normative claim about what we *should do*. The problem for Locke, on this interpretation, is that merely reflecting on the definition of words does not give us knowledge of substantive normative claims, so if moral knowledge is merely about the definitions of words then Locke's account misses what is most important about moral knowledge.

Although some have objected to Locke on the grounds that moral knowledge cannot be simply a matter of definition. Locke recognizes this very point:

Whoever treats morality so as to give us only the definitions of justice and temperance, theft and inconsistency, and tells us which are virtues, which are vices, does only settle certain complex ideas...with their names to them... But... [if all they do is define words, then] *the force of morality is lost, and evaporates only into words*, disputes, and niceties. And, however Aristotle, Anacharsis, [or] Confucius...shall name this or that action a virtue or vice...[those actions] will be still nevertheless indifferent as to any man's practice, which will by such kind of determinations be under *no obligation* to observe them. ("Of Ethick in General" §9, p. 12, my emphasis)

Locke can stipulate the definitions of property and justice. Perceiving the connection between them would even give us knowledge that "where there is no property there is no injustice". But by his own admission, if all he has done is show that a particular action satisfies his stipulated definition of justice, then so far as he has shown we are "under *no obligation*" to do that just action. Locke takes this to be an inadequate account of moral
knowledge. So he rejects the view that Berkeley and Hume attribute to him; moral

knowledge is *not* merely about perceiving the connections between definitions of moral terms.

The perception of a relation between the idea of justice and the idea of property

gives us knowledge that "there can be no injustice without property", but the perception

of the relation between these ideas is not sufficient for knowledge that being just is

morally good:

it is not enough to have determined Ideas of [actions], and to know what Names belong to such and such Combinations of Ideas. We have a farther and greater Concernment, and that is, *to know whether such Actions so made up, are morally good, or bad.* (E II.xxviii.4, 351, my emphasis)

In order to know that acting justly is morally good, some further requirement needs to be

met. He later explains that there is a "two-fold consideration" concerning moral actions:

To conceive rightly of Moral Actions, we must take notice of them, under this two-fold Consideration. First, As they are in themselves each made up of such a Collection of simple Ideas... Secondly, Our actions are considered, as *good*, *bad*, or *Indifferent*; and in this respect, they are relative, *it being their Conformity to*, *or Disagreement with some Rule, that makes them to be...Good or Bad* (E II.xxviii.15, 359, my emphasis)

The first consideration are terms for actions. But we have already seen that this consideration alone is not sufficient to know that an action is morally good. The second consideration is whether the action conforms to a rule: if an action conforms to a rule, then it is morally good; if an action violates the rule, then it is morally bad. This suggests that the further requirement for moral knowledge is that we perceive that the idea of an action conforms to our idea of a rule.

On Locke's moral theory there are three kinds of rules or laws: divine law, civil law, and the law of public opinion (E II.xxviii.7, 352). With respect to the divine law actions are morally "Good or Evil, Sin or Duty"; with respect to the civil law actions are "lawful, or unlawful"; with respect to the law of public opinion actions are "Vertues or Vices" (E II.xxviii.14, 358). However, any moral obligation imposed by civil law or the law of public opinion is ultimately dependent on divine law: the divine law "is the only true touchstone of *moral Rectitude*" (E II.xxviii.8, 352), "the true ground of Morality...can only be the Will and Law of a God" (E I.iii.6, 69), and "ultimately, all obligation leads back to God" (ELN: 183). Thus morality ultimately depends on divine law.

An action is morally good if it conforms to God's commands, and it is morally bad if it does not conform to God's commands:

Morally Good and Evil, then, is only *the Conformity or Disagreement of our voluntary Actions to some Law*, whereby Good and Evil is drawn on us, from the Will and Power of the Law-maker; which Good and Evil, Pleasure or Pain, attending our observance, or breach of the law, by the Decree of the Law-maker, is what we call Reward and Punishment. (E II.xxviii.5, 351, my emphasis)

Colman has persuasively argued that, for Locke, conformity to God's commands is by itself the ground of moral goodness (Colman 2003). Thus it is "only [by] the conformity or disagreement of our voluntary actions to some law" that those actions are made morally good or bad. Other passages confirm this interpretation. As we have seen, for example, says it is the actions "*Conformity to, or Disagreement with some Rule,* that makes them to be...[morally] Good or Bad" (E II.xxviii.15, 359, my emphasis). So there are compelling reasons for interpreting Locke's view as a divine command theory

according to which moral good and evil are determined solely by an action's conformity or disagreement to God's commands.

One could hold that God's commands are the ground of moral obligation, but to have moral knowledge we do not need to know what God commands us to do. (For example, perhaps God's will makes an action morally good or bad, but that we have *sui generis* moral intuitions that give us knowledge that an action is morally good or bad without our being aware of God's commands.) However, Locke is evidently not of this position. He says, "Without such Knowledge as this," namely that "God had set up, and would certainly punish the breach" of his laws, "a Man can never be certain, that any thing is his Duty" (E I.iii.13, 74). So, according to Locke, knowledge of morality requires that we know what God commands us to do.

