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Locke's Abstract General Ideas as Images: Some Questions ¹

I

In a well-known passage in his *Essay concerning Human Understanding* (hereafter *Essay*), John Locke says:

The Mind makes the particular Ideas, received from particular Objects, to become general; which is done by considering them as they are in the Mind such Appearances, separate from all other Existences, and the circumstances of real Existence as Time, Place, or any other concomitant Ideas. This is called Abstraction (II.xi.9)²

With this view, Locke sets out to explain the notion of abstract general ideas. Locke's language appears simple and clear, but his account is actually difficult to interpret.

First, consider the general ontological claim to which he commits himself at the outset: "all things that exist are only particulars" (III.iii.6). If the ideas, abstract or otherwise, are among the "things that exist," then it would follow that the ideas, even abstract general ones, are actually particulars. Yet it is not clear that Locke would regard ideas as on a par with, say, physical objects, which would be particulars in the full blown sense. For he says that all things are liable to change but that abstract ideas are "ingenerable, and incorruptible" (III.ii.9).

Furthermore, the language of 'separation' in the *Essay* which dominates the discussion of abstract ideas invites formidable challenges, the most famous of which is provided by the juvenile Berkeley who argues:

He that knows he has no other than particular ideas, will not puzzle himself in vain to find out and conceive the abstract idea, annexed to any name.³

¹ I thank the audience at the American Philosophical Association Eastern Division Meetings in 1995, in particular, Vere Chappell, for their comments. I also thank Jerry Cederblom, Laura Grams, Benjamin Hill, Andrew Newman, William Melanson and Derek Shiller for their suggestions.

² All parenthetical section references will be to John Locke, *An Essay concerning Human Understanding*, ed. P. H. Nidditch (Oxford: Clarendon Press, 1979).

³ *A Treatise concerning the Principles of Human Understanding in Philosophical Works*, ed. M. Ayers (London: Everyman, 1993), Introduction, § 24: 86.

One powerful and attractive strategy for dealing with the problems arising from Locke's rather incomplete and sometimes cursory treatment of abstraction is one according to which Locke's notion of abstraction should be viewed as referring to the cognitive mind's capacity to "partially consider" concrete and fully particular ideas. This interpretation seems to derive its impetus from the view that Locke is a thoroughgoing imagist, not only rejecting real and objective universals (whether Platonic or Aristotelian) but also arguing against the Cartesian model of abstract ideas as mind-dependent modes of understanding. If this interpretation is correct, then Berkeley's famous criticism of Locke mentioned above would be misplaced from the very outset. For the sake of convenience, I will call such an interpretation an "Imagist Model (IM for short)" for understanding Locke's theory of abstract general ideas.⁴ In what follows, I shall explain IM in detail and contend that this interpretation of the Lockean theory of abstract general ideas may be fundamentally incoherent. In particular, I will propose that it is in clear conflict with the explicit textual evidence one finds in Locke's *Essay*, and some, at least, of the consequences drawn from IM involve an almost intractable philosophical difficulty of which Locke seems implicitly aware.

II

In order to understand the context in which the controversy about imagism is raised, we now have to provide the historical background to the notion of abstraction, which is at the center of this controversy. Before Locke, Aristotle is probably one of the earliest who suggested an elaborate theory of abstraction. According to Aristotle, the mind abstracts by

⁴ Michael Ayers has been one of the foremost defenders of this model. See his "Locke's Doctrine of Abstraction: Some Aspect of its Historical and Philosophical Significance," in R. Brandt, ed. *John Locke: Symposium Wolfenbüttel 1979* (Berlin, New York: de Gruyter, 1981) and his more recent and definitive *Locke: Epistemology and Ontology* (London: Routledge, 1991), Vol. I, Part IV. A similar view can be found in J. L. Mackie, *Problems from Locke* (Oxford: Clarendon Press, 1976). See also Kenneth Winkler, *Berkeley: An Introduction* (Oxford: Clarendon Press, 1989) for a view that is sympathetic to this among others. E.J. Lowe in his *Locke* (New York and London: Routledge, 2005) says that "Locke's theory is...open to more than one interpretation" (36). Samuel Rickless in his *Locke* (London: Wiley-Blackwell, 2014) also suggests that Locke is agnostic on the question of imagism (27). For a view critical of the imagist reading, see, e.g., Jonathan Walmsley, "Locke on abstraction: A Response to M. R. Ayers," *British Journal for the History of Philosophy*, Volume 7, Issue 1, 1999: 123-134; David Soles, "Is Locke an Imagist?" *The Locke Newsletter* 30 (1999): 17-66. S.-J. Savonius-Wroth, Jonathan Walmsley, and Paul Schuurman, eds., *The Continuum Companion to Locke* (London and New York: 2010), 162-163; Yasuhiko Tomida, *Locke, Berkeley, Kant: From a Naturalistic Point of View*, Second Edition (Hildesheim, Zürich and New York: Georg Olm Verlag, 2015), 49ff. Nicholas Jolley, *John Locke: His Philosophical Theses* (Oxford: Oxford University Press) emphasizes the role of the active mind in generating the complex ideas, which are thus viewed as *concepts*, not images.

