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A REASSESSMENT OF LOCKE'S THEORY OF COGNITION OF THE EXTERNAL WORLD

by

Thomas Heyd

Department of Philosophy

submitted in partial fulfilment of the requirement for the degree of Doctor of Philosophy

Faculty of Graduate Studies The University of Western Ontario London, Ontario February, 1993

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ABSTRACT

Locke's Essay concerning Human Understanding has generally been read as primarily concerned with epistemology. In particular, it has been claimed that the Essay attempts to defeat epistemological skepticism, but fails in this enterprise because of the veiling character of Locke's ideas. By way of reexamination of the texts in question I show that epistemological skepticism is not the topic of the Essay, and that there is not sufficient reason to claim that Locke's account of knowledge leads to epistemological skepticism. I argue, moreover, that the motivating topic of the Essay is moral skepticism, and I explain the central role of ch. 8, book 2 in Locke's argumentation for the claim that we may achieve a science of morality. I conclude with an account of some of practical consequences of a science of morality, as conceived by Locke.

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CHAPTER 1: INTRODUCTION

An Essay concerning Human Understanding¹ is generally considered of central importance in epistemology. Peter H. Nidditch, for example, claims that "it has gained for itself a unique standing as the most thorough and plausible formulation of empiricism".² Without denying its purely epistemological merits, I propose in the following to read the Essay as a natural history of the human faculty of understanding, or intellect, that is intended to show that knowledge of morality is possible for human beings.³

Much internal evidence speaks for this interpretation. Aside from the evidence to be brought forward below, it is to be noted that Locke mentions that this work was conceived as the result of "five or six Friends meeting at my Chamber, and discoursing on a Subject very remote from this" (italics

² Nidditch, Foreword in John Locke, Essay vii.

³ For a somewhat similar approach to the *Essay* see John Colman, John Locke's Moral Philosophy (Edinburgh University Press, 1983) 1-2.

¹ John Locke, An Essay concerning Human Understanding, ed. Peter H. Nidditch (Oxford: Clarendon Press, 1975). References to Locke's works, including the Essay, are included in the text with digits indicating book, chapter and section, unless otherwise indicated. In the following I adhere to the rules outlined in the MLA Style Manual (Walter S. Achtert and Joseph Gibaldi, MLA Style Manual (New York: Modern Language Association of America, 1985)). Nonetheless, I make an exception with respect to capitalization. For the sake of textual accuracy I do not edit words that are capitalized in the original (even if the word originally was capitalized only because it was located at the beginning of a sentence).

elided);⁴ James Tyrrell noted on the margin of his copy of the Essay that this meeting "was in winter 1673 as I remember being myself one of those that met there when the discourse began about the Principles of morality and reveal'd Religion".⁵ It is also of significance that Locke was an active participant in the political life of his time,⁶ and that almost all of his other works are related to morality (if this term is taken in a broad way), insofar as they are concerned with political or religious subjects.⁷ Hence, it is consistent with Locke's larger *corpus* to suppose that the Essay is centrally concerned with morality, serving Locke's other works as conceptual backing.

Locke's undertaking seems motivated by the need to provide a foundation for morality on a basis other than innate principles or special revelation. This is evident from his argumentation in book 1 of the Essay, and in 4, 19 titled

⁴ "Epistle to the Reader" in Essay 7.

^b Quoted by R.S. Woolhouse, *Locke* (Brighton: Harvester, 1983) 7, who indicates that Tyrrell's copy survives in the British Museum. He also claims that Tyrrell was mistaken because "both drafts A and B are dated '1671'."

⁶ See, for example, Maurice Cranston, John Locke: A Biography (London: Longmans, 1968) passim; also see Peter Laslett, ed., introduction, Two Treatises of Government, by John Locke, revised ed. (New York: New American Library, 1965) 37-57.

'See, for example, the Two Treatises of Government, A Letter Concerning Toleration, On the Reasonableness of Cristianity as Delivered in the Scriptures, etc.

"Of Enthusiasm," respectively.⁸ This means that Locke has to show that knowledge of morality is possible given merely sensation and reflection as sources for "material" for reasoning and thought.

This dissertation is divided into two parts. In part I, three prominent epistemological problems are investigated. First, I examine the assumption that the Essay should be read as concerned with epistemological skepticism; second, I consider the assumption that simple ideas are quasi-photographic copies of external objects; and third, I investigate the claim that, due to their role as representations, ideas veil our cognition of objects. I conclude in part I that Locke's real concern is not epistemological skepticism, and that for Locke knowledge of the external world is possible even if ideas are not quasi-photographic copies.

⁸ Locke's human science of morality stands in stark contrast both to innatist accounts, as proposed for example by Locke's contemporary Herbert of Cherbury (see Locke's reference to Herbert's *De Veritate* at 1, 3, 15), and to the special access supposed by those who Locke calls "enthusiasts". Enthusiasm is the supposition of "Men...often flatter'd...with a perswasion of an immediate intercourse with the Deity....[that] whatever groundless Opinion comes to settle it self strongly upon their Fancies, is an Illumination from the Spirit of God, and presently of divine Authority" (4, 19, 5-6). 4, 19 was only added to the *Essay* in editions 4 and 5; nonetheless, as I point out below, it is likely that Locke was concerned already much earlier to provide an alternative to special revelation (as represented by 'enthusiasm') as a foundation for morality.

I proceed, in part II, with an examination of the role played by Essay 2, 8 in Locke's argumentation for the possibility of moral knowledge. 2, 8 is crucial because, on my account, it constitutes Locke's defence of the autonomy of ideas, that is, the claim that all simple ideas in the mind are fully legitimate for thought and reasoning -independently of the nature of their sources in reality. I introduce the chapters on the autonomy of ideas with a brief account of the requirements of, and problems faced by, a science of morality, from Locke's point of view. I close part II by noting that Locke's epistemological investigations, in combination with his concern about moral skepticism, issue in some important conclusions for morality, broadly conceived.

PART I Relation of the Understanding to the External World

CHAPTER 2: LOCKE'S ESSAY AND SKEPTICISM

1 .. .

There are at least two ways in which the relation of skepticism to the *Essay* may be discussed. On one hand, one may consider whether Locke intends to refute skepticism (either in general, or with respect to a specific area of knowledge); this is the issue I consider in this chapter. On the other hand, one may consider whether, independently of Locke's intentions, the *Essay* leads to skepticism; that is the question I investigate in the two chapters to follow.

John W. Yolton tells us that "Locke's doctrines were held suspect from the start"¹ on account of the skepticism which they seemed to underwrite. I do not attempt to discuss the fairness of the various charges addressed against the *Essay* by Locke's contemporaries, although in chapters 3 and 4 I examine the question whether on Locke's account we have reason to believe that we can have knowledge of the external world.

In this chapter I point out, first, that Locke does not really intend to debate the skeptic on whether we can know that there is an external world; second, that the Essay is

¹ John W. Yolton, John Locke and the Way of Ideas (Oxford: Oxford University Press, 1956) ix and passim.

not primarily an epistemological treatise intended to rebut skepticism in a general way; and third, that, insofar as Locke is concerned with skepticism in this work, his focus is on moral skepticism.

I. Skepticism Concerning the Existence of an External World

Jonathan Bennett stands out as a commentator who explicitly claims that Locke means to confront skepticism with respect to the existence of the external world.² Since Bennett's is a much studied commentary on Locke's Essay, I address myself repeatedly to Bennett's challenges in the following. I point out, however, that, despite appearances to the contrary, Locke does not address himself to these skeptical challenges, as Bennett assumes. (I return to Bennett's claims in chapter 4 to examine whether Locke indeed always "fumbles"³ the issue.)

Bennett detects a number of texts that appear to raise the type of question just introduced. He supposes that Locke's question from 4, 4, 3 "How shall the Mind, when it perceives nothing but its own *Ideas*, know that they agree with Things themselves?" is equivalent to his own question: "Is anything in the objective realm really in any way as it appears to be?" For Bennett this latter question, moreover, "turns into

² See Jonathan Bennett, Locke, Berkeley and Hume (Oxford: Oxford University Press, 1971) passim.

³ Bennett, Locke 65.

the question 'Is there really an objective realm at all?'".4

Bennett also seems to find support for the view that Locke takes on skepticism regarding the existence of the external world by quoting 4, 2, 14. The first sentence in Bennett's version of the quote reads "Whether we can...certainly infer the existence of anything without us, which corresponds to [our ideas], is that whereof some men think there may be a question made....⁵ Moreover, Bennett perceives Locke to be producing an "argument for the conclusion that 'our senses...do not err in the information they give us of the existence of things without us'^{#6} at 4, 11, 4.

I submit that Bennett's assumption that the question "'Is anything in the objective realm really in any way as it appears to be?' ...turns into the question 'Is there really an objective realm at all?'"⁷ is unfounded. The first question is actually a question about the relation of some particular appearance to some particular entity in the "objective realm", while the second one seems to concern the existence of the objective realm in a thoroughly general

- ⁶ Bennett, Locke 66.
- ⁷ Bennett, Locke 64.

⁴ Bennett, Locke 64.

⁵ Bennett, Locke 65. The replacement of text from the Essay by text in square brackets is by Bennett.

way. Locke's question from 4, 4, 3 "How shall the Mind, when it perceives nothing but its own *Ideas*, know that they agree with Things themselves?" similarly concerns the correspondence of particular ideas to particular things in the external world, and not the blanket question concerning the existence of the external world that Bennett equates it with.

When Bennett attributes to Locke the question "Whether we can...certainly infer the existence of anything without us, which corresponds to [our ideas], is that whereof some men think there may be a question made", he seems to assume that Locke is conjecturing "that perhaps there is really no objective world 'out there'".8 Notably, Bennett has replaced (without indicating that he is editing the text) his own, just quoted, version of the text for Locke's actual text which reads as follows: "whether we can thence certainly infer the existence of any thing without us". Moreover, Bennett has substituted his version "corresponds [to our ideas]" for Locke's actual text which reads: "which corresponds to that Idea". The result of the two replacements (i. e. "anything" for "any thing", and "[our ideas]" for "that Idea") is to suggest that Locke is asking a general question with respect to the very existence of the external world, while the text really only authorizes a question regarding the existence of any thing corresponding

⁸ Bennett, Locke 65.

to an idea in specific cases.

Bennett's assumption that at 4, 11, 3 Locke is producing an "argument for the conclusion that 'our senses...do not err in the information they give us of the existence of things without us'"⁹ also is misleading. The sentence from which Bennett has quoted comes from a section in which Locke is discussing the high degree of assurance that our senses are able to provide for the belief in the existence of things in the external world. The full sentence in question reads as follows:

But besides the assurance we have from our Senses themselves, that they do not err in the Information they give us, of the Existence of Things without us, when they are affected by them, we are farther confirmed in this assurance, by other concurrent Reasons. (4, 11, 3)

In other words, section 4, 11, 3 is not meant to show that our senses do not err, but only to further bolster the assurance which the senses already provide us. Furthermore, Locke clearly is not suggesting that he has evidence that can dissuade a confirmed skeptic since, only a few lines further up he notes that if anyone were a skeptic with respect to the existence of the external world he (Locke)

⁹ Bennett, Locke 66.

I think no body can, in earnest, be so sceptical, as to be uncertain of the Existence of those Things which he sees and feels. At least, he that can doubt so far, (whatever he may have with his own Thoughts) will never have any Controversie with me since he can never be sure I say any thing contrary to his Opinion." (4, 11, 3)

So, at least the texts that Bennett selects do not warrant the view that Locke is specifically concerned with engaging skepticism about the existence of the external world. It may be noted, however, that there are a number of passages in the *Essay* that explicitly refer themselves to those who are "so sceptical" as to question the correspondence of ideas to things. I propose that, rather than address this sort of skepticism as a position to debate, these passages tend--rightly or wrongly--to treat it as of negligible interest.

This is confirmed by the passage from 4, 11, 3, for example, from which I have just quoted. Similarly at 4, 11, 8, after having produced the "concurrent Reasons" to bolster our assurance in our senses, Locke says

if, after all this, anyone be so sceptical, as to

distrust his Senses, and to affirm, that all we see and hear, feel and taste, think and do, during our whole Being, is but the series and deluding appearances of a long Dream, whereof there is no reality; and therefore will question the Existence of all Things, or our Knowledge of any thing: I must desire him to consider, that if all be a Dream, then he doth but dream, that he makes the Question; and so it is not much matter, that a waking Man should answer him.

Someone who is "sceptical" about the existence of things corresponding to (what appear to be) his sensory experiences is also addressed in 4, 11, 10 and at 4, 2, 14. Locke's response uniformly is that such skepticism need not be engaged very seriously because such skeptics do not in practice maintain their skepticism: "He that in the ordinary Affairs of Life, would admit of nothing but direct plain Demonstration, would be sure of nothing, in this World, but of perishing quickly." (4, 11, 10)

Such neglect of the issue of skepticism regarding the relation of ideas to the external world may seem surprising since it is generally assumed that the topic of the *Essay* is 'he determination of the "Certainty, and Extent of humane Knowledge" (1, 1, 2). The introductory chapter of the *Essay*, moreover, repeatedly seems to express Locke's concern over

skepticism. He says, for example, that his enquiry is worthy **12** of pursuit because some may have concluded that "either there is no such thing as Truth at all; or that Mankind hath no sufficient Means to attain a certain Knowledge of it." (1, 1, 2) Furthermore, in the concluding section of 1, 1 he notes that one reason for writing the Essay was that "Men...raise Questions, and multiply Disputes, which never coming to any clear Resolution, are proper only to continue and increase their Doubts, and to confirm them at last in perfect Scepticism." (1, 1, 7) I submit that Locke's concern over skepticism is not, however, meant to set the stage for a debate over its tenability but only as a motivating factor for the investigation of the real topic of the Essay.

II. The Topic of the Essay

It is commonly believed that Locke's central concern in the *Essay* is with what we call epistemology¹⁰ since Locke declares his "Purpose" to be to "enquire into the Original, Certainty, and Extent of humane Knowledge; together, with the Grounds and Degrees of Belief, Opinion, and Assent" (1, 1, 2).¹¹ The result is that the *Essay* is often evaluated by the yardstick of latter-day epistemological concerns, and by the degree tc which it contributes to our contemporary

¹⁰ But see Maurice Mandelbaum, Philosophy, Science and Sense Perception (Baltimore: Johns Hopkins Press, 1966) 1-60.

¹¹ See, for example, Woolhouse 7; R. I. Aaron, John Locke (Oxford University Press, 1971) 77-78.

D. J. O'Connor, for example, assumes that what we take to be epistemology is the focus of the Essay and comments that "By thus raising the nature of knowing as a problem, Locke was introducing a new point of view into European philosophy."¹² Aaron criticizes Locke because he attempts "to 'draw a limit to thinking'" while his empiricist commitments supposedly should have prevented him from such a "self-refuting" undertaking.¹³ Woolhouse notes that it may seem "Surprising" that "Locke's final view [concerning the extent of human knowledge] has an element of scepticism about it."¹⁴ Yolton comments that "Modern critics are given to seeing in Locke's Essay a treatise on theory of knowledge and metaphysics, written independently of his social context".¹⁵ It is, of course, quite true, as O'Connor states, that the interest in epistemology has dominated modern Western philosophy, but to read the Essay in that light is anachronistic and has distorting effects.

In the following I argue that, contrary to appearances, the *Essay* is more appropriately classified as a kind of natural history. By this I mean that Locke pursues the investigation

¹² D.J. O'Connor, John Locke (Penguin, 1952) 27.

¹³ Aaron 79.

¹⁴ Woolhouse 9.

¹⁵ Yolton, Way 116-7.

of the human understanding in a manner similar to how he might study a disease like smallpox¹⁶: he allows his observations to rule his description. This interpretation obtains initial credibility from the fact that Locke treats the primary object of the Essay, namely the faculty of the understanding or intellect, as a natural object, that is, as something that has a characteristic nature that one may assume to be common to all human beings. This is confirmed by Locke's later comment about the Essay in his Reply to Stillingfleet:

my design being, as well as I could, to copy nature, and to give an account of the operations of the mind in thinking....all that I can say for the publishing of [the *Essay*] is, that I think the intellectual faculties are made, and operate alike in most men.¹⁷

In short, I propose that there is a simple explanation for why Locke does not particularly concern himself with a critique of either skepticism concerning the existence of the external world or skepticism in general. Locke does not begin with the assumption common in epistemology today, that

¹⁶ See Patrick Romanell, John Locke and Medicine (Prometheus, 1984) passim, for a defence of the claim that Locke's epistemology is largely based on his medical background.

¹⁷ John Locke, Mr. Locke's Reply to the Right Reverend the Bishop of Worcester's Answer to His Letter... in The Works of John Locke, 10 vols. (1823; Aalen: Scientia Verlag, 1963), 4:97-185, 138-139.

it is important to show that our belief in our ability to know the external world, or to know anything at all, is justified (or at least not entirely misplaced). Rather, he begins by determining, as well as his method permits, what this human faculty of the understanding can bear, given the materials and abilities at hand. In order to make clear what the topic of the *Essay* is, I examine in the following Locke's own account of the object, approach, method, and motivation of, his study.

II.1 Enquiry into the Understanding: the Object and Approach

The summaries in Locke's table of contents indicate that the object of study, the approach and method of study, and the motivation for the study each receive particular attention in the Essay's introductory chapter. The summary of section one seems to indicate the object of study: "An Enquiry into the Understanding pleasant and useful." Section two sets out the approach ("Design") and section three the method ("Method"). Sections four, five and six indicate the motivation for the study: "Useful to know the extent of our Comprehension" (section 4); "Our Capacity proportioned to our State and Concerns, to discover things useful to us" (section 5); "Knowing the extent of our Capacities will hinder us from useless Curiosity, Scepticism, and Idleness" (section 6). Section seven provides the historical context for how the motivation was first engendered: "Occasion of this Essay."

It has sometimes been overlooked that the object under study in the Essay is the faculty of the understanding, and not just our understanding qua extent of knowledge.¹⁸ Even a cursory inspection of the table of contents makes it clear that a *capacity* is under scrutiny. 1, 1, 1, for example, says: "Since it is the Understanding that sets Man above the rest of sensible Beings...it is certainly a Subject...worth our Labour to enquire into." At 1, 1, 2 Locke says that he will "consider the discerning faculties of a Man, as they are employ'd about the Objects, which they have to do with...." Section 4 begins by expressing the hope that "by this Enquiry into the Nature of the Understanding, I can discover the Powers thereof " Section 5 speaks of "the Comprehension of our Understandings.... * Section 6 speaks of a time "when we have well survey'd the Powers of our own Minds...." Section 7 recounts that when he first became motivated to write the Essay he decided "to take a Survey of our own Understandings, examine our own Powers, and see to what Things they were adapted." The "Epistle to the Reader" is similarly clear as to the object of study; Locke there speaks of "the Subject of this Treatise, the UNDERSTANDING...the most elevated Faculty of the Soul* ("Epistle," Essay 6).

It is quite true that 1, 1, 2 seems to say that Locke's purpose is primarily epistemolgical since he offers to

¹⁸ Compare, for example, O'Connor 26.

investigate "the Original, Certainty, and Extent of humane Knowledge..."; this part is usually quoted out of context, though. As I noted earlier, the marginal summary for the text in question, 1, 1, 2, says "Design." I. e. this section is meant to indicate the design or approach by which the "Enquiry into the Understanding" will proceed. This section on design, in addition to the section on method (1, 1, 3), points out how Locke will handle a problem well-known at the time,¹⁹ summarised by Locke in 1, 1, 1. The problem is that the intellect is assumed to be the faculty that carries out the thinking, enquiring, and investigating; hence it is (at least initially) unclear how the faculty itself can be studied: "The Understanding, like the Eye, whilst it makes us see, and perceive all other Things, takes no notice of it self: And it requires Art and Pains to set it at a distance, and make it its own Object." (1, 1, 1)

Locke's solution is to study the faculty at work in its characteristic activity. At 1, 1, 1 Locke indicates that what we need to do is allow "the Light...in upon our own Minds" in order to make "Acquaintance...with our own Understandings". It is at this point that section 2 introduces the manner in which light will be shed on our minds, i.e., it indicates the 'design' of the enquiry:

¹⁹ See, for example, Richard Burthogge, Organum Vetus et Novum, in Margaret W. Landes, ed., The Philosophical Writings of Richard Burthogge (Chicago: Open Court, 1921) 9-10.

This, therefore, being my Purpose to enquire into the Original, Certainty, and Extent of humane Knowledge; together, with the Grounds and Degrees of Belief, Opinion, and Assent; I shall not at present meddle with the Physical Consideration of the Mind; or trouble my self to examine, wherein its Essence consists, or by what Motions of our Spirits, or Alterations of our Bodies, we come to have any Sensation by our Organs, or any Ideas in our Understandings; and whether those Ideas do in their Formation, any, or all of them, depend on Matter, or no. (1, 1, 2; p. 43, lines 14 - 22)

As noted before, some commentators introduce the aims of the *Essay* by quoting Locke as intending only to "enquire into the Original, Certainty, and Extent of humane Knowledge; together, with the Grounds and Degrees of Belief, Opinion, and Assent".²⁰ It is clear from the above extended quotation of 1, 1, 2, though, that Locke is here drawing a *conclusion* (presumably based on the implicit premises in 1, 1, 1), as indicated by the word "therefore".

Given the ambiguity of the referent of the term "This" at the beginning of the section, some interpretation is necessary. The following paraphrase offers itself. It takes into account not only that Locke is drawing a conclusion

²⁰ See O'Connor 26.

regarding something introduced in 1, 1, 1, but also that lines 14-16 of 1, 1, 2 are part of a longer sentence (p. 43, lines 14-22, quoted above). It assumes that the reader is ready to equate a purpose only implicit in 1, 1, 1 with the purpose now made explicit in 1, 1, 2. It reads:

we need to become acquainted with our own understandings [this requires art and pains but is also a pleasant and useful undertaking] (paraphrasing 1, 1, 1); therefore, given that my purpose of becoming acquainted with the understanding really is equivalent to, or at least requires, the enquiry into knowledge, belief, opinion and assent, I shall not at present meddle with either the essential or the physical consideration of the mind (paraphrasing 1, 1, 2).

What is important for my interpretation is that the paraphrase indicates that the investigations regarding knowledge at 1, 1, 2 are meant as an approach to the primary topic at issue, the investigation of the faculty of understanding. The paraphrase also makes clear that the reference to the enquiry regarding knowledge, belief, opinion and assent is explicitly made in order to distinguish Locke's approach from competing approaches which, on the one hand, focus on essentialist considerations ("wherein its Essence consists"), and on the other hand, center on physicalist issues ("whether those Ideas depend on **20** Matter").

Locke is not alone in his decision to study the elusive faculty of the understanding by studying its activity (whatever is involved in arriving at knowledge, belief, opinion and assent); this is an approach also followed by others of the period, as well as originally by Aristotle. In his Organum Vetus et Novum, published in 1678 (twelve years before the Essay), Richard Burthogge, for example, proposes to study reason which, he says, "largely taken, is the same with Minde or Understanding".²¹ Like Locke, he continues his discussion by calling on the model provided by vision, in order to clarify the nature of the understanding: "Reason taken for the MINDE or Understanding, is that Faculty whereby a man is said to be reasonable, Intelligent, Understanding; as Sight is that Faculty whereby an Animal is said to be Seeing".²² Burthogge proceeds by noting that his roundabout approach is forced on him by the particularly elusive nature of the understanding:

I so define [reason/the understanding] by the Act, for that the Act is better known than the Faculty. To understand (as well as to see) is a first Notion...; [there are not] any Notions more intelligible, whereby

²¹ Burthogge 9-10.

²² Burthogge 10.

to mark Faculties, than those of their Acts. Acts we see, being conscious of them when we exert them; but Faculties we see not, we know not but by their Acts.²³

There are further similarities between Locke and Burthogge. Locke points out that his approach in the investigation of the understanding consists in seeking out the origin, certainty and reach of knowledge, belief, opinion and assent, while Burthogge continues by indicating, and subsequently investigating, the acts of the understanding, which he calls apprehension and judgement.

Burthogge's investigation of apprehension anticipates Locke's proposal for a study of the origins of human knowledge insofar as it concerns its materials in sensory experience; Burthogge states that "APPREHENSION is that Act of the Understanding whereby it is said to See or Perceive things, and is the same in relation to the Minde, that Seeing is in relation to the Eye.^{#24} Broadly speaking, Burthogge's investigation of 'judgement' anticipates Locke's proposed pursuit of certainty and extent of knowledge, belief, opinion and assent; Burthogge states that "Judgement is that Act of the Understanding whereby it having compared and considered things (presented to it, and apprehended by it) comes in the end and upshot, either to Assent, or

²³ Burthogge 10.

²⁴ Burthogge 11.

Dissent.^{#25} Without including it in his initial list, Burthogge, moreover, investigates what he calls 'truth.' In this Burthogge anticipates Locke's definition of knowledge: "Truth, as it is the Ground, Motive, and Reason of Assent, is objective Harmony, or the Harmony, Congruity, Even-lying, Answerableness, Consistence, Proportion, and Coherence of things with each other, in the Frame and Scheme of them in our Mindes.^{#26}

Aristotle, like Locke and Burthogge, notes that the intellect is an elusive object of study; his investigation of the intellect prefigures Locke's and Burthogge's insofar as he considers the study of the activities of the intellect as the appropriate approach to become better acquainted with the faculty itself. Aristotle speaks of a thinking part of the soul. He disagrees with those who strictly "identify thinking and perceiving", on the ground that error is supposedly possible in the case of thinking but not in the case of perceiving,²⁷ but seems to grant that thinking is akin to perceiving", the intellect or "thinking part of the

²⁷ See Aristotle, *De Anima*, ed. Richard McKeon, *The Basic Works of Aristotle* (New York: Random House, 1941) 3, 3, 427a, 21. (References to works by Aristotle are from McKeon's edition, unless otherwise indicated.)

²⁸ See Aristotle, *De Anima* 3, 4, 429a, 14.

²⁵ Burthogge 29-30.

²⁶ Burthogge 41.

soul must...be...capable of receiving the form of an object; ³ that is, must be potentially identical in character with its object without being the object.²⁹ From this it follows that "mind [nous]...can have no nature of its own, other than that of having a certain capacity.³⁰

Despite this apparent difficulty for the study of the intellect, Aristotle finds reason (which we will not discuss here) to affirm that "Mind is itself thinkable in exactly the same way as its objects"; his actual procedure in investigating the mind, however, is in terms of its activities. Setting the pattern for later investigators like Locke and Burthogge, Aristotle investigates intellect by considering its relations to imagination, judgement and knowledge.³¹

II.2 The Enquiry into the Understanding: Method

In section 1, 1, 2 on 'design' or approach Locke actually makes a reference to "this Historical, plain Method", anticipating the topic of 1, 1, 3. What Locke says in sections 2 and 3 regarding method is what makes his enquiry into the understanding a 'natural history.'

The meaning of the expression "Historical, plain Method" has

- ²⁹ Aristotle, *De Anima* 3, 4; 429a, 14-17.
- ³⁰ Aristotle, *De Anima* 3, 4; 429a, 18-23.
- ³¹ In Aristotle, De Anima 3, 3-7.

elicited a fair bit of discussion.³² There are in the text at least three clues to its elucidation. First, we have available the immediate context of the expression as found in 1, 1, 2. It is clear that "this Historical, plain Method", as applicable here, involves the consideration of the "discerning Faculties of a Man, as they are employ'd about the Objects, which they have to do with"; moreover, it excludes "Speculations...curious and entertaining", such as concerning the essential and physical aspects involved.

Second, we have the material in 1, 1, 3, which is the section that (according to the marginal summary) properly concerns method. In this section Locke repeats what he said in 1, 1, 2 concerning the approach that he will take to the understanding (i. e. that he will discuss the origin and certainty of knowledge, belief and opinion), but makes more explicit what it means to stay within the non-essentialist and non-physicalist bounds set for the historical, plain method. I.e. in this enquiry only the objects which the discerning faculties have to do with *directly* will be considered: "I shall enquire into the Original of those Ideas...which a Man observes, and is conscious to himself be has in his Mind".

Third, there is the material in 1, 1, 7, the section which serves as the conclusion (since section 8 really is only an

³² See for example, Romanell 144-147.

awkwardly placed apology) for section 1. In this section Locke recounts how he came to write the *Essay*, but also makes clear that he will not be drawn into an investigation of the ontology of the understanding. "I suspected we began at the wrong end...whilst we let loose our Thoughts into the vast Ocean of *Being*".

Hence, I propose that the text authorizes that "this Historical, plain Method", when applied to the activities of the understanding, requires that only those matters open to the direct scrutiny by the understanding itself (namely ideas) are to be made subjects of his study. This does not mean that Locke would not, on occasion, appeal to physical considerations; it simply means that, qua objects of this study, ontological and physical matters touching the nature of the soul and the mind's relation to physical objects will be excluded.

In short, Locke's enquiry is a natural history in the sense that what he concludes about the nature of the understanding and its activities is based on systematic study of replicable givens of experience. This, of course, is a method akin to the method which he employed in his chemical laboratory and in his lifelong medical practice: he seemed to have assumed that, to really obtain useful knowledge regarding the various chemicals and diseases that confront us, one does best to limit oneself to what is vindicated by

one's own experience.³³ Speculations about the natures/essences of chemical compounds or diseases may similarly make us "wander into those depths, where [we] can find no sure Footing" (1, 1, 7).

II.3 Motivation for the *Essay*: Contesting Moral Skepticism

I have been proposing that it is not Locke's intention to debate skepticism with regard to the existence of the external world (even though at times he touches on it), or even skepticism in general, since his express purpose is a (self-) observation-based natural history of the capacities of a human faculty, namely the understanding or intellect. Locke does admit, however, that his motivation for this enquiry is not merely academic. He repeatedly points out that the Essay is to serve some very practical concerns. Ironically, given that the Essay was criticized by his contemporaries for leading to moral and religious skepticism,³⁴ Locke set out to contest moral skepticism. This is evident from the introduction to the Essay and corroborated by what Locke has to say about morality, qua 'science', in comparison with the other sciences.

³⁴ See, for example, Yolton, Way 14, 18-19, 115-208.

³³ For example, see Kenneth Dewhurst, John Locke (1632-1704) Physician and Philosopher: A Medical Biography. With an Edition of the Medical Notes in his Journals (London: Wellcome Historical Medical Library, 1963); also see Romanell.

The marginal summaries also provide some insight in this case; as noted, section 1 is summarized as "An Enquiry into the Understanding pleasant and useful." One question that arises is, what aspect of this enquiry is claimed to be useful? It is answered in the summary for section 4: "Useful to know the extent of our Comprehension." The summary for section 5 continues by indicating how far our comprehension reaches: "Our Capacity suited to our State and Concerns." The summary for section 6 points out the advantage of actually knowing the extent of our understanding: "Knowledge of our Capacity a cure of Scepticism and Idleness." In short, the enquiry into the understanding is expected to be useful because, by determining the extent or reach of it, we are able to verify that it is sufficient to our condition and needs and, hence, able to overcome skepticism and idleness. But, what kind of skepticism is at issue here? The text in the sections makes abundantly clear that Locke is not very concerned with any type of skeptical conclusions except such as impinge on our morality or conduct.

Section 4, for example, claims that this natural history of the reach of the understanding will serve us as a warning "in meddling with things exceeding its Comprehension" because it leads us to "perplex our selves and others with Disputes about Things, to which our Understandings are not suited". Section 5 makes it explicit that the kind of skepticism at issue concerns morality, and reassures us that we need not fall into such skepticism:

...God...has given [human beings]...Whatsoever is necessary for the Conveniences of Life, and Information of Vertue; and has within the reach of their Discovery the comfortable Provision for this Life and the Way that leads to a better. How short soever their Knowledge may come...[human beings] have light enough to lead them to the Knowledge of their Maker, and the sight of their own Duties.

Section 6 reaffirms the claim that we are quite well equipped to know these duties. By exposing the limits of the understanding we are meant to forgo two types of skeptical attitudes. We will avoid, on the one hand, the attitude of the one who gives up the pursuit of knowledge completely, and, on the other hand, the attitude of the one who engages in a questioning frenzy: "we shall not be inclined either to sit still, and not set our Thoughts on work at all, in Despair of knowing any thing; nor on the other side question every thing, and disclaim all Knowledge, because some Things are not to be understood." These attitudes are to be avoided because we actually have enough knowledge for our real concerns, which are moral: "Our business here is not to know all things, but those which concern our Conduct." (1, 1, 6)

It being understood that our concern ought to be with

skepticism that extends so far as to interfere with proper conduct, we may assume that section 7 recount - that the Essay is a result of his concern over boundless moral skepticism³⁵:

Men, extending their Enquiries beyond their Capacities, and letting their Thoughts wander into those depths, where they can find no sure Footing; 'tis no Wonder, that they raise Questions, and multiply Disputes, which never coming to any clear Resolution, are proper only to continue and increase their Doubts, and to confirm them at last in perfect Scepticism.

Moreover, it seems that, from what Locke has to say about the 'science' of morality, as compared with other pursuits of knowledge, that he believes that he has shown that there is no cause for skepticism with regard to morality, even while he fully accepts that our knowledge in other areas is very limited. The most directly relevant text is in 4, 4, titled "Of the Extent of Humane Knowledge", especially sections 7-22. Without going through those discussions in detail here we may just note that, while he asserts several times that the sciences of bodies and spirits are very limited, the science of morality is only to be compared to

³⁵ As noted earlier, Tyrell's marginal note (quoted in Woolhouse 7) confirms this.

the great amplitude and certainty of mathematics in its reach.

Furthermore, at 4, 3, 25-26, he concludes that

whilst we are destitute of Senses acute enough, to discover the minute Particles of Bodies, and to give us *Ideas* of their mechanical Affections, we must be content to be ignorant of their properties and ways of Operation....And, therefore I am apt to doubt that, how far soever humane Industry may advance useful and *experimental* Philosophy *in physical Things, scientifical* will still be out of our reach....

Similarly, because of "a want in discoverable Connexion between those Ideas which we have" (4, 3, 28) he concludes that "as to a perfect Science of natural Bodies, (not to mention spiritual Beings) we are, I think, so far from being capable of any such thing, that I conclude it lost labour to seek after it." (4, 3, 29) The situation is quite different with respect to morality; Locke claims that there is reason to "place Morality amongst the Sciences capable of Demonstration" (4, 3, 18).

Morality, for Locke, is an area of knowledge that, like mathematics, requires no more than careful study of the relation of the relevant concepts to each other. Morality does not require the apprehension of any external entities because the ideas involved are constructed out of already present ideas: "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." (3, 11, 16)³⁶

Thus skepticism is indeed introduced at various places in the Essay but is handled in a consistent manner: Locke's tendency is to affirm the limitations that our faculties set for our awareness of the external world, but to assert that those faculties are sufficient for our conduct. In other words, the skepticism that he does address from the first chapter of the Essay is moral skepticism.