This interpretation fits into Locke's conception of knowledge. He defines knowledge as the perception of a relation between ideas. The "*Moral Relation*" is a relation between ideas that Locke describes as "the Conformity, or Disagreement, Men's voluntary Actions have to a Rule" (E II.xxviii.4, 350). So this gives us reason to think that we have moral knowledge by perceiving that our idea of an action conforms to the idea of God's commands. Elsewhere he argues that the proposition "*It is the Duty of Parents to preserve their Children*" is not innate: for "what Duty is, cannot be understood without a Law; nor a Law be known, or supposed without a Law-maker," and so "it is impossible, that this, or any other practical Principle, should be innate...without supposing the *Ideas* of God, of Law, [and] of Obligation" are also innate (E I.iii.12, 74).² We cannot know that parents have a moral obligation to preserve their children without knowing that God commands parents to preserve their children. Likewise, we cannot have knowledge of "any other practical Principle" without knowing what God commands us to do.

However, if on Locke's view moral knowledge is the perception that an action conforms to God's commands, then it is puzzling why some of his examples of demonstrations of moral principles make no explicit reference to God's commands. Above we saw that Locke seems to demonstrate that "where there is no property, there is no injustice" and "no government allows absolute liberty" merely by defining the relevant terms (cf. E IV.iii.18, 549). If merely perceiving the connection between the idea of justice and the idea of property were sufficient for knowledge of morality, then moral knowledge cannot also require that we perceive that our idea of a just action conforms to our idea of a divine command. I concede that these demonstrations as stated prove, according to Locke, that "where there is no property, there is no injustice" and "no government allows absolute liberty". I deny, though, that on Locke's view this counts as *moral* knowledge without an implicit reference to a rule. For, as we saw above, Locke denies that moral knowledge is merely about perceiving the connections between definitions of terms.

² Locke thinks that divine commands necessarily entail divine sanctions (cf. E II.xxviii.6, 351), and so he argues that innate knowledge of morality also would require innate knowledge of divine rewards and punishments in an afterlife (E I.iii.12, 74).

I suggest that, to be *moral* knowledge, Locke's demonstrations must make an implicit reference to a rule. For example, to know that acting justly is morally good, and hence have *moral* knowledge that "where there is no property, there is no injustice", we must perceive that our idea of acting justly conforms to our idea of a rule. A careful reading reveals that Locke implicitly refers to such a rule. For justice is a virtue, and virtuous actions are defined as those actions which conform to the "law" of public opinion (E II.xxviii.10, 353). Thus Locke's demonstration implicitly makes a reference to the law of public opinion. The law of public opinion is then morally obliging insofar as it is "co-incident" with divine law (E II.xxviii.10, 353). Similarly, "no government allows absolute liberty" makes an implicit reference to a rule. For an essential role of the sovereign, or governing body, is to make rules for its subjects to follow and enforce those rules with sanctions. Thus Locke's demonstration implicitly refers to the civil law, and the existence of such law explains why "no government allows absolute liberty". And again, civil law is morally obligatory only insofar as it is consistent with divine law. There is a way to understand these examples, then, in a way that is consistent with the interpretation that I am proposing: both demonstrations make an implicit reference to a rule, and moral knowledge requires that we perceive that an idea of an action conforms to the idea of a rule.

The objection that Locke makes moral knowledge a matter of definition is simply mistaken. Carefully defining our moral words is necessary but, by Locke's own admission, is insufficient for moral knowledge. We also want to know whether an action is morally good or bad, and an action is morally good by conforming to a rule or is morally bad by violating a rule. Thus moral knowledge is the perception that our idea of an action does (or does not) conform to the idea of a rule.

But how do we know what the rules are? In particular, since the moral goodness or badness of an action ultimately depend on God's commands, how do we know what God commands us to do?

§3 Demonstrative Knowledge of Morality

Locke thinks that if we "duly considered" our ideas of God, our rational nature, and our dependence on him, then we could demonstrate what the "Rules of Action" are, namely God's commands (E IV.iii.18, 549). However, although Locke thinks that a demonstration for a complete system of morality *can* be given, he does not think that such a demonstration *has* been given. Locke does give some instances of demonstrative moral knowledge (e.g. E IV.iii.18, 548; cf. E III.xi.16, 516; 2nd T: 2.6). But he concedes that "human reason...[has] never from unquestionable principles, by clear deductions, made out an *entire body* of the 'law of nature" (RC: 140, my emphasis). If there is to be a demonstration of the "entire body" of the law of nature, then it is something to be attained in the future.

Locke himself started, but never finished, a manuscript where he seemed to be trying to provide a demonstration of morality. Marks on the manuscript indicate that it was to be the last chapter of the first edition of the *Essay* (von Leyden 1954, p. 69). In this manuscript Locke describes two steps that are needed in a demonstration of morality. We "must first prove a law, which always supposes a lawmaker... This Sovereign Lawmaker who has set rules and bounds to the actions of men is God their maker". So Step One is to demonstrate that God exists and has given us a law. "The next thing then to show is that there are certain rules, certain dictates, which it is His will all men should conform their actions to" ("Of Ethick in General" §12, p. 14). Step Two would demonstrate what, specifically, God commands us to do. For example, Step Two would prove that "thou shalt not kill" is a divine command. But here, just where we would expect Locke to go on to provide such a demonstration, the manuscript abruptly ends. What he says here, though, gives us enough information to reconstruct how he thinks a demonstration of a system of morality would go.