stripping an object of its sensible qualities.⁵ The mind is capable of focusing on one of the sensible qualities of an object to the exclusion of others, and more general qualities to the exclusion of more particular qualities. For example, a mathematician abstracts the notion of pure quantity and dimension from the sensible objects. A philosopher abstracts the notion of being from the sensible objects.⁶

Aristotle was by no means an empiricist in the modern sense but he clearly suggested that the human mind was like an empty writing table at birth. Accordingly, all knowledge is ultimately based on senses. Further, all true existents are particulars and universals are arrived at only by means of abstraction. However, this does not prevent Aristotle from suggesting that all general knowledge is based upon abstraction from what is given in the senses.⁷ The more abstract a thing is, the farther it is from the senses. In his view, knowledge is nothing other than taking on the form of its object. While senses provide the basis of knowledge, abstraction serves as the basis of general knowledge. Just as senses are related to the sensible, and in this respect, dependent on the bodies outside the mind, intellect is related to the thinkable, and in this respect is separable from the sensible, and impassible from the affections of the world. Knowledge is identical to its object from this perspective as the latter is in a way what is knowable.⁸

The doctrine of abstraction reaches its pinnacle in the scholasticism of Thomas Aquinas. Our senses let in phantasms of sensible objects and the mind (active intellect) strips the particular features of the phantasms and grasps the intelligible species (intelligible forms) of an object. The intelligible form is numerically distinct from the material form (the sensible species) of the object. The intelligible form is the form of the object as it exists in the mind. Abstraction then for Aquinas is the process of stripping away particular features (particulars) of an object and considering the specific nature (universal) apart from them. It is a process of separating form from matter.⁹ All knowledge is based upon abstraction from what is given in the senses.

In the modern period, Descartes rejects the scholastic sense of an abstraction of form from matter but retains the fundamentals of the doctrine of abstraction. It is impossible to conceive of a substance apart from its essential attribute but the mind is capable of conceiving the principal attribute of a substance apart from the substance of which it is an attribute and apart from its modes. The mind can conceive of extension or thought apart from

⁵ Aristotle, *De Anima* 429b.

⁶ *Metaphysics* 1086a Cf. *Physics* 193b

⁷ *Metaphysics* 980a.

⁸ *De Anima*, 432a.

⁹ *Summa Theologica* I.P, q. 85a., 1ad1. The dictum "Nihil est intellectu quod prius non fuerit in sensu" is still valid for Aquinas.

both a substance and any of the modes of either attribute.¹⁰

This view of Descartes is further developed by the Port-royal school. For Antoine Arnauld and Pierre Nicole, we can consider a mode without reflecting on the substance.¹¹ Such consideration is an instance of knowledge by abstraction. Arnauld and Nicole typically speak of three types of abstract knowledge: (1) Consideration of arms and legs in separation from other parts of the body. (Note, however, Arnauld and Nicole's concession: "Although important, knowing a thing by a consideration of its integral parts is not what is commonly meant by abstraction."¹²); (2) Consideration of a mode without paying attention to its substance; (3) Consideration of one characteristic of a thing that possesses several characteristics separable only in thought, e.g., consideration of thought as a principal attribute of oneself, and consideration of triangularity apart from any of the accidental characteristics of a particular triangle.