³⁶ See also 4, 12, 8 and _, 28, 4-16.

CHAPTER 3: THE DENIAL OF QUASI-PHOTOGRAPHIC PERCEPTION AND KNOWLEDGE OF THE EXTERNAL WORLD

Independently of Locke's intentions in writing the Essay, one may pose the question whether on his account of cognition we may believe that we have knowledge of the external world. Some have supposed that sensory perception is quasi-photographic, and that knowing the external world is equivalent to its sensory perception, on Locke's account. Hence, if there are reasons for believing that perception is not quasi-photographic, then there may be reason to doubt that we are able to know the external world.

Roland Hall¹ has argued that simple ideas are not passively received in sensory perception, but that they are abstractions arrived at by a multitude of experiences. He proposes to reject what he calls the "bad psychology" of the *Essay* inherent in Locke's repeated claim that the mind is passive in the 'reception of ideas.'² Hall perceives that there is a cost associated with this reform of Locke's account, though:

What has to be discarded, if simple ideas are abstract, is the belief in the passive reception

¹ Roland Hall, "Locke and Sensory Experience -- Another Look at Simple Ideas of Sensation," *The Locke Newsletter* 18 (1987) 11-31.

² Hall 16.

of simple ideas, and so the guarantee of their correspondence to reality ("our simple ideas are all real and true", 2, 30, 2).³

In the following I show that Hall's reasons for supposing that perception is not passive (in the sense that Locke claims that it is) are not persuasive. Nonetheless there are other reasons, introduced by Locke himself, for believing that perception is not quasi-photographic. I proceed to show that on Locke's conception of knowledge, the non-photographic character of ideas does not constitute a reason to doubt our ability to know the external world.⁴

I. Ideas As Quasi-Photographic Copies And Passive Perception

It is not uncommon to believe that Locke's view of perception is quasi-photographic. The following discussion in Owen Flanagan's *The Science of Mind*,⁵ for example, well illustrates that this belief is widespread.

Flanagan mentions that Piaget's and Kohlberg's

⁵ Owen Flanagan, *The Science of Mind* (Bradford Books-MIT Press, 1984).

³ Hall 22.

⁴ Most of the material contained in this chapter has been published in Thomas Heyd, "Locke's Simple Ideas, the Blooming, Buzzing Confusion, and Quasi-Photographic Perception," The Locke Newsletter 20 (1989) 17-33.

objection to empiricism is simply this: if the mind is a blank slate, then whatever way stimulation is received is the way it must be processed, represented, and expressed. If, as Locke put it, the mind is just a 'storehouse of ideas'--if, that is, there is nothing of consequence between our ears--then sensory inputs and cognitive and behavioral outputs must be identical. Thus if we go for a walk in the park, all that can possibly be represented in the mind are discrete and disorganized impressions of the things in the park....⁶

Naturally, Flanagan notes that "[e]xperience, of course, falsifies this view of the mind. We do much more than merely make Xerox-like copies of physical objects."⁷ Later he adds that "Actually, even the British empiricists, the philosophers historically most identified with the copy theory of mind, recognized that the mind does not simply mirror nature", and that "What Locke, Berkeley, and Hume did attempt...was to construct the most parsimonious model possible by which to explain the mental transformations of sense inputs".⁸ Nonetheless, we are left with the

- ⁶ Flanagan 121.
- 7 Flanagan 121.
- ⁸ Flanagan 122.

impression that even for Flanagan Locke's theory of cognition largely does underwrite a "copy theory of mind".

The assumption that perception is a matter of making exact copies is shared by philosophers who more directly comment on Locke. Bennett, for example, assumes that "'particular ideas received from particular objects'....are supposed to be copies of them" on Locke's account.⁹ Aaron comments that Locke adopted the theory of representative perception (to be discussed below) which supposedly implies that "we are acquainted with ideas which are exact copies of originals" (even though Aaron notes that "in respect of ideas of secondary qualities, Locke rejected the theory").¹⁰

The supposition that perception is quasi-photographic for Locke undoubtedly was fuelled by his own statements in the Essay. He describes sensation by analogy to a camera obscura, an instrument much celebrated at the time which Locke probably had seen in use himself since, around 1685, fellow Royal Society member Robert Hooke, had "invented a convenient and effective camera in two versions"¹¹:

⁹ Bennett, Locke 22.

¹⁰ Aaron 102; also 116.

¹¹ Martin Kemp, The Science of Art (New Haven/London: Yale University Press, 1990) 190; Hooke's camera was a development of the various camera obscura designs extant since the Middle Ages. It is also speculated that Jan Vermeer (1632-1675), whose works Locke might have seen while in the Netherlands, may have used a camera obscura in the design of his works (Kemp 192-196).

For, methinks, the Understanding is not unlike a Closet wholly shut from light, with only some little openings left, to let in external visible Resemblances, or Ideas of things without; would the Pictures coming into such a dark Room but stay there, and lie so orderly as to be found upon occasion, it would very much resemble the Understanding of a Man, in reference to all Objects of sight, and the Ideas of them. (2, 11, 17)

Moreover, Locke frequently speaks of ideas as "copies"; for example at 2, 31, 12 he says that "Simple Ideas...are ektipa or Copies".

Hall seems to fall into the tradition that supposes that for Locke simple ideas are copies which are "passively received" in sensation. Since he attempts to show that Locke makes a mistake in this respect, I examine his arguments in some detail.

I.1 The Blooming, Bussing Confusion

In order to show that perception is not passive Hall appeals to Locke's own account. He largely reads Locke as a psychologist. "What are simple ideas?" asks Hall; "It looks as if simple ideas are, for Locke, the earliest experiences (cf. 2, 11, 7; 2, 1, 22)".¹² This, however, does not seem right to Hall:

It is far more likely that the initial human experiences after birth...are of what William James somewhere called 'a blooming, buzzing confusion', than of ideas 'simple and unmixed' (2, 2, 1). Locke's account is bad psychology.¹³

Hall notes that it is "common" to dismiss such difficulties on the ground that Locke is giving "a rational reconstruction of the process of knowing",¹⁴, but argues that "This approach...does nothing to remove the embarrassment about the supposed origin of simple ideas in experience", and Locke's "constant reference to the earliest experience of the child (2, 1, 6; 2, 1, 8; 2, 1, 21; 2, 1, 22; 2, 9, 5-7; 2, 9, 5)" gives the lie to the pretense that "Locke is not offering us an account in genetic psychology, part of his 'historical, plain method'."¹⁵

Hall is right in not brushing aside Locke's claims touching on psychology as so much irrelevant philosophical armchair speculation, for Locke explicitly tells us that his

- ¹⁴ O'Connor 43, cited by Hall 13.
- ¹⁵ Hall 13.

¹² Hall 12.

¹³ Hall 12-13.

philosophical claims are going to seek their support in various other investigations. So, it may be granted that the use of results from psychology (even "genetic psychology") is "part of his 'historical, plain method'", as Hall suggests, for Locke does undertake "to consider the discerning Faculties of a Man, as they are employ'd about the Objects, which they have to do with...." (1, 1, 2)

It may be objected, however, that Hall goes too far if he does not subordinate Locke's psychological musings to his overall goal, the investigation of the faculty of the understanding, for Locke clearly states that such enquiries are meant to "suffice to my present Purpose". (1, 1, 2) As noted before, concerning physiological and psychological matters Locke shows studied disinterest:

I shall not at present meddle with the Physical Consideration of the Mind; or trouble myself to examine, wherein its Essence consists, or by what Motions of our Spirits, or Alterations of our Bodies, we come to have any Sensation by our Organs, or any Ideas in our Understandings.... (1, 1, 2)

Hence, it will not do merely to gesture toward the various passages in which the earliest experience of the child is alluded to in order to conclude that Locke is making points with respect to genetic psychology. In fact, almost every one of the references which Hall offers as evidence that Locke is doing genetic psychology turns out to be only peripherally concerned with the psychological aspects. Rather, the passages in question principally serve to support Locke's argumentation against innate ideas, which, strictly speaking, is an issue of philosophy of mind.¹⁶

2, 11, 7, (which Hall mentions as a reference in this context) for example, is preceded by 2, 11, 6 which discusses whether children "receive Ideas before they come into the World" even though "they are far from those innate Principles"; section 7 itself simply discusses which may be the ideas that "are the earliest imprinted", e.g. light. In any case, even if we assumed that Locke is doing psychology, it is important to note that he does not assert or imply anywhere that our first, earliest or original, experiences are favoured with perceptions of clear ideas, even though, obviously, from birth on (and even in the womb) there is sensation (and eventually reflection), and consequently there are simple ideas "furnished to the Mind" (2, 2, 2).

Throughout, Locke emphasises that the child's mind "comes, by degrees...to retain and distinguish the *Ideas* the Senses 3 🛱

¹⁶ Historically, of course, psychology and philosophy of mind were intertwined; Hall provides no reasons, however, for applying the term 'psychology' to philosophical armchair speculation once again.

convey to it" (2, 1, 22). If anything, Locke concurs with James in his assessment of the child's phenomenology as "a blooming, buzzing confusion"; at 2, 1, 8, while discussing the lack of ideas of reflection in children, he says that

Children, when they first come into it, are surrounded with a world of new things, which, by a constant solicitation of their senses, draw the mind constantly to them, forward to take notice of new, and apt to be delighted with the variety of changing Objects. (emphasis added)

Naturally, if Locke is interested in arguing that ideas are not innate, he is going to point out their gradual acquisition throughout childhood as evidence for his view. What causes the trouble here for Hall? Hall seems to have difficulties in accepting that we may be acquiring most of our 'stock' of simple ideas during the turbulent years of childhood; this would be a legitimate worry if perception for Locke were of a quasi-photographic sort, for then it would be a true miracle if one ever came to have any clear ideas in one's life.

I.2 The Myth of Quasi-Photographic Perception

Hall notes that 2, 2, 1 states that ideas "enter by the Senses simple and unmixed". What exactly does it mean to say that ideas "enter by the Senses simple and unmixed"? Moreover, does this passage rule out a description of our early experiences as a "blooming, buzzing confusion"? To clarify we may consider the rest of the section following the claim that ideas "enter by the Senses simple and unmixed":

For though the Sight and Touch often take in from the same Object, at the same time different Ideas; as a Man sees at once Motion and Colour; the Hand feels Softness and Warmth in the same piece of Wax: Yet the simple Ideas thus united in the same Subject, are as perfectly distinct as those that come in by different Senses. The coldness and hardness, which a Man feels in a piece of Ice, being as distinct Ideas in the Mind, as the Smell and Whiteness of a Lily, or as the taste of Sugar, and Smell of a Rose: And there is nothing can be plainer to a Man, than the clear and distinct Perception he has of those simple Ideas; which being each in it self uncompounded, contains in it nothing but one uniform Appearance, or Conception in the Mind, and is not distinguishable into different Ideas. (2, 2, 1)

The examples given in this quote seem to support the view that perception is quasi-photographic, in the sense that photographs appear to reproduce the image that a (well-sighted) human being may have when looking at a (sufficiently illuminated) landscape. Apparently ideas enter the senses unmixed, each distinct from every other, allowing for no confusion. There are other passages in the *Essay*, though, which indicate that Locke entertains the possibility that simple ideas may be obscure and/or confused, and hence, that simple ideas do not reproduce the surroundings in a quasi-photographic manner.¹⁷

For example 2, 29, entitled "Distinct and Confused Ideas" notes that there are simple ideas that are obscure and confused. Section 3, explains that "The cause of Obscurity in simple Ideas, seems to be either dull Organs; or very slight and transient Impressions made by the Objects; or else a weakness in the Memory, not able to retain them as received." Section 4 tells us that a "confused Idea is such an one, as is not sufficiently distinguishable from another, from which it ought to be different". Section 6 expands on this by noting that what makes an idea "confused is...that it may as well be called by another Name...the difference which keeps the Things...distinct... being left out; and so

¹⁷ To speak of perception as "quasi-photographic" may seem to allow for imprecision in the resultant ideas, just as photographs may be blurred. I am, however, using the expression "quasi-photographic" to capture the sense conveyed by comparisons between perception and the making of "Xerox-like copies of physical objects" (Flanagan 121), which do seem intended to indicate that the resultant ideas should be clear and distinct.

the distinction, which was intended to be kept up by those different Names, is quite lost."

So, there appears to be an inconsistency between 2, 2, 1, which seems to say that in sensation we receive distinct ideas, and 2, 29, which seems to say that it is *quite possible* to have simple ideas which are obscure and/or confused. The apparent inconsistency may be overcome, though, if one considers in full the first sentence of 2, 2, 1:

Though the Qualities that affect our Senses, are, in the things themselves, so united and blended, that there is no separation, no distance between them; yet 'tis plain, the *Ideas* they produce in the Mind, enter by the Senses simple and unmixed.

This text makes it quite clear that 2, 2, 1 is about the difference between the "united and blended" state of qualities in things and the separated and "unmixed" state of ideas in our understanding; i.e. it is not a stipulation about the character (clear vs. obscure; distinct vs. confused) of the ideas which are the object of our cognitive processes.

Moreover, we may note that the examples given by Locke very much qualify the terms "unmixed" and "clear and distinct":

Locke does not claim, for example, that all shades of yellow produced by the powers corresponding to the primary qualities of some object are experienced by us (via the senses) unmixed. Rather, the manner in which ideas "enter simple and unmixed" is in the very general and gross way that, for example, vision distinguishes the fact that things appear to be coloured from the fact that they appear to be moving at various speeds, and that the sense of touch differentiates between the apparent texture and the apparent temperature of things. In fact, Locke seems to be echoing a discussion of Aristotle's that illustrates the discriminatory role of sense:

Each sense then is relative to its particular group of sensible qualities...e.g., sight discriminates white and black, taste sweet and bitter, and so in all cases. Since we also discriminate white from sweet, and indeed each sensible quality from every other, with what do we perceive that they differ? It must be sense....

So, what Locke seems to be saying is that the various very general kinds of distinctions which each *singular* sense may make with respect to the appearances of some *one* thing are as obvious to us as the distinctions "that come in by

¹⁸ Aristotle, *De Anima* III, 2, 426b, 6-14.

different Senses" (emphasis added). That is, the distinction **4** between the apparent colour and apparent size (both perceived by the sense of vision) of some one thing is as clear as the distinction between the apparent taste and the smell (perceived by the gustatory sense and the olfactory sense, respectively) of some one thing. In short, this passage just underscores the fact that what the senses come up with, after unscrambling the effects of the qualities of things, is also an artifact of the various capacities of each sense for making distinctions. Hence, rather than authorizing the view that the processes leading to perception are quasi-photographic. this passage undermines it: mixture in the thing can bring on un-mixture in the mind.

This also means that Hall's worry concerning some contradiction between Locke's view of simple ideas and the phenomenology of children vanishes: children may well passively receive confused and obscure ideas even if they are distinct and unmixed with reference to gross distinctions such as colour and motion. So this reason for rejecting Locke's stated view that ideas are passively received by the understanding falls apart. Hall has a related reason for rejecting the view that simple ideas are passively received, namely an argument to the effect that simple ideas are the result of abstraction. He argues this

on the basis of the conceptual role which simple ideas play and the character that they must have to take on that role.

I.3 Simple Ideas Are Universals

Hall notes that for Locke simple ideas function as universals. Hall paraphrases the following examples of simple ideas from 2, 2, 1,

coldness and hardness (in a piece of ice) the smell and whiteness of a lily the taste of sugar the smell of a rose

and notes that what they have in common is that they are "types of experience, to be had from objects of the sort mentioned."¹⁹ But if they are types then, Hall claims, they cannot be particulars because "What would be needed for the acquisition of such ideas [types] is, at least, repeated sense experiences within which the same or a similar element is found."²⁰ In other words, the "distinctness" of simple ideas (which he mistakenly attributes to simple ideas throughout, on the basis of the passage discussed above)

is not given in experience, but is in fact the result of a process of abstraction. So far from

¹⁹ Hall 14.

²⁰ Hall 15.

being directly given, simple ideas are obtained by the analysis of experience, and are really the workmanship of the mind.²¹

Hence, he implies, simple ideas cannot have been passively received.

Hall comments about his suggestion, that simple ideas are the "workmanship of the mind", that it "certainly is at odds with what Locke says" because for Locke "Once 'actual Perception' (2, 9, 3) occurs, the mind cannot alter the simple ideas received."²² Such a view would be supported by 2, 1, 25, for example:

These simple Ideas, when offered to the mind, the Understanding can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones in it self, than a mirror can refuse, alter or obliterate the Images or Ideas, which the Objects set before it, do therein produce.

Hence, it seems that for Hall we may either give up the notion that simple ideas are involved in conceptual thought (because too vague, wistful, 'impressionistic'), or give up

²¹ Hall 15.

²² Hall 16.

the notion that simple ideas are 'received passively' in perception. Hall chooses the second horn of the dilemma.

This, however, is a problem of Hall's own making. In the following I propose that Locke can well maintain that in the reception of simple ideas "the Understanding is meerly passive" (2, 1, 25) as long as the "workmanship of the mind" only occurs prior to the reception of ideas by the understanding.

I.4 Judgement and Alteration

Locke adverts quite readily to the need for distinct perceptions. At 2, 11, 1 he notes that

It is not enough to have a confused Perception of something in general: Unless the Mind had a distinct Perception of different Objects, and their Qualities, it would be capable of very little Knowledge....

Presumably this need is served by the "clear discerning Faculty of the Mind, whereby it perceives two Ideas to be the same, or different." (2, 11, 1)

The faculty of judgement operates similarly: it separates "carefully, one from another, *Ideas*, wherein can be found the least difference...." (2, 11, 2) Interestingly, Locke

tells us that, despite his repeated insistence that perception is passive (2, 1, 25; 2, 3, 1; 2, 22, 2; 2, 30, 3), at least with respect to the things which an adult is exposed to frequently, we habitually and rapidly replace the ideas of sensation by those of judgement (2, 9, 8-10):

We are farther to consider concerning Perception, that the Ideas we receive by sensation, are often in grown people alter'd by the Judgment, without our taking notice of it. (2, 9, 8)

The occasion for Locke's discussion of this replacement process is the 'Molyneux problem.' Molyneux suggests that a congenitally blind man will not be able to distinguish between sphere and cube by sight, at first, even if he can distinguish them by touch:

For though he has obtain'd the experience of, how a Globe, how a Cube affects his touch; yet he has not yet attained the Experience, that what affects his touch so or so, must affect his sight so or so; Or that a protuberant angle in the Cube, that pressed his hand unequally, shall appear to his eye, as it does in a cube. (italics subtracted; 2, 11, 8) At 2, 9, 9 Locke asserts that he agrees with Molyneux's assessment, and says that, at least with respect to sight, sighted human beings proceed by using some visual features as marks or *signs* for (that which we take to be) the causes of the stable appearances which we have:

When we set before our Eyes a round Globe, of any uniform colour, v.g. Gold, Alabaster, or Jet, 'tis certain, that the Idea thereby imprinted in our Mind, is of a flat Circle variously shadow'd.... But we having by use been accustomed to perceive, what kind of appearance convex Bodies are wont to make in us...the Judgment presently, by a habitual custom, alters the Appearances into their Causes: So that from that, which truly is variety of shadow or colour, collecting the Figure, it makes it pass for a mark of Figure, and frames to it self the perception of a convex Figure, and an uniform Colour; when the Idea we receive from thence, is only a Plain variously colour'd, as is evident in Painting. (2, 9, 8)

This seems to be an early account of how 'object constancy'²³ is achieved. It also provides us with a schema by which we can understand the manner in which we may

²³ See, for example, Irvin Rock, The Logic of Perception (Bradford/M.I.T. Press, 1985) 325 and passim.

'passively' receive ideas in such a way that they are not perceived as mere flat shapes with indistinct interior shading ("variety of shadow or colour...") but as stable configurations useful in the identification of three-dimensional objects²⁴: the (generally) subliminal judgement identifies certain indicative features (e. g. lines, shadows) with ideas of (perceptually) 'stable' things (e. g. convex figures) that our cognitive system is habituated to note or recognize in the presence of those features. For Locke those ideas of perceptually stable things, of course, ultimately must have their origin in experience; the difference between them and the ones that they replace is that the latter have acquired the value of signs in the interactions with our perceptual world.

So, in answer to the question how the object of some *particular* experience can function as a universal, that is, how it can stand for a *type* of other experiences, Locke notes that we just make one idea stand for another via an act of *judgement*.²⁵ At first sight this account of replacement and change of ideas by judgement may, however,

²⁴ Even though Locke appears to restrict this schema to sight, the reason for his restriction seems to lie entirely in the fact that his empirical research has not gone beyond sight. No pricipled objection to the extension to other senses seems involved.

²⁵ This act of judgement may be subliminal; see, for example, Rock, chapter 9, on "Unconscious Inference."

seem to be in conflict with Locke's claim, noted earlier, **52** that

simple Ideas, when offered to the mind, the Understanding can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones in it self, than a mirror can refuse, alter, or obliterate the Images or Ideas, which, the Objects set before it, do therein produce. (2, 1, 25)

It is to be noted that Locke only says that alterations are not possible "when they are imprinted", though. Consequently, he leaves open the possibility that various alterations of sensations may be effectuated prior to imprinting on or perception by, the understanding.²⁶ It is also important to take into account the context in which Locke offers the 'no alterations' doctrine: 2, 1 is about the origin of our ideas. That is, Locke is intent on showing that all ideas are ultimately derived from experience; that none are innate. And in one sense the effects of the qualities of external bodies *do* impose themselves on us: we

²⁶ Locke's account accords well with contemporary findings concerning the production of visual illusions: there are various factors (including cultural ones, e.g. the 'carpenter effect') which have a determining influence on whether an illusion will come about under certain circumstances, but, once the illusion is 'achieved,' it is nearly impossible to undermine it. See, for example, Rock, especially chapter 11.

cannot avoid hearing loud noises or seeing bright lights (unless we cover our ears or close our eyes). This reading is supported by Locke's use of the analogy with the mirror which cannot refuse the images which objects therein produce. Notably, mirrors can alter images, for example, by distorting them or turning them upside down. So, perhaps the type of alteration which we cannot accomplish is of the same sort as the mirror cannot: for example, the alteration of a yellow colour into an acrid smell.

In any case, presumably the 'alterations' spoken of in 2, 9 do not involve a 'destruction' of the prior ideas, nor need the alteration affect the ideas' structure, intensity or duration. Rather, as noted above, the alteration would seem to be of the sort achieved, for example, when initial impressions are superseded and perceptual 'object constancy' is attained: the image obtained in those cases in some sense remains the 'same', though it is now seen 'as a something' via the identification which the faculty of judgement effects. In crediting judgement²⁷ with the activity of replacing some idea with another, perception itself remains *passive*, as required by Locke's account, for perception consists in the *awareness* of ideas, that is, it consists of

²⁷ It is to be noted that the activities of judgement in this context may be fast, habitual and subliminal, but its 'pronouncements' are not 'given' by nature (in the sense of being 'forced' on us by their 'correspondence with nature') or even innate; rather, as the Molyneux case illustrates, they are very much dependent on the cumulative, shaping, effect of *experience*.

"observation of the mind" (2, 9, 4) or of impressions being 54 "taken notice of within" (2, 9, 3).

I conclude that Locke need not give up either the notion that simple ideas are received passively by the understanding nor that they play a role in conceptual thought as universals. It is clear that, since he admits habitual alteration of sensations, on Locke's account perception is not quasi-photographic. This conclusion may seem inconsistent with Locke's claim that simple ideas are 'copies,' and that the understanding works like a *camera obscura* that would "let in" the images of things. In reply one may note, however, that something may qualify as a copy' even if there are *some* alterations not evident in the original. (Poorly carried out forgeries are still copies of originals.)

II. Sensation Is Not Knowledge

If simple ideas of sensation are not quasi-photographic copies of things in the external world, our assurance that we may have knowledge of the external world may seem in jeopardy if to have such knowledge consists in 'having ideas.' In the following I argue against the assumption that for Locke, to know things in the external world is equivalent to the mere having of sensations. On my account, lack of quasi-photographic similarity between ideas and things does not become a reason to doubt our ability to know 55 the external world.

Locke has been credited with a model of knowledge according to which to have knowledge is to have ideas of things. That model takes up Locke's frequent identification of ideas with images or pictures,²⁸ but supposes that to know something is to have the picture of it. Hence, if the picture is distorted in some way, because the painter or the brush fail to be faithful to the original in every detail, our knowledge of the subject matter of the picture automatically will be distorted.

Aaron, for example, mentions that Locke's empiricism has in the past been misidentified with "sensationalism in the narrow sense". This amounts to the view that

we know the world in the act of sensing and know it only in this way. When I open my eyes and look around me my sensing is knowledge.²⁹

In fact, even recently philosophers have believed that Locke adheres to a sensationalist account of knowledge. Richard Rorty, for example, says of Locke that he "thought...of knowledge as a relation between persons and

²⁸ See, for example, 2, 1, 15; 2, 1, 25; 2, 8, 5.
²⁹ Aaron 109.

objects", and that for Locke "'having an impression' [upcn **5** the mental 'wax tablet' is] in itself a *knowing* rather than a causal antecedent of knowing."³⁰

Hall also seems to assume that Locke is committed to some sort of sensationalism since he supposes that, if perception is not passive, our assurance that we are capable of knowledge regarding the external world is in doubt: given that we have to discard "the belief in the passive reception of simple ideas" we lose "the guarantee of their correspondence to reality ('our simple ideas are all real and true', 2, 30, 2)".³¹

The equation of sense perception and knowing is common and longstanding. Descartes seems to be arguing against it already in *Meditations* II, where he discusses the knowledge that one may gather from observing a piece of wax. He concludes that the "knowledge of the wax" is not merely a matter of seeing, touching and smelling the piece of wax, but a matter of judgement: "the perception I have of it is a case not of vision or touch or imagination--nor has it ever

³⁰ Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton University Press, 1980) 142.

³¹ Hall 23.

been, despite previous appearances--but of purely mental scrutiny".³²

Similarly for Locke, mere sense perception is not to be equated wih having knowledge; his model of knowledge cannot simply be a picturing model, since for Locke some ideas (that is, ideas of secondary qualities) definitely do not resemble their causes. Rather, for Locke, as for Descartes, knowledge is a matter of perception at the level of the understanding, but it is a perception of the differences and similarities between ideas that constitutes knowledge: "Knowledge then seems to me nothing but the the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas." (4, 1, 2)

Locke's definition was subjected to criticism by Edward Stillingfleet, supposedly due to its newness,³³ but more properly due to the fact that it seems to restrict the knowable to the ideas found within one's mind.³⁴ Locke

³⁴ See Edward Stillingfleet, The Bishop of Worcester's Answer to Mr. Locke's Letter concerning Some Passages Relating to His Essay of Human Understanding... (1697) in Edward Stillingfleet, Three Criticisms of Locke (Cornet reprint, 1987) 125-126.

³² Rene Descartes, Meditations in The Philosophical Writings of Descartes, trans. John Cottingham, Robert Stoothoff, Dugald Murdoch, 2 vols. (Cambridge: Cambridge University Press, 1989) Meditations II, AT 31, 2:21. References to Descartes are from Cottingham, Stoothoff and Murdoch, unless otherwise indicated.

³³ Reply 142-143.

himself thought of his definition as a significant contribution to the discussion of the understanding since "yet nobody, that I had met with, had, in their writings, particularly set down wherein the act of knowing precisely consisted."³⁵

The materials for Locke's definition of knowledge seem to have been available prior to his formulation (as Locke readily admits³⁶). Burthogge, for example, says that "Assent on Evidence by the testimony of our own Senses rightly circumstanced and conditioned, is as firm as it can be, and is called Knowledge."³⁷ To assent appears to be a matter of judging something to be true;³⁸ but "Truth, as it is the Ground, Motive, and Reason of Assent, is objective Harmony, or the Harmony, Congruity, Even-lying, Answerableness, Consistence, Proportion, and Coherence of things with each other, in the Frame and Scheme of them in our Mindes."³⁹

On Locke's account, ideas are not any less adequate as vehicles of knowledge if they fail to resemble their objects; this is the argument in 2, 8 (to 12 further

- ³⁶ Reply 142-144.
- ³⁷ Burthogge 47.
- ^{3#} Burthogge 37.
- ³⁹ Burthogge 41.

³⁵ Reply 143.

discussed below). Ideas are often spoken of as pictures or images by Locke, but their function with respect to knowledge is to serve as distinguishing signs or marks. For example, speaking of the secondary quality ideas whiteness, coldness and pain Locke says

they are real *Ideas* in us, whereby we distinguish the Qualities, that are really in things themselves. For these several Appearances, being designed to be Marks, whereby we are to knrw, and distinguish Things, which we have to do with; our *Ideas* do as well serve us to that purpose, and are as real distinguishing Characters, whether they be only constant Effects, or else exact Resemblances of something in the things themselves.... (2, 30, 2)

In other words, even if it turned out that some people always perceived as yellow that which I perceive as blue, due to the peculiar activity of the respective nervous systems prior to the reception of ideas by the understanding, this need not impede us from agreeing on the character of the external world as long as the effects are systematic, that is, constantly produced.

So, since knowledge for Locke is a matter of noting the distinguishing features between ideas, lack of passivity in

their reception need not pose a problem for our assurance that we may have knowledge of the external world as long as the ideas in question are reliable conduits of the characteristics of things, or, in Locke's words, "constant Effects" of things.

CHAPTER 4: THE VEIL OF PERCEPTION UNVEILED

Locke's account of knowledge and perception has frequently been called an example of a representationalist theory because Locke's ideas, qua representations of things, seem to stand between our minds and things in the external world. The problem with representationalist theories of perception is supposedly that, on their account, we do not have direct knowledge of things. Hence we cannot compare the representations to the things they are supposed to represent, since there is no independent access to the external world. So, Locke's account is taken to be problematic because it seems to imply that, even if ideas were faithful copies of the external world, we could never know if ideas indeed are reliable vehicles for knowledge because our only access to the external world is via those same ideas.

According to Aaron, the representationalist or representative theory of perception comes to this: "Knowledge of the real...need[s] an intermediary object between the knowing mind and the ultimate object."¹ The reasons for attributing such a theory to Locke seem to be based on three kinds of textual evidence. There is Locke's repeated assertion that we cannot perceive things without mediation; for example: "'Tis evident, the Mind knows not

¹ Aaron 101.

Things immediately, but only by the intervention of the Ideas it has of them." (4, 4, 3) Moreover, there are Locke's explicit statements to the effect that the only objects of our understandings are ideas; he says, for example, "the Mind, in all its Thoughts and Reasonings, hath no other immediate Object but its own Ideas, which it alone does or can contemplate...." (4, 1, 1) Finally, there is the repeated claim that thought is about ideas which are in our own minds: "EVERY Man being conscious to himself, That he thinks, and that which his Mind is employ'd about whilst thinking, being the Ideas, that are there, 'tis past doubt, that Men have in their Minds several Ideas...." (2, 1, 1)

In response to the problems attributed to Locke's allegedly representationalist account of knowledge and perception, various interpretations of the meaning of 'idea' in the *Essay* have been offered.² I briefly consider those interpretations below in part II, while discussing the Aristotelian roots of Locke's term 'idea.' Here I show that, even if Locke's account were representationalist in a full-blown sense, it would be consistent with the belief that we can have knowledge of the external world. After that I note that the approach which treats the *Essay* as primarily concerned with the epistemological problems of sensory

² See John W. Yolton, *Perceptual Acquaintance from* Descartes to Reid (Minneapolis: University of Minnesota Press, 1984), chapter 5, especially 93-94, 101-103. Also see Michael Ayers, Locke, 2 vols. (London: Routledge, 1991) 1:56-57; Bennett, Locke passim, especially 68.

perception is partially responsible for the belief that Locke's account of perception and knowledge veils reality; I argue that the issue in the Essay is, rather, the understanding's capacity to discover the nature of things. Finally, I introduce an explanation, based on Locke's reaction to other contemporary accounts of cognition, for the representationalist aspects of Locke's account.

I. Knowledge of the External World

Prima facie, Locke's account of perception and knowledge does seem to fit the description corresponding to the representational theory of perception. Nonetheless, there is reason to believe that the apparent representationalism of Locke's Essay is compatible with knowledge of the external world. Three places in the Essay seem of particular interest in this respect: 4, 2, 14, about which the marginal summary says that it deals with "Sensitive Knowledge of particular Existence"; 4, 11, which concerns "our Knowledge of the Existence of other Things" (that is our knowledge of other things than the existence of the self and of God); and 4, 4, which deals with "the Reality of our Knowledge".

I.1 Sensitive Knowledge of Particular Existence (Essay 4, 2, 14)

4, 2 concerns human capacities for knowledge with respect to "the degrees of its Evidence." (4, 2, 1) Section 14 follows a prolonged discussion of intuitive and demonstrative knowledge which is summarised this way: "These **6** two, (viz.) Intuition and Demonstration, are the degrees of our Knowledge; whatever comes short of one these, with what assurance soever embraced, is but Faith, or Opinion, but not Knowledge, at least in all general Truths." (4, 2, 14)

Curiously, immediately after this pronouncement, Locke appears to withdraw the claim that only intuition and demonstration amount to knowledge; he begins by saying "There is, indeed, another Perception of the Mind, employ'd about the particular existence of finite Beings without us; which going beyond bare probability, and yet not reaching perfectly to either of the foregoing degrees of certainty, passes under the name of Knowledge." He closes the section by concluding that "we may add to the two former sorts of *Knowledge*, this also, of the existence of particular external Objects, by that perception and Consciousness we have of the actual entrance of *Ideas* from them...." So in 4, 2, 14 Locke is proposing that there is another sort of knowledge, third in evidential strength, which concerns the existence of particular beings in the external world.

There are two preliminary issues to consider. It may be objected that Locke's inclusion of sensitive knowledge of particular existence among the degrees of knowledge is inconsistent with the statement that intuition and demonstration encompass the totality of the sorts of knowledge. The inconsistency is only apparent, though, because Locke had already specified that the dual classification strictly applied to "all general truths". In other words, since the new sort of knowledge concerns "particular existence", this is a sort that may be added on to the others.

Moreover, it may be noted that Locke does not here propose to offer an argument for the existence of the external world in a general way. If he manages to offer convincing reasons for believing in the existence of any particular finite beings without us, though, this should suffice for belief in the external realm since evidence for the existence of any item in the external realm is evidence for the existence of the realm itself.

So, on what grounds may we believe that we have sensitive knowledge, that is, knowledge (albeit of a lesser degree of certainty than the intuitive or demonstrative sort) of the existence of some finite beings in the external world? Locke takes note of the fact that it has been questioned whether the presence of an idea in one's mind indicates anything about the existence of a corresponding thing: "whether there be any thing more than barely that *Idea* in our Minds, whether we can thence certainly inferr the existence of any thing without us, which corresponds to that *Idea*, is that, whereof some Men think there may be a question made...." (4,

2, 14) Conscious of this query, Locke introduces a fairly straightforward argument.