Locke takes himself to have already demonstrated Step One, saying he has "already proved" that God exists and "has set rules" for the actions of men ("Of Ethick in General" §12, p. 14). Locke's demonstration for God's existence is in Book IV chapter x of the *Essay*.³ In earlier chapters I argued that Locke holds the Dual Relation View, which is the view that knowledge of existence includes *both* the perception of a necessary connection between ideas *and* a necessary connection between an idea and the actual existence of an external object. The upshot of this interpretation is that because there is a necessary connection between ideas, that same relation must hold for anything corresponding to those ideas. So because there is a necessary connection between the *idea* of ourselves thinking and the *idea* of God's existence, if we are *actually* thinking then it must be the case that God *actually* exists. Of course, having the idea of ourselves

³ He gives a similar argument in the earlier manuscript *Essays on the Law of Nature* (ELN: 151-153).

thinking is itself an act of thinking. So we actually exist, and consequently God must actually exist. This is Locke's account of real knowledge of God's existence.⁴

Once the existence of God is granted, Locke needs to show that God gives us a law to live by. In Locke's proof for God's existence, God created us with a rational nature (E IV.x.5, 620-621; cf. ELN: 157). That God intentionally created us with a rational nature indicates to us that he wants us to act in conformity to the requirements of reason. For it is absurd to think that "God would have made [man] a rational creature, and not required him to have lived by the law of reason". Instead, God gave us a "rule which was suitable to [our] nature", namely "the law of reason, or, as it is called, [the law] of nature" (RC: 11). God has made us rational *so that* we will abide by the dictates of reason. So, according to Locke, we can infer from our rational nature to the conclusion that God commands us to act in accordance with reason (cf. ELN: 157). However, Locke has not yet specified what it is that reason dictates that we should do. This latter task is Step Two in the demonstration of morality, a step which Locke never completed.

Although Locke never completed a demonstration of morality, he gives us enough information to show how he thinks such a demonstration would go. Step One is to prove that God exists and commands us to act in particular ways. Locke thinks he can prove that God exists by showing that there is a necessary connection between the idea of ourselves thinking and the idea of God's existence, and this counts as "real knowledge" because these ideas necessarily correspond to God's actual existence (see chapter 2). He then continues this chain of ideas by arguing that the idea of ourselves as rational agents,

⁴ For further discussion, see chapter 2.

and the idea of God as our creator, is connected to the idea that God commands us to act in accordance with the dictates of reason. Step Two would then demonstrate that our idea of this or that particular action conforms to the idea of God's command (i.e. the dictates of reason).

The Dual Relation View can extend to moral knowledge in the following way. As explained above, there is a chain of necessary connections between the idea of ourselves thinking and the idea of God's existence, so there must be a necessary connection between our actual thinking and God's actual existence. But now we see that, on Locke's view, the chain of ideas can continue from the idea of God's existence to the idea of a divine command. There must, then, be a necessary connection between God's actual existence and the actual divine command. Moreover, since God does actually exist, it necessarily follows that God actually issues that divine command. Therefore, when we perceive that our idea of an action conforms to our idea of God's command (that has been demonstrated in the way explained above), then we can be certain that this action is morally good. So the Dual Relation View explains how we can have knowledge of an objective moral standard (i.e. that an action conforms to God's actual commands).

§4 Real Knowledge of Morality

In this section I want to draw out a tension in Locke's claim that moral knowledge is a kind of *real* knowledge. On the one hand, Locke seems to claim that moral knowledge can be real knowledge without corresponding to anything in the actual world. On the other hand, though, his demonstration of morality depends on (i) knowledge of the actual existence of God, and (ii) knowledge of God's actual commands. I argue below that Locke *should* say that moral knowledge is real only if ideas of moral rules conform to God's actual commands.

Locke distinguishes between "real" ideas and "fantastical" ideas. For our ideas of substances, Locke says our ideas are "real *Ideas*" if they "have a Conformity with real Being, and Existence of Things" (E II.xxx.1, 372). The idea of a man is a "real" idea because it conforms to an actual thing in the world, but the idea of a centaur is a "fantastical" idea (i.e. not a real idea) because this idea does not conform to anything in the actual world (E II.xxx.5, 374). Locke later introduces a similar distinction for knowledge:

Our Knowledge therefore is *real*, only so far as there is a conformity between our *Ideas* and the reality of Things (E IV.iv.3, 563)

We have real knowledge when we perceive a relation between ideas and those ideas conform to reality. So we can have real knowledge that "all men are animals" because, in addition to perceiving that these ideas agree, the ideas also conform to actual men and actual animals in the world. But even though we perceive an agreement between the idea of centaur and the idea of animal, we cannot have real knowledge that "all centaurs are animals" because the idea of centaurs does not correspond to anything in the actual world. Thus, while Locke concedes the point that we can have knowledge about ideas of substances that do not correspond to reality, he introduces a special category of *real* knowledge to describe knowledge about ideas of substances that do correspond to reality.

For all other complex ideas (besides those of substances), those ideas are real if they "have a Conformity...with their Archetypes" (E II.xxx.1, 372). An archetype is a pattern, and in Locke's view many archetypes are our own ideas. For example, we call "the complex *Idea* of three Lines, including a Space" a "triangle" (E II.xxxi.6. 379). We then use this complex idea as a pattern for determining what is and what is not a triangle: if there exists in the world an object with three sides, then it is a triangle; if there exists in the world an object that does not have three sides, then it is not a triangle. Thus our idea of a triangle is an archetype or pattern. "These Ideas, being themselves Archetypes, cannot differ from their Archetypes, and so *cannot be chimerical*"; that is, all ideas of this kind must be real ideas (E II.xxx.4, 373). In Locke's corresponding account of real knowledge, he says that, for ideas that are their own archetypes (that is, all complex ideas except those of substances), "to make our Knowledge *real*, it is requisite, that the *Ideas* answer their Archetypes" (E IV.iv.8, 565), and since these ideas are their own archetypes, these ideas "cannot want any conformity necessary to real Knowledge" (E IV.iv.5, 564). So the perception of a relation between complex ideas that conform to their archetypes counts as real knowledge.