III

What is an Imagist Model? For the sake of perspicuity, IM may best be characterized as consisting of the following two theses:

- (1) Abstraction is not separation in the literal sense but a mere partial consideration.¹³
- (2) An abstract general idea just is a particular image such that (2a) it is currently before the cognitive mind; and (2b) it represents all particulars precisely resembling it in the respect upon which the mind is focused in abstraction.¹⁴

Let me begin with Thesis (1). In the *Essay*, Locke does seem to present abstraction as separation in some well-known passages. Abstract general ideas are "separate from all other existences and the circumstances of real existence..." (II.xi.9). It is indeed "such *precise*,

¹⁰ *Principles of Philosophy*, I: 52-59. For the Cartesian background to Locke's view of abstraction, see Walter Ott, *Causation and Laws of Nature in Early Modern Philosophy* (Oxford: Oxford University Press, 2009), Part III.

¹¹ Antoine Arnauld and Pierre Nicole, *Logic or the Art of Thinking*, Jill Van Buroker, ed. (New York: Cambridge University Press, 1998), 37-38. As is well known, this is an important issue in Locke, who seems to think that abstraction means generalization. Later, Kant discusses abstraction in the sense of (mental) separation in his *Logic Lectures*. It was Thomas Reid, however, who first clearly proposed that abstraction in this sense does not necessarily imply generalization. See note 31 below.

¹² *Ibid.*

¹³ Partial consideration is Ayers' phrases (*Locke: Epistemology and Ontology*, vol.1, 251). To my knowledge Locke uses this expression only twice in the *Essay* (II.xii.13). Mackie prefers "selective attention" (110). I will take the two phrases to mean the same thing, and use them interchangeably.

¹⁴ Ayers, 249.

naked Appearances in the mind *without* considering how, whence, or with what others they came there" (ibid.; emphasis mine). In addition to mentioning such "appearances, *taken* from particular beings" (ibid.), Locke also says that "The 3d [act of mind] is separating them from all other ideas that accompany them in their real existence" (II.xii.1), that "man can ... wholly separate [ideas]" (ibid.) and also that in abstraction the man considers "an *Idea* under *no other Existence* but what it has in the understanding" (IV.ix.1; italics mine). For him, abstraction is indeed one of the many operations of the mind that are actively applied to particular ideas.¹⁵ He explains abstraction with regard to an idea of white as follows:

Thus the same Colour being observed today in Chalk or Snow, which the mind yesterday received from Milk, it *considers that appearance alone* (italics added) makes it a representative of all of that kind; and having given it the name *Whiteness*, it by that sound signifies *the same quality* wheresoever to be imagined or met with; and thus universals, whether *Ideas* or Terms, are made (ibid.).

Such a passage strongly suggests that, for Locke, to abstract an idea from other existence is to separate and consider it in complete isolation from other ideas. Thus abstraction is a process that secures a true universal, "the same quality," applicable to many things, actual or imaginary. All and only abstract ideas are general ideas.¹⁶ This suggests that the Lockean abstract ideas are all determinable, not determinate. Locke simply does not consider the case where the shape or a color of a certain black cube of marble is imagined apart from the other determinate attribute. The general attribute "shape," a true determinable, is thought of apart from any specific (i.e., determinate) shape. In this respect, Locke's abstraction is different from that of the Port-royal school or Berkeley or for that matter Hume.¹⁷

On IM the colorful and 'reified' language of mental operations one finds in the *Essay* should not be taken too literally. John Mackie, for example, thinks that Locke's reified way of describing the mental operations on ideas *as* entities is quite misleading.

¹⁵ Locke thinks that a complex idea, e.g., the idea of murder, murder, can be an abstract general idea, in which case abstraction would require 'uniting' as well as separation.

¹⁶ V. C. Chappell, "Locke's Theory of Ideas," in his *The Cambridge Companion to Locke* (New York: Cambridge University Press, 1994), 40.

¹⁷ Berkeley's criticisms against Locke's abstract ideas in the *Principles of Human Knowledge* (Introduction, §§ 6-24: 76-86) are many; based on his introspection, Berkeley sometimes claims that it is simply not possible to form an abstract idea of motion. Furthermore, in an argument from our conceivability, he suggests that whatever is not possible in existence is inconceivable. But, it is not possible for a general quality to exist. Thus, a general quality is inconceivable. Also, from the considerations of meaning, he argues that the meaning of a general term is an indeterminate, loosely associated set of objects, not a determinable abstract entity. Thus, an intensional theory of meaning is superfluous. Finally, in what might be called an argument from inconsistency, Berkeley suggests that an abstract idea is different from any particular idea yet it is also the same as each of them as it applies to the latter, e.g., the idea of a general triangle.