Consistent with his definition of knowledge as being "the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas" (4, 1, 1), he notes that there is a "Perception of the Mind" of a difference between, on one hand, ideas which appear to arrive from external objects and, on the other hand, ideas which appear to arrive from our memory: "We as plainly find the difference there is between any Idea revived in our Minds by our own Memory, and actually coming into our Minds by our Senses, as we do between any two distinct Ideas." (4, 2, 14) Consistent with his historical method, which suggests that anyone should be able to come to the same conclusions as he does if the evidence provided by experience is examined, Locke invites his readers to examine their own ideas to test this claim: "I ask any one, Whether he be not invincibly conscious to himself of a different Perception, when he looks on the Sun by day, and thinks on it by night; when he actually tastes Wormwood, or smells a Rose, or only thinks on that Savour, or Odour?" (4, 2, 14)

With respect to this invitation Bennett introduces an objection, coming from an imaginary objector, which appears the more difficult to refute for its simplicity. Bennett imagines that his objector would like to consider the

evidence that one may have for believing that the difference **6**7 in ideas indicates a difference in referents:

the questioner, once started, will rightly refuse to be fobbed off with this; for he is asking, among other things, whether we ever really do look on the sun....He will say: 'The mere fact that what is commonly called "imagining the sun" differs markedly from what is commonly called "seeing the sun" does not imply that the latter kind of experience really is, at least sometimes, a seeing of a real sun.'³

The first thing to note in the objection introduced by Bennett is that it offers no reason in terms of independent evidence to doubt the distinction itself, as proposed by Locke; it really only exploits the fact that Locke leaves the argument somewhat undeveloped. Locke is implicitly arguing that, since the distinction between the two sorts of ideas is consistent with an assignment of one sort as originating in the external world and the other sort as originating in the imagination, it is reasonable, in the absence of any contradictory evidence, to believe that the ideas that appear to originate in the external world actually do so. That is, Bennett's objector has nothing to offer to bolster his objection but the mere possibility that

³ Bennett, Locke 65-66.

there might be no object from which the idea in question originates. Locke's proposal, which is in agreement with common sense, in contrast, has all the credibility of a successful explanatory hypothesis speaking for it. As J.L. Mackie, for example, puts it, one way to argue for the existence of an external world is to note that "the real existence of material things outside us is a well-confirmed outline hypothesis [insofar as] it explains the experiences we have better than any alternative hypothesis would....^{w4}

In the text Locke anticipates another, related objection. He imagines an objection that relies on the fact that in dreams we do falsely suppose that we are perceiving the external world. So, the objection is that, similarly, while awake, we may falsely suppose that ideas are entering our senses when this actually is not so. Locke's reply is twofold. First he considers the objection a reason to dismiss the objector since the objection seems to raise a difficulty that, pragmatically, makes its own discussion without point: if the apparent difference between ideas of (apparent) sensation and ideas recalled from memory were to be ignored because in dreams we do not note such differences then, Locke claims, "Reasoning and Arguments are of no use, Truth and Knowledge nothing."

⁴ J.L. Mackie, Problems From Locke, (Oxford: Clarendon Press, 1976) 64.

This reply may seem not to do away with the difficulty that we may indeed be subject to an illusion of the sort conceived here, but it again points up the gratuitousness of the objection. As in Bennett's objection, there is only a mere possibility that we may be mistaken in making the distinction noted by Locke; the objector has offered no evidence to show that it is indeed so.

Locke's second response is to point out that the difference between the two sorts of ideas corresponds perfectly well with the type of classification that, from a pragmatic point of view, we would want to make if an external world were the cause of the sort of ideas that seem to originate in the external world: "we certainly finding, that Pleasure or Pain follows upon the application of certain Objects to us, whose Existence we perceive, or dream to perceive, by our Senses, this certainty is as great as our Happiness, or Misery, beyond which, we have no concernment to know, or to be." (4, 2, 14) That is, the sort of ideas that appears to arise in the external world consistently is associated with perceptions of pleasure or pain (the concernments of our happiness or misery), and, even if there were no external world, it would be rational to treat the class of ideas associated with pleasure and pain as if they were originating in a realm apart, for example, the external world. In other words, Locke seems to argue for his distinction on the basis that, if for no other reason, at

least pragmatically it makes sense to assign one sort of ideas to an origin commonly referred to as the 'external world.'

The influence of the Epicurean philosophy on Locke has sometimes been noted by Locke scholars.⁵ Interestingly, this last argument of Locke's for the reality of an external world on the basis of the (apparent) witness of the senses clearly echoes quite faithfully Lucretius' views on this matter. In his discussion of the notion that "the concept of truth was originated by the senses and that the senses cannot be rebutted",⁶ Lucretius says that "to let things clearly apprehended slip from our grasp" is "to attack belief at its very roots--to tear up the entire foundation on which maintenance of life is built....If you did not dare trust your senses so as to keep clear of precipices and other such things to be avoided and make for their opposites, there would be a speedy end to life itself."⁷)

I.2 Of our Knowledge of the Existence of other Things (Essay 4, 11)

4, 11 deals with the existence of chings other than the self and God. It again raises the point that the mere having

⁵ See, for example, Aaron 32-35.

⁶ Lucretius, On the Nature of the Universe, DRN IV 478-79; trans. R. E. Latham (Penguin, 1979) 145.

⁷ Lucretius DRN IV, 505-510; Latham (trans.) 146.

of an idea in one's mind is no reason for believing that a thing corresponding to it exists in the external world: "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 Vision of a Dream, make thereby a true History." (4, 11, 1)

Repeating the general claim made in 4, 2, 14, Locke asserts here that "The *Knowledge of the Existence* of any other thing [than self and God] we can have only by *Sensation*", which means that "no particular Man can know the *Existence* of any other Being, but only when by actual operating upon him, it makes it self perceived by him." (4, 11, 1) In contrast to the somewhat formal line of argument developed in 4, 2, 14, that is, as based on the perception of the commonly perceived difference between one type of ideas (those of sensation) and another (those of recall), in 4, 11 Locke mostly produces a net of reasons for believing in the existence of the external world, which arise from the nature and relations to each other of our senses.

The basic reason for the assurance that the senses report from the external world is the 'testimony' of each sense itself:

whilst I write this, I have, by the Paper affecting my Eyes, that *Idea* produced in my Mind,

which whatever Object causes, I call White; by which I know, that that Quality or Accident...doth really exist, and hath a Being without me. And of this, the greatest assurance I can possibly have, and to which my Faculties can attain, is the Testimony of my Eyes, which are the proper and sole Judges of this thing.... (4, 11, 2)

Here Locke seems to be implicitly arguing, as in 4, 2, 14, from a discernible difference between ideas arising from actual sense experience and ideas arising in other ways. The net of reasons specific to this chapter are introduced as supplementary evidence to the more basic assurance that sensation qua distinguishable event provides: "But besides the assurance we have from our Senses themselves, that they do not err in the Information they give us, of the Existence of Things without us, when they are affected by them, we are farther confirmed in this assurance, by other concurrent Reasons." (4, 11, 3)

The "other concurrent Reasons" can be summarised as follows. First, experience teaches us that what appear to be specific sense organs, are necessary, even if not sufficient, conditions for the acquisition of specific sense ideas (for example, visual ideas require visual organs). They are necessary because "those that want the Organs of any Sense, never can have the Ideas belonging to that Sense"; they are not sufficient, though: "The Organs themselves, 'tis plain, do not produce them [that is, the ideas belonging to sense]: for then the Eyes of a Man in the dark, would produce Colours...." (4, 11, 4) So, the supposition that the ideas from sensation, already recognizable as such in other ways, are witnesses of the external world is confirmed by the fact that these ideas only arise if appropriate sense organs are engaged.

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Second, ideas apparently arising from sense experience are also such that, given the appropriate physical conditions (i.e. that the organ is exposed to a stimulus), they cannot be manipulated at will in the way that ideas called up by the imagination can: "when my Eyes are shut, or Windows fast, I can at pleasure re-call to my Mind the Ideas of Light, or the Sun....But if I turn my Eyes at noon towards the Sun, I cannot avoid the Ideas, which the Light, or Sun, then produces in me." (4, 11, 5)

Third, as an instance of the claim that ideas produced in sensation differ from ideas recalled from memory he notes that one may consider that ideas apparently produced in sense perception may be accompanied by the sensations of pain or pleasure in a manner that does not occur in the case of those same ideas when they are recalled from memory:

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many of those Ideas are produced in us with pain, which afterwards we remember without the least offence....we remember the pain of 'unger, Thirst, or the Head-ach, without any pain at all; which would either never disturb us, or else constantly do, as often as we thought of it, were there nothing more but Ideas floating in our Minds...without real Existence of Things affecting us from abroad. The same may be said of Pleasure, accompanying several actual Sensations.... (4, 11, 6)

Fourth, given (what seems to be) appropriate physical access (and possibly some initial tuning of the senses to each other in childhood), ideas apparently produced in one sensory organ may appear to find regular concomitants in other sense organs in a manner not occuring (at least not generally) when ideas are recalled from memory:

Our Senses in many cases bear witness to the Truth of each other's report, concerning the Existence of sensible Things without us. He that sees a Fire, may, if he doubt whether it be any thing more than a bare Fancy, feel it too; and be convinced, by putting his Hand in it. (4, 11, 7)

Even though not distinguished by Locke as a further separate reason for feeling assured of the existence of things in the external world, he provides a reason that may be counted as of a fifth sort. Namely, the effects caused by us, on the basis of ideas fully manipulable in the imagination, in (what at least appears to be) the external world, in turn cause ideas in us during visual perception that are not manipulable any more in the manner that they were originally in the imagination:

I see, whilst I write this, I can change the Appearance of the Paper...those Characters...once made on Paper...it is manifest, that they are not barely the Sport and Play of my own Imagination, when I find, that the Characters, that were made at the pleasure of my own Thoughts, do not obey them; nor yet cease to be, whenever I shall fancy it, but continue to affect my Senses constantly and regularly, according to the Figures I made them. (4, 11, 7)

What distinguishes this reason from the second discussed above is that it is an illustration of the *independence* of the external world, despite our ability to make limited changes in it. Ideas in the mind can be modified at will, but if those same ideas (mediated by hands and pens) arise in sensory perception, they cannot.

These reasons for being assured of the existence of the external world have been subjected to criticism by, for example, Bennett because they supposedly beg the question against the skeptic. Bennett says that by making a reference to sense organs Locke appeals to one of "the 'things without' whose reality is in question."⁸ It would seem, though, that the difficulty here concerns more the way Locke has phrased things than an assumption of the conclusion.

One may reconstruct Locke's argument in the following way. Locke notes various correlations arising from what apparently is empirical observation: experience shows that if one has what appear to be organs, classified as visual, which apparently function properly, then one tends (to a very high degree of likelihood) to have ideas which one may classify as visual (such as of colours), but only if there seem to be causes which, at least for theoretical reasons, are classified as 'exterior.' Given enough experience in these matters, it would seem reasonable to draw the conclusion that the best explanation for these correlations is that a realm of the 'exterior,' which includes things and sense organs, is a constantly effective realm. As such one may assert that it indeed exists, and that (apparent) sense organs require the presence of actual objects from the external world do elicit their specific ideas in us.

⁸ Bennett, Locke 66.

Furthermore, in accordance with his historical method, Locke arrives at this conclusion concerning the reach of the understanding in an inductive way, that is, by considering what the deliverance of experience is; consequently his conclusion only serves us in order to be "farther confirmed in this assurance", and not to be certain, "of the Existence of Things without us". (Bennett misrepresents things when he claims that Locke introduces the reason just discussed as an "argument for the conclusion that 'our senses...do not err in the information they give us of the existence of things without us'"⁹; as just noted, Locke explicitly states that the senses and the "concurrent Reasons" only provide us *assurance*, and not certainty, concerning "the existence of things without us".¹⁰)

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Bennett also claims that Locke begs the question when, noting that there is a "manifest difference" in the character of the ideas produced by sense perception and those produced otherwise, Locke concludes that the causes in the first case are "exterior". Moreover, Bennett wonders why Locke assumes that "if there were no 'things affecting us from abroad' any given kind of 'idea' would be either always

⁹ The ellipsis in the quote is Bennett's.

¹⁰ The difference between certainty and assurance is made explicit by Locke. Certainty belongs to knowledge (4, 4, 18), while assurance is one of the degrees of assent given that the probability that some matter of fact is high (4, 16, 6). With respect to the case at hand, Locke claims that our assurance approaches certainty (4, 11, 3), but continues referring to it as assurance.

or never accompanied by pain."¹¹ In both cases Bennett is right if he means to indicate that the arguments offered by Locke are sketchy. But in both cases the apparent gaps can easily be filled in in the manner I have indicated above. In other words, Locke observes that the differences between two types of ideas, one of which he attributes to "exterior causes" and often is accompanied by pleasure or pain, are so systematic that the best explanation is that one indeed has the external world as cause.

Locke, moreover, addresses a potential objector who is "so sceptical, as to distrust his Senses" and who claims that all experience is but a dream. He replies that "the certainty of Things existing in rerum Natura, when we have the testimony of our Senses for it, is not only as great as our frame can attain to, but as our Condition needs." (4, 11, 8) Bennett objects to this reply by stating that "this suggests that there is room left for residual doubt, and if that is conceded then everything is conceded."¹² Bennett's objection only makes sense if one assumes that he has presupposed that Locke is concerned to overcome skepticism; as noted above, however, Locke has made quite explicit that his purpose is not to debate skepticism but to examine the faculty of the understanding. Bennett's skeptic, in any case, offers little reason for doubting the existence of the

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¹¹ Bennett, Locke 66.

¹² Bennett, Locke 67.

external world except that the possibility may be thinkable; **7** Locke notes the dearth of motivation for a skeptical point of view by noting that what often seems to be offered is not a reason but a "pretence of doubting." (4, 11, 10)

I.3 Of the Reality of Our Knowledge (Essay 4, 4)

4, 4 discusses the issue "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 Reasonings of a sober Man, will be equally certain." (4, 4, 1) Locke recognises that the crucial question is "But what shall be here the Criterion? How shall the Mind, when it perceives nothing but its own Ideas, know that they agree with Things themselves?" (4, 4, 3)

This passage has often been understood as being addressed to the issue of representationalism. That is, it has been suggested that Locke is asking how one knows that the ideas gathered in sensory perception are veridical representations of the things sensed. I propose that such interpretations are mistaken; this chapter is about what Locke calls "general truths" or "general knowledge", and the problem it deals with is the supposition that all knowledge, to be called real, needs to make reference to things outside the understanding. Already in 4, 2, 14 Locke made a distinction between on one hand, "general Truths", as concern the properties of triangles and cubes, and, on the other, "the particular existence of finite Beings". In his extended introduction to 4, 4 he indicates that in this chapter he is aiming to argue for the reality of "general Truths":

I hope, before I have done, to make it evident, that this way of certainty, by the Knowledge of our own *Ideas*, goes a little farther than bare Imagination: and, I believe it will appear, that all the certainty of general Truths a Man has, lies in nothing else. (4, 4, 2)

This reading is confirmed by noting the last section of the prior chapter. There, at 4, 3, 31, Locke notes that we must pursue "general Knowledge" in a different manner than knowledge of "the Existence of Things": "as to all general Knowledge, we must search and find it only in our own Minds, and 'tis only the examining of our own *Ideas*, that furnisheth us with that....as the Existence of Things is to be known only from Experience." The fact that 4, 4 is not intended to offer arguments for the belief that sensation is veridical is also confirmed by the retrospective statement in the introduction to 4, 9-11, the chapters on 'knowledge of existence': "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." (4, 9, 1)

Given that, on Locke's account, knowledge "is only the perception of the agreement or disagreement of our own Ideas', he has to answer the query whether on this account claims such as "that a Harpy is not a Centaur" is "as much a Truth, as that a Square is not a Circle." (4, 4, 1) Locke's response is that our knowledge is real "only so far as there is a conformity between our *Ideas* and the reality of Things." (4, 4, 3) In his view there are "two sorts of *Ideas*, that, we may be assured, agree with Things." (4, 4, 3) On the one hand, simple ideas are real since, as books 1 and 2 were to show, they are the "product of Things operating on the Mind in a natural way" (4, 4, 4). On the other hand, all complex ideas, except ideas of substances, are assured to be real, since each of them is "not designed to represent any thing but it self" (4, 4, 5).

The reality of all simple ideas is confirmed at 2, 30, 2, which argues that it has been shown (presumably in book 1) that "in simple *Ideas...*the Mind is wholly confined to the Operation of things upon it; and can make to it self no simple *Idea*, more than what it has received." For example, the taste of pineapple is an idea only available to those who have eaten pineapples. Complex ideas that are supposed to be representations of substances may or may not qualify as real knowledge; it depends on how accurate and complete our collection of simple ideas has been. We have real knowledge regarding complex ideas that are taken to be representations of substances if the complex ideas in question actually have referents in the external world. This is one respect in which the reasonings of the sober person differ from the crazy person's: the sober one only supposes to have real knowledge with regard to substances if she has reason to believe that her collection of simple ideas has gone well; the crazy one, in contrast, may assume his musings with regard to thoroughly imaginary creatures (for example, centaurs, chimerae) to constitute real knowledge. (4, 4, 11-12)

Notably, the reality of ideas does not depend on whether the ideas in question are presently received, through the processes of sensation or reflection, or are recalled from memory. Rather, the distinction strictly is between ideas that have "a Foundation in Nature" and such that do not; the first are called real, the others "Fantastical or Chimerical" (2, 30, 1). This means that there can be conformity even between the idea of whiteness or of bitterness (which are ideas of secondary qualities), and the corresponding secondary qualities in things: "the Idea of whiteness, or bitterness, as it is in the mind, exactly answering that power which is in any Body to produce it there, has all the real conformity it can, or ought to have, with the Things without us." (4, 4, 4) (Hence, interestingly, since according to 2, 8 ideas of secondary qualities do not resemble the qualities in things that cause ideas in minds, it is clear that 'conformity' and 'agreement' do not imply 'resemblance.')

I conclude that the point of 4, 4 is that the reality of our knowledge depends, on the one hand, on how carefully we distinguish between simple ideas, complex ideas other than ideas of substances, and ideas of substances, and, on the other hand, on how well we are able to 'receive,' construct, and 'collect' ideas, respectively. To summarise my discussion of Locke's account of knowledge of the external world: even on the assumption that Locke's theory of knowledge and perception were representational, Locke offers substantial reasons for believing that there is an external world, and for believing that we can know a range of things about it.¹³

II. The True Reach of Human Cognition

As noted earlier, Locke's account of knowledge and perception appears to be representationalist because of his

¹³ For argumentation similar to mine intended to show that Locke's representationalism does not lead to skepticism, see Martha Brandt Bolton, "A Defense of Locke and the Representative Theory of Perception," in New Essays on Rationalism and Empriricism, eds. Charles E. Jarrett, John King-Farlow and F.J. Pelletier, Canadian Journal of Philosophy, suppl. vol. IV (1978) 101.

various assertions to the effect that we cannot perceive things without mediation via ideas, which we have in our minds.¹⁴ In the following I propose that Locke's account has often been misunderstood because the Essay has been read as primarily concerned with epistemological issues, as they arise in sensory perception. After that I point out that for Locke the issue in question is whether the understanding can reach the natures of things. Finally, I note that, in important respects, Locke's account is not representationalist because in his view we do perceive things in the external world--insofar as they are perceivable by us.

II.1 Appearance Vs. Reality

As has been pointed out above (and is further discussed below), the Essay is about the nature of the understanding, and, moreover, largely about the capacity of the understanding for grasping the natures of things in the external world (see, for example, 4, 21, 1). The Essay has often been read in a quite different way, however.

Bennett, for example, supposes that "Locke's theory of reality is a view about the nature of the distinction between the subjective and objective, inner and outer, appearance and reality; the distinction between there being sensory evidence for something's being the case, and its

¹⁴ See, for example, 4, 4, 3; 4, 1, 1; 2, 1, 1.

really being the case." (emphasis added)¹⁵ Bennett proceeds to illustrate the distinction that he takes Locke to be interested in by discussing the statement 'John appeared to be ill--he was white-faced and trembling':

The words 'appearance' and 'reality' do not, as they stand, mark the distinction I want....John's pallor and tremors are represented as appearances of the reality which is his illness; but colour, movement, etc., are objective, inter-personal facts which Locke and I want to put on the 'reality' side of the appearance/reality distinction....I use 'appearance'/'reality' to refer to the distinction which has facts about sensory states on one side of it and everything else on the other.¹⁶

Bennett continues by identifying Locke's ideas with what he terms 'sensory states.' Bennett's appearance/reality distinction sets out a major topic in the philosophical discussion of sensory perception, but it is not Locke's appearance/reality distinction; Locke's distinction is not about the distinction between the subjective and the objective.

¹⁵ Bennett, Locke 63.

¹⁶ Bennett, Locke 63-4.

On Locke's account, each person's ideas, of course, are only 86 accessible to him- or herself qua objects of his or her understanding, but that does not mean that it cannot be known in an indirect way what ideas are the objects of some person at a particular time. Locke makes it quite clear that one of the great sources of disputes is the failure to assure oneself that one's conversation partners share the same idea when uttering the same word. I do not intend to discuss here Locke's account of the relation of words to ideas; suffice it to note that he takes words to be those "external sensible Signs, whereby those invisible Ideas, which his thoughts are made up of, might be made known to others." (3, 2, 1) That is, even though Locke recognises that there are important problems in the achievement of an understanding of the ideas held by another human being, he doesn't consider these problems to be insurmountable (at least in principle). It seems incorrect, however, to suppose that Locke would want to put colour on the 'reality' side of the distinction, since Locke is guite insistent that colour-ideas have nothing "but Powers" on the reality side of the distinction as their causes (see 2, 8, 10).

Bennett's further discussion makes it even more evident that the distinction attributed to Locke is not Locke's:

The distinction to which I am calling attention is one which we do often enough employ. It is involved in much of our knowledge that things which appear to be thus are really so: I have been working with royal blue so that the eggshell-blue wall now looks green to me....When a question of this kind arises, we can check whether what appears to be so really is so. I may compare the wall with the sample labelled 'eggshell-blue'....¹⁷

Locke may indeed agree that our judgements concerning the deliverances of sensory perception are revisable and correctable in the manner adduced by Bennett, but this does not mean that from Locke's point of view the judgements about appearances once they have been sufficiently scrutinised have descriptive value with respect to the reality side. Rather, Locke's distinction concerns what one may call a proto-scientific matter: we have appearances of things in the world, but what we need to ascertain is whether those appearances are an appropriate guide to the natures of things in the external world.

The effect of this type of misunderstanding is that when Locke asks a question such as "How shall the Mind, when it perceives nothing but its own *Ideas*, know that they agree with Things themselves?" (4, 4, 3), Bennett concludes that it is impossible to answer "on the grounds that it precludes

¹⁷ Bennett, Locke 64.

any use of the ordinary appearance/reality distinction".¹⁸ That is, on the assumption that the appearance/reality distinction concerns the epistemological investigation of ordinary sensory perception, it seems that one must "move from limited premisses about sensory states to *limited* conclusions about the objective realm."¹⁹

Locke's distinction is not an "ordinary appearance/reality distinction", though. It is introduced as a distinction between our perceptual world of appearances of things and a reality consisting of the natures, that is, the structures and powers of things. Locke's distinction is introduced on the hypothesis that often the natures of things may not be quite as their appearances would make us believe; on his reckoning, this hypothesis is found to be justified given the evidence that the appearances themselves supply.

II.2 Objects of the Understanding: The Natures of Things

In line with the common assumption that the Essay is concerned with epistemology in the manner that is usual in the twentieth century, it also seems to be assumed that the type of knowledge that Locke is concerned with in this work cuts across the distinction between incidental and fundamental matters. That is, the assumption seems to be that Locke's enquiry would concern itself equally with

¹⁸ Bennett, Locke 65.

¹⁹ Bennett, Locke 67.

whether, for example, John's face really has the pallor of snow or the pallor of old sheets, as with whether we can know what are the definitory characteristics of the human species; or with whether this metal object has the yellow colour of gold or of brass, as with whether we can know the true nature of gold qua sort of thing that has a specific nature.

I propose that, consistent with the proto-scientific investigation into the nature of the understanding, the objects of the understanding that really are of interest to Locke in the *Essay* are the *natures* of things. This may seem to conflict with Locke's repeated assertions to the effect that we cannot come to an understanding of the real essences of things; there is no conflict, however, since one may seek to know whether essences can be known even if one has to deliver a negative report.

To establish in a preliminary manner the claim that Locke is primarily interested in the understanding qua tool for the investigation of the natures of things, I briefly focus on three particularly relevant parts of the Essay. Already in 1, 1 Locke provides some hints regarding the kind of 'things' our understandings equip us for (and so can know), and what kind of things we are not equipped for (and hence should not seek to know). For example, as noted above, he points out the danger of losing "our Thoughts into the vast

Ocean of Being" (1, 1, 7). One of the places in the Essay that directly addresses the question concerning the objects of the understanding is 4, 3 titled "Of the Extent of Humane Knowledge." In this chapter Locke makes it evident that his concern is with the natures of substances.

In section 9 Locke speaks of the knowledge of substances as knowledge regarding the natures of types of substances and not just as knowledge of particular objects:

... in this consists the greatest and most material part of our Knowledge concerning Substances. For our Ideas of the Species of Substances....

Section 14 similarly is about types of substances and their essences: "In vain therefore shall we endeavour to discover by our *Ideas...*what other *Ideas* are to be found constantly joined with that of our complex *Idea* of any Substance....So let our complex *Idea* of any Species of Substances, be what it will...." His interest in types of things is confirmed in the concluding sections which bemoan the limitations of our understandings:

in physical Things, scientifical [knowledge] will still be out of our reach: because we want perfect and adequate Ideas of those very Bodies, which are nearest to us....Those which we have ranked into Classes under names...we have but very imperfect, and incompleat Ideas of. (4, 3, 26)

Moreover, in addition to our ignorance of "the whole extent of material Beings" we may "add the Consideration of that infinite number of Spirits...which are yet more remote from our Knowledge, whereof we have no cognizance, nor can frame to our selves any distinct *Ideas* of their several ranks and sorts...." (4, 3, 27) In short, Locke's interest mostly seems directed toward knowledge of specific differences among kinds of things.

This is confirmed by the examples that he uses. In 4, 3, for example, he speaks in a thoroughly general way of flame, gold, opall, *lignum nephriticum*, cherubims, seraphims, injustice, property, government and heptagons. He is quite explicit that what we lack in comparison with some higher beings is their capacities for insight into the natures of things themselves: "What Faculties therefore other Species of Creatures have to penetrate into the Nature, and inmost Constitutions of Things; what *Ideas* they may receive of them, far different from ours, we know not." (4, 3, 23) As noted earlier, Locke does, of course, make reference to a kind of knowledge which he calls "of the real, actual, *Existence* of Things". He does not devote much space to this type of knowledge, though, and confines himself to confirming our belief that the self, God, spirits, and the

physical things with which we presently have sensory acquaintance, exist.

One may also consider the last chapter of book 4, which seems to serve as a conclusion to the *Essay* as a whole. There Locke outlines the "objects of Knowledge" or "Objects of the Understanding" as being of three sorts:

First, The Nature of Things, as they are in themselves...Secondly, That which Man himself ought to do, as a rational and voluntary Agent, for the Attainment of any End, especially Happiness...Thirdly, The ways and means, whereby the Knowledge of both the one and the other of these, are attained and communicated.... (4, 21, 1)

It may be objected that, hence, Locke himself includes other things than the natures of things under the rubric 'objects of the understanding' than I suppose. One may note, though, that in each case the object of knowledge is the *nature* of some realm of things: "Things [physical and spiritual] as they are in their own proper Beings...", the nature of practically effective actions (especially as considered by ethics), and the "Nature of Signs" (4, 21, 4). I conclude not only that the *Essay* is best read as a natural history of the understanding, but also that the focus of Locke's study is the understanding qua capacity for knowing the natures of **93** things.

II.3 Perception Is of Things--As Manifested To Us

Given that Locke's concern in the Essay is with the natures of things, the objection raised to his theory of cognition when it is called 'representationalist' is that he posits a mediation, via ideas in our own minds, as necessary. Such mediation, the objection says, constitutes a 'veil.' As noted, I further discuss Locke's conception of ideas in part II. Here I simply intend to explain the most straightforward reason for believing that Locke's ideas do not veil.

The problem constituted by the supposition that "the Mind...hath no other immediate Object but its own Ideas" (4, 1, 1) is that it leads us to worry about the reliability of ideas as conduits of the true characteristics or natures of things. There are reasons for believing that Locke shared this worry in some respects but not in others. Locke supposed that there is a problem regarding the reliability of ideas as conduits insofar as it concerns secondary qualities. Secondary qualities are just not rendered to us in a manner fully commensurate with their natures. We can observe this by comparing ideas of secondary qualities with ideas of primary qualities.²⁰

²⁰ See 2, 8; I discuss this issue more fully in part II.

In general, however, Locke does not consider the positing of ideas qua immediate objects of the mind to be a fundamental problem. In other words, he does not suppose that to speak of ideas as the immediate objects of the mind radically cuts us off from things. Why? I propose that the reason why ideas are not veiling intermediaries for Locke is that in his view they are not intermediaries; they are things--insofar as manifested to us.²¹ That is, one may suppose that things in the world have constitutions that govern the manner in which they interact with other things. For example, in some things (such as pieces of wax) the sun will cause an effect described as melting, and in others (such as the human organ of vision) an effect described as the image of a bright, vellow disc. The visual effect on us is what Locke would call a number of simple ideas. The awareness of the characteristics of a thing as given by the sensory reception of these ideas (yellow, circle, bright) is what it is to see the thing in the external world called the sun.

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Even though Locke says that *ideas* are the immediate objects of thought (4, 1, 1), and that we do *not* know *things* "immediately" (4, 4, 3), this does not by itself mean that ideas are intermediaries. I propose that Locke's contrast is one between a knowledge of things that is 'immediate'

²¹ This point of view is similar to the position of John W. Yolton, "Ideas and Kowledge in Seventeenth-Century Philosophy," Journal of the History of Philosophy 13, 2 (1975) 145-147, 158-165; also see Yolton, Acquaintance 88-104.

insofar as it is to know without mediation their constitutions/essences, and a mediated knowledge of the constitutions/ essences of things via ideas. For Locke, knowledge of the natures of things is only possible via the presentations of those objects to us. In other words, ideas are not intermediaries between the mind and things, even though ideas are the basis for inferences to the underlying structure of things. So, to note ideas received in sensation is to note how things manifest themselves to us (that is, how they appear to us) through the only conduits we have.

One way to determine if, according to Locke, we perceive things in the real world, or only veiling stand-ins, is to ask what else there might be besides what Locke claims we perceive when our senses encounter the world. The answer is that there is indeed something unperceived, namely a multitude of minute particles swarming in their various configurations. According to Locke the reason for our perceptual blindness with respect to these minute particles and their behaviour is not that we are locked into a world of ideas on account of some epistemic or metaphysical principle, though, but that our perceptual capacities simply prove to be limited.

This is evident in many places in the Essay. Locke repeatedly laments the fact that our faculties do not reach

the perfection that some other beings might be able to reach. As noted above, he states for example that

What Faculties...other Species of Creatures have to penetrate into the Nature, and inmost Constitutions of Things; what Ideas they may receive of them, far different from ours, we know not. This we know, and certainly find, that we want several other views of them, besides those we have, to make Discoveries of them more perfect." (4, 3, 23)

It is also evident that, on Locke's account, the failure in epistemic reach of our perceptions is due to the imprecision of our sense organs. High-powered microscopes, for example, might alleviate much of our ignorance of the natures of things:

I doubt not but if we could discover the Figure, Size, Texture, and Motion of the minute Constituent parts of any two Bodies, we should know without Trial several of their Operations one upon another, as we do now the Properties of a Square, or a Triangle. (4, 3, 25)

So, if on Locke's account sensory perception, even though imperfect, really is of things in the external world, then

it is necessary to explain how this is consistent with his repeated claim that we are only acquainted with ideas and not 'things themselves.' Though not entirely satisfactory, the answer seems to be that we are confused by the terms. We perceive things but the knowledge or aquaintance we gain through perception does not extend as far as to their natures. Since to know 'things themselves' to Locke seems to signify a knowledge of their natures²², this apparently is Locke's motivation for denying that we are able to have this sort of knowledge.

III. An Explanation for the Appearance of Representationalism in Locke's Account

Given that Locke's account of perception and knowledge is not representationalist, it remains puzzling why Locke would have repeatedly stated that the objects of the understanding are not the things themselves but our own ideas in our minds. I propose that the explanation is that he intends to show his disagreement with certain central aspects of other contemporary accounts of perception and knowledge, and corresponding uses of the term 'ideas.'

So, first I briefly introduce the characteristics of scholastic accounts of perception and knowledge, and indicate how Locke's formulations may be seen as attempts to show disagreement with those prevailing conceptions. Next, I

²² See, for example, 4, 21, 1.

discuss how Locke's insistence on locating ideas in our minds may have arisen from his attempts to avoid an alternative, epitomised by Nicolas Malebranche, of 'seeing Ideas in God.' Finally, I show that Locke makes it quite clear in his comments on Malebranche's and the peripatetics' accounts of perception and knowledge that, contrary to what one might expect from a representationalist account, he objects to the assumption that ideas are entities in their own right.

III.1 Scholastic Accounts of Perception and Knowledge

Locke's readiness to enter into dialogue with other contemporary accounts of knowledge and perception is evident in a variety of places, but especially in his statement that the term 'idea' stands for the referents of the terms 'species,' 'phantasm,' and 'notion':

the Word Idea...being that Term, which, I think, serves best to stand for whatsoever is the Object of the Understanding when a Man thinks, I have used it to express whatever is meant by *Phantasm*, *Notion, Species....* (1, 1, 8)

Scholastic accounts of sensory perception and of the cognition of the natures of things are quite varied and

often incompatible with each other.²³ In general it seems that the Aristotelian framework, which postulates that the form of the thing perceived and known is somehow received in the mind of the perceiver, is followed. That is, the assumption seems to be that what is perceived is the thing itself (mediated or not) by way of species, formae, similitudines, simulacra or idola.²⁴ Species is a Latin term that means 'appearance' and has its root in specere which means 'to look.' Hence, species has the same root meaning as the Greek term transliterated into English as 'idea' (apparently chosen by Locke to replace the terms species, notion and phantasm), namely 'visual aspect' or 'appearance.'²⁵

²⁴ Hamilton 951. Lindberg 133-134, 140-142, glosses Buridan and Ockham for an account that does, and an account that does not, require species in perception, respectively.