Locke claims that moral knowledge is a kind of real knowledge. He makes this point by drawing an analogy between mathematics and morality. He says, "it will easily be granted, that the Knowledge we have of *Mathematical Truths*, is not only certain, but *real Knowledge*" (E IV.iv.6, 565). This is for two reasons. First, it follows from the fact that mathematical ideas are their own archetypes (i.e. stipulated definitions) that the perception of a relation between these ideas counts as real knowledge. Second, Locke points out that "the Knowledge he has of any Truths or Properties belonging to a [triangle], or any other mathematical Figure, are nevertheless true and certain, even of real Things existing" (E IV.iv.6, 565). He explains that if we perceive a necessary connection between our *idea* of a triangle and the *idea* of having interior angles add up to 180°, then it must also be true of any *actual* triangle that its interior angles *actually* add up to 180° (or two right angles):

Is it true of the *Idea* of a triangle, that its three Angles are equal to two right ones? It is true also of a Triangle, where-ever it really exists... [so] he is sure what he knows concerning those Figures, when they have barely an Ideal Existence in his Mind, *will hold true of them also, when they have a real existence in Matter* (E IV.iv.6, 565 my emphasis)

The relation between the *idea* of a triangle as a three sided figure necessarily entails that its angles have interior angles of 180° (E II.xxxi.6. 379), and *since this relation is necessary*, the same relation must hold for any *actual* triangle and the *actual* having of interior angles equal to 180°. In this way the perception of the necessary relation between these ideas gives us some knowledge of reality: namely, that if a triangle actually exists then it must have interior angles equal to 180°. It is worth pointing out, though, that since this knowledge of reality is only conditional it does not require that there actually exist any triangles. Even if a triangle is "never found...existing mathematically, *i.e.* precisely true, in this Life", it is still true in reality that *if* there exists a triangle *then* it must have interior angles equal to 180°. Locke's overall goal for real knowledge is to give an account of knowledge where "there is a conformity between our *Ideas* and the reality of Things" (E IV.iv.3, 563), so the fact that mathematical knowledge gives us some (conditional) knowledge of reality provides Locke some reason to categorize such knowledge as *real* knowledge.

Locke says that the same points hold for moral knowledge. With respect to the first point, as with mathematics, a complex idea of an action is its own archetype. For example, Locke stipulates that courage is made up of the ideas: (i) perceived danger, (ii) calm consideration about what the right thing to do is, and (iii) doing the right thing "without disturbance, or being deterred by the danger of it". We annex the name "courage" to this complex idea "to signifie it to others, and denominate from thence any Action [we] should observe to agree with it" is courageous; and "thereby" we have "a Standard to measure and denominate Actions by, as they agreed to it" (E II.xxxi.3, 377). So our idea of courage is the pattern or archetype for being courageous: if an action has characteristics (i), (ii), and (iii) then the action is courageous, but if the action does not have those characteristics then the action is not courageous. Thus moral ideas "being themselves Archetypes, cannot differ from their Archetypes" and therefore must be real ideas (E II.xxx.3, 373). "And hence it follows, that *Moral Knowledge* is as *capable of real Certainty*, as Mathematicks" (E IV.iv.7, 565).

With respect to the second point, just as the necessary relations between our mathematical ideas must also hold true in reality, the necessary relations between our moral ideas must also hold true in reality. Locke says:

If it be true in Speculation, *i.e.*, in Idea, that Murther deserves Death, *it will also be true in Reality* of any Action that exists conformable to that Idea of Murther. (E IV.iv.8, 566, my emphasis)

If we perceive that there is a necessary connection between our *idea* of murder and the *idea* of deserving death, then "*it will also be true in Reality*": any *actual* act of murder must *actually* deserve death. Note also that, just as in knowledge of mathematics, knowledge of morality does not require the actual existence of an action corresponding to our idea. There does not need to be any instance of murder in the world for it to be true in reality that murder deserves death. Similarly, Locke says:

All the Discourses of the Mathematicians...*concern not* the *Existence* of any of those Figures: but their Demonstrations, which depend on their Ideas, are the same, whether there be any Square or Circle existing in the World, or no. In the same manner, the Truth and Certainty of *moral* Discourses abstracts from the Lives of Men, and the Existence of those Vertues in the World... Nor [is Cicero's *De Officiis*] any less true, because there is no Body in the World who practices his Rules, and lives up to that pattern of a vertuous Man. (E IV.iv.8, 566)

So knowledge of morality can give us knowledge about reality even though "Existence

[is] not required to make it real" (E IV.iv.8, section heading, 565).

We have seen that Locke emphasizes the analogy between mathematics and morality. He asserts that moral knowledge can count as real knowledge since moral terms such as "murder" and "courage" are their own archetypes and therefore count as real ideas. Moreover, unlike in the case of substances which, to be real, require the existence of the thing corresponding to the idea, Locke indicates that real knowledge of morality does not require that our idea of an action correspond to the actual performance of that action in reality. All this is worth emphasizing. But there reaches a point where the analogy between mathematics and morality breaks down.