As a set of instructions for framing a complex abstract idea such as the idea of manslaughter, it is quite doubtful that the description of such operations can be properly carried out. Mackie suggests that we “naturalize” these descriptions and take them as metaphorical descriptions. The vocabulary of reified operations would then be replaced by a more natural vocabulary of cognitive activities (e.g., ‘pay attention to’, ‘associate,’ ‘recognize,’ etc.) Mackie says:

Locke’s basic theory of abstraction, then, is that it consists in paying selective attention to one feature in a complex particular object of experience and ignoring the other features which are in fact occurring along with it.¹⁸

In a well-known study, Ayers is equally assertive in voicing his view that Locke’s language of separation should be taken metaphorically. He argues that “for Locke, then, as for Berkeley himself, abstraction is this kind of ‘partial consideration’ of the object of imagination or sensation for the purpose of general thought.”¹⁹ On IM, to abstract an idea then is not to consider a particular quality independently of the rest of the compresent qualities among which that quality exists, so as to suppose that we can have an idea of what, for example, extension or color is like, in complete isolation from the rest. Rather, it is to give a partial consideration to an aspect of the compresent qualities with the rest of the concomitant qualities still in view.

Clause (2a) expresses the gist of imagism, but this does not entail that abstract ideas, thus constructed as particular occurrent images, cannot be possessed by the mind as dispositional type-ideas (as opposed to momentary token-ideas).²⁰ Clause (2b) may be briefly explicated by means of Locke’s example of the color white. If a mind sees a white piece of paper, for example, it may notice that it precisely resembles, in respect of color, other pieces of paper; it pays attention to the feature in which it precisely resembles these others and pays no attention to or ignores (temporarily) the accompanying shape, size, etc. An abstract idea is nothing other than the “selectively attended to” or “partially considered” part of a (complex) idea that we have of a concrete particular object; this explains how we have something in our minds with which we can associate a general expression such as “whiteness”. The merit of IM is that it is quite consistent with Locke’s particularist ontology. For IM allows us to avoid commitment to the ontology of abstract general ideas. Further, Locke may best be understood as employing the doctrine of abstraction (following Pierre Gassendi) “as a weapon in the

¹⁸ Mackie, 112.

¹⁹ Ayers, 251.

²⁰ Ayers, 249.

imagist arsenal, turning it against Cartesian principles themselves.”²¹ To view abstraction as separation may prepare the way for the reintroduction of the Cartesian distinction between sensory and purely intellectual intuition and ultimately the doctrine of innate ideas. This would be most devastating to Locke's well-known campaign against innatism.²²

IV

Ingenious as it may be, IM seems to involve some insuperable difficulties. Above all I would first like to submit that any alternative to the view of abstraction as separation must be able to explain away the language of separation that Locke carefully employs in his account of abstraction. In the relevant passages, Locke seems to think that we can have an abstract idea of a quality quite independently of the rest of the concomitant qualities that, together with the quality, may constitute the particular object in experience. We can literally ‘retain’ or ‘separate’ an abstract idea by, e.g., ‘leaving out’ its concomitants.

Now on IM Locke's “idea” can be understood only as a sensory image. After all, IM involves the claim that Locke was an imagist. There is no denying that Locke sometimes uses “idea” to refer to particular images and concrete sensations or feelings. However, it is not clear that Locke always employs the notion of idea in the way that we normally use “image”. “Idea” is also used to refer to the meanings of general words in the discussions of complex ideas and definitions. Some complex ideas such as, e.g., the idea of three-sidedness, may form the nominal essences of triangle (III.vi.4).²³ Such essences are nothing more than abstract ideas formed by the mind to provide significance for general terms, and their presumed immutability derives from our own power to retain the precise content of an abstract idea even in the absence of conforming instances (III.iii.19). Further, Locke speaks of relative ideas (II.xxi.3). As a matter of fact, he thinks that almost all of our ideas are relative. For he says that our ideas typically “include some kind of relation in them” (ibid.). These not only involve the idea of substance but also the ideas of qualities as well as the idea of infinity.²⁴ All of these various uses of ideas indicate that images, *prima facie*, are not

²¹ Ibid.

²² For more on this, see Halla Kim, “Locke on Innatism,” *Locke Studies*, Volume 3 (2003), 15-39.