²³ My synopsis of scholastic accounts of perception and knowledge comes primarily from Sir William Hamilton, "Note M," in Thomas Reid, The works of Thomas Reid, ed. William Hamilton (Edinburgh, 1846-1863), 951-960. Although somewhat dated, Hamilton summarised the material exemplarily; see, for example, Clemens Baeumker, "Zur Vorgeschichte zweier Lockescher Begriffe," Archiv fuer Geschichte der Philosophie (1907-1908) 493 fn.4, who considers Hamilton's scholarship in this area unequalled. For further descriptions of scholastic accounts of perception, see also David C. Lindberg, Theories of Vision from Al-Kindi to Kepler (London: University of Chicago Press, 1976) 132-145; Ayers 1:26-33; Woolhouse 157-163.

²⁵ For the Greek root of 'idea' and an explanation of Locke's choice of this term, see J. O. Urmson, "Ideas," Encyclopedia of Philosophy, 8 vols. (New York: MacMillan, 1972) 4:118-121.

Species could be impressae or expressae; a species impressa is supposed to be the "vicarious existence itself, as emitted by the object, as impressed on the particular faculty", while a species expressa is "the operation itself, elicited by the faculty and the impressed species together; that is, a perception or an intellection, as including both the object and the act."²⁶ Most scholastic opinions appear to agree regarding the reality of species expressae, insofar as they are taken to be acts of knowledge, while they vary regarding the reality of species impressae.27 Some claim that for cognition species impressae are not necessary in the senses, others that they are not necessary in the intellect, and others still that they are not necessary in either the senses or the intellect.²⁸ There is also dissension with regard to the origin or source of species. The choices considered include that the mind creates them itself; that they are innate in the mind; and that they are known in the divine intellect.²⁹

Some of these disputes find a trace in the Essay. The debate about whether there Fre only phantasms (found in the senses), or only intellectual species (found in the intellect), or whether both exist is sidestepped by Locke.

- ²⁶ Hamilton 953.
- ²⁷ Hamilton 954.
- 28 See Hamilton 954-5.
- ²⁹ See Hamilton 955-956.

He simply stipulates (in 1, 1, 8) that the objects of the intellect, whether one prefers to consider them phantasme or species, be called *ideas*.

The distinction between impressed and expressed species, insofar as one implies a (virtual) object and the other the act of perception, appears to get clossed over in Locke's use of the term 'idea.' As a consequence of this gloss some commentators, such as Yolton, have argued that Locke uses the term 'idea' ambiguously to refer to both the intentional object and to the "act" of perception.³⁰

It seems that Locke is content to let most of these debates settle themselves. He does, however, enter the fray with regard to at least two of them: on the one hand, he disputes that the mind is in direct cognitive touch with the forms or natures of things; on the other hand, he deploys arguments to show that the objects of the understanding are not created by the mind itself, nor are they innate, nor are they known by us by some kind of 'insight' into the divine intellect.

Locke's participation in those two disputes supplies an explanation for the aspects of his account that make it seem representational. If he had reasons to argue that the objects of the understanding do not always resemble the

³⁰ See, for example, Yolton, Acquaintance 90-94, 101.

natures or forms of things, then, even if he means to assert **10**2 that the objects of sensory perception are *bodies* or things in the external world, he needs to say that the *immediate* objects of the intellect are something else than the natures of things. Moreover, if he were to argue that the objects of the understanding are not innate in us nor created by us, then if he is to leave clear that, furthermore, they are also not 'seen in God,' he needs to say where he believes them to be. His solution is to reiterate that they are 'in the mind,' and, furthermore, that they are 'in our own minds.'

Since Locke argues for the non-resemblance of one sort of ideas, it seems reasonable to assume that this is motivation enough for his denials that the (immediate) objects of the understanding are the natures of things.³¹ Locke does arcue against the doctrine that ideas are innate in us in book 1. His frequent reiterations that the mind is passive in perception (which I noted earlier) are an indication of his repudiation of the thesis that the mind creates ideas. Locke's repeated emphasis on locating ideas 'in our minds' when they are contemplated by the understanding, moreover, seems to imply a rejection of the thesis that ideas may be contemplated elsewhere (as in the mind of God). It may, however, seem somewhat unclear whether Locke had considered

³¹ As noted before, in Locke's terms this gets translated into a denial that the intellect knows 'things themselves.'

the thesis of the perception of ideas in God as an alternative that he would have to repudiate, even if only implicitly, by stating that ideas are 'in our own minds.'

III.2 Not Seeing Things in God

Locke's rejection of the doctrine of the perception of ideas in God is most clearly evident in An Examination of P. Malebranche's Opinion of Seeing All Things in God.³² The Examination, however, was not published until 1706, seventeen years after the Essay. The earliest mention by Locke of Malebranche's doctrine seems to occur in a letter to Molyneux on 28 March, 1693 (3 years after the Essay's publication), where he states that he has something to say against "Malebranche's hypothesis of seeing all things in God".³³ Cranston claims that Locke's critique "was prompted by the writings of Norris",³⁴ who had attacked Locke's Essay in print in 1690 and was very influenced by Malebranche. It seems unlikely, though, that Locke would not have been acquainted earlier than 1690 with Nicolas

³⁴ Cranston 388, fn.2.

³² John Locke, An Examination of P. Malebranche's Opinion of Seeing All Things in God in John Locke, Works 9:211-255.

³³ John Locke to William Molyneux, 28 March 1693 in E.S. de Beer (ed.), *The Correspondence of John Locke*, 8 vols. (Oxford: Clarendon Press, 1979) letter no. 1620, 4:665.

Malebranche's The Search After Truth³⁵, which had its first **1** edition published in 1674-75. The two early drafts of the Essay (Drafts A and B),³⁶ both dated '1671,' do not seem to anticipate Malebranche's doctrine, but they already locate ideas 'in us' when ideas are contemplated by the understanding.³⁷ There are, in any case, good reasons for thinking that Locke might have considered the doctrine of seeing ideas in God even without acquaintance with Malebranche's work.

As Yolton has thoroughly documented, Locke's use of the term 'idea' was considered unfamiliar and new in his time.³⁸ Locke acknowledges himself in Draft A that his use is new: "the Ideas of things simple or compounded...not haveing met

³⁷ See, for example, Draft A, section 5; 14. When examining the development of the *Essay*, I generally appeal to Draft A since it is the earliest extant version.

³⁸ Yolton, Way especially 86-98.

³⁵ Nicolas Malebranche, The Search After Truth, trans. Thomas M. Lennon and Paul J. Olscamp, and Elucidations of the Search After Truth, trans. Thomas M. Lennon (Ohio State University Press, 1980).

³⁶ Draft A is found in John Locke, An Early Draft of Locke's Essay Together with Excerpts from his Journals, R.I. Aaron and Jocelyn Gibb (eds.), (Oxford: Clarendon Press, 1936). Draft A is also found in John Locke, Draft A of Locke's Essay Concerning Human Understanding The Earliest Extant Autograph Version, transcribed with critical apparatus Peter H. Nidditch (University of Sheffield: Dept. of Philosophy, 1980); my quotations are from Aaron and Gibb. Draft B is found in John Locke, Draft B of Locke's Essay Concerning Human Understanding The Fullest Extant Autograph Version, transcribed with critical apparatus Peter H. Nidditch (University of Sheffield: Dept. of Philosophy, 1982).

with it any where I thought soe new a notion and something out of the way ought to be made plaine." (section 7; 15-16) The newness of Locke's use of 'ideas' is also evident if the *Essay* and Burthogge's *Organum* are compared, since the *Organum* draws a clear contrast between "Sentiments" in the "Fancy" and "Notions: Apprehensions of Reason, or Ideas."³⁹ Locke's use of the term 'idea' has generally been traced to Descartes who used it in a similar way to refer to "whatever is immediately perceived by the mind."⁴⁰ Descartes, however, readily acknowledges that the term 'idea' was in use already:

I used the word 'idea' because it was the standard philosophical term used to refer to the forms of perception belonging to the divine mind....⁴¹

The use of the term 'ideas' to refer to the forms in the mind of God is also evident in Burthogge's Organum, which states that, according to "some of the School-men", truth consists in "that conformity which is in things to their original Ideas in the Divine Intellect."⁴² The doctrine, even if not phrased in terms of 'ideas,' also finds an echo

⁴² Burthogge 33.

³⁹ Burthogge 17-18.

⁴⁰ Descartes, Third Set of Objections and Replies, AT 181; 2:127. Also see AT 188, 2:132; AT 366; 2:253.

⁴¹ Descartes, Third Set of Objections and Replies, AT 181; 2:127.

in Boyle who states that "some schoolmen and philosophers "" have derived forms immediately from God".⁴³ In fact, the doctrine that knowledge is of ideas seen in God had been discussed already by Augustine.⁴⁴

Insofar as seeing ideas in God is a kind of private revelation, it fits Locke's description of 'enthusiasm.'⁴⁵ Enthusiasm had already been a target for critique in Burthogge's Organum,⁴⁶ and in a Journal entry of Locke's on 19 February 1682.⁴⁷ In his exchange of letters with Molyneux in 1693, while preparing the second edition of the Essay, Locke comments that he would like to add a chapter on Malebranche's hypothesis.⁴⁸ Molyneux, in his reply, identifies Malebranche's hypothesis as an "Enthusiasme[]...in Philosophy".⁴⁹ Fox Bourne claims that

⁴³ Robert Boyle, The Origin of Forms and Qualities According to the Corpuscular Philosophy (1666) in Selected Philosophical Papers of Robert Boyle, ed. M.A. Stewart (Manchester University Press, 1979) 56.

⁴⁴ For example, in Augustine, On Free Will, 2, 8, in Philosophy in the Middle Ages: The Cristian, Islamic, and Jewish Traditions, eds. A. Hyman and J. J. Walsh, 2nd ed., (Indianapolis: Hackett, 1987); see also A. Hyman and J.J. Walsh, "Augustine" in Philosophy in the Middle Ages 15-20.

⁴⁵ See 4, 19, 5-7.

⁴⁶ Burthogge 16-17.

⁴⁷ 19 February 1682, in Aaron and Gibb 119-121.

⁴⁸ Locke to William Molyneux, 28 March 1693, in de Beer, letter no. 1620,, 4:665.

⁴⁹ William Molyneux to Locke, 18 April 1693, in de Beer, letter no. 1622, 4:668.

"Locke did not add a chapter to the Essay" and concludes ¹ that Locke's interest in Malebranche's thesis only found its precipitate in the posthumously published Examination.⁵⁰

Locke, in fact, did add a chapter "Of Enthusiasm" (4, 19) to the fourth edition, which touches on some of the implications of seeing things in God. The first sentence of the chapter seems to contain a not-so-veiled reference to Malebranche's worK: "He that would seriously set upon the search of Truth...." (4, 19, 1) No explicit mention is made of Malebranche, however, probably because "I love not controversies, and have a personal kindness for the author."⁵¹

To summarise, it seems that at the time of writing the Essay Locke had reason to clearly indicate the location of ideas, insofar as under consideration by the understanding, and he expressed concern for the related doctrine of enthusiasm since at least 1682. Given that the issue of seeing ideas in God is most clearly treated in the Examination, I examine some of the claims that Locke makes there with an eye towards the clarification of his manner of expression in the Essay.

⁵⁰ Henry Richard Fox Bourne, The Life of John Locke, 2 vols. (London, 1876; Aalen: Scientia Verlag, 1969) 2:276-277.

⁵¹ Locke to William Molyneux, 26 April 1695, in de Beer, letter no. 1887, 5:352-353.

Texts from the Examination have been cited by commentators 108 who aim to show that Locke apparently knew of the skeptical implications of his 'way of ideas' but incomprehensibly failed to address them.⁵² I propose that, on closer scrutiny, the Examination shows that, despite Locke's and Malebranche's common claim that ideas are the objects of the understanding, only Malebranche opens himself up to serious criticism.

Regarding Locke's views, the Examination makes it quite clear that he believes that, while on his account we do perceive things in the external world, the objects of the understanding (insofar as they are objects of this mental faculty) are neither things themselves (qua natures of things) nor verisimilar proxies but what he calls ideas. Ideas are the effects of particles in motion and since ideas are not somewhere in physical space they must be in some realm accessible to the human intellect. So, barring extrasensory perception, and barring that they are 'seen in God,' they must be thought of as located 'in' our own minds.

⁵² For example, Aaron 102-103. But also see A. D. Woozley, "Introduction" in John Locke, An Essay Concerning Human Understanding, ed. A. D. Woozley (abridged; London: Collins, 1964) 27; Mackie 37-38; H.E. Matthews, "Locke, Malebranche and the Representative Theory," in I.C. Tipton, ed., Locke on Human Understanding (Oxford University Press, 1977).

The text from the Examination that has been cited³³ to show 109 Locke's awareness of the difficulties arising from a representative theory of perception asks, "how can I know that the picture of any thing is like that thing, when I never see that which it represents?" (section 51; 250) It is adduced that the difficulty raised here is that, given two objects of knowledge, namely the 'picture' in the mind and the 'thing' in the world, no epistemic tools are available to investigate their relation to each other.

Actually, the text cited would be a poor choice to illustrate the difficulties posed by representationalism if it were not quoted out of context. First of all, here is a fuller rendition of the text:

In his Eclaircissements on the Nature of Ideas...he [that is, Malebranche] says, that 'he is certain that the ideas of things are unchangeable.' This I cannot comprehend; for how can I know that the picture of any thing is like that thing, when I never see that which it represents? For if these words do not mean that ideas are true and unchangeable representations of things, I know not to what purpose they are.

⁵³ For example, by Aaron 102-103.

Locke continues by suggesting that perhaps Malebranche means **110** that "the idea I have once had will be unchangeably the same as long as it recurs the same in the memory", but whether an idea "be the true representation of any thing that exists, that upon his principles, neither our author nor any body else can know." (section 51; 250)

On Malebranche's account (that is, "upon his principles") we see all things in God. Hence, Locke's query concerns how, given that on Malebranche's account ideas are not the direct causal effects of things on us but perceptions of something 'in God,' we are to know anything about their supposed physical (or spiritual) referents ("any thing that exists"). So, Locke is not questioning the viability of ideas as representations in this passage, but the viability of Malebranche's particular epistemic theory.⁵⁴

Incidentally, Locke appears to have misunderstood Malebranche in the passage in question. In the text under scrutiny by Locke ("Elucidation Ten") Malebranche seems intent to show that there are truths applicable to things, such as that "twice two is four, and that my friend is to be valued more than my dog", which "all men can know".⁵⁵ Malebranche proposes that the explanation for this apparent indication of the 'universality of reason' is that all minds

⁵⁴ Also see Yolton, Way 98-99.

⁵⁵ Malebranche 612.

consult the same "Reason", namely God's Reason. In other words, the reason for claiming that "the ideas of things are immutable" seems to be that these "ideas of things" are the eternal truths, as found paradigmatically or exemplarily in God.⁵⁴ Consequently, in this case, Locke seems to be mistaken in thinking that Malebranche means to say that "ideas are true unchangeable representations of things"; rather, Malebranche seems to be saying that ideas, qua (capital 'I') Ideas; that is, qua exemplars or paradigmata in the mind of God, are unchangeable. Hence, 'idea' here does not mean 'representation' of some particular thing, and on Locke's own account its unchangeableness could not be checked upon by seeing "that which it represents" in any case because mathematical and other conceptual truths are at stake.

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Locke's readiness to challenge the implication of Malebranche's claim that we cannot "see that which [an idea] represents" indicates that Locke believed that on his own account one does "see" the things represented by ideas. This is also evident from other sections of the *Examination*. In section 19; 221, for example, he asks of Malebranche

how can he know that there is such a real being in the world as the sun? Did he ever see the sun? No,

⁵⁶ This reading is confirmed if Malebranche's footnote reference to "Aug. *De libero arbitrio*. bk 2. ch. 8 ff." is consulted.

but on occasion of the presence of the sun to his eyes, he has seen the idea of the sun in God, which God has exhibited to him, but the sun, because it cannot be united to his soul, he cannot see.

Similarly, he asks, in section 52; 253:

how do or can we know there is any such thing existing as body at all? For [on Malebranche's account] we see nothing but the ideas that are in God; but body itself we neither do nor can possibly see at all; and how then can we know that there is any such thing existing as body, since we can by no means see or perceive it by our senses, which is all the way we can have of knowing any corporeal thing to exist?

The point of Locke's questions seems to be that Malebranche gives up a perfectly respectable explanatory hypothesis, namely that a certain sort of ideas are best explained by supposing them to be the effect of external things, in order to replace it with a hypothesis which requires the assumption of divine guarantees for belief in a (God-mediated) linkage of one sort of ideas (the ones that seem to be 'sensory') with the external world. On Locke's account the hypothesis of the existence of the external

world receives considerable confirmation from our experience, but on Malebranche's account our experience can provide no evidence for the existence of the external world, since our experience, ex hypothesi, does not make contact with it. Given that no other source of evidence for the existence of the external world readily offers itself, Locke concludes that Malebranche has no reason (except faith) to believe that he sees the sun, and that the sun exists, even when it seems to him that he is looking at the sun.

III.3 Against Reified Intermediaries

As noted before, the primary objection to theories of sensory perception described as representationalist concerns the fact that if it is supposed that only intermediaries, and not bodies, are perceived then it becomes difficult to ascertain the reliability of perception. One reason why Locke's account of perception may be branded representationalist is because of his statements to the effect that the objects of the mind are ideas and not things themselves: "the Mind knows not Things immediately, but only by the intervention of the Ideas it has of them." (4, 4, 3) The ideas posited by Locke, if understood as mere appearances qua manifestations of things on human sense organs, should not give rise to the charge that his account is representationalist; if ideas are understood as entities with their own nature, however, the charge might seem more justified.

Due to Locke's reluctance in the Essay to settle ontological 114 questions, it may seem that for Locke ideas indeed could be substantial entities. This supposition is dispelled when it is observed that, confronted with the accounts of Malebranche and of those that he calls "Peripatetics", Locke readily shows his disagreement with accounts of perception that reify intermediaries. Locke's awareness of these reifying accounts may also explain why he emphasizes that the ideas perceived by the understanding have their existence insofar as they are 'in our own minds.'⁵⁷

Malebranche says that to know bodies "is to know them through their ideas".⁵⁸ Malebranche refers to ideas as "real beings....and spiritual beings at that".⁵⁹ From this, and from Malebranche's opinion that it is "an absurdity to think they are 'annihilated when they are not present to the mind'", Locke concludes that for Malebranche ideas are substances: "the whole force of this argument would persuade one to understand him so" (Examination, section 17; 219).

Actually Locke admits that he does "not remember that he [Malebranche] any where speaks it out, or in direct terms calls them substances" (section 17, 219). In fact,

⁵⁷ Regarding 'deontologising ideas' see Yolton, "Ideas and Knowledge" 158-164; also Yolton, Acquaintance 88-104.

⁵⁸ Malebranche 236.

⁵⁹ Malebranche 222-3.

Malebranche says explicitly that "if it be said that an idea 115 is not a substance, I would agree".⁶⁰ Nonetheless, it is fairly clear from section 18; 219-220 that Locke disagrees with the claim that ideas are entities in their own right, and it seems reasonable to assume that this is at least one reason why, despite not making any ontological commitments, he takes care to emphasize in the *Essay* that, insofar as they are materials for thought and reasoning, ideas strictly are conceived to be 'in our own minds.'

This is also evident in his commentary on Malebranche's statement regarding how we know God. Malebranche says: "Only God do we know through Himself, for...only He can act on our mind and reveal Himself to it."⁶¹ In his comment Locke rejects the view that it is intelligible that God could directly act on our minds and, hence, reveal Himself to us immediately (that is, without the mediation of ideas). Without going into Locke's reasons, we may note that he concludes that "it is about the *ideas* which are *in our minds* that I think our author's inquiry here is, and not about the real existence of those things whereof we have ideas, which are two very remote things." (emphasis added; section 43; 240)

⁶⁰ Malebranche 223.

⁶¹ Malebranche 236.

Locke's disagreement with the reification of intermediaries 116 between mind and bodies is also evidenced by his wholesale repudiation in the Examination of what he calls the "peripatetic doctrine of the species". Locke speaks of "species, or visible appearances of bodies" (section 9; 216) and of "visible species" (section 10; 217). He says that the "peripatetic doctrine of the species Goes not at all satisfy me" insofar as he does "not think any material species, carrying the resemblance of things by a continual flux from the body we perceive, bring the perception of them to our senses" (section 9; 214).

He contrasts that account with his own: "the perception we have of bodies at a distance from ours, may be accounted for, as far as we are capable of understanding it, by the motion of particles of matter coming from them and striking our organs." (section 9; 215) He continues by noting that in the case of vision "Impressions made on the retina by rays of light, I think I understand; and motions from thence continued to the brain may be conceived, and that these produce ideas in our minds, I am persuaded, but in a manner to me incomprehensible." (section 10; 217) In other words, Locke rejects the view that in perception the understanding is given the object itself, insofar as a transmission of a verisimilar appearance or species is concerned, while he, nonetheless, fully accepts that we do have "perception...of bodies at a distance from ours" (emphasis added), insofar as they have effects on our minds via their impressions on retinae and further motions affecting the brain.

A positive account of what Locke takes ideas to be seems to be called for in order to fully assess whether ideas do not function in a veiling manner, as it has been argued. Given that some of the most relevant passages with regard to the status of ideas occur in 2, 8, I leave further discussion of this issue for chapter 7, though.

To summarise the point of this section as a whole, the wider context in which Locke writes the Essay does furnish a respectable explanation for Locke's apparent representationalism. I propose that Locke speaks of ideas as the immediate objects of the understanding because he intends to show his disagreement with theories of perception that postulate direct access to the forms or essences of bodies. Moreover, I propose that it is probable that he locates ideas, insofar as perceived, *in* our minds because of his disavowal of accounts that make perception of things a 'seeing in God.' Finally, the Examination also makes it clear that for Locke ideas are 1.0t real entities that could come in between the mind and bodies: ideas are only the manifestations things.

PART II Knowledge of Morality and the Autonomy of Ideas

CHAPTER 5: THE SCIENCE OF MORALITY

Commentators¹ have generally treated 2, 8 as a testing ground for Locke's commitment to empiricism since he attempts, in that chapter, to make a distinction between qualities which, strictly speaking, are beyond experience. As argued above, the primary motivation for the *Essay* is moral, instead of epistemological, skepticism. Consequently one may ask what role 2, 8 plays in this context. In this second part of the dissertation I propose that 2, 8 plays an integral role in Locke's attempt to set the foundations for a science of morality.

In this chapter I elucidate what is required, from Locke's point of view, to establish knowledge of morality, and I note some difficulties in this undertaking. In the four following chapters I consider in some detail the role of 2, 8 in this context. The last chapter briefly examines some implications arising from Locke's attempt to ground a science of morality.

¹ See, for example, Mackie, *Problems*, chapter 1; O'Connor 60-72.

I. Requirements for a Science of Morality

Locke is most explicit about attaining knowledge of morality at 4, 3, 18.² Insofar as the *Essay* is to investigate the "Original, Certainty, and Extent of humane Knowledge", 4, 3, titled "Extent of Humane Knowledge", is a centrally important chapter. Up to section 18 the story of the extent of human knowledge is rather disappointing.

Locke claims that our knowledge of substances is mostly based on ideas of secondary qualities. Concerning gold, for example, we may know that yellow colour, malleableness, fusibility and fixedness belong to it, but fail to know the further properties of gold for lack of knowledge of the primary qualities of the corpuscles on which the secondary depend. Moreover, if we knew the primary qualities of the corpuscles of a substance such as gold, we still would not know how to identify the secondary qualities in terms of which those primary ones may manifest themselves to our sense organs. (4, 3, 12-14) In contrast, knowledge of moral right and wrong is not only possible according to Locke, but attainable at a high degree of certainty, namely at the demonstrative level.³

² The *Essay*'s "Index" also directs us to 3, 11, 16 and 4, 12, 8. Moreover, see 2, 28, 4-16 for Locke's account of "moral relations".

³ See 4, 2 for a discussion of the "Degrees of Knowledge", intuitive, demonstrative and sensitive.

The search for a demonstrative account of morality is not unique to Locke. Richard Cumberland and Samuel Pufendorf both claim that such a demonstrative account is possible.⁴ Without here attempting to give either a detailed analysis of the foundations that "might place Morality amongst the Sciences capable of Demonstration", or a critique of Locke's proposal from the point of view of ethics or the history of ethics, we may note that he gives us a capsule account of the requirements of such a science at 4, 3, 18:

The Idea of a supreme Being, infinite in Power, Goodness, and Wisdom, whos? Workmanship we are, and on whom we depend; and the Idea of our selves, as understanding, rational Beings, being such as are clear in us, would, I suppose, if duly considered, and pursued, afford such Foundations of our Duty and Rules of Action, as might place Morality amongst the Sciences capable of Demonstration....

Locke is not explicit about it here, but from both the Essay and Draft A it is clear that he perceives the need to make a definite distinction between those rules of morality instituted by civil autorities, custom, and those

⁴ See Colman 138. "History of Ethics," Encyclopedia of Philosophy, 1972, 3:92 notes that Hobbes attempted to base ethics on the method of Euclid's geometry; Spinoza, moreover, wrote Ethics Demonstrated in the Geometric Manner.

promulgated by God. At Essay 2, 28, 7-10 he distinguishes rules of morality such as 'civil law' and 'the law of opinion or reputation,' on one hand, from the 'divine law,' on the other. In Draft A he contrasts them directly:

Another sort of moral Ideas or rules of our actions there is...being not of our own makeing but depending upon something without us and soe not made by us but for us and these are the rules set to our actions by the declard will or laws of another who hath power to punish our aberrations. These are properly and truly the rules of good and evill because the conformity of our actions with those bring upon us good or evill. (section 26; 39)

It is clear that Locke assumes that true rules of morality require an ever-present, powerful, external threat of punishment because otherwise there would be no motivation for compliance.⁵ Consequently, it is of prime importance to establish both that we can have the concept of a God who, at all times, can know our actions and has the power to punish, and that such a God exists.

Moreover, for this God to be able to punish and reward, and to do it fairly, his subjects have to be of a particular

⁵ See also 2, 28, 6.

sort: they have to be corporeal in order to be subject to punishment, and they have to be rational, in order for the rules of morality to be understood and, hence, for the punishment to be just. Even though Locke does not state the necessity of corporeality on the part of human beings at 4, 3, 18, he is explicit about it at 3, 11, 16, where the possibility of a demonstrative science of morality also is discussed: "when we say that Man is subject to Law: We mean nothing by Man, but a corporeal rational Creature...."

The final ingredient in Locke's very succinct statement at 4, 3, 18 of the "Foundations of our Duty and Rules of Action" is that we are this supreme being's "Workmanship". For clarification of the significance of this claim one may note that in *The Second Treatise of Government* Locke argues that we ought to obey the "Law of Nature" expressed through "Reason" because God is our maker:

Reason, which is that Law [that is, the Law of Nature], teaches all Mankind, who will but consult it, that being all equal and independent, no one ought to harm another in his Life, Health, Liberty, or Possessions. For Men being all the Workmanship of one Omnipotent, and infinitely wise Maker;...they are his Property, whose Workmanship

they are, made to last during his, not one anothers pleasure. $(II, 6)^6$

So, having a clear notion of ourselves as being the "Workmanship" of God provides the justification for his rule over us and our adherence to his law, since being God's "Workmanship" makes human beings his property, and harming human beings (presumably a primary topic of morality) is harming his property.⁷

Presumably, for the rules of morality to apply, both God and human beings have to exist. But, as with mathematical entities, the existence of moral beings is a separate issue, and hence dealt with separately by Locke.⁸ On the whole, this divine command theory is not a new approach to morality, even though (as I point out in my concluding chapter) in Locke's application of it to political and social issues, it can have some surprising (and weighty) consequences.

⁸ He argues for the existence of God, of oneself and of other beings at 4, 9-11.

⁶ The rule of the divine law over us is also justified by appeal to the claim that we are "his Creatures" at 2, 28, 8.

⁷ As is discussed below, the injunction against harming the property of human beings is given further justification in the *Treatises* on the basis of the human right to self-preservation. It is questionable, however, whether on Locke's account a justification can be found to condemn harming God's property. It would seem that only voluntarist grounds could be found.

In summary, according to 4, 3, 18 morality is demonstrable if we have the particular concepts of God, human beings and God's workmanship, as Locke defines them. A science of morality based on these concepts had initially caused him some difficulties, though, as is evident from Draft A.

II. Difficulties: God and Human Beings

Locke's idea of God, as just noted, is "of a supreme Being, infinite in Power, Goodness, and Wisdom...." This is not an unusual manner of conceiving of God, but it poses a difficulty for Locke since it is unclear how either sensation or reflection could have furnished the idea of infinity, required for the concept of a being with infinite attributes, to one's human mind. Locke's recognition of this difficulty is evident both in the Essay and in Draft A.

In the Essay the topic "Of Infinity" is allocated a full chapter with 22 sections. Even though it is placed among other chapters on simple modes, and its emphasis is on the infinity of space and duration, links with the issue of the infinity of God are maintained. The introduction acknowledges that, when we think of infinity, there arises in us the assurance "That the Great GOD, of whom, and from whom are all things, is incomprehensibly Infinite...." (2, 17, 1) "The difficulty", however, "is, how we come by those boundless Ideas of Eternity and Immensity, since the Objects, which we converse with, come so much short of any approach or proportion to that Largeness." (2, 17, 2) The conclusion of the chapter confirms that the issue in question is how experience can be the basis for the notion of infinity:

Duration, Space, and Number....I pretend not to treat of them in their full Latitude: it suffices to my Design, to shew, how the Mind receives them, such as they are, from Sensation and Reflection; And how even the Idea we have of Infinity, how remote soever it may be from any Object of Sense, or Operation of our Mind, has nevertheless, as all our other Ideas, its Original there. (2, 17, 22)

It is even more evident in Draft A that Locke's motivation for discussing the notion of infinity arises from the difficulty of assigning an origin in experience to it. Apparently Locke had not discussed this notion in an early version of Draft A until he had aired his views and gathered objections. There are two objections, recorded and considered in the three concluding sections 43-45 of Draft A. The first argues that "all our notions and knowledg are not derived either from the Ideas taken in by our outward senses or the sense we have of the operation of our own minds" because we have "certain innate Ideas or principles of whose truth we are certain though our senses could never come to any observation about them" (section 43; 67). The second is more specific; it "is of those men who say they 126 have a positive Idea of Infinite, which Idea cannot possibly be had from our senses and therefor that we have Ideas not at all derived from our senses." (section 44; 69)

Obviously, the first, more general, objection would have been a reason for the development of the new material that makes up the first 16 sections of Draft B, and for book 1 of the Essay. Locke supposes that the second objection is based on the following reasoning: "Finite is that which hath an end, an end is a negation of farther production or extension Infinite is the negation of that negation ergo the Idea of Infinite is positive." (section 44; 70)⁹ The question is, though, how one may arrive at a positive idea of infinity by way of sensation or reflection.

Without going into details here, it is to be noted that in Draft A and in the Essay Locke replies by arguing that it is absurd to believe that anyone could have a positive idea of infinity or eternity; Locke proceeds to argue that the idea of infinity is really arrived at by a negation of either finite duration or finite space. On the basis that being is positive, he concludes that the conception of "a being without a begining is but a negative Idea." (section 44; 70) This conclusion introduces its own difficulty, though, since it is unclear how one could have such a "negative idea",

⁹ See also 2, 17, 14.

that is, if the mind only obtains its ideas through experience (sensation or reflection). As I show below, the first task at 2, 8, especially at sections 1-6, is to overcome this difficulty.

Like his idea of God, Locke's idea of human beings, as rational corporeal beings, is not unusual; rather, it agrees with the Aristotelian definition of human beings as rational animals. In practice, however, other characteristics, such as bipedality and capacity for speech, were appealed to in order to decide membership in the human species.¹⁰ Notably, Descartes makes speech a sign of mind, and hence, humanity: being "incapable of arranging various words together and forming an utterance from them to make their thoughts understood....shows not merely that the beasts have less reason than men, but that they have no reason at all."11 Furthermore, it is obvious from 3, 11, 16 (where he argues that even monkeys endowed with reason would be subject to law), that for Locke disputes about the appropriate criteria for me bership in the human species were an issue regarding morality.¹²

¹⁰ See, for example, 3, 11, 20.

¹² See also Colman 240, who notes in the context of the knowledge of natural law, insofar as it is a guide to morality, that "it would seem essential...that we do have an understanding of the form or real essence of human nature."

¹¹ Descartes, Discourse on Method, AT 57-58; 1:140. But see Pierre Gassendi, Fifth Set of Objections, AT 269-271; 2:188-189.

Given variability in a number of features (such as skin colour, intelligence, etc.), sensory observation, by itself, does not straightforwardly determine who is to be counted among 'human beings;' as in all taxonomy observation has to be guided by theoretically founded criteria in order to know which features are relevant. Locke decides that "whether a Child or Changeling be a *Man* in a physical Sense, may amongst the Naturalists be as disputable as it will" (3, 11, 16); from the point of view of law (which, in this context, means morality), we simply need to suppose that a human being is a "corporeal rational Creature...." Draft A provides further context for Locke's decision to stipulate a definition of human beings.

In Draft A the issue concerning the nature of human beings is not explicitly addressed in connection with morality. One might suppose that the topic of morality provides the motivation, though, since section 27, which, among other things, discusses the concept of human nature, is preceded by sections 23, 24, 25 and 26 which are the sections that mostly deal with morality ("Moral relations"; "the moral standard"; "The law of nature, a divine enactment"). The discussion of the concept of "Man" arises in the context of the insufficiency of so-called "principles viz. what is is, and It is impossible for the same thing to be and not to be" for "the probat' n of propositions where in are words standing for complex Ideas v.g. Man, horse, Gold, Virtue."

Locke concludes that, given these principles, someone acquainted only with white people may form a concept of human beings that allows him to "demonstrate by the principle Impossibile est idem esse et non esse that a Negro is not a Man." (section 27; 44-45)

The trouble, in Locke's eyes, lies in the general assumption that we can attain an understanding of the nature of things with our sensory capacities. To arrive at an understanding of

the complex Ideas of things we call substances and also modes and relations...being made up of a great number of those simple ones...we are art to collect a certain number of those simple ones...and give that precise Idea soe collected a name which we will have to belong to a whole species and which name of right doth belong to that Idea in our mindes, which Idea is thought to conteine the essence or formality of something existing without us.... (section 27; 46)

Even if "more or lesse accurately drawn from a carefull observation of many particulars of things existing without us", however, such a complex idea "can never assure us that that is the essence of a number of things existing without us of which we have noe cognizance by our senses." (section 130 27; 46)

Two types of problems are noted here. One is the assumption that inductive procedures can be sufficient for the determination of the defining features (including those of which "we have noe cognizance by our senses") of natural things. The other is the assumption that an idea in our mind might "conteine the essence or formality of something existing without us". Both problems reemerge at Essay 3, 6 ("Names of Substances"). 3, 6, 24 suggests that the assumption that we may sort species according to their "real internal Structures" or by "substantial Forms" is a result of learning "the Language of the Schools". Subsequent sections in 3, 6 focus on the issue of the "Definitions of the word Man". Fundamental to the discussion in 3, 6 is that we can not simply assume that we have access to the "essence or formality" of external things. As I argue below, the other task at 2, 8 is to show that we do not generally have access to the nature or essence of things in sensation or reflection.