In the previous sections I have argued that we have knowledge that an action is morally good by perceiving that the idea of that action conforms to the idea of God's command. Notice that the idea of God is an idea of a substance. Therefore, this idea is real only insofar as it corresponds to an actual object in the world. Unlike in mathematical knowledge, then, it is *not* the case that moral knowledge consists *solely* in perceiving relations between ideas which are their own archetypes. There is at least one idea in the chain of complex ideas that, to give us real knowledge, requires the existence of something in the actual world.

Further, I suggest that the idea of God's command is real only insofar as it conforms to God's actual commands. We have seen that, on Locke's view, real ideas either (a) "have a Conformity with real Being, and Existence of Things", or (b) "have a Conformity...with their Archetypes" (E II.xxx.1, 372). Although Locke gives here a disjunctive criterion for being a real idea, the commonality between the two kinds of cases is that they conform to the things they are supposed to represent. "Ideas of substances are real, when they agree with the Existence of Things" (subject heading, E II.xxx.5); that is, when an idea of a substance (which is a representation of an external object) agrees with the existence of an actual external object, then that substance-idea is a real idea. All other complex ideas are real because they "cannot differ from their Archetypes" (E II.xxx.4, 373) and so they "can never be capable of wrong representation" (E IV.iv.5, 564). In both cases Locke is concerned about the accuracy of representation: if an idea conforms to what it purports to represent, then it is a real idea. To have real knowledge, then, we must perceive a relation between ideas, and those ideas must accurately represent the things they purport to represent. The idea that God commanded us to do x is an idea that may or may not correspond to God's actual

commands. So for this kind of idea to be real, I suggest, it must accurately represent

God's actual command.

There is a passage, however, where Locke appears to take the curious position that moral knowledge does not need to correspond to God's actual commands. He says:

For if I measure anything by a Yard, I know, whether the thing I measure be longer, or shorter than that supposed Yard, though, perhaps the Yard I measure by, be not exactly the Standard: Which, indeed, is another Enquiry. For *though the Rule be erroneous, and I mistaken in it*; yet the agreement, or disagreement observable in that which I compare with, makes me perceive the Relation. Though *measuring by a wrong rule*, I shall thereby be brought to judge amiss of its moral Rectitude; because I have tried it by that which is not the true Rule: yet I am not mistaken in the Relation which that Action bears to that Rule I compare it to, which is agreement, or disagreement. (E II.xxviii.20, 362, my emphasis)

Suppose we wrongly believe that God commands us to do *x*. The implication of this passage is that perceiving that an action conforms to that supposed command to *x* still counts as perceiving the moral relation, and so would still count as moral knowledge; for we "have a true Notion of Relation, by comparing the Action with the Rule, whether the Rule be *true*, or *false*" (E II.xxviii.20, 362, my emphasis). Locke here is allowing for the possibility that we can have moral knowledge even when our ideas of moral rules do not conform to God's actual commands.

But, I suggest, Locke should say that we can have *real* knowledge of morality only when our ideas of moral rules conform to God's actual commands. Indeed, in the passage above Locke allows that our ideas of moral rules could be wrong: a "Rule [may] be true, or false", and if we compare an action to the "wrong Rule" we will "thereby be brought to judge amiss of its moral Rectitude" (E II.xxviii.20, 362). The possibility of making a mistake presupposes that there is an *actual fact* about the moral goodness or badness of doing *x*. The ground for that moral fact, of course, is God's actual command. Locke's allowing us to be mistaken about moral rules shows us that there can be a gap between our ideas of moral rules and reality. It is just this kind of gap that real knowledge is supposed to close: "*Our knowledge* therefore is *real*, only so far as there is a conformity between our *Ideas* and the reality of Things" (E IV.iv.3, 563). What Locke *should* say, then, is that we can have real moral knowledge only insofar as our ideas of moral rules conform to God's actual commands.

On this account, demonstrative moral knowledge would have the following structure. We perceive that there is a necessary connection between the idea of God's existence and the idea that God commands us to do x, and then we perceive that a particular action conforms with God's command that we do x. By perceiving the relations between these ideas we have moral knowledge that doing x is morally good. In order for this knowledge to be *real* knowledge, each of these ideas must conform to the thing they represent. Thus the idea of God's existence must conform to God's actual existence, the idea of God's commanding us to do x must conform to God's actually commanding us to do x, and then the idea of x and the idea of the particular action that conforms to the command to x are their own archetypes that represent themselves and thereby these ideas count as real ideas. The perception of relations between this chain of real ideas, then, provides us with real knowledge that doing x is morally good.

On this interpretation, when Locke claims that the existence of things is not required for real knowledge of morality, this claim should be restricted to our complex ideas of actions. The idea of God's existence and the idea of the moral rules, which are also required for moral knowledge, do require that those ideas represent God's actual existence and the actual existence of a divine command. What Locke denies must exist for moral knowledge are actual moral actions. He says that moral knowledge does not require that there actually exists anyone "in the world that exactly practices [those moral] rules, and lives up to that pattern of a virtuous man"; and knowledge that "murder deserves death" does not require that anyone has actually committed murder (E IV.iv.8, 566). So real knowledge of morality does not require that *our idea of an action* corresponds to an actual action in the world; but, I have argued, real knowledge of morality does require that *our idea of God's commanding us to do an action* corresponds to God's actual existence and God's actually commanding us to do that action.