²³ Curiously, Locke suggests that, for modes such as triangles, the nominal essences coincide with real essences, while, for substances, they never coincide – as a matter of fact, their real essences are never known to us (III.iii.18).

²⁴ As Locke says of the idea of substance, this idea is “no distinct Idea” (II.xxiii.2), an “obscure and relative Idea” (II.xxiii.3), a “confused Idea of something in which they [qualities of which we have ideas] belong, and in which they subsist” (II.xxiii.3); and “no clear, or distinct Idea” (II.xxiii.4). The idea of substance then is obscure, confused, and relative. The idea of qualities here involve not only

compatible with abstraction. For Locke seems to believe that images alone do not provide for the kind of generality that the process of abstraction purports to bring about (II.xi.9, III.iii.14). Thus Locke's use of "idea" suggests that not all ideas are images, e.g., the general idea of a triangle.

Ayers believes that this interpretation is mistaken because, as noted earlier, it is "in effect to import the Cartesian distinction most alien to [Locke], the distinction between imagination and intellect."²⁵ According to him, the question as to whether Locke was an imagist is a historical question of where he stood in the debate between the Cartesians who were in favor of the distinction, and empiricists (Hobbes and Gassendi) who repudiated it.²⁶ There is no denying that Locke is generally inclined to side with the empiricists but this does not seem to conclusively show that he was an imagist. In other words, the problem of determining whether he was an imagist is too specific and local to be settled by reference to the historical consideration of the general trends of the philosophers of the period. Cartesian elements seem to lurk in Locke's background even though he was not strictly a Cartesian.

For example, Locke's treatment of intuitive knowledge is a case in point. He argues that we have intuitive knowledge when the mind perceives the relations of two ideas immediately and without the help of other ideas (IV.ii.1, IV.iii.2). In this way not only do we acquire the knowledge that white is not black or that a circle is not a triangle (IV.ii.1), but also the knowledge that certain numbers are equal (IV.iii.19), that bare nothing cannot produce any real being (IV.x.3), or even that I exist. But if Locke was an imagist, it is not clear how he accommodates such claims. As an imagist, he would have to say that an arithmetical assertion stating equality between two numbers, say, " $100 + 100 = 200$," is known to the mind by way of the construction of intermediary steps with the aid of mental images and names of numbers.²⁷ But this directly contradicts Locke's professed intuitionism, according to which we may perceive the necessary connections among abstract ideas without recourse to any intermediaries.

In *Essay* II.viii, Locke launches the famous distinction between primary qualities and secondary qualities. According to Locke, the human mind receives ideas from bodies around it, which have powers to produce those ideas in us. Qualities in things are actually such powers to produce sensations in us. Locke goes on to show that there are two types of qualities.²⁸ First, primary qualities are those that are inseparable from the body in all changes.

the ideas of secondary qualities but also primary qualities (II.xxi.3). The idea of infinity is discussed in II.xxix.16.

²⁵ Ayers, 251.

²⁶ Ayers, 44.

²⁷ Ayers, 52.

²⁸ Actually, Locke speaks of three types of qualities but I will ignore the tertiary qualities.

They are what the body constantly keeps. Indeed, Locke claims that they are found in every particle of matter. Finally, our ideas of primary qualities resemble the qualities themselves. These include solidity, extension, figure, motion or rest, bulk, texture and number. From these considerations, we may say that primary qualities for Locke are basic physical structural properties of body. To see how this is the case, let us examine an example that he gives to support his view. Here is what he says:

[T]ake a grain of wheat; divide it into two parts. Each part has still solidity, extension, figure, and mobility; divide it again and it retains still the same qualities; and so divide it on, till the parts become insensible; they must retain still each of them all those qualities. For division which is all that a mill or pestle or any other body does upon another in reducing it to insensible parts can never take away either solidity, extension, figure or mobility from any body but only makes two or more distinct separate masses for matter of that which was but one before all which distinct masses reckoned as so many distinct bodies after division make a certain number. (II.viii.9)

Call this the “argument from the grain of wheat.” This is an argument designed to show that there are in bodies primary qualities and they are not merely subjective but objectively present in bodies as we conceive them. Primary qualities are built into the body, so to speak.²⁹

In contrast to primary qualities, Locke argues that secondary qualities are “nothing in the objects themselves” but they are merely “powers to produce sensations in us by the arrangement of their primary qualities” (II.viii.10); our ideas of secondary qualities do not resemble secondary qualities themselves. These include colors, sounds, tastes, smells, heat or cold, etc. What are in a body are all primary qualities and their arrangements. Secondary qualities, like all qualities for Locke, are in body but they are nothing like we imagine them to be in body. As a matter of fact, secondary qualities are merely powers in body that are due to the peculiar configurations of their corresponding primary qualities. It is very tempting to say that secondary qualities have nothing to do with body but this is not true. I think Locke’s point here is that secondary qualities don’t really exist in the way we ordinarily think they do. But there is no question our ideas of them arise from our interaction with the bodies by way of perceptions.