In summary, Locke's science of morality requires that he show at least two things. First, in order to show that we can have an idea of "a supreme Being, infinite in Power, Goddness and Wisdom" (4, 3, 18), it is necessary that Locke show how it is possible for us to have an idea of infinity, given that sensation and reflection are the only sources of **131** ideas. This means that he needs to show that it is possible to have "negative ideas," or, as he puts it in the *Essay*, that ideas of absences or privations are as "positive" as any other ideas.

Second, in order to show that human beings are subject to the "supreme Being" he needs to show that it is appropriate to stipulate a definition of human beings as "rational, understanding Beings". (4, 3, 18) This means that Locke has to throw doubt on an important alternative, and possibly misleading, approach of arriving at a definition of entities, namely the approach that supposes that we are able to determine (e.g., through sensation) a substance's "essence or formality". It also means that he should show that the ideas in the human understanding are independent from things in the external world to such a point that complex ideas made up by us (such as the idea of human beings) may be considered fully legitimate in thought and reasoning.

I contend that Locke argues for these two theses at 2, 8, first, by supporting the equality of all ideas in our minds, and second, by undermining the doctrine of the communication of forms. As a whole, Locke's argumentation amounts to a defence of the autonomy of the ideas in our minds, or, in other words, the thesis that the ideas in our minds are fully legitimate tools for thought and reasoning independently of the nature of their causes in things.

CHAPTER 6: ALL IDEAS ARE EQUAL

As mentioned above, Locke argues for the autonomy of ideas in terms of two theses. Here I first clarify the difficulty that Locke tries to resolve regarding ideas of privations, and then describe the nature of the arguments he deploys to show that all ideas are equal.

I. Materials for Thought, and Privations

Despite 2, 8's uninformative title, "Some farther Considerations concerning our simple Ideas", Locke reveals his concerns quite readily. The closing section of the previous chapter (2, 7) gives a sense of the issue to animate 2, 8. At 2, 7, 10 Locke claims to have completed his survey of most of the various types of simple ideas that human minds may have, and returns to one of the main subjects that inform book 2 as a whole, namely the sufficiency of simple ideas obtained in experience as materials for thought and reasoning.

This topic is in evidence, for example, at 2, 1, 1 which begins with the assumption that every conscious human being who thinks recognises that it is ideas that the mind trades in, and that it deals with ideas of many kinds such as "Whiteness, Hardness, Sweetness, Thinking, Motion, Man, Elephant, Army, Drunkenness, and others...." Locke states that the point of book 2 is to complement his direct attack

on innate ideas by showing "whence the Understanding may get 134 all the *Ideas* it has, and by what ways and degrees they may get into the Mind...." (2, 1, 1)

2, 7, 10 returns to this subject. This is clear also from the marginal summary: "Simple Ideas the Materials of all our Knowledge." Having repeated that all human knowledge is founded on simple ideas arrived at by sensation and reflection, he argues that no other sources are needed:

Nor let any one think these too narrow bounds for the capacious Mind of Man to expatiate in....Nor will it be so strange, to think these few simple *Ideas* sufficient to employ the quickest Thought, or largest Capacity; and to furnish the Materials of all that various Knowledge, and more various Fancies and Opinions of all Mankind, if we consider how many Words may be made out of the various composition of 24 Letters.... (2, 7, 10)¹

An objection seems to have arisen in Locke's mind, however, leading to "Some farther Considerations concerning our simple Ideas." Without elaborating upon the objection for the readers' benefit, he states his reply at 2, 9, 1:

¹ The combinatorial power of the alphabet had also been noted by Boyle 49, who gives credit to Lucretius. (One appropriate text, for example, is found at Lucretius DRN I 823-26; Latham (trans.) 51.)

whatsoever is so constituted in Nature, as to be able, by affecting our Senses, to cause any perception in the Mind, doth thereby produce in the Understanding a simple *Idea*; which, whatever be the external cause of it, when it comes to be taken notice of, by our discerning Faculty, it is by the Mind looked on and considered there, to be a real *positive Idea* in the Understanding, as much as any other whatsoever; though, perhaps, the cause of it be but a privation in the subject. (2, 8, 1)

In order to better understand what Locke intends by his reply, it is useful to explore the subject of privations a little further.

Further hints about the privation doctrine, which Locke is addressing, are found at 2, 8, 3, where he discusses "the *Ideas* of White and Black" with reference to "the Philosopher, who hath busied himself in considering their Natures, and thinks he knows how far either of them is in its cause positive or privative...." This reference to "the Philosopher" is not intended as a respectful acknowledgement of his colleagues; in this section he applauds painters and dyers for their perspicacity where "the Philosopher" fails. The reference he makes to philosophers at other points in the *Essay* is often no more complimentary; at 3, 10, 8, for example, he associates "the Philosophers of old" with "the **136** Schoolmen" who "aiming at Glory and Esteem" indulged in disputing "to cover their Ignorance...."² More importantly, the mention of the philosopher's attention to the natures of colours in the context of a privation doctrine suggests that Locke is contrasting his views with Aristotelian-scholastic doctrines.

There is good reason for seeking out the Aristotelian context for Locke's discussion at 2, 8 since the topics discussed by Locke in book 2 closely parallel the discussion of *De Anima* II, 5 to III, 3:

Locke's book 2 begins with a discussion of the origin of ideas, argues that the mind is passive in the reception of ideas (2, 1, 25), and continues at 2, 2 with arguments to the effect that ideas cannot be made or destroyed. In comparison, Aristotle begins with a discussion of "sensation in the widest sense", and what it means to perceive, in book II, chapter 5, and claims that, with respect to "the special objects", each sense "never errs in reporting that what is before it is colour or sound" at II, 6.

² Philosophy itself, however, is a subject of esteem for Locke in "The Epistle to the Reader" 10.

Locke proceeds to speak of ideas of seeing and hearing, 137 and their unique objects (light and colours, and noises, sounds and tones) at 2, 3. Aristotle continues to discuss the special object of sight, namely colour, and its actualizing agent, at II, 7, and the special object of hearing, namely sound, at II, 8.

Next, at 2, 4, Locke introduces an idea received from touch, namely solidity, and argues that "This of all other, seems the *Idea* most intimately connected with, and essential to Body". Aristotle discusses taste, which is a kind of touching, at II, 10, and touching itself, at II, 11, and argues that "What can be touched are distinctive qualities of body as body".

Ideas of more than one sense receive only an honorary mention in Locke's 2, 5 (2, 5 encompasses only 6 lines), but Locke promises to "speak more at large of these in another place". After a summary at II, 12, Aristotle proceeds to discuss the manner of apprehension of the "common sensibles" at book III, chapter 1.

Locke's 2, 6 and 2, 7 are about ideas of reflection and sensation. Aristotle's III, 2 begins with an attempt to explain how we manage to sense sensing itself (for example, how we perceive that we are seeing). At 2, 8 Locke discusses the difference between the causes of sensory perceptions (that is, qualities in things) and perceptions (that is, ideas in minds). Aristotle's III, 2 discusses some alleged confusions with respect to sensible objects and percipient senses, and argues that "The earlier students of nature were mistaken in their view that without sight there was no white or black, without taste no savour."

Locke deals with perception at 2, 9, and so does Aristotle at III, 3.

In short, the evidence suggests that Locke followed very closely the order of discussion set out by Aristotle,³ and tends to agree with his ancient predecessor on many of the topics in guestion.⁴

It is of relevance for this discussion that Aristotle has a privation doctrine. For example, at *Categories* 10, 12a, 26-41 he speaks of privative and positive faculties or

⁴ The relation of Essay 2, 8 to De Anima III, 2 is complex, though; as I point out below, this relationship cannot be summarised by simply claiming that there is agreement or disagreement between the two.

³ This is not to suggest that Aristotle had a *direct* influence on Locke's writing; my proposal, rather, is that, independently of whether it is Aristotle himself or a later commentator whom Locke is following in book 2, the parallels between Locke's and Aristotle's discussions call for a reading of Locke's text in the light of Aristotelian doctrines. For further comments on the Aristotelian framework of Locke's discussion, see below.

possessions: "We say that that which is capable of some particular faculty or possession has suffered privation when the faculty or possession in question is in no way present in that in which, and at the time at which, it should naturally be present."⁵

Significantly, Aristotle identifies some of the features of things as 'qualities' and some as 'accidents.' Among the four definitions of 'quality' discussed in the Metaphysics the most relevant for the interpretation of Essay 2, 8 states that 'quality' means

differentia of the essence, e.g., man is an animal of a certain quality because he is two-footed, and the horse is so because it is four-footed; and a circle is a figure of particular quality because it is without angles....⁶

At Categories 8, 9a, 28-34 Aristotle introduces the "affective qualities":

Sweetness, bitterness, sourness, are examples of this sort of quality, together with all that is akin to these; heat, moreover, and cold,

⁵ Aristotle, Categories 10, 12a, 28-32.

⁶ Aristotle, *Metaphysics* V, 14, 1020a, 33-36.

whiteness, and blackness are affective qualities.⁷

He tells us that the reason why sweetness, heat, cold, and so on, are called 'qualities' is that

those things that possess them are themselves said to be such and such by reason of their presence. Honey is called sweet because it contains sweetness; the body is called white because it contains whiteness; and so in all other cases."

'Accident,' in contrast, primarily means

that which attaches to something and can be truly asserted, but neither of necessity nor usually, e.g., if some one in digging a hole for a plant has found a treasure....And a musical man might be pale; but since this does not happen of necessity nor usually, we call it an accident.⁹

⁹ Aristotle, *Metaphysics* V, 30, 1025a, 13-21.

⁷ Affective qualities differ from mere affections in that affective qualities are caused by something "permanent and lasting" while affections "may easily be rendered ineffective or speedily removed...." (Aristotle, Categories 8, 9b, 9-34)

⁸ Aristotle, Categories 8, 9a, 32-34.

So, since privations concern features that "should naturally 141 be present",¹⁰ we are justified in assuming that it is *qualities* (properties that characterise things themselves), and not accidents, that are deemed to be lacking when a privation is mentioned.

The assumption that Locke is addressing an Aristotelian-inspired account of privations is supported by the fact that Locke speaks of the cognition of privations at 2, 8 in a manner remarkably similar to Aristotle's at De Anima III, 6, 430b, 20-23. The occasion in Aristotle's text concerns the cognition of "Points and similar instances of things that divide.... " Aristotle notes that such items "are realized in consciousness in the same manner as privations" or "how evil or black is cognized; they are cognized, in a sense, by means of their contraries." Locke attempts to explain in a similar way what "negative Names", such as insipid, silence or nihil refer to by saying that they "denote positive Ideas; v.g. Tast, Sound, Being, with a signification of their absence." (2, 8, 5) Given Aristotle's account of privations, it is possible to make some sense of the objection that Locke obliquely alludes to at 2, 8, 1.

Locke seems to be replying to the supposition that perceptions of privations are not fully informative since they only indicate that a particular quality fails to be

¹⁰ Aristotle, *Categories* 10, 12a, 28-32.

present in a thing. (For example, if one tasted some honey 142 that failed to be sweet one would have a perception of a privation; this perception could not, however, instruct one about the nature of honey.) Aside from those corresponding to the "negative Names" insipid, silence, *nihil*, Locke lists the following ideas, suggesting that some of them may come under the suspicion of being caused by privations in the subject: "Heat and Cold, Light and Darkness, White and Black, Motion and Rest..." (2, 8, 2). The difficulty entailed by ideas caused by privations seems to be their derivative character: cold is understood only if heat is understood, darkness only if light is, etc.

Interestingly, Locke's statement that "negative Names" stand "not directly for positive Ideas, but for their absence" (2, 8, 5) may at first seem inconsistent with his claim at 2, 8, 1 that all ideas in the mind are positive. Editions 1-3 of the Essay even say that negative names stand for "negation in some certain Ideas", even though Locke adds there that he is not speaking of "any Ideas in the Mind, but their absence." One may read Locke's statement in the first three editions as embodying an intermediate stage between the somewhat careless phrase "negative Ideas" of Draft A and the final version in editions 4-5 of the Essay. Careful reading of the passage, as rendered in the final edition, can resolve the apparent inconsistency, however. Locke does not say that negative names stand for non-positive ideas. Rather, he merely says that 'negative names' apply when certain ideas are lacking: "Insipid", for example, applies if there is no taste.

Considered in the light of the Essay's larger project as it is conceived of here, that is, in the light of the Essay's concern with moral skepticism, Locke's rejection of the supposition that ideas caused by privations are inadequate may have significant repercussions. As I have pointed out above, one of the objections to Locke's early, nearly completed version of Draft A had been that, since we have the idea of infinity, and since it seems inconceivable that we might have acquired this idea by way of either sensation or reflection, it is concluded that we therefore acquire some ideas in other ways. (section 44; 69) Locke's reply in Draft A was an argument to the effect that, since the idea of infinity is the negation of the positive ideas of finite duration or finite space, it is not a positive but a negative idea. As noted, this proposal bears its own difficulty since it is unclear how such an idea of an absence of a thing can be obtained in perception. (The difficulty is apparent if one supposes perception to consist in the reception in the mind of fourt from things because then it would seem that no perception at all should ensue on the occasion of an absence of a form.)

It has been suggested that Locke's discussion of ideas of privations seems to be in reply to a similar discussion by Descartes in Meditations III.¹¹ Meditations III consists largely in an argument for the existence of God from the fact that we have an innate idea of a "substance that is infinite, <eternal, immutable>, supremely intelligent, supremely powerful, and which created both myself, and everything else (if anything else there be) that exists.^{#12}

The argument assumes the identification of ideas with something like images,¹³ and proceeds to argue that some ideas (such as the idea of cold) may be called materially false because they represent privations "as something real and positive". For Descartes the idea of infinity, however, is not merely a negation of the idea of the finite (in the way that for him the conceptions of rest and darkness are negations of movement and light) because we "clearly understand that there is more reality in an infinite substance than a finite one...." This is confirmed for Descartes by the observation that the conception of infinity

¹¹ Ayers 1:39-41, claims that Locke opens 2, 8 with a discussion of privations because of Descartes' arguments in the *Meditations*.

¹² Descartes, Meditations III, AT VII, 45; 2:31.

¹³ Descartes, Meditations III, AT VII, 37; 2:25. Also see AT VII, 38.

serves us as a benchmark for discovering that we are not perfect.¹⁴

As noted, if Locke is not to admit any other sources of ideas than sensation and reflection, he has to show that the an idea of infinity arrived at simply by a negation of the idea of the finite (which is available through experience), is fully legitimate. That means that he has two courses of action; on one hand, he may attempt to show that we do not have reason to consider false either ideas arising from privations or negations of positive ideas. On the other, he may attempt to show that the assumption that ideas resemble their causes is not well-founded in any case. In fact, Locke takes both courses of action.

By arguing for the existence of God within the context of the discussion of privations Descartes clearly has set the problem that Locke is considering at 2, 8. It is not so clear that Locke is concerned to debate Descartes in particular, though. Rather, given Locke's explicit concern for morality, it is more likely that he is intent to dissuade any "moralists and theologians of his century" who happen to argue in the Cartesian manner for an innate notion of the infinite.¹⁵)

¹⁴ Descartes, *Meditations* III, AT VII, 43-47; 2:29-32.

¹⁵ Yolton, Way, chapter 2, illustrates thoroughly that the question whether we have innate ideas of God was widely debated in England prior to 1688.

II. Arguments for the Equality of all Ideas

The arguments offered at 2, 8, 1-6 are presented on the supposition that "perhaps, the cause of [some idea] be but a privation in the subject." (2, 8, 1) The arguments are somewhat veiled because, as just noted, Locke does not identify the exact view that he argues against, but a relatively coherent picture can be constructed. As mentioned before, the view against which he argues implies that at times we may have a perception of some subject as being, for example, cold, dark, or black, and that these perceptions are considered inadequate representations of their causes because those causes only are privations.

Against this view Locke argues in two ways: destructively and constructively. Locke's destructive argumentation is aimed at showing that even those who manipulate the natures of things do not make reference to the privative or positive nature of the causes of ideas in our minds. The constructive argumentation is to show that ordinary experience supports an equal treatment of all ideas in the mind, no matter whether their causes are positive or privative.

So, to begin Locke appeals to the expertise of craftspersons, such as painters and dyers. As a fully trained pharmaceutical chemist, and as a collaborator with Robert Boyle,¹⁶ Locke knew that certain external changes,

¹⁶ See Dewhurst, chapter 1, especially 17-23.

colour changes in particular, often signify changes in the 147 nature of the things under investigation. Dewhurst tells us, for example, that Locke repeated experiments of Boyle's which show "that several elements gave a specific colour when put to the flame....¹⁷ Painters and dyers, however, routinely, and expertly, manipulate the natures of paints and dyes in mixing them, but do not find any reason to make distinctions among perceptions on the basis of their underlying causes.

Locke takes the opportunity to note that painters and dyers remain unconcerned about the privative or positive natures of their perceptions even though they have as good a grasp (or, rather, a better grasp) of how to distinguish colours (and also how to appropriately mix paints and dyes) as do those "philosophers" who claim that they can make distinctions in the very natures of things:

A painter or Dyer, who never enquired into their causes, hath the *Ideas* of White and Black, and other Colours, as clearly, perfectly, and distinctly in his Understanding, and perhaps more distictly, than the Philosopher, who hath busied himself in considering their Natures.... (2, 8, 3)

¹⁷ Dewhurst 20, 22.

Locke's constructive argumentation for not distinguishing ideas on the basis of their supposed causes in things relies on an appeal to common experience. He simply asks whether people's experience testifies to differences in reality among ideas when classified according to whether their causes are privations. Locke's example at 2, 8, 5 compares the ideas produced in us by the shadow of a human being and by the "Man himself" in dazzling sunshine. He extends his examples at 2, 8, 6 to other cases in which we obtain quite definite images from surfaces that do not reflect light as effectively as the surroundings: "a hole perfectly dark", or such a hole painted, or the images (presumably letters and/or drawings) produced by the dark ink with which he writes. He supposes that there is agreement that the images ("Picture"; "Figure") caused by these privations in things appear as "clear and positive" as, or even more so than, the images caused by objects fully illuminated. Hence, Locke concludes, people have good reason not to make distinctions among ideas in their minds on the basis of supposed privations in the objects.

Perhaps Locke foresaw that advocates of the distinction between ideas of privative and ideas of positive causes would appeal to some kind of classificatory neatness as the justification for their view. For example, it could be argued that, ordinarily, we perceive figures less distinctly as the light of day wanes; when it is fully dark, we experience a full privation of the figures of objects. Similarly, the perception of cold might be counted as a perception of a privation since it can be appreciated as an experience of progressively less warmth as we move away from a heat source such as a fire. Locke contends, however, that even the appeal to classificatory neatness fails in some cases. He introduces as an example the case of motion/rest:

The privative causes I have here assigned of positive Ideas, are according to the common Opinion; but in truth it will be hard to determine, whether there be really any Ideas from a privative cause till it be determined, Whether Rest be any more a privation than Motion. (2, 8, 6)

Aristotle is generally credited with the view that the completed condition of things is rest, since that is what they 'naturally' aspire to. Consequently one would assume that for Aristotle motion is the condition of privation.¹⁸ There is an exceptional circumstance in which, from Aristotle's point of view, this supposition apparently would not be true, however.

He notes that if there were a void "no one could say why a thing once set in motion should stop anywhere...a thing will

¹⁸ Also compare Aristotle, *Physics* III, chapters 1-3.

either be at rest or must be moved ad infinitum, unless something more powerful get in its way.^{#19} Aristotle rejects this type of movement for various reasons; he considers it absurd, and, moreover, he assumes that it conflicts with the evident reality of "natural locomotion, e.g.; [of] fire upward and earth downward....^{#20} In the sixteenth and seventeenth centuries, though, natural philosophers such as Galileo and Descartes, for example, argued that a body set in motion on a plane would continue to travel at its given speed indefinitely.²¹ Hence, Locke has good reason to note that it remains unclear which one of the members of the motion/rest pair really is to be considered the privation.

In summary, having found that expert practitioners operate successfully without making distinctions between ideas in the mind on the basis of the supposed positive or privative causes of those ideas, that common experience does not call for the distinction, and that, even taken at face value, it cannot deliver a fully satisfactory classificatory schema, Locke finds sufficient cause to hold that the "Understanding" rightly "considers all [ideas] as distinct, positive Ideas" (2, 8, 2).

¹⁹ Aristotle, Physics IV, 8, 215a, 19-22.

²⁰ Aristotle, Physics IV, 8, 214b, 14-15.

²¹ See, e.g., A. Rupert Hall, The Revolution in Science 1500-1750 (London: Longman, 1983) 99-109.

CHAPTER 7: FORMS, IDEAS AND QUALITIES

In the following three chapters I examine Locke's case against the communication of forms in perception as presented at 2, 8, 7-26. Most succinctly, what Locke attempts to show within a broadly Aristotelian framework (with the help of experience available to all) is that, at least in many cases, what is perceived is not a good guide to what, in things, causes that perception. This means that, even if sensory perception is a reliable guide to the distinctive features of things, it is insufficient as a guide to the essences or natures of things. Furthermore, if ideas gathered through sensation or reflection cannot be regarded as reliable guides as to the nature of their causes, then distinctions between simple ideas in our minds on the basis of their origins are beside the point. Consequently, Locke's case against the communication of forms in perception argues for the autonomy of simple ideas in our minds from their causes in things.

Locke's case against the communication of forms is made through a number of distinctions that culminate in the conclusion that the causes in things are often much unlike their effects in our minds. That is, first Locke makes a distinction between the features of things insofar as they are perceptually present and insofar as they are causally involved modifications of things: the distinction between

ideas in minds and qualities in things. Next, he states criteria that distinguish between two sorts of modifications in things that may be causes of perceptions: the distinction between primary and secondary qualities. Furthermore, he specifies the relationship among the two sorts of modifications of matter that cause sensory perceptions and the two sorts of perceptions that they cause: this is what I call the resemblance thesis. Finally, Locke attempts to show that, on the basis of experience, his model of perception is in better agreement with Aristotelian presuppositions than the scholastic model that supposes a communication of forms: the arguments for the resemblance thesis.

Throughout part II I frequently appeal to a reading of the issues discussed by Locke that places them in a broadly Aristotelian framework. By this I mean that I suppose that Locke addresses the issues in question keeping in mind that Aristotle's teachings constitute the received view. Given the generally anti-Aristotelian mood among the seventeenth century philosophers and scientists with whom Locke is (and was) associated, this manner of reading the Essay may seem somewhat surprising. Locke's discontentment with the Aristotelian instruction that he received at Oxford is well known.¹ Locke does, however, share with others, such as Robert Boyle,² considerable respect for Aristotle himself³

¹ See Cranston 38-39.

² See, e.g., Boyle, Origin 9-10.

alongside his disdain for the peripatetic philosophy. Hence, 153 it is not unreasonable to suppose that Locke would argue against what he took to be scholastic or peripatetic theses, such as the communication of forms, while phrasing his case in an Aristotelian vocabulary.

Given that the external evidence for Locke's attention to Aristotle's works,⁴ or to the works of the scholastics,⁵ is scanty, my reason for reading his argumentation in the context of those works is mostly internal.⁶ That is, I propose that reading Locke's argumentation at 2, 8 in an

⁴ As far as we know it, Locke only owned five books of Aristotle's (see John Harrison and Peter Laslett, 2nd ed., *The Library of John Locke* (Oxford: Clarendon Press, 1971) nos. 117-121), and they do not include *De Anima*, the *Categories, Physics*, or *De Generatione et Corruptione*, for example.

⁵ E.J. Ashworth, "'Do Words Signify Ideas or Things?' The Scholastic Sources of Locke's Theory of Language," *Journal of the History of Philosophy*, 19, #3 (July 1981) 304-305, lists a number of scholastic authors that Locke might have read, only two of which were found in Locke's library (see Harrison and Laslett, no. 2548a for R. Sanderson, and no. 2982 for P. du Trieu).

⁶ It is highly unlikely that Locke would not have known, at least second hand, the Aristotelian and scholastic context of the discussion regarding forms, ideas, and qualities, since his colleague Robert Boyle, whose works Locke collected and whith whom he collaborated, had made direct reference to that context in his The Origin of Forms and Qualities (1666). Boyle quotes from Suarez (at 8, 29), Cabaeus (at 9), Scaliger (at 13, 54, 59), Hurtadus (at 29), Aquinas (at 54), and makes reference to Aristotle in various places (including at 4, 10, 69, 73).

³ See 4, 17, 4.

Aristotelian framework simply makes more sense of it than 154 many other readings that have been tried to date.⁷

I. Perception and Forms

From an Aristotelian point of view it is fully plausible that knowledge of the natures of things could be achieved on the basis of sensation. Aristotle describes sense as "what has the power of receiving into itself the sensible forms of things without the matter". He explains that sensation is similar to

the way in which a piece of wax takes on the impress of a signet-ring without the iron or gold...: in a similar way the sense is affected by what is coloured or flavoured or sounding, but it is indifferent what in each case the *substance* is; what alone matters is what *quality* it has....⁸

As noted earlier, some scholastic commentators went beyond this view by positing that perception requires the

⁸ Aristotle, *De Anima* II, 12, 424a, 17-22. Furthermore, see *De Anima* III, 4, 429a, 14-17; and III, 7, 431a, 1.

⁷ It may also be noted that it would make sense for Locke to write in such a manner that he could be interpreted as commenting on Aristotle, if he were interested in receiving wide circulation for his work in traditional establishments. Locke did seem to have such an interest (see his reaction to John Wynne, an Oxford don who suggested making an abridgment of the Essay that would "prove the futility of the old systems of philosophy as taught at Oxford", in Cranston 384).

intervention of intentional species. Some posited the transmission of substantial forms, that is, forms or qualities that have an existence apart from the matter that they may inform. Given the variety of views among Aristotelian-inspired doctrines of perception, for the purposes of this investigation I speak of the doctrine of the communication of forms as an account that supposes that, in perception, forms, which are assumed to be the defining, essential characteristics of things, are communicated to the mind of the perceiver (whether with the intervention of intentional species or not).

As is well known, the doctrine of substantial forms was repudiated by various figures in the seventeenth century, including Descartes' and Boyle.¹⁰ As noted above, I propose that Locke's account of perception offered at 2, 8 is intended to repudiate the doctrine of the communication of forms. Locke expresses his disagreement with this doctrine at various places in the *Essay*, often in terms of a rejection of 'substantia' forms.' At 3, 6, 24, for example, Locke states that people do not sort things according to their presumed "internal Structures" but, rather,

⁹ See, for example, Descartes, Optics, AT 85; 1:153. Also see Sixth Set of Replies, AT 437; 2:295.

¹⁰ Boyle's The Origin of Forms and Qualities is largely directed against this doctrine. See, for example, Boyle, Origin 67.

'tis evident, that 'tis their own Collections of sensible Qualities, that Men make the Essences of several sorts of Substances....Much less were any substantial Forms ever thought on by any, but those who have in this one part of the World, learned the language of the Schools....¹¹

He also points out a contrast between the ignorant and the supposedly learned similar to the contrast developed at 2, 8, 3 between the philosopher and the painters and dyers; this time he notes an allegiance of the learned to the doctrine of substantial forms:

and yet those ignorant Men, who pretend not any insight into the real Essences, nor trouble themselves about substantial Forms, but are content with knowing Things one from another, by their sensible Qualities, are often better acquainted with their Differences; can more nicely distinguish them from their uses; and better know what they may expect from each, than those learned quick-sighted Men, who look so deep into them, and

¹¹ Substantial forms and species are repeatedly discussed throughout 3, 6. Mackie discusses and endorses the view that one may make reference to the real essence of a substance as a way to distinguish it from another substance; he notes, though, that Locke "disapproves" of "this way of using substance-terms" (J.L. Mackie, "Locke's Anticipation of Kripke," Analysis, 34, #6, (June 1974):179).

talk so confidently of something more hidden and essential. (3, 6, 24)

Similarly, at 4, 4, 16, he repudiates the assumption that species play a role in the knowledge of natures:

So necessary it is to quit the common notion of Species and Essences, if we will truly look into the Nature of Things, and examine them, by what our Faculties can discover in them as they exist, and not by groundless Fancies, that have been taken up about them.

Moreover, at 2, 31, 6 he suggests that the terms 'form' and 'substantial forms' are meaningless: "If any one will say, that the real Essence, and internal Constitution, is...its particular form; I am farther from having any Idea of its real Essence, than I was before." Furthermore, "when I am told, that something besides the Figure, Size, and Posture of the solid Parts of that Body, is its Essence, something called substantial form, of that, I confess, I have no Idea at all, but only of the sound Form...." (2, 31, 6)

Locke's rejection of the doctrine of communication of substantial forms and of species is not expressed in so many words at 2, 8, but he comes close to it at 2, 8, 25. There he attempts to explain why the two kinds of secondary

qualities (those he calls "immediately perceivable" and those he calls "mediately perceivable" or "a third sort") are treated so differently. In this context he notes that upon seeing changes of colour in wax, or on faces, from exposure to the sun

we forwardly enough conclude the Production of any sensible Quality in any Subject, to be an Effect of bare Power, and not the Communication of any Quality, which was really in the efficient, when we find no such such sensible Quality in the thing that produced it. (emphasis added; 2, 8, 25)

He continues by observing that, even though we should also judge that there is no communication of qualities when our senses are affected by external bodies, we do not, because in this case qualities in the things and ideas in the mind seem alike:

But our Senses, not being able to discover any unlikeness between the *Idea* produced in us, and the Quality of the Object producing it, we are apt to imagine, that our *Ideas* are resemblances of something in the Objects, and not the Effects of certain Powers, placed in the Modification of their primary Qualities, with which primary 15%

Qualities the *Ideas* produced in us have no resemblance. (2, 8, 25)

II. Ideas and Qualities

The last sentence of 2, 8, 6 indicates that Locke is assigning privative causes to certain ideas merely guided by "common Opinion", and suggests that there is cause to call into doubt such assignments (for example, with regard to the ideas of motion and rest). In the next sentence Locke indicates that, given such uncertainty, it would be "convenient" to clarify the relation between ideas in minds and their material causes in things in order "To discover the nature of our *Ideas* the better, and to discourse of them intelligibly", distinguishing them insofar "as they are *Ideas* or Perceptions in our Minds; and as they are modifications of matter in the Bodies that cause such Perceptions in us...." (2, 8, 7)

Locke does not claim to proceed in a purely inductive manner, though. He has a thesis that he intends to argue: "that so we may not think (as perhaps usually is done) that they [ideas] are exactly the Images and Resemblances of something inherent in the subject...." (2, 8, 7) In other words, Locke is concerned to prove mistaken an account of perception, which apparently had considerable currency at the time. This mistaken approach fails to distinguish between the features of things as they are perceptually

available and as they are present in things; it leads to the 160 assumption that they generally resemble each other.¹²

Margaret Atherton has argued that the distinction between ideas and qualities is of eminent importance in 2, 8.¹³ This claim is supported by the fact that a relation between ideas and qualities, namely resemblance, remains a topic until the very last section of 2, 8; it is also supported by the marginal summaries, and by Locke's summary statement at 2, 8, 22: "it being necessary, to make the Nature of Sensation a little understood, and to make the difference between the Qualities in Bodies, and the Ideas produced by them in the Mind, to be distinctly conceived...."

In the following I discuss some difficulties regarding this distinction. I close this chapter by briefly noting the historical context of Locke's use of the term 'idea.'

II.1 Ideas in the Mind and in Things

It has been considered problematic that already in his introduction of the distinction Locke appears to use the term 'ideas' for something that he also characterises as a

 $^{^{12}}$ As already indicated, Descartes, Meditations III, AT 38; 2:26, notes that we tend to assume that such a resemblance is taught to us by nature itself.

¹³ Margaret Atherton, "'Ideas in the Mind, Qualities in Bodies': Some Distinctive Features of Locke's Account of Primary and Secondary Qualities" (unpublished).

feature of external things¹⁴: "Ideas...as they are modifications of matter in the Bodies...." (2, 8, 7) The difficulties seem compounded at 2, 8, 8. First Locke defines the terms 'idea' and 'quality': "Whatsoever the Mind perceives in it self, or is the immediate object of Perception, Thought, or Understanding, that I call Idea; and the Power to produce any Idea in our mind, I call Quality of the Subject wherein that power is." In the next sentence, however, it seems uncertain if he is in fact adhering to his definitions:

Thus a Snow-ball having the power to produce in us the *Ideas* of *White, Cold,* and *Round,* the powers to produce those *Ideas* in us, as they are in the Snow-ball, I call *Qualities;* and as they are Sensations, or Perceptions, in our Understandings, I call them *Ideas....* (2, 8, 8)

This may seem confusing since the term "they" before the semicolon seems to refer to "powers"; if the second occurrence of the term "they" is meant to have the same reference, though, then Locke is saying "as [powers to produce Ideas in us] are Sensations...I call [those powers] Ideas". This clearly seems nonsense, ¹⁵ since Locke

¹⁴ For example, by Aaron 116.

¹⁵ But see Ayers 1:58, who readily adopts the view that "they" means "powers" in both cases.

precisely is intent at 2, 8, 8 to introduce a terminological **162** contrast between ideas and qualities in terms of perceptions in minds, on the one hand, and modifications of matter and powers in things, on the other.

Two alternative interpretations readily offer themselves.¹⁴ One option is to assume that the two occurrences of the pronoun "they" have different references. The first "they" could refer to "the Powers to produce those *Ideas* in us", and the second "they" could refer back to "the *Ideas* of *White, Cold,* and *Round*". This reading might seem justified if there were a parenthesis around the text "the Powers to produce those *Ideas* in us, as they are in the Snow-ball, I call *Qualities*". Since there is no parenthesis, or anything similar to bracket this portion of the text off, I consider this interpretation too strained to be satisfactory.