References to God's commands appear to be notably absent from Locke's discussion of real knowledge of morality. Near the end of this discussion, though, Locke refers to God's role as the lawgiver:

One thing more we are to take notice of, That where GOD, or any other Lawmaker, hath defined any Moral Names, ...there *it is not safe* to apply or use [those names] otherwise. (E IV.iv.10, 567, my emphasis).

If all God did was say, "This action is called 'murder'," then his name for that action would not be any more significant to moral knowledge than anyone else's name for that action. In the previous section Locke imagines a scenario where one person calls the idea of a three sided figure a "triangle" while another person calls the idea of a three sided figure a "square". What we call the figure does not change the fact that the idea of this shape is necessarily connected to the idea of having interior angles equal to 180°. Thus we can know that this figure (whatever it is called) has interior angles equal to 180°. Similarly, perhaps one person calls an action x "just" while another person calls that same action "unjust". Regardless of what we call the action, we can still perceive that the idea of x conforms to a moral rule, and thus we can know that doing x (whatever such an action is called) is morally good. Similarly, Locke concedes that even if we call x by a different name than God calls it by, "this too disturbs not the certainty of that Knowledge" that x conforms to a moral rule (E IV.iv.10, 568). So God's merely naming xmurder is by itself irrelevant to moral knowledge. Why, then, does Locke say "it is not safe to apply or use [names for moral actions] otherwise" (E IV.iv.10, 567) than God has?

It is because *God commands us not to murder* that we ought to care about how God defines the term "murder". For God's commands determine the moral goodness or badness of an action. So, insofar as we want to do what is morally good, when God says "do not murder another person" we have a vested interest in figuring out what God means by "murder". Locke's comment that we ought not to deviate from God's use of moral terms, then, hints at God's role a lawmaker. This is significant because Locke's discussion of real knowledge includes a reference to God's commands, which plays an essential role in the account of moral knowledge that I am attributing to Locke.

In this chapter I have argued that, on Locke's view, we have knowledge of morality by perceiving that an idea of an action conforms to (or violates) our idea of a divine command. This marks a significant improvement over other interpretations. We have seen that Berkeley, Hume, and others have criticized Locke's account of moral knowledge for being knowledge by mere stipulation. Such an account would not capture the normative character of morality, and so could not plausibly be said to be moral knowledge. I have shown, though, that Locke recognizes that moral knowledge cannot be just about defining words. Moral knowledge also requires that our carefully defined ideas of actions conform to a moral rule, which must ultimately be a divine command.

That God commands us to act in a certain way is a substantive claim that we might be wrong about. This account opens up the possibility that our ideas of moral rules might be mistaken, and Locke intends his account of real knowledge to secure us knowledge of an objective moral standard. Knowledge of morality is real because each of the chain of ideas in demonstrative knowledge of morality is a real idea. Importantly, I suggest, to have real knowledge of morality our idea of God's command must correspond to God's actual commanding us to do that action. I take this to be a positive feature of Locke's account of real knowledge. What we want from an account of real knowledge of morality is that when we have real knowledge that a particular action is morally good then the action *really is* morally good. On the view that I have attributed to him, Locke can say exactly that.

On the interpretation I have advanced in this chapter, then, Locke has an account of how we have real knowledge of substantive moral principles. We can know that an action is morally good by perceiving that our idea of the action conforms to our idea of God's command. This is a substantive moral claim. Moreover, Locke's account of real knowledge shows how we can know that God actually commands us to do certain actions. Thus his account of real knowledge explains how, according to Locke, the perception of relations between ideas can give us knowledge of an objective moral standard.

CHAPTER 8:

Conclusion

In this dissertation I have used Locke's account of real knowledge as a way to understand how we have knowledge of the actual world. Knowledge is the perception of a necessary relation between ideas. Yet Locke recognizes that some of our knowledge is knowledge *of reality*, whereas other items of knowledge are *not* about reality. For example, we can know that "centaurs are animals" but this is not knowledge *of reality* because centaurs do not actually exist. This sort of knowledge is merely the perception of a relation between ideas.

By contrast, real knowledge is knowledge *of reality*. There are two requirements for real knowledge. In addition to the perception of a relation between ideas, real knowledge requires that there be a necessary connection between those ideas and reality. It is because of this second condition for real knowledge that Locke thinks that perceiving relations between the ideas can give us knowledge of the actual world. For, given this necessary connection between the ideas and reality, when we perceive a relation between the relevant ideas it necessarily follows that those ideas correspond to the way the world actually is. Hence, on Locke's view, this necessary connection between ideas and reality allows us to have knowledge *of reality*.

One standard objection to Locke's epistemology is that on his representationalist theory of perception we cannot have knowledge that external objects exist. For on this view we can directly perceive only the *idea* of the object, which raises a question about

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whether there *actually exists* an external object corresponding to that idea. If we can only ever directly perceive our ideas, then there is no way to "check" and find out if there actually are external objects, and hence we cannot know that external objects exist.

The account of real knowledge is Locke's own answer to this objection. Some of our ideas have a necessary connection to reality. Thus when we perceive these ideas it necessarily follows that these ideas correspond to reality. With respect to sensitive knowledge that material objects exist, Locke takes there to be a necessary connection between the *idea* of ourselves currently having a sensation and the *actual existence* of an external object causing that sensation. Therefore, whenever we have sensation of an object, and we perceive the idea of ourselves having that sensation, then it necessarily follows that the external object actually exists.