Now, what is the relevance of Locke’s argument from the grain of wheat to the question of imagism? First of all, it is not easy to see how one can possibly say, purely on the basis

²⁹ It is tempting to hold that primary qualities of body are what philosophers traditionally call “essences” of body. For Locke speaks of them as constant throughout all changes. This temptation should be resisted. For Locke the essence of an individual body is totally veiled from us (III.vi.3). As a real constitution of a body, it is totally unknown to us. Locke does speak of the nominal essence of body but this is completely determined by our social conventions and nothing deters us from including what Locke calls ideas of secondary qualities from entering into the components of such nominal essences.

of the argument, that bodies preserve the same qualities in our successive division of them. Locke, however, never says that dividing the grain of wheat always and necessarily results in its retaining exactly the same primary qualities. All that is suggested by the argument is that it is bound to have some particular primary qualities or other. Before the division, the grain was presumably oblong. After the first division, it is now half-moon shaped. ‘Oblong’ and ‘half-moon’ are incompatible figures. But both of the shapes are figures and this is what Locke suggests. This applies to other qualities as well. The size of the grain (or rather that of its divided pieces) may reduce, but the size itself can continue to be used to describe the grain. We can expect the same is true of all other objects. Why does Locke say that the grain of wheat retain the same qualities throughout divisions when this is obviously not the case? I believe that when he speaks of primary qualities being constant in the grain of wheat experiment, he actually means that our ideas of primary qualities are constant. In other words, our ideas of primary qualities invoked in the example of the grain of wheat are abstract general ideas that are true of the grain of wheat under all its various circumstances. Primary qualities are the true ‘measures’ of things in the sense that they can genuinely describe bodies in any conceivable situations. Things are, on Locke’s view, bound to have a certain degree of solidity, a certain type of shape, a certain size, etc. In general, things never fail to have some primary qualities or other. Thus, objects of our cognition are intrinsically possessed of primary qualities in general – things as such necessarily have figures, numbers, extension, solidity, etc. This strongly suggests that Locke is speaking of our ideas of primary qualities of the grain of wheat as abstract general ideas. Of course, a particular existing thing must have particular primary qualities. After all, all things that exist are particulars for Locke. But this does not prevent us from describing the properties of objects in general terms. Locke’s claim at the outset is then that primary qualities are inseparable from bodies. Our ideas of primary qualities of bodies are inseparable from our idea of bodies. But a particular primary quality may be separated from bodies. A particular shape of a grain (e.g., ‘oblong’) may be separated from it when it is cut in half. Therefore, when Locke says that primary qualities are inseparable from bodies he does not mean particular primary qualities. Rather Locke suggests that our ideas of primary qualities go hand in hand with our idea of bodies. If I am not mistaken, Locke’s argument for the objective existence of primary qualities presupposes his view of abstraction and also of abstract general ideas.³⁰

³⁰ Locke’s argument for primary qualities in general, and the grain of wheat argument in particular, seems to have been influenced by Descartes’s well-known discussion of the piece of wax. In *Meditation* II, Descartes intimates that secondary qualities are not essential to the nature of the body such as a piece of wax. Even earlier, Galileo speaks of the example of a feather in his famous *Assayer* (1623), suggesting that secondary qualities no more belong to the body than tickling resides in a feather. Berkeley’s criticism of Locke’s distinction is really a criticism of the latter’s primary qualities (see, e.g.,

The situation gets aggravated when we turn to another philosophical difficulty facing IM. According to IM, an abstract idea is just a particular image currently present in the cognitive mind. For example, the particular image of a white piece of paper before the mind – the concrete image of a white piece of paper with its peculiar whiteness, squarish figure, smooth texture, etc. – may be viewed as an abstract idea in so far as the mind is focused on, e.g., its color, i.e., the particular shade of whiteness in this case. This particular image can be thought to represent all white objects which precisely resemble the paper in respect of color. Thus the mental image not only functions as a representative of a class but also functions as a standard by which to “rank real Existences into sorts” (II.xi.9).