Another option is to be guided by the natural reading of the second occurrence of the term "they" as referring to "the

¹⁶ Besides the two interpretations I introduce here, Jonathan Bennett, "How to Become Uncomfortable with Locke's *Essay*" (read at the 'Why Is the History of Philosophy Important To Philosophy?' Conference, Simon Fraser University, 20-21 Feb. 1987), 6, has offered a further reading of this text by isolating the following phrase from its context: "The powers to produce those ideas in us, as they are in the snowball, I call qualities; and as they are sensations or perceptions in our understandings I call them ideas". He concludes that the passage "makes sense only if one ['they'] refers to qualities and the other to ideas...." The difficulty represented by this reading would seem to be of his own making, though, since additional, relevant context is readily available.

Ideas of White, Cold, and Round". If this reading is applied 163 to the first "they", that portion reads like this: "the Powers to produce those Ideas in us, as [the Ideas of White, Cold, and Round] are in the Snow-ball, I call Qualities". Despite the difficulties that this reading may entail, I propose that it is the option of choice.

The difficulty with this reading and, in general, with Locke's use of the term 'ideas,' would seem to arise from the common assumption that ideas strictly are mental objects. On the face of it, Locke appears to share this assumption since he states that "Whatsoever the Mind perceives in it self, or is the immediate object of Perception, Thought or Understanding, that I call Idea." (2, 8, 8) It is guite possible, though, that in the clause following "or" Locke is not merely elaborating on the first clause but intends to indicate that there are two classes of things he calls 'ideas': something perceived in the mind "it self", and something that is an "immediate object" of the understanding. In other words, Locke may be reminding us that "whatsoever" is perceived in the mind "it self" includes "the Operations of our own Minds within us" (2, 1, 4), that is, what he also calls 'ideas of reflection.'

This interpretation is given support by the fact that 2, 8 immediately precedes three chapters (chapters 9, 10, and 11) that deal with ideas of reflection ("Of Perception", "Of Retention", "Of Discerning"), and by the similarity in the 16.4 description of ideas of reflection at other locations in the *Essay*. For example, when introduced at 2, 1, 4, ideas of reflection are described as obtained "by reflecting on [the mind's] own Operations within it self." (emphasis added) Similarly, at 2, 1, 8 they are described as the result of the understanding turning "inwards upon it self." (In contrast, with regard to ideas of sensation, Locke says that "Our Senses, conversant about particular sensible Objects, do convey [them] into the Mind...." (2, 1, 3))

Hence, instead of intending to limit the meaning of the term 'idea' to what is in the mind, it may be Locke's intention at 2, 8, 8 to emphasise the further extension of the use of the term 'idea' from the appearances of external objects of perception to "the Operations of our Minds within us". Moreover, this interpretation makes it plausible that the "immediate object of Perception, Thought or Understanding", may well be an external object, insofar as it is manifested to us.

The difficulties detected in the passage under discussion have prompted some commentators to read the last sentence of 2, 8, 8 as Locke's acknowledgement for his (supposedly) blundering use of the term 'ideas'¹⁷:

¹⁷ Aaron 103, for example, assumes that at 2, 8, 8 Locke "apologizes beforehand" for "such loose talk".

...which Ideas, if I speak of sometimes, as in the 1 things themselves, I would be understood to mean those Qualities in the Objects which produce them in us.

Although consistent with Locke's statement that he did not edit the Essay to his full satisfaction,¹⁸ to interpret the above statement as an acknowledgement of a loose use of the term 'ideas' is not really satisfactory. The most obvious reason for doubting this interpretation is that, if Locke had been uncomfortable with his use of the term 'ideas,' he would, at least, have corrected 2, 8, 7 and 2, 8, 8. (Locke's willingness to correct the text of the Essay is thoroughly documented in the countless emendations carried out by him in the five editions that appeared in his lifetime.) Moreover, he even enshrines this use of the term 'ideas' in his Index to the Essay: "IDEA....As in the mind, and in things must be distinguished".¹⁹

It is even more obvious that Locke is not excusing himself for being sloppy in his use of the term 'ideas' when 2, 8, 8 is read in conjunction with Draft A of the Essay. In Draft A he states that when he speaks "of simple Ideas as existing in things I would be understood to mean such a constitution

¹⁸ See "The Epistle to the Reader" 7-8, where he admits that he wrote the Essay "by incoherent parcels", and that he is "now too lazie, or too busie to make it shorter."

¹⁹ "Index," Essay 730.

of that thing which produces that idea in our mindes." (section 45a; 73) The next sentence makes clear that he is not apologizing for misspeaking but explaining his use of the term; he uses the term 'idea' to refer to something non-mental, and then adds that he will also employ the term 'quality' for the (supposedly) resembling causes of ideas in things:

Soe that Idea when it is spoken of as being in our understanding is the very perception or thought we have there, when it is spoken of as existing without is yet cause of that perception, and is supposd to be resembled by it, and this also I call quality.... (section 45a; 73)

At this point it becomes imperative to attempt a positive account of what Locke means by the term 'idea.' As noted above, recently commentators have offered various alternative interpretations of the meaning of the term 'idea' in response to Locke's supposed representationalism. One interpretation proposes that Locke uses the term 'idea' primarily to mean "act" of perception.²⁰ The immediate difficulties with this construal can be summarised by noting that the texts appealed to are somewhat ambiguous. As an example of a supporting text Yolton gives "having *Ideas* and

²⁰ Yolton, Acquaintance, chapter 5, especially 93-94, 101-103.

Perception being the same thing" (2, 1, 9). Given that "Perception" is singular, a straightforward reading of this text would be to equate "having Ideas" and "Perception", and not to suppose that Locke means to equate "having Ideas" with "having Perception", as Yolton seems to suggest. (To Yolton's credit it must be said that he seems aware of this sort of difficulty, since he admits that "Locke does sometimes speak of ideas as the immediate objects of thought, not just as perceptions."²¹)

Another alternative consists in supposing that by 'ideas' Locke means appearances.²² This interpretation has the advantage that it does not treat ideas as things, and hence would seem to forestall the possibility that ideas could veil perception. It also has the advantage that there are plenty of texts that identify ideas as appearances (e.g., 2, 30, 2; 4, 4, 4). The assumption that Locke means appearances by the term 'ideas' may lead to the supposition that the term stands for something mental, though, requiring that one set aside Locke's actual application of the term to

²¹ Yolton, "Ideas and Knowledge" 160. Also see Yolton, Perceptual Acquaintance, chapter 5; Ayers 1:52-69.

²² Bennett supposes that the only objects of the mind are appearances; hence, his view seems to be in conflict with the interpretation offered above, according to which, for Locke, the mind does have access to things in the external world (Bennett, Locke, passim, especially 68).

something non-mental as "loose talk".²³ In addition to Locke's use of the term 'ideas' to make reference to "the modifications of matter in the Bodies that cause...Perceptions" (2, 8, 7) just discussed, Locke also speaks of ideas as being present in mirrors, for example.

Locke compares the soul to a "Looking-glass, which constantly receives variety of Images, or Ideas" (2, 1, 15); in the same chapter he notes that "the Understanding can no more refuse to have [ideas], nor alter [them], when they are imprinted, nor blot them out, and make new ones in it self, than a mirror can refuse, alter, or obliterate the Images or Ideas, which, the Objects set before it, do therein produce." (2, 1, 25) The images on a mirror are not things in their own right that could veil the objects that they reflect; reductively, they are the effect of bundles of light reflected off, or generated by, some objects. What makes images out of the bundles of light seems to be our apprehension of them as something. So, if Locke's analogy is further pursued, then what makes the perturbations in the mind appearances is not their instantiation as mental states but our apprehension of them as something, that is, as signs.²⁴

²⁴ Also see Ayers 1:60-66 on "Ideas as natural signs".

²³ But see Ayers 1:51, who does not seem to find this an obstacle, and readily moves from arguing that Locke is an imagist to the conclusion that "Locke's 'ideas', when not occuring in actual sensation (or 'reflection'), are sensory images or quasi-sensations."

Locke confirms this supposition in a variety of ways. On the 16one hand, apprehension of impressions as something seems implied in his insistence that impressions must reach "the observation of the Mind" (2, 9, 4), and that impressions have to be noticed, for there to be perception: "whatever impressions are made on the outward parts [of the body], if they are not taken notice of within, there is no Perception." (2, 9, 3) On the other hand, Locke underlines that what is specific to ideas is their ability to serve us as "Marks of Distinction". At 2, 32, 14 Locke discusses the repercussions that result "if the Mind (as in most Men I believe it does) judges these Ideas to be in the Things themselves." Locke continues by arguing that, for ordinary purposes anyway, this supposition is of no consequence: "For God in His Wisdom, having set [ideas] as Marks of Distinction in Things, whereby we may be able to discern one Thing from the other...it alters not the Nature of our simple Idea, whether we think, that the Idea of Blue, be in the Violet it self, or in our Mind only...." (2, 32, 14) The point directly relevant to our discussion here is that Locke's ideas can be spoken of as being either 'in' things (such as mirrors and violets) or 'in' minds because the term really is only a way of making reference to features that distinguish.

Hence, it seems that Locke's concept of idea is best described in functional, and not in ontological, terms. An

account of ideas, which respects his various uses of the term, considers ideas such marks as can distinguish objects (or events) in perceptible ways.²⁵ Consequently, insofar as ideas are 'marks of distinction,' they can mediate the understanding of things without being thing-like intermediaries. It may seem, however, that on this proposal Locke grants the communication of forms after all.²⁶ That is, if Locke posits ideas in things and corresponding ideas in our minds, then it may seem only natural to suppose that ideas travel from things to minds. This seems confirmed by various passages. At 2, 1, for example, Locke repeatedly speaks of ideas being conveyed to, or coming into, the mind.²⁷ At 2, 1, 2 he asks us to suppose that the mind is like "white Paper, void of all Characters", and speaks of ideas being "painted on" the mind by the fancy. Moreover, as noted before, he speaks of ideas that enter the mind as being analogous to the "Pictures" projected from the "Objects of sight" onto the wall of a "dark Room" (by which we may suppose that he means a camera obscura²⁸). (2, 12, 12)17) An alternative, more consistent interpretation is pr sible, though.

²⁵ See also 2, 31, 1, which speaks of "perceivable Ideas."

²⁷ See, for example, 2, 1, 1; 2, 1, 3.

²⁸ See my discussion above of Locke's 'dark room.'

²⁶ Ayers 1:61, notes that "Locke may certainly seem sometimes to have reverted to the discarded model of the transmitted form...."

If ideas are 'marks of distinction' then it makes some sense 171 to refer to things by way of the ideas that they cause in our minds: one attributes the colour blue to violets because this is a distinguishing mark for violets among other flowering plants. If it is asked, however, what constitutes certain marks of distinction (i.e., what instantiates those ideas), then the appropriate answer is in terms of "the modifications of matter of Bodies", or in terms of "Ideas or Perceptions in our Minds", respectively.²⁹ The analogy that suggests itself is the case of rainbows, which can be spoken of as 'in the cloud of droplets' that generates the light effect, but also as 'in the mind' that perceives those droplets as a rainbow; despite the apparent ambiguity there is no reason to suppose that a 'rainbow-form' is communicated in perception.³⁰ When Locke speaks of ideas being conveyed to the minds from things he may mean nothing more than that whatever distinguishes a thing becomes perceptually available to the mind through that process. Hence, despite the use of the term 'ideas' for something 'in' things as well as 'in' minds,³¹ there is no need to

³⁰ See also Ayers 1:58.

³¹ Locke's usage also has precedents in Draft A, 6, 14, 16, 28.

²⁹ To anticipate my discussion below regarding resemblance in the *Essay*: on Locke's account, one has reason to suppose that there is a resemblance between the modification of matter in a thing and the perception that it causes in our minds, as in the case of shape, when, on the basis of the perception, one is enabled to draw further conclusions regarding the modifications of matter in the thing.

postulate a communication of forms between them in perception.

I conclude that the fundamental distinction that Locke proposes when he contrasts ideas in the mind and qualities in things is not a distinction between something that is fundamentally mental and something that is fundamentally extra-mental, but a distinction between marks of distinction as they are instantiated in minds and as they are constituted by the modifications of matter in bodies. Of course, the distinction between ideas in minds and qualities in things is only of interest if there are cases in which ideas in the mind do not characterize a thing in such a way that from those ideas alone one may understand how the qualities of that thing interact with the qualities of other things; in Locke's terms this is to say, if there are cases in which ideas in minds and qualities in things do not resemble each other. As noted, Locke's thesis at 2, 8, 7-22 is precisely that there is a class of such cases.

II. 2 Brief Historical Note on 'Idea'

Locke's broad use of the term 'idea' is not without contemporary precedent. The term 'idea' appears to be in use among both scholars and laypeople in the seventeenth century. In scholarly circles, the term 'idea' seemed to imply leanings toward Platonism.³² Emily Michael and Fred S. Michael have shown, however, that there also "was a pre-Cartesian non-Platonic use of 'idea.'^{w33} They emphasize that in various sixteenth century and early seventeenth writings something material, namely a brain impression, was referred to as an idea. Apparently the term 'idea' was even applied to actual physical objects at some points in time; the Michaels report that "In Latin, in the twelfth century, the term 'idea' was used to denote an image or icon carried in a religious procession."³⁴ It is also of possible significance that van Helmont, who according to Dewhurst³⁵ was read by Locke during various periods in his development, an⁻¹ apparently was influential on him, speaks of ideas being rendered detectable through material changes.³⁶

J.O. Urmson, furthermore, indicates that prior to Descartes' time the term was used to mean pattern or exemplar besides

³² This is evident, for example, in Samuel Parker's attack on the use of the term 'ideas' in his A Free and Impartial Censure of the Platonic Philosophie (1666) passim.

³³ Emily Michael and Fred S. Michael, "Corporeal Ideas in Seventeenth-Century Psychology," *Journal of the History* of Ideas (1989) 31.

³⁴ E. Michael and F.S. Michael 36.

³⁵ Dewhurst 6, 19.

³⁶ See Allen G. Debus, *The Chemical Philosophy*, 2 vols., (New York: Science History Publications, 1977) 2:360-361.

meaning a mental item.³⁷ Locke knew Greek and was ready to 174 introduce words of Greek origin into the English language in their etymological sense. At 4, 21, 4, for example, he introduces "semeiotike" as "the Doctrine of Signs". Urmson notes that "In classical Greek [the term 'idea'] never lost the possible meaning 'visual aspect'".³⁸ Locke may have supposed himself to be returning to a more orthodox Aristotelian account of perception and, to make the distinction between himself and certain scholastic interpreters, felt motivated to use the transliteration 'idea' of the Greek term for 'form' instead of its Latin equivalent 'species.'

³⁸ Urmson 118.

³⁷ J.O. Urmson, "Ideas," Encyclopedia of Philosophy, 119.

CHAPTER 8: PRIMARY AND SECONDARY QUALITIES

In the following I introduce the distinction between primary and secondary qualities, discuss two conceptual difficulties related to the distinction, and provide a brief historical review of its genesis.

I. The Distinction

2, 8, 9-14 attempt to show that there are two kinds of material modifications that may cause ideas in minds. Those Locke calls "original or primary Qualities of Body" are

utterly inseparable from the Body, in what estate soever it be; such as in all alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as Sense constantly finds in every Particle of Matter, which has bulk enough to be perceived, and the Mind finds inseparable from every particle of Matter, though less than to make it self singly perceived by our Senses. (2, 8, 9)

Locke's lists of primary qualities vary. No. 2, 8, 9, for example, he includes among primary qualities "Solidity, Extension, Figure, Motion, or Rest, and Number." At other places he includes such features as texture and situation.

This may seem to pose a problem for some interpretations,¹ **176** but it simply seems to indicate that, without putting much importance on which particular qualities are included, Locke is ready to call primary whichever qualities fit his description.²

There is another kind of cause of ideas in minds of which Locke says that "I to comply with the common way of speaking call Qualities, but for distinction secondary"; Locke claims that these other causes of ideas "in truth are nothing in the Objects themselves, but Powers to produce various Sensations in us by their primary Qualities...." (2, 8, 10) Among these ideas of secondary qualities Locke lists "Colours, Sounds, Tasts, etc." There is "a third sort which are allowed to be barely Powers" which include "the power in Fire to produce a new Colour, or consistency in Wax or Clay by its primary Qualities...." (2, 8, 10)

So, Locke's proposed test for the cogency of the distinction between these two kinds of qualities requires us to determine whether the first (solidity, extension, figure...) in contrast to the second (colours, sounds, tastes, etc., and also the powers of fire to produce new colours, etc.)

¹ See, for example, Alexander, Ideas, Qualities and Corpuscles (Cambridge University Press, 1985) 133-135.

² Compare the non-committal statement at 2, 7, 10: "These, if they are not all, are at least (as I think) the most considerable of those *simple Ideas* which the Mind has...."

indeed are a) inseparable from the body, b) not affected by 177 alterations, changes and force, and c) found by sense in every bit of matter, and assumed to be present in each material particle.

II. Difficulties

Locke's distinction between primary and secondary qualities has received severe criticism. Mackie notes that "It is widely believed among philosophers that, whatever Locke said about primary and secondary qualities, it is wrong."³ Alexander, moreover, points out that "The arguments of 2, 8, 16-21 by which, it is alleged, Locke seeks to support [the distinction] have been regarded as easy targets for the beginning student of philosophy", and that if the usual interpretation of the distinction "is correct then Locke must have been both foolish and incompetent."⁴

Most of the difficulties concerning the distinction between primary and secondary qualities touch on Locke's arguments for it. I consider those difficulties below after examining the purport of what I call the 'resemblance thesis.' Here I limit myself to the discussion of two difficulties of a conceptual nature, namely whether all qualities are mere powers for Locke, and whether secondary qualities only have existence in the mind.

³ Mackie, Problems 7.

⁴ Alexander 117.

Locke states that "the Power to produce any Idea in our mind, I call Quality of the Subject wherein that power is." This is followed by an example: "Thus a Snow-ball having the power to produce in us the Ideas of White, Cold, and Round, the Powers to produce those Ideas in us, as they are in the Snow-ball, I call *Qualities....*" (2, 8, 8) This looks very much as if Locke is defining all qualities, including those he calls primary, as powers, since "Round" is one of the ideas produced by "Powers". Here Mackie perceives a difficulty, for he finds that Locke is "partly inconsistent" because at 2, 8, 9 "what [Locke] identifies as primary qualities are 'solidity, extension, figure, motion or rest, and number', and these are not powers: rather they are intrinsic properties of things which may be the grounds or bases of powers....^{#5} This difficulty arises out of a misunderstanding, however.

There is reason to suppose that Locke does distinguish between qualities that are mere powers and qualities that are more than mere powers in his contrast between primary and secondary qualities. As noted, those he calls secondary he describes as "Qualities, which in truth are nothing in the Objects themselves, but Powers to produce various Sensations in us by their primary Qualities...." (2, 8, 10) He says that the "third sort" of qualities are "barely Powers" though they are "as much real Qualities in the

⁵ Mackie, Problems 12.

Subject" as those he has just introduced as secondary qualities. In contrast to both secondary and the "third sort", those he calls primary are also called "original" and considered inseparable from things. So, these passages confirm the contrast between mere powers and genuine qualities.

Instead of crediting Locke with an inconsistency I propose to re-examine what he is up to at 2, 8, 8. Strictly speaking, Locke does not equate qualities and powers in the passage in question; rather, "to comply with the common way of speaking" he also gives the name 'qualities' to the "powers to produce various Sensations in us by their primary qualities". Properly speaking, it is "primary Qualities" that "we may observe to produce simple *Ideas* in us" (2, 8, 9), though. So, Locke's statement at 2, 8, 8 appears to aim at a broadening of the use of the term 'quality.' That means that at some points (as in 2, 8, 9) the term 'quality' may well refer to intrinsic features of bodies, and at other points (as in 2, 8, 10) the term 'quality' may refer to mere powers.

This reading is supported by an inspection of corresponding passages in Draft A. In Draft A he seems to give the name 'quality' to two types of causes of ideas in minds. First, as quoted earlier, he calls the external, resembling cause of a perception 'idea,' but this "also I call quality,

whereby I meane any thing existing without us which affecting any of our senses produces any simple Idea in us". Secondly, "because the powers or capacitys of things which too are all conversant about simple Ideas, are considerd in the nature of the thing and make up a part of that complex Idea we have of them therefor I call those also qualitys...." (section 45a; 73) In other words, Locke decides to call by the term 'quality' both a) the things that cause ideas in minds and resemble the ideas they cause, and, almost as an afterthought, b) the powers or capacities of things that also cause ideas and are "considerd" (by some unnamed persons) to be part of the nature of things.⁶

So, even if he is not explicit about which particular qualities are to be assigned to the two categories, it is fairly clear that already in Draft A Locke differentiates between causes of ideas, properly speaking, and powers. Notable for our purposes is both, that the second kind of qualities are called "powers" and are not said to resemble ideas, and that Locke nowhere says that both types of qualities are powers. Rather, to the causes of ideas that he calls 'qualities' he adds (mere) powers.

⁶ But see Martha Brandt Bolton, "The Origins of Locke's Doctrine of Primary and Secondary Qualities," *Philosophical Quarterly* 26, (Oct. 1976), 310-311, who takes note of this same passage, and the corresponding one from Draft B, and concludes that "Locke makes no explicit distinction between mere powers and those that are not."

Section 45a from Draft A also provides us with insight into ¹ the development of his case against the communication of forms. Immediately after including the powers to produce ideas in minds among those items that he will call 'qualities' he makes a distinction that partially anticipates the content of the distinction between primary and secondary qualities that he makes in the Essay⁷:

...I...destinguish qualitys into actuall and potentiall v.g. all the actuall qualitys in hony suger salt are those which any way affect our senses being duely applied to them and soe cause simple Ideas in us as its tast colour and smell and tangible qualitys, the potentiall qualitys in it are all the alteration it can of its actuall qualitys receive from any thing else, or all the alteration it can make in other things v.g. solution in water, fusion in a strong fire corrosion of Iron &c. (section 45a; 73)

As it stands, "actuall" qualities seem to comprise both (what he later calls) primary and secondary qualities, since colours as well as "tangible qualitys" are being referred to; "potentiall" qualities seem to comprise the so-called

⁷ Bolton, "Origins" 307-308, in contrast, emphasises that the distinction discussed here is not to be confused with the distinction between primary and secondary qualities.

"third sort" of 2, 8, 10 (also called secondary qualities " mediately perceivable"). As their names imply, the "actuall" ones are full-fledged causes which only require "our senses being duely applied to them" to have an effect on us. The "potentiall" ones, in contrast, are really capacities for change in a thing, or for causing change in another thing; they become "actuall" potentially, that is, given appropriate conditions.

My hypothesis is that at some point in time between the writing of the drafts and the publication of the *Essay*, Locke decides that some of those qualities he calls "actuall", such as colours, tastes, and smells, are more like those he calls "potentiall" because colours, tastes and smells are dependent on enabling conditions just as the capacity to corrode iron is: colour perception requires the presence of light just as the corrosion of iron requires humidity. In contrast, he retains the "tangible qualitys" among the "actual1" qualities since they are effective "whether we take notice of them or no". (2, 8, 18)

The other difficulty for the distinction between primary and secondary qualities that I consider here concerns the assumption that, according to Locke, secondary qualities only have existence in the mind. This view had been quite common among Locke commentators prior to Reginald Jackson's

seminal paper.⁸ Mackie comments that the assumption chat secondary qualities are mind-dependent was fuelled by statements such as the introduction to secondary qualities at 2, 8, 10:

2dly, Such Qualities, which in truth are nothing in the Objects themselves, but Powers to produce various Sensations in us by their primary Qualities, i.e. by the Bulk, Figure, Texture, and Motion of their insensible parts, as Colours, Sounds, tasts, etc.

Mackie suggests that some have read this text "as if 'but' were the conjunction, and so have taken the first part of the remark as saying that secondary qualities are not in the objects at all."⁹

There is sufficient ambiguity at 2, 8, 10 to cause the impression that secondary qualities are not in things at all. This is reinforced by assertions emphasising the contrasting intrinsic character of primary qualities. For example: "The Bulk, Figure, Number, Situation, and Motion, or Rest of [Bodies'] solid Parts....may be properly called

⁸ Famously Reginald Jackson, "Locke's Distinction Between Primary and Secondary Qualities," *Mind* 38 (1929), argues against this view; he lists various of his contemporaries who held it.

⁹ Mackie, Problems 12.

real Original, or primary Qualities, because they are in the **181** things themselves, whether they are perceived or no...." (2, 8, 23) To conclude that, if secondary qualities are nothing in the objects, then secondary qualities must be mind-dependent is not satisfactory, however.

Mackie proposes that the "often-quoted remark 'nothing ..., but' means (despite the comma) 'nothing except'.... "10 This makes sense in terms of the context, but leaves one wondering whether justice really has been done to the text. Contrary to Mackie's proposal one may try to reconstruct the meaning of this text by giving the two commas before "but" their full weight. In this case it quickly becomes obvious that a verb is missing that would connect "Such Qualities" with "but Powers...." This problem can be remedied readily, however, by taking one's cue from the introductory "2dly" which takes us back to 2, 8, 9 where the itemization begins: "Qualities thus considered in Bodies are, First such as are utterly inseparable...." So, if one makes the sentence at 2, 8, 10 fully explicit with the help of 2, 8, 9, and if one gives the two commas in question the weight of brackets, the sentence in question at 2, 8, 10 can be rewritten as follows:

Qualities thus considered in Bodies are, 2dly, Such Qualities [which in truth are nothing in the

¹⁰ Mackie, Problems 12.

Objects themselves] as are but Powers to produce various Sensations in us by their primary Qualities....

So, the contrast drawn here is between primary qualities that are 'in bodies' in such a way that they are inseparable, and secondary qualities that are 'in bodies' even if in such a way that they are a function of another sort of qualities, namely a function of those that are inseparable. In Locke's words, secondary qualities are "in Bodies" but "nothing in the Objects themselves"; how are we to understand this? Locke gives us the answer by drawing an analogy between the secondary qualities and the 'third sort' of qualities:

the power in Fire to produce a new Colour, or consistency in Wax or Clay by its primary Qualities, is as much a quality in Fire, as the power it has to produce in me a new *Idea* or Sensation of warmth or burning, which I felt not before, by the same primary Qualities.... (2, 8, 10)

It is reasonable to attribute a power (or potential) to melt wax or to burn my skin to the fire, but there is little reason to assume that there is a wax-melting or a skin-burning quality (actually) 'in the object itself.' The

power to melt wax or to burn skin are real powers but are not 'something in the object itself' because they are not inseparably linked to the fire: a particular piece of wax and a particular portion of my skin may melt and burn, respectively, only at a certain distance and after a certain exposure time to fire (especially if just previously they were subjected to significant cooling, for example). I conclude that, at least 2, 8, 9, does not offer sufficient reason to assume that for Locke secondary qualities only have existence in the mind.¹¹

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III. Brief Historical Note

R. J. Hirst claims that the "distinction between primary and secondary qualities...received its classical formulation in Locke's Essay", even though it was "first stated and thus named by Robert Boyle...."¹² In a much neglected paper Clemens Baeumker, however, makes a strong case for the view that, while the distinction has precedents that go as far back as Aristotle and the Greek atomists, the distinction

¹¹ More could, of course, be said on this subject but, given the general agreement with Jackson's demolition of that mistaken doctrine, I limit myself to this discussion of Mackie's interesting point.

¹⁷ R.J. Hirst, "Primary and Secondary Qualities," Encyclopedia of Philosophy, 455. Also see Jackson passim; Mackie 15; and Alexander Ideas, Qualities and Corpuscles passim, for the view that Locke's distinction is Boyle's. My own survey of the relevant texts of Boyle confirm Baeumker's view. Alexander 65-76, adopts Locke's terms in his discussion of Boyle, but acknowledges that Boyle does not strictly adhere to Locke's classification of terms.

propounded by Locke is in important respects uniquely Locke's and unlike Boyle's.¹³

Aristotle develops a distinction between "primary differences" of bodies and those that are merely derivative in the process of investigating which are "originative sources" of perceptible body;¹⁴ he claims that "neither whiteness (and blackness), nor sweetness (and bitterness)", for example, are originative sources because they are not tangible qualities.¹⁵ The tangible are privileged in this sense because for Aristotle (as for the atomist tradition) touch is the basic sense; it is basic since it reaches the thing perceived itself. The other organs of sense "bring about perception only through something else, viz. through the media. Touch takes place by direct contact with its objects....^{#16}

Among the various contraries of tangible qualities (hot/cold, dry/moist, heavy/light, hard/soft, viscous/brittle, rough/smooth, coarse/fine), Aristotle singles out the two pairs hot/cold and moist/dry as primary

¹⁶ Aristotle, *De Anima* III, 13, 435a, 15-18.

 $^{^{13}}$ I am indebted to Baeumker and Hamilton for drawing my attention to many of the historical sources discussed here.

¹⁴ Aristotle, *De Generatione et Corruptione* II, 2, 329b, 17-18; 330a, 25.

¹⁵ Aristotle, *De Generatione et Corruptione* II, 2, 329b, 10-14.

because of what he calls their power to act or to be acted on. The "primary differences" of bodies are those which are "distinctive qualities of body as body" and, moreover, "characterize the elements", namely fire, air, water and earth.¹⁷ Significantly, for Aristotle tangible qualities other than hot/cold and moist/dry, such as fine/coarse, even while derived from the primary differences, are regarded as features in the objects.

Baeumker notes that the Arabic and medieval commentators of Aristotle's texts gradually both develop the terminology and extend the original Aristotelian distinction. In his commentary on *De Generatione et Corruptione* II, 2 Averroes, for example, speaks of "primary qualities" where Aristotle has "primary differences" or "elementary qualities".¹⁸ Albertus Magnus opposes (as *qualitates primae*) hot/cold and moist/dry not only to the other tangible, but to all the other sensible qualities (as *qualitates secundae*).¹⁹ The expressions '*qualitates primae*' or '*primariae qualitates*' are used by Thomas Aquinas, Roger Bacon and Bonaventure,

¹⁷ Aristotle, De Anima II, 11, 423b, 28-29. Also see De Generatione et Corruptione II, 2, 329b.

¹⁹ Averroes, Middle Commentary on Aristotle's De Generatione et Corruptione, trans. Samuel Kurland (Cambridge, Mass.: Mediaeval Academy of America, 1958) 74-75; also see Baeumker 496-497.

¹⁹ Baeumker 497-498.

making those expressions common already in the thirteenth (81) century.²⁰

According to Baeumker, Heinrich von Hessen, of the fourteenth century, is the first who uses not only the expression 'qualitates primariae' but also the terms 'qualitates secundariae.' According to von Hessen, secondary qualities are the result of the activity, singly or in combination, of primary qualities. According to this account, qualities such as colours, smells and tastes are the result of the activity of the basic qualities warm, cold, dry and humid. Following Aristotle, these secondary qualities are generated in things themselves.²¹ Baeumker notes that this doctrine received great circulation, was disseminated by scholastics such as Bartholomaeus Arnoldi von Usingen, and was well represented in scholastic textbooks in Locke's time as, for example, in Goudin's Philosophia Juxta Inconcussa... reprinted ten times between $1671 \text{ and } 1692.^{22}$

²⁰ Baeumker 498.

²¹ Baeumker 498-500, indicates von Hessen's work as a manuscript called *De Reductione Effectuum In Causas Communes* located in the National Library, Paris, lat.14887.

²² Baeumker 500; Goudin, Philosophia Juxta Inconcussa Tutissimaque D. Thomae Dogmata Quator Tomis Comprehensa, reprinted and used in teaching even as late as the nineteenth century. Unfortunately, it is uncertain whether Locke had read Goudin; nothing authored by Goudin was found in his library, as describedby Harrison and Laslett.] In contrast, among the natural philosophers of the sixteenth **190** and seventeenth centuries such as Galileo and Descartes, the tendency is to deny the reality of sensible qualities in bodies. The claim 's that all sensible qualities are subjective, and that matter causes them through the mechanical accidents of its corpuscles. The disagreement of the natural philosophers in question with the Aristotelian-scholastic positions is illustrated by their rejection of the terminology associated with the latter.

Galileo claims that if the sensing being "were removed, all these qualities [tastes, odors, colours, and so forth] would be wiped away and annihilated"; shape, place, movement or rest, contiguity or lack thereof, and number, in contrast, are "primi e reali accidenti".²³ Descartes denies that there are "substantial forms and real qualities" in things since we cannot comprehend their production: "there is no way of understanding how...(size, shape, and motion) can produce something else whose nature is quite different from their own -- like the substantial forms and real qualities which many <philosophers> suppose to inhere in things....^{w24} Boyle contrasts what he variously calls

²³ Galileo Galilei, The Assayer, in Discoveries and Opinions of Galileo, trans. Stillman Drake (New York: Anchor, 1957) 274; Hamilton 831.

²⁴ Descartes, Principles, part 4, section 198, AT 322; 1:285.

"accidents", "moods or primary affections of bodies"²⁵ or "mechanical affections of matter"²⁶ such as size, figure and movement or rest with "those less simple qualities (as colours, tastes, and odours)" which he calls "sensible qualities"²⁷ or, somewhat apologetically, "these secondary qualities, if I may so call them".²⁶ Boyle argues that it is a mistake to believe that "these sensible qualities are real beings in the objects they denominate, and have the faculty or power to work such and such things" or that

it is necessary [that objects] should have in them anything more, like to the ideas they occasion in us -- those ideas being either the effects of our prejudices or inconsiderateness, or else to be fetched from the relation that happens to be betwixt those primary accidents of the sensible objects and the peculiar texture of the organ it affects....²⁹

So, Aristotle assumes there to be qualities or forms in bodies and corresponding forms in minds.³⁰ In contrast, a

30	Aristot	:le, De	Anii	na II	r, 12,	424a,	17-18.	
29	Boyle,	Orígin	31.					
28	Boyle,	Origin	32.					
27	Boyle,	Origin	21,	31.				
26	Boyle,	Origin	40.					
25	Boyle,	Origin	21,	40,	51.			

prevalent opinion among the modern natural philosophers is 192 that bodies are only properly described in terms of the accidents of bodies;³¹ those accidents occasion sensory effects or perceptions of sensible qualities in minds which tend to be dissimilar from the accidents that cause them. Possibly simple rejection of the Aristotelian classification and terminology might have been regarded as a begging of the question by those trained in Aristotelian ways; Locke anticipates this sort of objection by accepting the Aristotelian terms while he argues for a different content to the contrast between primary (or originative) and secondary (or derivative) features of things.

Locke accepts the point of view already held by Aristotle,³² according to which all sensory perceptions, including perceptions of colours and tastes, are caused by qualities 'in bodies,' and stipulates that whatever causes sensory perceptions or ideas in minds may be called 'quality.' Since his Aristotelian-trained contemporaries are already acquainted with a distinction in things between what they call primary and secondary qualities such that the

³¹ This terminology does not imply that some accidents cannot be essential to particular bodies; the term 'accidents' seems chosen in order to create a contrast with the supposed substantial being of the scholastic 'substantial qualities'. See, e.g. Boyle, Origin 38-39; 20-21.