In some respects Locke's reply to this standard objection is inadequate. It does not seem to be the case that the idea of having a sensation is necessarily connected to the actual existence of an external object. For it seems possible that we could have the idea of having a sensation (i.e. perceiving that the mind is having sense perception) even when the *idea* of having a sensation does not correspond to our *actually* having a sensation. Further, in order to know that one idea is caused by an actual gold substance while another idea is caused by an actual silver substance, there would have to be a necessary connection between the idea of having a sensation of *gold* and the actual existence *of gold*, and there would have to be a necessary connection between the idea of having a sensation of *silver* and the actual existence *of silver*. But, as Berkeley points out, both of these sensations might have one and the same cause: namely, God. So even if we grant

Locke that the idea of having a sensation is necessarily connected to the actual existence of an external object, this does not also mean that there is a necessary connection to a particular material substance that is distinguishable from other particular substances.

But suppose there is a necessary connection between the idea of having a sensation of a thing and the actual existence of that particular thing. From Locke's perspective, at least, that would answer the standard criticism that on his representationalist theory of perception we cannot know that our idea of an object corresponds to the actual existence of that object. For, granting the necessary connection, it will necessarily follow from the fact that we are perceiving the idea of having a sensation of an object that the external object actually exists. So, given the necessary connection between some of our ideas and reality, Locke's representationalist theory of perception does not pose an insuperable obstacle to our having knowledge about the actual world. For, contrary to the objection, on Locke's view there is a necessary connection between some of our ideas and the actual existence of an external object, and so perceiving ideas can give us knowledge about the actual existence of external objects.

A second common criticism of Locke's epistemology is that his definition of knowledge cannot provide a plausible account of knowledge of existence. He defines knowledge as the perception of a relation between ideas. But perceiving relations between ideas does not seem like the sort of thing that can give us knowledge that an external object actually exists.

However, this objection ignores Locke's account of *real* knowledge. The perception of a relation between ideas is necessary but not sufficient for real knowledge.

In order to have real knowledge there must also be a necessary connection between those ideas and reality. This necessary connection between ideas and reality explains why Locke thinks that perceiving a relation between ideas can give us knowledge that an external object actually exists. For, given the necessary connection between particular ideas and the actual existence of an external object, when we perceive the relation between those ideas it will necessarily follow that the object actually exists. Because perceiving the relation between the relevant ideas necessarily entails the actual existence of the external object, Locke thinks that perceiving the relation between these ideas can give us knowledge that the external object actual exists.

One might worry that, granting the interpretation I argue for in this dissertation, we cannot *know* (in Locke's sense) that there is a necessary connection between our ideas and external objects, and therefore we cannot *know* that the external objects exist. However, this objection assumes that in order to have real knowledge we must know that the second requirement for real knowledge is satisfied. But this is to make knowing that we satisfy the second requirement for real knowledge a *third* requirement for real knowledge, and there is no textual evidence that Locke accepts this third requirement. So just as a matter of textual interpretation, this objection is unfounded.

An implication of this reply is that the second requirement for real knowledge is an *externalist* requirement. For merely *satisfying* the two requirements is enough for real knowledge; we do not need to be *aware* that the second requirement is satisfied. The internalist-externalist debate in epistemology is a substantive debate about the philosophical merits of accepting externalist requirements for knowledge. Both positions can be given a reasonable defense, as evidenced by the continued debate on this issue. So whatever our preferred position in the end, it would be unreasonable to immediately rule out the possibility of having knowledge of the existence of external objects on Locke's account simply because he includes an externalist requirement for knowledge of existence.

Moreover, if the second requirement were not needed for knowledge that an object exists, then knowledge that an object exists (as such) would not bear any relation to the actual existence of the object. On the Ideas-Only View, for example, it seems possible to satisfy the requirement for knowledge of existence by perceiving a relation between ideas even when the object does not actually exist. In that case we would "know" an object exists when, in fact, the external object does not actually exist. This is problematic. And even if the object did exist, our knowledge as such would not be dependent on its existence. For, as it was just pointed out, we could "know" that the object exists when it does not, and so our knowledge that it exists cannot be dependent on its existence. Again this seems problematic. By contrast, the Dual Relation View that I attribute to Locke requires that our ideas have a necessary connection to the actual existence of the external object. It would therefore be impossible to have knowledge that an object exists without the external object actually existing, which makes knowledge that an object exist (as such) depend on the actual existence of the external object. For this reason it is philosophically attractive to include the externalist requirement for real knowledge that an external object exists.

Another notable feature of the interpretation of Locke I have defended in this dissertation is that it assigns a much more important and extensive role to real knowledge than commentators have done up to this point. Most commentators have passed almost entirely on giving a detailed discussion of Locke's account of real knowledge. Others limit real knowledge to being only about our abstract ideas. The one interpretation which uses real knowledge in order to understand knowledge of existence limits this knowledge to sensitive knowledge of material objects. By contrast, on my interpretation much of our knowledge, and the knowledge we care about most, is all real knowledge. The most valuable knowledge we can have is knowledge that God exists and knowledge of morality, both of which on my interpretation (and *only* on my interpretation) count as real knowledge. Further, knowledge of our own existence as well as the existence and nature of material objects all count of real knowledge. The knowledge for which there is the greatest practical benefit, then, is real knowledge.

As Locke says, "'tis the Knowledge of things that is only to be prized", adding that "'tis this alone that gives value to our Reasonings...that it is of Things as they really are, and not of Dreams and Fancies" (E IV.iv.1, 563). It is *real knowledge* that is to be valued, then, since it is *real knowledge* that can give us of knowledge of how things really are in the actual world. And in this dissertation I have shown how, according to Locke, we get this highly prized real knowledge.