But this view appears to be mistaken. Recall now that, for Locke, abstraction as a process involves generalization in itself. Thus, for him, abstracting alone would yield the universal objects.³¹ Abstraction is important for him because it is essential to an account of general knowledge. An object of thought becomes general by abstraction alone. Now if IM is correct, then the aspect of a particular image upon which the mind is focused, and which is, accordingly, partially and selectively considered, would be capable of explaining the general knowledge. This in turn would be possible only if it applies to more than one object. But this process of application to many is exactly what IM cannot account for. The aspect of a particular image thus selectively attended to would be a particular attribute rather than a general attribute. For on IM it is not the idea existing in real separation from other concomitant ideas. An aspect of an idea that is not separated from the rest of the concomitant ideas of a given object cannot be an idea considered in isolation, but only one partially considered at once in conjunction with the rest. Such an aspect of the idea cannot be a general attribute of whiteness but only a particularized whiteness, e.g., the whiteness of this paper over here, which is true only of this particular paper. The idea of particularized attribute, however, cannot be a general idea because it cannot be true of other white objects. This shows that IM cannot explain the point of abstraction as a mental operation in Locke's account of generality in human knowledge. In effect, it is not clear that clause (2b) can be satisfied by any abstract ideas at all. For no idea, insofar as it is partially considered, can precisely resemble any other idea.

Berkeley, *Three Dialogues Concerning Hylas and Philonous*, the First Dialogue in Ayers, *Philosophical Works*, op. cit., 182-185). Further, it suggests that Locke's argument for the distinction crucially depends on his view of abstraction.

³¹ This view is sharply contrasted with, e.g., that of Thomas Reid, who makes a distinction between abstraction and generalization. For him, abstraction is a process of thinking separately. Generalizing, on the other hand, is said to be the process of finding an attribute in a number of different individuals. Thus abstraction is a preliminary step on the way to the generalizing. See his *Essay on the Intellectual Powers of Man*, V.ii. In *The Works of Thomas Reid*, ed. William Hamilton (Edinburgh: Maclachlan and Stewart, 1872), Vol. I, 393-6.

Further, even though we cannot form the image of an abstract idea of extension without any particular size or figure, we can think of (i.e., conceive) it (or reason with it) in general terms. Our abstract reasoning does not simply consist in chains of associated images. Images are not necessary elements of our thinking. They are accidental concomitants of our thoughts. But this suggests that abstract general ideas are essential not only for our general reasoning power but also for the purpose of communication in general. For the question is how we effect our communicative goals.

Locke then proposes that abstraction goes hand in hand with a language use. Words have ideas as their primary significations and things as their secondary significations (III.ii.2). A proper name then stands for a particular idea but a general term stands for an abstract general idea as its primary signification. So you can have abstract general ideas only if you can employ the corresponding general terms. Since my own ideas are private and for this reason inaccessible to others, I make use of the articulate sounds of human speech as external sensible signs by means of which I can convey my thoughts to others. The absence of any universal human language, Locke argues, shows that the connection between each word and the idea it primarily signifies is not natural but purely conventional, an association established only by “voluntary Imposition” (III.ii.1). This association is rendered so intimate by frequent repetition that words facilitate the invocation of some ideas more easily than their corresponding objects. Nevertheless, since we freely and arbitrarily form the required association, this often makes it difficult for a speaker to be sure that the appropriate idea has actually been invoked in a hearer (III.ii.8).³²

If IM is correct, there is a fundamental problem here: since ideas as images differ from person to person, and even in a single individual at different times, and since the association of words with ideas is purely arbitrary, even when secured by conventional agreement, it follows that the correct signification of a particular use of any word depends wholly upon the particular idea in the mind of its speaker, to which the hearer has no access except through the mediation of the word (III.ii.2). Thus, according to Locke’s view of language, it is always possible that two people interact with each other verbally even though they do not achieve genuine communication in case they do not associate similar ideas with the words by means of abstraction when they employ the words. There is simply no guarantee that, in the absence of any abstraction, the complex of sensory ideas that I associate with the word “gold” would be the same as the one you use in our communication with each other.