³² This is not to say that the direct influence on Locke for this view and terminology was not some later source.

primary cause the secondary, Locke admits the principle, but 193 then proceeds to argue for a different content to the distinction. The primary are those with "the power to act", while the secondary are merely derivative; experience teaches, however, that it is not the pairs hot/cold and moist/dry that are to be called primary, but solidity, extension, etc. That is, Locke identifies 'qualities' with the 'accidents' of Boyle³³: "...Qualities, which are capable of producing simple Ideas in us; which Qualities are commonly called Accidents." (2, 23, 2) Locke contends that the originative qualities are solidity, extension, etc., because they are inseparable, constant, etc. If this is so, however, then the secondary lack a fundamental characteristic (generally assumed according to the Aristotelian theory of perception), namely that in their case there is no resemblance with the perceptions that they cause.

³³ See, e.g., Boyle, Origins 20.

CHAPTER 9: THE RESIDELANCE THESIS

Locke states at 2, 8, 7 that his aim is to distinguish ideas qua perceptions from ideas qua modifications of matter "so we may not think (as perhaps usually is done) that they are exactly the Images and Resemblances of something inherent in the subject...." In order to make his case, he introduces a terminological distinction between perceptions in minds and their causes in things, as well as a distinction between two kinds of causes in things of perceptions. The latter distinction comes furnished with a set of criteria. He also underwrites the plausibility of the model of perception that he envisions by providing a summary account at 2, 8, 11-14 of the physical interactions involved. For the latter account he relies on a mechanical and corpuscularian schema.

Having said this much, Locke is able to give more precision to the thesis first propounded at 2, 8, 7. He can now specify in which cases he proposes that there may be a "resemblance" and in which not. This specification is anticipated at various points (for example, 2, 8, 13 and 2, 8, 14), but only fully spelled out at 2, 8, 15. For easy reference I call his reformulated thesis the 'resemblance thesis':

the Ideas of primary Qualities of Bodies, are Resemblances of them, and their Patterns do really exist in the Bodies themselves; but the Ideas, produced in us by these Secondary Qualities, have no resemblance of them at all.

The thesis that some ideas may resemble their causes has brought about considerable objections. The most interesting among these objections can be examined under the following two headings: the very idea of a resemblance between ideas and external bodies; and, our ability to assess such resemblances.

I. The Idea of a Resemblance Between Ideas and Qualities

From the time of George Berkeley it has been asked how an idea in the mind could resemble an item outside of the mind. Berkeley's answer has seemed right to many commentators. Berkeley had considered whether "there may be things like them [like ideas], whereof they are copies or resemblances...." He answers the question by claiming that "an idea can be like nothing but another idea; a colour or figure can be like nothing but another colour or figure." Berkeley's reasoning is based on introspective evidence: "If we look never so little into our thoughts, we shall find it impossible for us to conceive a likeness except only between **196** our ideas.^{#1}

Berkeley's discussion, similar to much of the discussion surrounding Locke and the issue of resemblance, supposes that the comparison by which resemblance is to be established has to be analogous to the comparison by which we decide whether we have two geometrical figures of the same shape in our field of vision. Hence, since ideas are the manifestations of things (and the only manifestations of things), it becomes mysterious how on the visual model the comparison Letween idea and thing is to be effectuated.²

This approach overlooks, however, first, that (as noted before) Locke was working within an Aristotelian framework that takes resemblance between things and perceptual objects for granted,³ and second, that resemblances can be established by inferences (that is, not merely on direct perceptual evidence alone) and on other terms than mere

¹ Berkeley, Principles, in Berkeley's Philosophical Writings, ed. David M. Armstrong (New York: MacMillan, 1965), section 8; 64.

² Armstrong, introduction, Berkeley's Philosophical Writings 17, finds this argument "extremely ingenious, probably valid", but does not indicate if he finds it sound.

³ As noted earlier, this assumption was so common that Descartes, *Meditations* III, AT 38; 2:26, begins by supposing that "Nature has apparently taught me to think this."

similarity in appearance.⁴ Resemblances may be posited quite legitimately between mathematical models of resource depletion and the actual activity of mineral extraction from the earth, for example.

To summarise the earlier discussion, Locke speaks of ideas as being in things insofar as they are the appearances of things produced by the modifications of matter; qualities are the features in things that may be considered the causes either of perceptions or of changes in bodies. To assess the resemblance between ideas in mind and qualities in things is to compare the appearances of things with the features of things that make them causally effective. I conclude that, since the appearance of a thing might reveal something about the thing's causal effectiveness, it is not absurd to propose that ideas in minds may be compared with the qualities or "Patterns" in bodies that cause them.⁵

⁵ Interestingly, Gottfried Wilhelm Leibniz, New Essays on Human Understanding (1704), eds. Peter Remnant and Jonathan Bennett (Cambridge: Cambridge University Press, 1981); book 2, chapter8, section 13, takes the view that it

⁴ Notably in the sixteenth century resemblances were often posited between observables and unobservables precisely on account of the supposition that certain observable features can serve as signs for the hidden. See, for example, Michal Foucault, The Order of Things (New York: Random House, 1970) 17-32; Walter Pagel, Paracelsus: An Introduction to Philosophical Medicine in the Era of the Renaissance (Basel: Karger, 1982) 53-61. Locke seemed to be acquainted with the tradition that posits resemblances between the microcosm and macrocosm since his library includes texts by Oswaldus Crollius (Tractatus De Signaturis), Jan Baptista van Helmont, and Paracelsus, for example (see Harrison and Laslett, nos. 887, 888; 1417; and 2192, respectively).

II. Comparing Ideas and Qualities

Aside from the conceptual difficulty just discussed, there is a practical one since Locke supposedly requires us to compare something in the mind with something in a material thing. D.J. O'Connor seems to have this worry in mind when he suggests that secondary qualities are unknowable since their "existence can never be rendered probable or improbable by any observable evidence whatever."⁶ This claim is partially based on his belief that "we have only to ask: if all we can ever experience directly are ideas and if we can never look behind the curtain of ideas to observe the physical objects which cause our ideas, how can we ever know anything about the 'qualities' of such objects or even know that they exist at all?"⁷ In other words, on O'Connor's view, "It can be said, in general, that it is a necessary condition for the validity of any causal argument that both the cause and the effect referred to should be events which

is intelligible that also in the case of ideas of secondary qualities "there is a kind of resemblance" since "it is not the custom of God to act with so little order and reason." Leibniz posits an "orderly", "exact and natural relation" between the secondary qualities and the ideas they cause in us. This much Locke concedes too at 2, 8, 13, but Locke's point is precisely that, in the case of secondary qualities, the "natural relation" is such that the ideas that they cause in us do not reveal the nature of their causes.

⁶ O'Connor 69.

¹ O'Connor 65.

are, in principle at any rate, capable of being directly **199** experienced.^{#8}

Moreover, it has been claimed that "an empiricist cannot consistently hold that ideas of sensation represent, and are caused by, unperceived external objects such as corpuscles."⁹ Presumably the problem consists in that it is assumed that for an empiricist all knowledge claims must be the result of either a sensory or an introspective acquaintance with the object of knowledge. Since Locke claims that the causes of ideas of sensation frequently may be imperceptible corpuscles which, by definition, do not offer themselves to experience, it is concluded that on his account there cannot be any experience-based knowledge of the causes of many of our ideas. Hence, it is proposed that for Locke claims to the effect that there is or is not a resemblance between ideas and their causes must remain moot.

These concerns, however, only arise in case Locke is (or should be) committed to the view that to know something about the world outside our minds is to have sensory acquaintance with it. Locke indeed requires sensation as the foundation for knowledge of things in the external world. As discussed in part I, though, Locke's notion of knowledge is

⁸ O'Connor 70; see also Mackie, *Problems* 51-55 on this doctrine.

⁹ Noted by Alexander, *Ideas, Qualities and Corpuscles* 129.

not sensationist; rather, knowledge is a matter of assessing 200 the ideas in one's mind for agreements and disagreements among each other. (4, 1, 2)

The issue of the cognition of invisible particles has also been discussed in the context of what is called the problem of 'transdiction' or 'transduction.'¹⁰ This problem can be summarised by the question: "are there justificatory principles by which to sanction inferences from what is observable to what in principle is unobservable?"¹¹ The lack of explicit justificatory principles for trans-diction/-duction need not constitute a problem for Locke, though, since inferences from the observable to the unobservable can be sanctioned pragmatically, that is, if it is the case that such inferences provide explanatory or predictive power.¹² So, given that the things that cause perceptions in us produce a variety of ideas, which are noted by our various senses, Locke's resemblance thesis can be subjected to critical examination if the ideas caused in

¹⁰ See Mandelbaum, chapter 2, who introduces the term 'transdiction'. J.E. McGuire, "Atoms and the 'Analogy of Nature'," *Studies in History and Philosophy of Science* 1, #1 (1970), modifies the term into 'transduction' in recognition of its relation to the problem of induction.

¹¹ McGuire 3.

¹² Locke does not explicitly argue for the legitimacy of pragmatic sanction of such inferences, but his argumentation often implies it. For example, at 4, 2, 14, where he proposes that the inference to the existence of things that cause certain ideas is justified by the evident difference between sensation and recollection.

us by particular things through sensation indeed vary in 30 systematic ways.

III. Justification of the Resemblance Thesis

In the following I first discuss some common assumptions about Locke's justification for the resemblance thesis. After that I review the criteria for the distinction between primary and secondary qualities, and how they promote the resemblance thesis. I close by assessing what I consider to be Locke's main arguments for that distinction and resemblance thesis.

III.1 Introduction

According to the resemblance thesis the ideas of primary qualities do, and the ideas of secondary qualities do not, resemble their causes. Given that ideas are the perceptible manifestations of things and qualities are the underlying modifications of matter that cause those manifestations, Locke cannot mean that the resemblance between ideas and qualities is to be understood in terms of a similarity in appearance. Since Locke's concern is with the natures of things, however, one may understand resemblance in this situation to mean that the nature of a thing is represented by ideas in such a way that we may understand how the thing functions. For example, the inventor of the Strasbourg clock may have had an idea of the clock that resembles the nature of the clock because he knew the features that contribute to

its functioning, but a visitor, such as "a gazing Country-man", did not.¹³

Those ideas that stand for features of things that are constant and inseparable also give us understanding of how those things function. In contrast, those ideas that, although reliable as indicators, reflect modifications of matter that are inconstant and separable do not instruct us about the causally effective features of things. Consequently, Locke's arguments for the distinction between primary and secondary qualities may be considered aguments for the resemblance thesis as well.¹⁴

As already noted, Locke's defence for the distinction between primary and secondary qualities has long been considered exemplarily botched.¹⁵ Woolhouse summarises the interpretation generating this kind of judgement as

¹⁵ See, for example, Mackie 7.

¹³ See 3, 6, 3. Boyle also makes reference to this clock in A Requisite Digression in Selected Philosophical Papers 160, 170, 174. Furthermore, Descartes' comparison between his two ideas of the sun in Meditations III is relevant: Descartes argues that the idea of the sun that he has from reason (and presumably reveals the sun's nature) is the one that resembles it, and not the mere image-idea that he has from sensation.

¹⁴ Bolton, "Origins" 316, fn.29, similarly notes that the resemblance thesis is a consequence of the theses that primary qualities are inseparable from things and that secondary qualities are mere powers, but concludes from this that the resemblance thesis is of no importance. As noted, there are good reasons for believing that the resemblance thesis is of central importance in 2, 8, though.

supposing that "Locke has in mind facts about perceptual 203 error and illusion."¹⁶ It has been suggested that Locke would like to persuade us, for example, that the apparent brown colour of the table in front of me is not truly a feature of the table; that the apparent brown colour is only an idea caused in me by (what we today call) the atomic substructure of the table, since, on withdrawal of light, the brown colour disappears. Given this interpretation of Locke's views, it is easy to conclude that Locke should also have argued for the unreality of the apparent shape of the table.¹⁷ Reginald Jackson, for example, comments that Locke "must know...that the statement [that 'a circle or square are the same, whether in idea or existence, in the mind or in the manna'] is not true, if it means that the surface of a certain shape produces a percept of the same shape."¹⁸

If 2, 8, 15-22 are read as a response, within a generally Aristotelian schema, to the doctrine of the communication or transmission of forms, Locke's undertaking changes significantly in character. Notably, most of Locke's examples are not about such things as the colour of tables but about things such as fire, snow, manna, almonds and porphyry, that might be supposed to have characteristic

¹⁶ Woolhouse 154.

¹⁷ See, for example, Aaron 120.

¹⁸ Jackson 69; see also Peter Alexander, "Boyle and Locke on Primary and Secondary Qualities," *Ratio* 16, #1 (1974) 54, 118.

natures manifested through the ideas we have of them. So, my ²⁰⁴ thesis is that Locke does not argue for the distinction between primary and secondary qualities and the resemblance thesis by appealing to the inaccuracy of sensation apparent to us in observation pure and simple. Rather, on my reading, at 2, 8, 15-22 Locke points out that observation, coupled to an Aristotelian notion of natures, both subtly thwarts certain expectations that the doctrine of the transmission of substantial forms implies, and confirms his own account of perception.

More recently some commentators have assumed that Locke is not really providing arguments for the distinction between primary and secondary qualities and for the resemblance thesis on the basis of sensory experience, but that he is primarily attempting to make plausible the corpuscularian theory of nature and perception. On this interpretation Locke's case for the resemblance thesis would rest on the general strengths of the corpuscularian theory and on the persuasiveness of his account at 2, 8, 11-14 regarding how the respective perceptions of primary and secondary qualities are brought about. 2, 8, 15-22 are only supposed to serve as a set of illustrations for how the corpuscularian theory would explain certain phenomena.¹⁹

¹⁹ Most notably see Alexander, "Boyle and Locke" passim; Alexander, Ideas, Qualities, and Corpuscles passim and especially 117-123, 190; also Mackie 21. Bolton, "Origins" 306, fn.5, in contrast, questions the assumption that "Locke simply acquiesced in the tenets of Boyle's

2, 8, 15 does seem to close the discussion developed up to **305** that point: "From whence I think it is easie to draw this Observation...." To suppose that the resemblance thesis is not strictly argued for but only introduced as the upshot of an alternative, albeit very plausible, corpuscularian account is not a satisfactory interpretation, however.

The statement of the resemblance thesis does wrap up the introductory discussions regarding the two distinctions, but then it returns the readers back to the pursuit of the main goal outlined at 2, 8, 7. I propose that Locke states the resemblance thesis in an explicit way at 2, 8, 15 because he is about to begin offering reasons for holding it. This is in keeping with his manner of proceeding elsewhere. The claim that all ideas are positive, introduced in 2, 8, 1, for example, is only argued for thereafter (first at 2, 8, 2-6, and then, by implication, at 2, 8, 7-26). Moreover, Locke likely would have spoken in terms of a "conclusion" if that had been his intention since he does speak in those terms elsewhere in the chapter (for example, at 2, 8, 26: "To conclude..."). A conclusion would not have been as appropriate as an "Observation" at 2, 8, 15, though, since the considerations offered in the prior sections were of a rather tentative character: "we may conceive..."; "Let us

corpuscular hypothesis....This approach to Locke's doctrine leaves unanswered the question why Locke should have included in his own examination of the extent of the human knowledge the experimentally based physical hypothesis of his colleague Boyle."

suppose at present..."; "It being no more impossible, to 20 conceive...."

Furthermore, the marginal summaries give ample clues to the effect that sections 15-22 are meant to constitute the defence of the resemblance thesis: "Sections 15-22. Ideas of primary Qualities are resemblances; of secondary, not." In the case of the sections 23, 24 and 25, the marginal summaries show that these sections function as a conclusion to the previous ones, and that the conclusion underwrites the tenability of the resemblance thesis: "Section 23. Three sorts of Qualities in Bodies." "Sections 24, 25. The 1st. are Resemblances. The 2d. thought Resemblances, but are not. The 3d. neither are nor are thought so." Hence, I propose that Locke provides the mechanico-corpuscularian account at 2, 8, 11-14, of how ideas in minds may be produced, in order to show that it is also physically plausible to dispense with the doctrine of a communication of forms, but that, in addition to illustrations, Locke also proceeds to offer arguments against that doctrine at 2, 8, 15-22.

III.2 Criteria

As indicated above, when Locke initially makes the distinction between primary and secondary qualities he distinguishes the primary from the secondary qualities by the following three criteria:

[primary qualities are] such as are utterly inseparable 207 from the Body, in what estate soever it be;

such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps;

and such as Sense constantly finds in every particle of Matter, which has bulk enough to be perceived, and the Mind finds inseparable from every particle of Matter, though less than to make it self singly perceived by our Senses.

Some commentators, such as Mackie, assume that the presentation of these criteria in itself constitutes an argument for the distinction. Mackie considers it "almost worthless", though, because it allegedly is based on an "unfair comparison between determinable qualities on the primary side and determinate ones on the secondary side."²⁰ Upon splitting a body up it will continue to have *some* shape, size, and so on, no matter how small the particles are; in contrast, its particular colour or temperature, Locke seems to say, may change from white to brown or warm to cold, for example.

"We can regard heat-or-cold, or temperature," Mackie suggests in reply,

²⁰ Mackie, Problems 20-21.

as a determinable analogous to motion-rest: a thing's determinate temperature is separable from it, but so is its determinate state of rest or motion, and just as it will always have some motion-or-rest, so it will also have some temperature.²¹

Mackie claims, moreover, that to appeal to the mind's need to attribute size, shape and so on to things, as the third criterion seems to do, is a sleight of hand since the mind's habits cannot be a sufficient reason to credit invisible particles with the primary qualities found by sensation in visible bodies.²² There is a problem with Mackie's criticisms, however.

It remains unclear why one would assume that the contrast that Locke is drawing is between the continued presence of some primary qualities, such as shape, and the mere variability of secondary qualities, such as colour. In other words, it is unclear why one should think that the contrast drawn by Locke is between "determinable qualities on the primary side and determinate ones on the secondary side." A better reading can be had if one supposes that Locke is speaking of determinable qualities in both types of cases.

²¹ Mackie, Problems 21.

²² Mackie, Problems 21.

Regarding the possibility that a body may lose its colour 209 (that is, that colour may be "separable"), it may be noted that further on in book 2 Locke appeals to the effects of microscopes to argue this point:

Had we Senses acute enough to discern the minute particles of Bodies, and the real Constitution on which their sensible Qualities depend, I doubt not but...that which is now the yellow Colour of Gold, would then disappear, and instead of it we should see an admirable Texture of parts of a certain Size and Figure. This Microscopes plainly discover to us.... (2, 23, 11)

It is quite likely that Locke would have had first-hand experience with microscopes, since they were fashionable in his time, and since one of his colleagues in the Royal Society, Robert Hooke, carried out important work with this instrument. (Hooke used a compound microscope scientifically and wrote the first treatise on microscopy.²³) Locke writes in his Journal for 24 November 1678 what seems to be a record of his own use of a microscope while travelling close to Orleans.²⁴ It may be that, while carrying out an experiment, he noticed that some preparations, when examined

²⁴ Dewhurst 147.

²³ See Hall, Revolution 252.

under the microscope, lose the colouration that they had to 210 the naked eye.²⁵

Following in Berkeley's steps,²⁶ it may be objected that bodies subjected to visual inspection are always apprehended as being coloured in some way. In reply one may say that it is already commonly granted that some objects, such as (clear) air, (clean) water, and clear, untinted glass, are colourless. Even if objects, such as untinted waterglasses, may appear to have a colour because of the colour of the objects behind them, it seems appropriate to judge that untinted waterglasses are colourless due to their transparency. Similarly, one's conclusion upon looking through a microscope may sometimes be that one is viewing a 'colourless' surface.

It is also of interest here that Locke was apparently introduced by Boyle to colour dilution tests in the context of experiments designed to discover matter's constitutive particles. Such experiments may have shown that, at a certain point of dilution, colour disappears even while various chemical procedures may have shown that traces of

²⁶ See Berkeley, Principles, section 10; 64-65.

²⁵ E.M. Curley, "Locke, Boyle, and the Distinction Between Primary and Secondary Qualities," *Ratio* 81 (1972) 459-460, correctly notes that, contrary to Berkeley's interpretation, Locke's point is not only that the colours of things change when viewed under a microscope, but that under those circumstances"things...have no color at all."]

the vanishing ingredient were still present.²⁷ Locke's cognizance of such experiments is likely since his Journal records other such occasions; he was present, for example, in 1679 at an experiment at Boyle's involving "a limpid liquor as clear as rock water that turned skie colour only by admission of the aire.^{#28} Hence, it is quite intelligible to suppose that colour, insofar as it is a determinable quality, may disappear. In contrast, size and shape arguably do not disappear even in the case of microscopically small particles. When a preparation is viewed under the microscope some particle's size and shape remain visible, even if they cannot always be determined with precision when boundaries are not clearly detectable.

The case for the disappearance of sounds and tastes is even more straightforward. If, for example, a grain of wheat is dropped from a particular height, such as a metre, it may make a sound on impact with a surface, such as a table. If this piece of grain is divided several times there will be a point at which its impact with the table will be inaudible; moreover, this will probably occur while the piece's shape and size are still perceptible to the naked eye. It is also of interest that, through his association with Boyle, Locke may have been witness to experiments that showed that objects which ordinarily, given certain conditions, emit

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²⁷ See Dewhurst 22.

²⁸ Journal entry of 4 June 1679, in Dewhurst 165.

sounds (for example, bells upon striking) fail to do so in a 212 vacuum.²⁹ In 1678 Locke himself records an experiment in his Journal regarding the sound made by water in a vacuum.³⁰ Furthermore, it is possible that, along with the colour dilution tests, Locke may have been a participant in taste dilution tests; it seems that a point may be found at which a substance in solution, such as sugar, will be too diluted for taste perception but still detectable in terms of features such as its contribution to the weight of the liquid.

To summarise, Locke's criteria for distingishing primary from secondary qualities, as set out at 2, 8, 9, should not be considered flawed, as it has been argued. This means that we have reason to believe that we have evidence supporting the distinction between primary and secondary qualities if it turns out that a body must always retain qualities such as size and shape, "what soever estate" a body be in, but that a body may fully lose qualities such as colour, sounds and tastes. So, Locke's argumentation at 2, 8, 15-22 should be scrutinised to determine whether he indeed shows that there is a difference between primary and secondary qualities according to the criteria set out at 2, 8, 9.

³⁰ Journal entry of 10 February 1678, in Dewhurst 104.

²⁹ For a summary account of Boyle's air pump experiments, see Hall, *Revolution* 261-263.

III.3 Pain, Sickness and Manna

It has been assumed that at 2, 16-18 Locke argues that it is impossible for us to distinguish "our ideas of secondary qualities from ideas such as of pain, the content of which, [Locke] thinks, must be admitted to be incapable of directly qualifying a material thing....³¹ It may be objected, however, that we can very well make such a distinction; that we make the distinction precisely insofar as we locate pain inside us and secondary qualities, such as colour, outside us.

Locke, however, does not deny that we can make such distinctions. Locke points out that it is generally assumed that perceptions as of heat, light, whiteness, coldness, and sweetness resemble their causes, but that pain and sickness do not. Locke asks why we should judge that this dissimilarity between the sets of perceptions holds if they all may be produced in the same way. He proceeds to illustrate his point with three examples: fire, snow, and manna.

Pain arising from a flame arises in the same manner as the sensation of warmth, namely by our approach to it; pain from snow comes about in the same manner as the sensation of cold, namely by our tactile contact with it; pain from manna

³¹ James Gibson, Locke's Theory of Knowledge and Its Historical Relations (Cambridge University Press, 1960) 102.

is caused in the same manner as the sensation of sweetness, 214 namely by our ingestion of it. Locke notes that the difference in nature commonly attributed, for example, to the causes of the sensations of pain and warmth that one may experience when one approaches a fire remains unexplained on the usual account:

And yet he, that will consider, that the same Fire, that at one distance produces in us the Sensation of Warmth, does at a nearer approach, produce in us the far different Sensation of Pain, ought to bethink himself, what Reason he has to say, That his Idea of Warmth, which was produced in him by the Fire, is actually in the Fire; and his Idea of Pain, which the same Fire isoduced in the same way, is not in the Fire. (2, 8, 16)

So, Locke's point is that there is nothing but common prejudice to uphold the judgement that the types of sensation represented by pain and warmth, respectively, are dissimilar in their causes.

Another objection supposes that Locke's case featuring the "analogy between ideas of secondary qualities and pain and nausea" fails to show that secondary qualities have a different type of cause in bodies than primary qualities: "There is no obvious respect in which colours etc. are more akin to pain and nausea than shapes are."³² Locke, however, **315** directly addresses this type of objection in his case study featuring manna.

Manna, the exudation of fraxinus ornus (a European ash tree), as commercially available outside of its areas of origin in Southern Europe, apparently was unremarkable in its outward appearance. It looked yellowish (Locke says white), and was light and friable.³³ It was sold in the form of flakes, fragments or thick droplets.³⁴ It could have an elongated shape (manna canellata), or a roundish or squarish shape, since it was collected on the round leaf (penca) of the opuntia cactus or "in unglazed pots, wooden bowls, or rush baskets...placed on shelves to dry and harden....³⁵ Hence, given the variety of shapes in which it could be obtained, it was probably identified mostly by its colour and sweetness, and by its more recondite, that is, laxative, powers, often involving pain and sickness.

As noted already, Locke argues that since sweetness is as characteristic of manna as sickness and pain, and since evidently all these sensations are brought about through a

³² Mackie, Problems 22.

³³ R.A. Donkin, *Manna: An Historical Geography* (The Hague/Boston/London: Dr. W. Junk B.V., 1980) 90.

 ³⁴ "Manna," Encyclopedia Brittannica, 15th ed., 783.
 ³⁵ Donkin 93.

closely connected process (that is, ingestion), it is arbitrary to denominate sweetness a quality that really is in manna, and pain and sickness a mere effect. Having established the close connection between sickness and pain, on one hand, and sweetness and whiteness, on the other, Locke proceeds to contrast the common assignment of sweetness and whiteness to the essence of manna with the assignment of figure and motion to a particular piece of manna:

Motion and Figure are really in the Manna, whether we take notice of them or no: This every Body is ready to agree to....That these Ideas of Sickness and Pain are not in the Manna, but Effects of its Operations on us, and are no where when we feel them not: This also every one readily agrees to....why...the Sweetness and Whiteness, effects of the same Manna...should be thought to exist in the Manna, when they are not seen nor tasted, would need some Reason to explain. (2, 8, 18)

Locke admits elsewhere (for example, at 3, 11, 19) that, in the identification of animal and vegetable species, shape may well be an essential feature. Motion, moreover, might be thought to be a similarly characteristic feature of some bodies (for example, in the case of heavenly bodies), and of importance in their identification. A piece of manna, however, neither has a characteristic, natural figure nor a 217 specific motion. As pointed out above, it may be flaked, globular, or of any of the shapes that the collecting vessel has; and it has only the motion that is incidentally provided it. So, a piece of manna that is large enough to be sensed may be the cause of our perception of, for example, a round or a square figure; if moved, it may, for example, cause an image of a circular or a square-shaped movement:

A piece of Manna of a sensible Bulk, is able to produce in us the Idea of a round or square Figure; and by being removed from one place to another, the Idea of motion. This Idea of Motion represents it, as it really is in the Manna moving: A Circle or Square are the same, whether in Idea or Existence; in the Mind, or in the Manna.... (2, 8, 18)

At this point one may again consider an objection drawing its inspiration from Berkeley's claim that an idea can only be like another idea: it may be asked if it makes any sense to claim that an idea is the same in the mind and in an object. As discussed before, Locke uses the term 'idea' to refer to the perceptible manifestation of a thing. When applied to this issue this means that, to have the ideas of the figure and motion of a piece of manna means that one has experience of it that could (given a certain degree of reliability in one's senses) guide us in the assessment of 218 such a piece's behaviour in actual space (that is, 'in existence'). So, in reply to the objection it may be said that, given enough information about the shape of a piece of manna and regarding the type of movement that it is undergoing (for example, a spherical piece rolling down an incline of a particular gradient), we may be able to explain and predict some things about that piece's trajectory. Consequently, it does make sense to assert that one's idea of, for example, a thing's motion may be "the same" as its actual motion.

To summarise, it is of interest that an accidental feature, such as the particular shape and motion of a piece of manna may give us explanatory and predictive power regarding the states of that piece of manna, "whether we take notice of them or no" (that is, even if we look away after noting its initial conditions). In contrast, supposedly «ssential features such as the whiteness and sweetness of a piece of manna, however, are no sure sign of anything (unfortunately not even of its curative power). The answer to Mackie's objection is therefore that the perceivable colour of a thing is more like the pain that it may cause than like the perceived shape because, even if certain pain and colour sensations are identificatory features of a certain sort of thing, neither allows us to infer anything further about that thing, while shape sensations may.

III.4 Reversible Alteration and Porphyry

With regard to Locke's porphyry case it has been assumed that Locke argues for the distinction between primary and secondary qualities by merely claiming that colour depends on a feature external to objects: the presence of light. An objection offered to this is that a secondary quality such as colour is not so different from a primary quality such as shape since light is needed in both cases for their visual perception. More generally, it is said that all qualities have their perceptual conditions. Colour may seem to 'vanish' in the dark, but so does visually perceived shape. These objections are only effective, though, if it is assumed that Locke attempts to establish the distinction between primary and secondary qualities and the resemblance thesis simply on the basis of perceptual differences.

Porphyry has been defined as "a beautiful and very hard rock anciently quarried in Egypt, composed of crystals of white and red plagioclase felspar embedded in a fine red ground mass....³⁶ It seems that, on account of its colours, the rock was referred to as a precious material for the construction of pillars, pavements and statues.³⁷ On account of its hardness it also seems to have served as material for mortars and pestles at least as far back as the seventeenth century. In 1634 Peacham, for example, says: "I

³⁶ "Porphyry," Oxford English Dictionary 139.

³⁷ "Porphyry," Oxford English Dictionary 139-140.

like best the porphyry, white or greene marble, with a mullar or upper stone of the same."³⁸

Qua thoroughly experienced pharmaceutical chemist, Locke was likely acquainted with the use of porphyry as a grinding instrument. This assumption is given credibility by the fact that he notes the hardness of porphyry ("that hard stone"), and discusses it immediately prior to the pounded almond case.

So, what is most distinctive about porphyry seems to be the combination of its red and white colour and its hardness. Locke notes that, nonetheless, the distinctive colours of porphyry seem to disappear and reappear through the simple device of withdrawal and reintroduction of illumination: "Hinder but light from striking on it, and its Colours Vanish; it no longer produces any such *Ideas* in us: Upon the return of Light, it produces these appearances on us again." This prompts him to ask, "Can any one think any real alterations are made in the *Porphyre*, by the presence or absence of Light...?" (2, 8, 19)

As noted above, from an Aristotelian point of view, the term 'alteration' functions as a technical term which denotes a change in quality: "a thing is altered when change of

³⁸ "Porphyry," Oxford English Dictionary 140.

quality takes place....^{#39} Moreover, "Everything...that undergoes alteration is altered by sensible causes, and there is alteration only in things that are said to be essentially affected by sensible things.^{#40}

There are reasons for thinking that Locke would not have used the term 'alteration' simply as equivalent to 'change.' As a chemist, who probably was familiar with Boyle's methods of determining the changing acidity and alkalinity of mixtures by changes in colour, he would have known that colour changes in natural substances frequently indicate 'real alterations' in their chemical structure or real essence.⁴¹ Given Locke's acquaintance with Boyle, moreover, it is worth noting that the latter claims that the "naturalists" speak of alteration "when oil comes to be frozen, or to change colour, or to grow rancid".⁴² Interestingly, the change in consistency and colour that some oils (such as olive oil) may undergo when cooled, and

³⁹ Aristotle, Categories 14, 15b, 12-13.

⁴⁰ Aristotle, *Physics* VII, 3, 245b, 1-3.

⁴¹ Regarding Boyle's colour tests for distinguishing acids from alkalies, see Bernard Vidal, *Histoire de la Chimie* (Presses Universitaires de France, 1985). Boyle also is said to have written the first book on dyes ("dyes", *Encyclopedia Brittanica*, 15th ed.). Boyle's research regarding the nature of light extended even to bioluminescence; he showed that light can be cold, and that a body's capacity to emit light can be affected by chemical agents and the presence of air ("Luminescence", Encyclopedia Brittanica, 15th ed.).

⁴² Boyle, Origin 52.

the change to a rancid state, are relatively permanent and thoroughgoing transformations. Locke's emphasis on the question whether there is any real alteration, and the assertion that, despite variance in illumination, it is a "hard Stone" with an unchanging "Configuration of Particles, both Night and Day" (2, 8, 19), seems to indicate that he was using the term in its Aristotelian sense.

The disappearance and reappearance of colours in porphyry poses two problems. First, since the alteration in question would be producing a privation and a subsequent possession of some defining qualities of porphyry, this would conflict with Aristotle's claim that "In the case of 'positives' and 'privatives'...change in both directions is impossible. There may be a change from possession to privation, but not from privation to possession.^{#43} Second, since everything "that undergoes alteration is altered by sensible causes",⁴⁴ an appropriate sensible cause in the case of the dis- and re-appearance of colours must be found.

From an Aristotelian point of view light would not be an adequate cause.⁴⁵ For Aristotle the dis- and re-appearance of colours would probably not have been a problem in any case. Confirming again the thesis that in many ways Locke's

- ⁴⁴ Aristotle, Physics VII, 3, 245b, 1-2.
- ⁴⁵ Aristotle, *De Anima* II, 12, 424b, 9-10.

⁴³ Aristotle, Categories 10, 13a, 31-34.

223 account of perception is in agreement with Aristotle's, and that Locke's constitutes a critique of certain scholastic developments (such as the assumption that there are substantial forms), Aristotle's account turns out to be similar to Locke's. For Aristotle what is visible is colour, which is dependent, however, on something else, namely something that "is in its own nature visible; 'in its own nature' here means not that visibility is involved in the definition of what thus underlies colour, but that that substratum contains in itself the cause of visibility." Ultimately, perceived colour is the result of a certain power of the substrata in question which is actualised given the medium 'light': "Every colour", insofar as its substratum is in question, "has in it the power to set in movement what is actually transparent [that is, light]; that power constitutes its very nature."46 Analogously, for Locke the perception of a particular colour is a function of the power of a particular underlying corpuscular structure ("modification of matter") of things.