WORKS CITED

Aaron, Richard I., John Locke, 3rd edition (Oxford 1971)

Allen, Keith, "Locke and Sensitive Knowledge," *The Journal of the History of Philosophy* vol. 51, n. 2 (April 2013)

Anstey, Peter, John Locke and Natural Philosophy (Oxford University Press, 2011)

Ayers, Michael, *Locke volume 1: Epistemology* (Routledge 1991)

- Berkeley, George, *Principles Concerning Human Understanding*, in *The Works of George Berkeley* volume II, edited by A. A. Luce and T. E. Jessop (Thomas Nelson and Sons LTD, 1949)
- Philosophical Commentaries, in The Works of George Berkeley volume I, edited by A. A. Luce and T. E. Jessop (Thomas Nelson and Sons LTD, 1949)
- Carson, Emily, "Locke's Account of Certain and Instructive Knowledge," *British Journal* of the History of Philosophy vol. 10, n. 3 (2002)

Chibeni, Silvio Seno, "Locke on the Epistemological Status of Scientific Laws," *Principia: an International Journal of Epistemology* vol. 9, n. 1-2 (December 2005).

Colman, J. (1983), *John Locke's Moral Philosophy*. Edinburgh: Edinburgh University Press.

- (2003), 'Locke's Empiricist Theory of the Law of Nature,' in *The Philosophy of John* Locke: New Perspectives, edited by Peter R. Anstey. London: Routledge.
- Coventry, Angela and Kriegel, Uriah, "Locke on Consciousness," *History of Philosophy Quarterly* vol. 25, n. 3 (July 2008)
- Domski, Mary, "Locke's Qualified Embrace of Newton's Principia," Interpreting Newton: Critical Essays, ed. Andrew Janiak and Eric Schliesser (Cambridge University Press, 2012)
- "Observation and Mathematics," *The Oxford Handbook of British Philosophy in the Seventeenth Century*, ed. Peter Anstey (Oxford University Press, 2013)
- Gibson, James, *Locke's Theory of Knowledge and its Historical Relations* (Cambridge University Press 1960)

- Goldman, Alvin, "A Causal Theory of Knowing," *Journal of Philosophy* vol. 64, n. 12 (June 1967)
- Hume, David, Enquiry Concerning Human Understanding, ed. Tom L. Beauchamp (Oxford University Press 1999)
- Jolley, Nicholas, Locke: His Philosophical Thought (Oxford University Press 1999)
- Loeb, Louis E., From Descartes to Hume (Cornell University Press 1981)
- Nagel, Jennifer, "Sensitive Knowledge: Locke on Skepticism and Sensation," *The Blackwell Companion to Locke*, ed. Matthew Stuart (Blackwell, forthcoming).
- Newman, Lex, "Locke on Sensitive Knowledge and the Veil of Perception Four Misconceptions," *Pacific Philosophical Quarterly*, vol. 85 (2004).
- "Locke on Knowledge," The Cambridge Companion to Locke's "Essay Concerning Human Understanding", ed. Lex Newman (Cambridge University Press 2007)
- Owen, David "Locke on Sensitive Knowledge," David Owen's papers: http://www.ic.arizona.edu/ic/dwo/David%27s%20Papers/papersind.htm (dated December 2008; accessed September 2012)
- Pappas, Gregory, "Epistemology in the Empiricists," *History of Philosophy Quarterly* vol. 15, n. 3 (July 1998)
- Rickless, Samuel C., "Is Locke's Theory of Knowledge Inconsistent?" *Philosophy and Phenomenological Research*, vol. 77, n. 1 (July 2008)
- "Locke's 'Sensitive Knowledge': Knowledge or Assurance?" Oxford Studies in Early Modern Philosophy, forthcoming
- Roth, Robert, "Locke on Ideas and the Intuition of the Self," *International Philosophical Quarterly*, vol. 28, no. 110 (June 1988)
- Smith, George E. "The Methodology of the *Principia*," *The Cambridge Companion to Newton*, ed. George E. Smith (Cambridge University Press, 2002)
- Soles, David E., "Locke's Empiricism and the Postulation of Unobservables," *Journal of the History of Philosophy* vol. 23, n. 3 (July 1985)

Stapleford, Scott, "Locke on Sensitive Knowledge," Theoria v. 75, n. 3, Sep 2009

- von Leyden, W., "Introduction," *Essays on the Law of Nature*, ed. W. von Leyden. (Oxford University Press 1954)
- Weinberg, Shelly, "The Coherence of Consciousness in Locke's *Essay*," *History of Philosophy Quarterly* v. 25, n. 1 (January 2008)
- Winkler, Kenneth P. "Locke's Defense of Mathematical Physics," *Contemporary Perspectives on Early Modern Philosophy*, ed. Paul Hoffman, David Owen, and
- Gideon Yaffe (Broadview Press, 2008)
- Woolhouse, Roger, "Locke's Theory of Knowledge," *The Cambridge Companion to Locke*, ed. Vere Chappell (Cambridge University Press 1994)
- Woozley, A. D., "Introduction," *An Essay Concerning Human Understanding*, ed. A. D. Woozley (Collins 1964)
- Yolton, John, Locke and the Compass of Human Understanding: A Selective Commentary (Cambridge University Press 1970)