This consideration then reinforces the idea that the use of general terms is one of

³² Locke thus insinuates that both the equivocal use of terms and the invention of needless jargon by the learned amount to violations of the conventional agreements upon which language is properly founded (III.x.5).

the most important features of linguistic competence. Even though the actual things that exist – including words themselves – are invariably particular, Locke suggests that at least some words ought to be employed in a general signification. For having a distinct word for each and every particular thing would go well beyond our linguistic and intellectual capacities. If one employs unique names for particular ideas, this would make one practically impossible to communicate with others who do not share exactly the same ideas. Above all, the most significant types of knowledge are exactly those that subsume many particulars under some general rule. Thus, we are naturally inclined to favor general terms. As Locke himself puts it, “Language had yet a farther improvement in the use of general Terms, whereby one word was made to make a multitude of particular existences” (III.i.3). Only under exceptional circumstances will the practical needs of life override it in favor of having distinct names for particular things (III.iii.5). Since words are “signs of Ideas” (III.i.3), Locke claims that the signification of every general term must be an abstract general idea, employed by the mind in reference to many particular existences.

V

Locke thus suggests that abstraction is not only a separation but also a generalization. First of all, abstraction means to separate what is common to many from what is unique to each. This happens when you give a consideration of a part of a complex idea in separation from others. Abstraction then is to focus on a part of a complex idea to the exclusion of other parts. But abstraction here is not a mere passive gazing but an active exercise of mental absorption. After all, for Locke, abstraction is one of the three major operations, i.e., activities, of the mind to generate complex ideas, together with combination and comparison. Abstract ideas are “the invention and the creature of the understanding” (III.iii.11). This is why abstraction is also a generalization. Abstract ideas for Locke then must be general or universal ideas. In this respect, abstract ideas are “general representative of all of the same kind” and thus serve as “standards to rank real existences into sorts” (II.ii.9).

From this point of view, abstraction happens only if the individual mind begins to let in particular ideas through sensation or reflection, has these ideas fixed and deposited in memory and makes use of words to signify their ideas to others (II.ix.10). In contrast to Arnauld, Berkeley, and Thomas Reid, who all believe that an abstract idea is not by itself a general idea, Locke strongly suggests that an abstract idea is, *eo ipso*, a general idea. In particular, abstract ideas cannot be a loosely connected bundle of particular ideas (as Berkeley later thought) but a “precise, naked appearances in the mind, without considering,

how, whence, or with what others they came there” (II.ix.9). Thus, the power of abstracting is what distinguishes the humans from other animals (II.ix.12).

Is an abstract idea for Locke then a particular idea merely considered in separation from other aspect of a complex idea as IM charges? Is an abstraction for Locke a selective attention? We have seen that there is some pretty strong evidence against it. First, the language of separation ubiquitous in the *Essay* tells a different story. Further, if abstraction were merely selective attention, then an abstraction would not exactly amount to generalization. But Locke holds that abstract idea is the same as a general, universal idea. Indeed, if abstraction were a merely selective attention, then abstract idea would not have a precise range of objects as its reference. But a Lockean abstract idea is that “precise, naked appearance” with a determinate class of objects. This class is not unchangeable but it is not indeterminate either as the doctrine of selective attention in IM suggests.

Further, there are two types of abstract ideas for Locke: qualitative abstract ideas and substantive abstract ideas. First, qualitative abstract ideas are formed, e.g., when we observe the same quality in various objects and consider that appearance alone, making it a representative of all of that kind. This includes such ideas as the idea of whiteness. Secondly, substantive abstract ideas are formed, e.g., when we leave out something that is peculiar to each individual, and retain so much of those particular complex ideas of several particular existences as they are found to agree in. The idea of man is a case in point.

Finally, note that Locke’s abstract idea viewed as separate but general ideas does not imply that his ontology of particular objects is mistaken. Nor does it entail that his view of abstraction is incompatible with his ontology. For on this view the abstract general ideas are not independent, self-subsisting entities, but mind-dependent modes of understanding. They are creatures of our understanding. On a plausible yet strict sense of ‘existence’, they do not genuinely exist in the way that e.g., my desk or car exist. For example, Locke says that general ideas such as the idea of a triangle – i.e., the idea of a figure which is “neither Oblique, nor Rectangle, neither Equilateral, Equicural, nor Scalenen; but all and none of these at once” – are “something imperfect, that *cannot exist*” (IV.vii.9; emphasis mine). Thus his particularist ontology remains intact.