Interestingly, Boyle argues for the falsity of the doctrine of substantial forms similarly to Locke, by drawing attention to the alterations (in terms of corruption and "redintegration") obtained in substances such as lead, vitriol and turpentine as a result of the administration of heat or other laboratory techniques. Boyle notes that on a

⁴⁶ Aristotle, De Anima II, 7, 418a, 27-34; 418b, 1-5.

scholastic account these substances lose essential qualities 22.4and then regain them, which is contrary to the assumption that they are governed by substantial forms.⁴⁷

The porphyry case seems to provide Locke with a paradigm case to show up the deficiency of the doctrine of the communication of substantial forms. Even when, due to the lack of light, the stone previously identified as porphyry appears to suffer from a privation of some of its essential features (that is, of the normal causes of its colours), we are not tempted to doubt that we are dealing with an unaltered piece of porphyry. We believe that the stone stays the same and that only our sensory perception of colour-ideas changes. Hence, it seems a mistake to think of our perceptions of red and white as resembling a quality or modification of matter in the stone: it seems that in the case of colour perception there is no communication to our understanding of a form inherent in the stone.

Moreover, the objection that colour is not so different from shape, since in both cases light is needed for their visual perception, is answered by the fact that Locke is calling for a comparison of the natures of things, not perceptions. The shape and hardness of a piece of porphyry remain the same (as evidenced by touch or by its use in pounding), while we have no good reason to suppose that anything

⁴⁷ Boyle, Origin 53-99 passim.

resembling colour remains the same (as evidenced by looking 325 in the dark), upon the withdrawal of light.

III.5 Mysterious Alteration and the Pounded Almond

Almonds, insofar as available outside of Southern European areas, probably were identified by their ellipsoid snape, particular sweet taste (or bitter taste, in the case of bitter almonds), and white interior cleaved kernel.⁴⁶ Almond oil seemed to be known at least as early as the late 16th Century.⁴⁹ It is possible that, qua chemist, Locke may have pounded bitter almonds himself to obtain almond oil, since this oil may be of chemical interest.⁵⁰

Locke notes that mere pounding alters the almond's taste and colour, and asks "What real Alteration can the beating of the Pestle make in any Body, but an Alteration of the *Texture* of it?" (2, 8, 20) With respect to this case it has been suggested that Locke is begging the question insofar as he assumes that the only effect that the beating of an almond with a pestle could produce is an alteration in texture; it is claimed that Locke's discussion itself shows,

49 "Almond,' Oxford English Dictionary 353.

⁴⁸ It is likely that, then as now, the peach-like outer skin and hard exterior shell would remain behind in the areas of origin before export of the almonds to places such as England.

⁵⁰ Dewhurst 20, mentions that, among other preparations, Locke in 1666 obtained various oils (for example, by distillation) in his laboratory.

however, that the beating evidently also produces changes in 226 colour and taste.⁵¹

This objection misses the point. Apparently Locke has reason to believe that the common point of view is that a pestle can only achieve division: "division (which is all that a Mill, or Pestel, or any other Body, does upon another, in reducing it to insensible parts)...." (2, 8, 9) The passage itself does not go into details, but it seems that Locke expects agreement on the view that pounding is an appropriate "sensible cause" for division but not for colour change; he might argue that, ordinarily, to obtain a colour change one needs to do something such as mix differently coloured bodies, or perhaps bring into contact with each other chemically active substances.⁵²

Moreover, from an Aristotelian perspective, something odd seems to occur when an almond is pounded: upon pounding there results a privation of two qualities (sweetness and whiteness) and a subsequent acquisition (possession) of two new qualities (oiliness and 'dirty' colouration). In other words, Locke is suggesting here that it is unreasonable to expect that a resemblance holds between our sensations of

⁵¹ See, for example, Mackie, Problems 22.

⁵⁷ Locke himself reports in his Journal on colour changes achieved chemically: "A solution of silver nitrate turned green ribbon into phyllymort immediately with a circle of blue about the edges of the fyllymort...." (Journal entry for 22 July 1676, in Dewhurst 71)

the almond's colour and taste, and the almond's nature, since the same object first would have the forms of sweet taste and white colour 'in' it, and then lose them while acquiring, in the process, the forms of oily taste and 'dirty' colour. Furthermore, even if it were granted that alteration of the almond had happened, on the Aristotelian schema this would only explain the privation of sweetness and whiteness, but not the acquisition of the two new qualities since on Aristotle's view "There may be a change from posession to privation, but not from privation to possession."⁵³

This case once again shows that, within a broad Aristotelian framework, the account of perception that posits a communication of forms is not borne out by experience and that, hence, the assumption that the natures of bodies always resemble the ideas that we have of them is not warranted.

III.6 The Impossible Possession of Contraries

The case of the different temperature perceptions in two hands placed in the same bucket of water at 2, 8, 21 has been regarded as one of Locke's central arguments for the distinction between primary and secondary qualities.⁵⁴ Supposedly it appeals to the illusory character of heat and 2

⁵³ Aristotle, Categories 10, 13a, 32-4.

⁵⁴ See, for example, Aaron 120.

cold sensations, and the unvarying character of figural sensations. The assumption is that Locke argues that perceptions such as those of heat and cold are relative to the "temporary condition of our organs",⁵⁵ while perceptions such as those of figure are not. To this claim it is objected, again, that all qualities have their perceptual conditions, and that, given enough ingenuity, we can produce an equivalent relativity of perception with respect to sensations of figure, for example.

More recently it has been suggested that the passage should be given less importance than previously because Locke clearly prefaces the section by saying that this account merely constitutes an application of what he has concluded regarding ideas. Given that Locke does begin 2, 8, 21 by stating "Ideas being thus distinguished and understood, we may be able to give an Account...", this latter interpretation seems appropriate. The case regarding the different temperature perceptions is, however, contributory to Locke's account of perception since it confirms its explanatory power.

Hot and cold are what Aristotle calls 'contraries.' They are also 'affective qualities,' however. Bodies characterised by affective qualities "are themselves said to be such and such by reason of their presence [that is, the presence of the

⁵⁵ Gibson 102.

affective qualities]....^{#56} That is, if our perceptions of heat and cold in the respective hands were indeed ideas resembling the qualities in the water, the water would be both hot and cold. Hence, an experience such as Locke describes is strictly impossible from Aristotle's point of view. This is precisely what Locke contends, too: "Whereas it is impossible, that the same Water, if those Ideas were really in it, should at the same time be both Hot and Cold." (2, 8, 21)

The corpuscularian account that Locke relies on at 2, 8, 11-14 to give his perceptual account plausibility resolves the difficulty by withdrawing the ascription of heat and coldness from the object itself. Consequently the ascription of contraries to bodies themselves is also withdrawn:

if we imagine Warmth, as it is in our Hands, to be nothing but a certain sort and degree of Motion in the minute Particles of our Nerves, our animal Spirits, we may understand, how it is possible, that the same Water may at the same time produce the Sensation of Heat in one Hand, and Cold in the other.... (2, 8, 21)

Interestingly, Boyle reports that the supporters of the doctrine of substantial forms claim that the "spontaneous

⁵⁶ Aristotle, Categories 8, 91, 30-34.

return of heated water to coldness...must necessarily be ascribed to the action of the substantial form". The difference in heat perception in the two hands posited by Locke would be very puzzling on this account, since the substantial form of water inexplicably has a different effect on the respective hands. Boyle's own explanation of temperature perception is, like Locke's, based on differences in relative motions at the corpuscular level.⁵⁷

It may be objected, though, that Locke's case is still defective because it makes a problematic contrast between temperature and shape perceptions, since the above quote continues by claiming "...which yet Figure never does, that never producing the *Idea* of a square by one Hand, which has produced the *Idea* of a Globe by another." (2, 8, 21) As is well known, shape may cause illusions as well as secondary qualities do. Hence it may be objected that, even if the corpuscularian account can explain the simultaneous presence of different temperature perceptions, it does not really serve to support the distiction between primary and secondary qualities and the resemblance thesis.

Berkeley, for example, seems to argue in this way. In Three Dialogues he has Philonous say the following:

⁵⁷ Boyle, Origin 59-60.

Was it not admitted as a good argument, that neither heat nor cold was in the water, because it seemed warm to one hand and cold to another?....Is it not the very same reasoning to conclude there is no extension or figure in an object, because to one eye it shall seem little, smooth and round, when at the same time it appears to the other, great, uneven and angular?

When Hylas asks whether such a visual perception ever happens, Philonous responds that he "may at any time make the experiment, by looking with one eye bare, and with the other through a microscope."⁵⁸

The objection, even if a little contrived (since we do not often receive radically different information from each of our eyes), would appear to cause some difficulty to Locke if he were arguing that secondary qualities cause illusions and primary do not. As noted before with regard to perceptions of the brown table, the accuracy of sense perception is not of concern to Locke, but our ability to directly apprehend the natures of things. Locke's lack of interest in perceptual accuracy is evidenced by the fact that Locke himself makes reference to illusions involving ideas of primary qualities such as apparent size (for example, at 2, 21, 63). The fact that under certain circumstances an object

⁵⁸ Berkeley, Three Dialogues 153.

may look bigger or more "angular" than under other circumstances may not have seemed to Locke to constitute a problem, because, in principle (at least since the emergence of Renaissance painting), the relation between the apparent size and apparent shape and the actual shape and size are known to be calculable functions of the locations of object and eye.⁵⁹

Locke's mention of figure at all may be explained by the fact that, with respect to the same object, variance in tactile perceptions of shape is unlikely, while variance in temperature perceptions is common, and has been seen as a problem since Plato.⁶⁰ Locke, furthermore, may be reminding his readers that his account of figure, *qua* inseparable property of bodies, conforms with Aristotle's assertions regarding figure: "Qualities admit of variation of degree....The qualities expressed by the terms 'triangular' and 'quadrangular' do not appear to admit of variation of degree, nor indeed do any that have to do with figure."⁶¹

- ⁶⁰ See Plato, Theatetus 154b, for a similar case.
- ⁶¹ Aristotle, Categories 8, 10b, 26 to 11a, 7.

⁵⁹ Descartes, Optics, AT 134; 1:169, discusses how human beings perceive "the orientation of each part of an object relative to our body". An entry in Locke's Journal indicates that he knew this work, since he lists it among others "pour bien etudier la doctrine de Mr de Cartes" (Aaron and Gibb 105-111).

To conclude, given that he argues within an Aristotelian framework, Locke's arguments just discussed marshall considerable support for the resemblance thesis, that is, the thesis that the ideas of primary qualities do, and the ideas of secondary qualities do not, resemble their causes in bodies. As such, these arguments strengthen Locke's claim that we can, and must, distinguish between ideas in minds and modifications of matter in bodies. As noted, that distinction amounts to a rejection of the doctrine of communication of forms in perception. The rejection of the doctrine that ideas are transmitted forms, along with the argumentation for the equality of ideas (no matter whether they are produced by positive or by privative causes), amount to a (tacit) declaration of autonomy for the ideas in our minds. As argued above (in chapter five), the autonomy of ideas is of crucial importance for the possibility of a science of morality. Hence, the defense of the resemblance thesis just examined may be said to provide some significant backing to the establishment of a science of morality and, consequently, to the repudiation of moral skepticism, which is the central purpose of the Essay.

CHAPTER 10: IMPLICATIONS FOR MORALITY

On my account, Locke's argumentation at 2, 8 constitutes a case for the autonomy of the ideas in our minds. The autonomy of ideas, in its turn, contributes to the establishment of a science of morality through its legitimation of the particular, complex ideas of God and of human beings proposed by Locke at 4, 3, 18 and 3, 11, 16. At this point it may be asked what the significance of this legitimation is. This question may arise because it is generally supposed that Locke does not in fact deliver on a science of morality. A letter from Locke to Molyneux of 1692 has been cited as evidence that Locke himself dispaired of the task.¹

Molyneux had asked him to carry through on the development of the science of morality. Locke replied: "Though by the view I had of moral ideas, whilst I was considering that subject, I thought I saw that morality might be demonstrably made out, yet whether I am able to make it out is another question."² As Colman has noted, however, Locke's apparent uncertainty about being able to carry through on such a science is not to say that such a project must fail.³

¹ See, for example, Aaron 256.

² William Molyneux to Locke, 27 August 1692 in de Beer 4:508; Locke to William Molyneux, 20 September 1692 in de Beer 4:524.

³ Colman 139.

Locke's evasiveness may also be seen in the light of his anomymous publication of, and the secrecy surrounding, Two Treatises of Government and other texts relating to morality such as the Letter Concerning Toleration.⁴ Having developed his account of morality in such works as far as he found important or timely, but unwilling to acknowledge authorship, he may have been forced into reluctant temporising in his correspondence with Molyneux.

It is not my intention here either to provide a full-scale commentary or a critique of Locke's moral philosophy. Rather, I only propose to show that Locke's foundational conceptions of God and human beings do have a significant role in his moral philosophy. This may not have been obvious to some readers of the *Essay* since Locke's moral philosophy only becomes explicit elsewhere, as, for example, in the *Treatises*. In the following I begin by addressing an objection to my proposal that the *Essay* and the *Treatises* be read in a coordinated fashion. After that I briefly discuss how Locke's conceptions of God and of human beings may, for Locke, legitimise certain central notions of his political theory as laid out in the *Treatises*. I conclude by sketching some of the most significant consequences of Locke's

⁴ Locke apparently did not openly admit his authorship of these books until shortly before his death; see Cranston 459-460. For an account that furnishes an explanation for Locke's secrecy, see Richard Ashcraft, Revolutionary Politics and Locke's Two Treatises of Government, (Princeton University Press, 1986).

approach to morality as they arise out of the application of 236 his principles.⁵

I. Science and Practice

According to my reading, Locke aims in the Essay to set the foundations for a science of morality which, up to a point, is given specific content in the Treatises.⁶ In contrast, Peter Lasslett has argued that it is a mistake to suppose that the Essay and the Treatises are complementary.⁷ Laslett supports his point of view by arguing that the methods applied in the two works differ greatly, and by supposing that Locke was pessimistic about the possibilities of certainty in political philosophy.⁸

⁶ For a detailed assessment of Locke's claim that morality is demonstrable, see Colman 138-176.

⁷ Peter Laslett, introduction, Treatises 96; also Walter Euchner, Naturrecht und Politik bei John Locke (Frankfurt/Main: Europaeische Verlagsanstalt, 1969) 147-148. But see Raymond Polin, La Politique Morale de John Locke (Paris: Presses Universitaires de France, 1960) passim; Ruth Grant, John Locke's Liberalism (University of Chicago Press, 1987) especially 21-26; John Dunn, The Political Thought of John Locke (Cambridge University Press, 1969) 92-93; Neal Wood, The Politics of Locke's Philosophy (University of California Press, 1983) 180-182.

⁸ Laslett 96-99.

⁵ Given the limited aims of this chapter, I do not discuss on this occasion many of the issues, such as his voluntarism or his account of natural law, that normally would receive attention in an examination of Locke's moral and political philosophy. For the same reason I do not make full use of various relevant texts authored by Locke, such as the Essays on the Law of Nature.

Most importantly, regarding the difference in methods, Laslett notes that "Two Treatises is not written on the 'plain, historic method' [sic] of the Essay." From Laslett's point of view, if the "plain, historic method" had been applied "we might expect in the first place that it would insist on the limitations of our social and political understanding.... Moreover, "the situation, the rights, the duties discussed, would have been presented recognizably as the 'complex ideas' or 'mixed modes' of Locke's system of knowledge, the product of ratiocination and therefore fixed and definite, capable of entering into a mathematically demonstrable morality."¹⁰

This issue deserves more space than can be devoted to it here, but one may note that, if the two works are to complement each other, a difference in methods may actually be appropriate, since the method applied in each work should be tailored to the particular goals pursued. So, since the goal of the *Treatises*, unlike the goal of the *Essay*, is not to prove moral skepticism mistaken, a different, more applied method may be appropriate. Furthermore, if, on one hand, government and the "original of Political Power" (II, 1) are for Locke part of a broadly conceived notion of morality, and, on the other hand, from Locke's point of view a science of morality is possible, then it would be amiss to

⁹ Laslett 96.

¹⁰ Laslett 96.

expect Locke to "insist on the limitations of our social and 236 political understanding". Moreover, given that Locke perceived the need to be very secretive about his authorship of Two Treatises,¹¹ it should not be surprising if he were to avoid some of the more obvious links, such as the nomenclature involving 'complex ideas' and 'mixed modes,' from the Treatises.

In support of the view that Locke believes that certainty in political philosophy is unlikely, Laslett cites a Journal entry of Locke's "written at the time when, as we suppose, he was working over *Two Treatises*....It reads almost as a conscious commentary on the relationship between philosophy, ethics and politics." Laslett notes that Locke had "just expressed his belief in the possibility of demonstrating ethics" when he proceeds to question our ability to acquire knowledge with regard to certain other areas:

By the knowledg of natural bodys and their operations reaching litle farther then the bare matter of fact without haveing perfect Ideas of the ways and manners they are produced nor the concurrent causes they depend on. And also the well management of publique and private affairs depending upon the various and unknowne humors interests and capacitys of men we have to doc with

¹¹ Laslett fully acknowledges this; see especially 17.

in the world and not upon any setled Ideas of things physique, politie and prudence are not capeable of demonstration....¹²

As in natural sciences, such as chemistry, observation and analogical reasoning seem to be the only viable approaches to "politie and prudence":

but a man is principally helpd in them by the history of matter of fact and a sagacity of enquireing into probable causes and findeing out an analogie in their operations and effectswhether this course in publique or private affairs will succeed well whether rhubarb will purge or Quinquina cure an ague is only known by experience and there is but probability grounded upon experience or analogicall reasoning but noe certain knowledg or demonstration.¹³

From this journal entry Laslett concludes that "Empirical medicine, rather than philosophy, seems to be the model for the man who sets out to comment on political matters."¹⁴

¹² 26 June 1681, quoted by Aaron and Gibb 117.

¹³ June 1681, quoted by Aaron and Gibb 117.

¹⁴ Laslett 98.

Although I am generally in agreement with Laslett's appeal to Locke's medical background as a source for some of his epistemological insights, it seems mistaken to assume that the above passage indicates that for Locke there cannot be certainty in political philosophy. Locke does indeed say that "prudence and politie are not capeable of demonstration", but he makes clear that his reference is to the "well management of publique and private affairs"; in other words, his reference is to the non-demonstrability of issues concerning policy (Locke spells it "politie") or practice. Pessimism about the possibilities of a science of prudence and policy need not imply pessimism regarding political philosophy as encompassed by a broad notion of morality.¹⁵

This reading is supported by the fact that, in the journal entry just quoted, Locke expresses considerable confidence in the demonstrability of what he calls "morall things":

he that has a true Idea of god of himself as his creature or the relation he stands in to god and his fellow creatures and of Justice goodnesse law happynesse &c. is capeable of knowing morall

¹⁵ See also Grant 23-24.

things or have a demonstrative certainty in them....¹⁶

Locks further confirms the assumption that he makes a distinction between a broad moral theory, which encompasses the concern for political and social concepts such as "Justice" and "law", and the practical dictates of prudence in particular circumstances, by adding that "the truths of mathematiques and morality are certain whether men make true mathematicall figures, or suit their actions to the rules of morality or noe."¹⁷

II. Foundations, Development and Application of Moral Ideas

As noted above, Locke assumes that a science of morality can be achieved if only the idea of God, qua "supreme Being, infinite in Power, Goodness, and Wisdom, whose Workmanship we are, and on whom we depend", and the idea of human beings, qua "understanding, rational Beings", were "clear in us" and "duly considered, and pursued" (4, 3, 17). He also provides us with hints as to how such a science may be developed, and how it may be applied.

The development of the science of morality is to follow the example of (what Locke takes to be) the method of

 17 26 June 1681, quoted by Aaron and Gibb 117.

 $^{^{16}}$ 26 June 1681, quoted by Aaron and Gibb 116. Notably this Journal entry also foreshadows the foundational statement at Essay 4, 3, 18.

mathematics. Locke is not explicit about what he takes the method of mathematics to be, but primarily he seems to think of it as composition and analysis aided by the depiction of figures common to geometry.¹⁸ Interestingly, central to the method of mathematics, as conceived by Locke, is the procedure summarised by Locke's definition of knowledge: "Knowledge then seems to me nothing but the perception of the connexion and agreement, or disagreement and repugnancy of any of our Ideas." (4, 1, 2) In the context of Locke's comparison between mathematics and the science of morality he notes, for example, that demonstration in morality involves "the Examination of the Habitudes and Correspondencies, Agreements or Disagreements, of several of them [moral ideas] one with another...." (4, 3, 19) Morality can be demonstrative like mathematics because, unlike the situation in natural philosophy, one need not investigate the natures of things since the ideas in question may be arrived at by stipulation.¹⁹

Locke apparently assumes that the application of the science of morality is a straightforward matter. Having defined the terms of morality, its application consists in determining if the world fits the account given in the definition: "Men" may "frame in their Minds an *Idea*, which shall be the

¹⁸ See 4, 3, 19; 2, 28, 4-16; also see Colman, chapter 4.

¹⁹ See also Colman 152.

Standard to which they will give the Name Justice, with which Pattern so made, all Actions that agree shall pass under that denomination...." (3, 11, 17) The definition at 4, 3, 18 gives further precision to the application of the idea of justice:

Where there is no Property, there is no Injustice, is a Proposition as certain as any Demonstration in Euclid: 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.... (4, 3, 18)

Having defined the concept of injustice as the violation of the right to property, the application of the term consequently seems dependent on determining whether there is agreement or disagreement between the external world and the notion of a violation of the right to property.

To return to the topic of this chapter, one may ask how Locke's conceptions of God or of human beings, as defined at 4, 3, 18, provide a foundation to morality in the case of our application of the idea of justice, for example. Locke is not explicit about this, but, upon closer scrutiny with the help of *The Second Treatise of Government*, the foundational importance of both ideas can be shown.

On Locke's scheme it is imperative to determine what the term 'property' stands for if one is apply the term 'justice.' At 4, 3, 18 Locke merely equates property with "a right to any thing", leaving the foundation of that right itself open to question. As is well known, The Second Treatise supplies a fuller answer:

Man (by being Master of himself, and Proprietor of his own Person, and the actions or Labour of it) had still in himself the great Foundation of Property....Labour, in the Beginning, gave a Right of Property.... (II, 44-45)

It may seem that in this passage Locke has only muddled the waters by basing the right to property in things on the right to the fruits of one's labour, which, ultimately, is based on the right to own one's own body. That is, Locke is arguing that property in things is justified insofar as those things are an extension of one's body, and one has ownership of one's body. So, confusingly, he seems to be basing the general notion of property on a particular instance of the same.

The particular instance of one's ownership of one's body, moreover, is not considered a given even by Locke, since he clearly foresees cases in which a person does not own her or his own body: "Captives, taken in a just and lawful War, and

such only, are subject to a Despotical Power...." (II, 172) 245 Such subjection to despotical power, furthermore, prevents the mastery of oneself: "For what Compact can be made with a Man that is not Master of his own Life?" (II, 172) To be prevented from mastery of oneself, however, effectively makes slaves of the captives. This is evident, since "...as soon as Compact enters, Slavery ceases...." (II, 172)

Aside from its problematic basis in the ownership of one's own body, Locke does provide another foundation to the right to property (even if this right is granted only to those who are 'masters of themselves' and, hence, not slaves): "He that is Master of himself, and his own Life, has a right to the means of preserving it...." (II, 172) In other words, the right to property is based on the right to the fruits of one's labour, and this right to one's labour is further justified by appeal to the right to the necessities for survival. In *The First Treatise of Government* the right to property in one specific type of thing (non-human "Creatures") is based even more clearly on the right to survival: "Man's *Property* in the Creatures, was founded upon the right he had, to make use of those things, that were necessary or useful to his being." (I, 86)

The right to those things necessary or useful for survival, finally, is based precisely on the foundational ideas given at 4, 3, 18. That is, it is based on the combination of the

animal (corporeal) and the rational nature of human beings, and the assumption that we are the workmanship of a good, wise, and powerful God:

God having made Man, and planted in him, as in all other Animals, a strong desire of Self-preservation...that Man should live and abide for some time upon the Face of the Earth, and not that so curious and wonderful a piece of Workmanship by its own negligence, or want of Necessities, should perish again....having planted in him, as a Principle of Action by God himself, Reason, which was the Voice of God in him, could not but teach him and assure him, that pursuing that natural Inclination he had to preserve his Being, he followed the Will of his Maker.... (I, 86)

In other words, by being corporeal certain needs become evident. By being rational it becomes self-evident that, because we are God's workmanship, it is morally right (if not even obligatory) to preserve ourselves. In order to preserve ourselves, furthermore, it may be necessary to take possession of various things. So, a respect for God's workmanship and his property (namely ourselves qua human beings) is the foundation for our human right to preservation, which itself is the foundation for a human

right to property. And, given that Locke defines justice as the respect for property, on Locke's scheme a clear understanding of his conceptions of God and of human beings indeed are foundational.

Locke's other example, at 4, 3, 18, of a proposition involving moral terms that is "as certain as any Demonstration in *Euclid*" is that "*No Government allows absolute Liberty*: The *Idea* of Government being the establishment of Society upon certain Rules or Laws...." Although not evident at 4, 3, 18, the justification for liberty-restricting government can also be found in Locke's ideas of God and of human beings.

Given that the right to property is based on these foundations, it is to be noted that, according to Locke, "The great and chief end...of Mens uniting into Commonwealths, and putting themselves under Government, is the Preservation of their Property." (II, 124) The explanation for why human beings do and should subject themselves to government is that otherwise they may not be able to enjoy their property, and, hence, assure their (God-appointed) survival:

...in the state of Nature....the enjoyment of the property he has in this state is very unsafe, very unsecure....And 'tis not without reason, that he

seeks out, and is willing to joyn in Society with others who are already united, or have a mind to unite for the mutual *Preservation* of their Lives, Liberties and Estates, which I call by the general Name, *Property*. (II, 123)

There is another central conception of Locke's political philosophy which receives crucial backing from his two foundational ideas, namely the right to revolt.

Locke provides us with a fairly complex account of the circumstances under which it is legitimate to revolt.²⁰ Roughly, one may summarise his account by noting that, given that government is for the purpose of protecting the citizens' property in lives, liberties and estates, a government that acts despotically towards those whose property it is to protect loses its legitimation. Locke, however, goes beyond this by arguing for the legitimacy of even killing a ruler (or any other human being, for that matter) who, through the use of force, has become an aggressor.

In chapter 18 of The Second Treatise Locke assesses whether one may resist the commands of a prince if that ruler is a tyrant. He notes that, if force is applied to a person, and the force in question does not allow the opportunity to

²⁰ See Treatises II, chapters 15-19.

appeal to law, that "puts him that uses [force] into a state 24% of War, and makes it lawful to resist him." (II, 207) In the case of a threat to one's life, moreover, "the Law of Nature gave me a Right to destroy him, who had put himself into a state of War with me, and threatned my destruction." (II, 207)

Given that all human beings are God's property, the license to destroy those who use force (even if it were in self-defence) may seem poorly grounded. Elsewhere, however, Locke justifies the destruction of a person exercising 'despotical power' by claiming that, through his use of force, such a person has placed himself outside of humanity:

For having quitted Reason, which God hath given to be the Rule betwixt Man and Man, and the common bond whereby humane kind is united into one fellowship and societie; and having renounced the way of peace...and so revolting from his own kind to that of Beasts by making Force which is theirs, to be his rule of right, he renders himself liable to be destroied by the injur'd person and the rest of mankind, that will joyn with him in the execution of Justice, as any other wild beast, or noxious brute with whom Mankind can have neither Society nor Security. (II, 172) Laslett suggests that "this is a drastic argument, and we may think it somewhat crude."²¹ It finds its backing, however, in the foundational idea of "our selves, as understanding, rational Beings" (4, 3, 18). The link is not made explicitly, but, given Locke's consideration in the *Essay* of what might be appropriate reasons for considering 'monstrous births' or 'changelings' literally beyond the human species,²² it seems that Locke indeed takes the capacity for rationality (and its exercise from a certain age) to be a necessary condition for the inclusion in the human species. As noted above, those who qualify as human beings are God's property (II, 6); hence, Locke seems to be arguing that those who do not fit the criteria of humanity by threatening other human beings (that is other property of God) may rightfully be destroyed.

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Having pointed out the manner in which Locke's conceptions of God and of human beings may function as foundations for certain central notions of his political philosophy, I do not intend to imply that Locke's science of morality need not confront very serious objections. I cannot properly develop those objections here, but am ready to briefly sketch some of the practical consequences of his moral philosophy that may lead to those objections.

²¹ Laslett 109.

²² See, for example, 3, 11, 20 or 4, 4, 13-16.

III. A Sketch for Objections

To define the concept of justice in terms of respect for property where the term 'property' broadly covers "Lives, Liberties and Estates" has very serious consequences when applied to the enclosure of the commons (which were still relatively abundant in the seventeenth century), or the colonisation of lands inhabited by native peoples, as in the Americas. Given that the term 'property' is to cover such a range of concerns, it may easily happen that under certain interpretations of justice some peoples' lives and liberties are not as safeguarded from encroachment as the estates of others.

As an example one may note that Locke unmistakably throws his weight behind those who would appropriate land "by improving it", given the proviso that "there was still enough, and as good left" (II, 33). 'Improvement' of land through logging and agriculture may, under propitious circumstances, leave "enough, and as good" for others similarly set to 'improve' the land, but may, nonetheless, make sheer survival impossible for those who rely on continuous stretches of forest and prairie for hunting and gathering. Speaking of the drive toward improvements in agriculture in seventeenth century Europe, the historian D. H. Pennington, for example, notes that

'Better' use of land could mean the loss of the extra food and fuel provided by woodland or waste....The Breton peasant, lacking barns, stables, and heavy ploughs, had no prospect of benefiting from better cattle-farming. Worse still, improvement for the landlord could depend on extracting far more labour from the tenant.²³

To assume that the prime purpose of government should be "the Preservation of Property" also has drastic consequences when coupled with the doctrine of the legitimacy of the acquisition of property through labour and colonisation. If, outside of their country of origin, members of some political society were to 'improve' some common or 'waste' lands, prime facie not administered by any government, on Locke's conception of government this would call for irredentist annexation of the improved lands:

every Man, when he, at first, incorporates himself into any Commonwealth, he, by his uniting himself thereunto, annexed also, and submits to the Community those Possessions, which he has, or shall acquire, that do not already belong to any other Government. For it would be a direct Contradiction, for any one, to enter into Society

²³ D.H. Pennington, Seventeenth Century Europe (New York: Longman, 1985) 54.

with others for the securing and regulating of Property; And yet to suppose his Land, whose Property is to be regulated by the Laws of the Society, should be exempt from the Jurisdiction of that Government to which he himself the Proprietor of the Land, is a Subject. (II, 120)

Such irredentist annexation following upon col misation, moreover, is no mere fictional possibility for Locke who claimed that "there are still great Tracts of Ground to be found which...lie waste...." (II, 45) Irredentist annexation, however palatable to the self-interest of settlers and investors in new colonies,²⁴ is scarcely compatible with the self-determination of autochthonous peoples, whose self-government may have remained unrecognised because they are perhaps only tribally organised. This is especially true if, by appeal to a state of war that may result from the conflicting interests of original inhabitants and settlers' improvements to the land, Locke's definition of human beings grants colonists the right to "destroy" the native inhabitants of the land. (The moral justification for such actions would be based on the assumption that the exercise of force by those resisting 'improvements' exhibits their irrationality, and lack of

²⁴ Locke was an investor himself and involved repeatedly in the administration of British colonies. See Cranston 115, 155-156, 401-447.

reason places a being outside of humanity according to the **254** foundational definition.)

Ultimately a science of morality that finds its foundation in the prudentially good behaviour required by the supposition of an ever-watchful and very powerful deity must be thoroughly unsatisfactory if serious doubts about such a deity's existence could crop up, or if ways to circumvent such a deity's wrath can be found, or if one could nourish the conviction that one's fate is independent of one's actions. Obviously each of these possibilities are given for some people; they are epitomised by those who deem themselves to be atheists, those who believe that they can obtain a pardon, and those who deem themselves to be predestined, respectively.

The attempt to found policy and practice on moral and political principles which, ultimately, are only of a prudential sort can have serious consequences, as is obvious even in some of Locke's own activities. Despite his voluminous writings on morality and Cristianity (for example, The Reasonableness of Cristianity and A Paraphrase of St. Paul's Epistles), Locke owned substantial stock in the slave-trading Royal African Company,²⁵ and advocated that the problem of 'pauperism' in England be solved by

²⁵ Locke bought 400 pounds stock in the Royal African Company in 1674, and 200 pounds more in 1675, Cranston 115, fn.3.

controlling the poor. Locke's measures to solve pauperism, proposed in 1697, are worth discussing in a little more detail here, since they include seizing people for begging, forcing them onto state vessels to serve for three years (at little or no pay, and at a high risk of bellicose encounters²⁶), or to "be kept at hard labour for three years" in a house of correction. For the forging of identificatory passes a man was to "lose his ears" the first time, and second offenders were to be "transported to the plantations".²⁷

It is to be noted that Locke's probably faulty causal analysis was partly to blame for the proposal of these harsh measures, since he believed that the cause of the "growth of the poor...can be nothing else but the relaxation of discipline and corruption of manners....^{#28} In reality pauperism in England had been "painfully abundant all through the disordered period of the later Stuart rule, following on the turmoil of the Commonwealth period; but it was greatly increased during the famous 'seven barren years,' from 1692 to 1699.^{#29} Among other things, there

²⁹ Fox Bourne 2:376.

²⁶ Pennington 248, notes that in the seventeenth century any ship's "chances of being involved in fighting before it returned were usually high."

²⁷ Locke, Board of Trade Papers, Domestic bundle B, #6, quoted by Fox Bourne 2:377-390.

⁷⁸ Board, quoted by Fox Bourne 2:378.

were harvest failures in 1693 and 1697-98 "which brought near-famine conditions in some areas but not in others" such that "the results of chronic malnutrition" would have been exarcerbated.³⁰ The implication from Locke's case seems to be that a moral and political philosophy merely founded on the fear of punishment and the hope for rewards may tragically fail to deliver a moral practice that recognises the fragility and value of human lives.

To close the discussions undertaken in this dissertation, I conclude that there is sufficient evidence to believe that the Essay primarily concerns itself with moral and not epistemological skepticism. This is shown by Locke's argumentation to the effect that, even if our assurance regarding the existence of the external world does not reach certainty, it is sufficient for conduct. It is shown, moreover, by his elaborate defence of ideas of sensation and reflection as fully suitable qua materials of the understanding, for the establishment of certain knowledge of morality.

Locke's defence in the *Essay* of the possibility of a science of morality is of crucial importance, given the wide appeal of his social and political philosophy. It is of special urgency to consider his foundations of morality, given the

³⁰ D.C. Coleman, *The Economy of England 1450-1750* (Oxford University Press, 1986) 93.

severe implications that a moral scheme largely based on the 257 right to individual appropriation can have, in practice, for the less well situated. Ultimately, Locke's account of morality invites us to examine anew whether morality can be based on prudential considerations.

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