

Locke on Nominal vs. Real Essence and the Identity of Substances

Why a "Mass of Matter" and an "Oak Tree" Can Be in the Same Place at the Same Time

Michelle Dyke

Yale University

In "Locke on Individuation and the Corpuscular Basis of Kinds," Dan Kaufman argues there is an "intractable" problem in Locke's *Essay Concerning Human Understanding* involving a contradiction between Locke's views on the identity of individual "things" and his understanding of the real and nominal essences of substances. Locke's opening remarks on the identity of "things" in Chapter XXVII of Book II imply that an "oak tree" and the "mass of matter" that constitutes it at a given time are two different things and that they can coincide in the same place and time provided they are of different "kinds." Intuitively, the different kinds they exemplify are simply indicated by the names "oak tree" and "mass of matter," respectively. Yet Kaufman believes Locke's discussion of nominal and real essence, in combination with Locke's corpuscular understanding of the basis of qualities, commits Locke to the claim that it is impossible for any x and y to share the same real essence and yet differ with respect to any of their nominal essences, and thereby differ in kind, as would be required of the coinciding "oak tree" and "mass of matter." Yet Locke neither is nor should be committed to such a claim. Kaufman's criticism problematically fails to take into account that the properties associated with a given nominal essence need not be, and in fact often will not be, the result of features of any one of what Kaufman refers to as an "individual real essence." The alleged tension may therefore be resolved. The realization that the properties of a given nominal essence need not be a subset of features of some one individual real essence helps to clarify the entirety of Locke's

discussion of the identity of substances; Locke's theories of the essence and identity of substances are not only compatible but in fact mutually reinforcing, even if the emerging conception is, for external reasons, not totally compelling.

Locke's statements in Chapter XXVII of Book II do indeed commit him to the claim that an oak tree and the mass of matter constituting it at a given moment are two distinct things of different kinds. Locke states it is impossible for "two things of the same kind [to] exist in the same place at the same time," and that "one thing cannot have two beginnings" in place and time (II.xxvii.1). As Vere Chappell had already argued elsewhere, it follows from these principles and from Locke's own description of the persistence conditions for an oak tree and for a mass of matter that they are not identical things (Kaufman 502). A mass of matter, for Locke, is a particular collection of conjoined atoms; the same mass cannot survive a loss, replacement, or addition of particles (Kaufman 502). Yet the persistence conditions for organisms, according to Locke, involve continuation of the same "life." A tree can survive the loss of a few of its atoms and remain the same tree provided it still partakes of the same continued life (Kaufman 502). The tree would, however, be constituted by a new mass of matter since its atoms are not exactly the same. Since no one thing can have two beginnings in place and time, Locke must hold that a tree and the mass of matter constituting it at a given moment are not the same identical thing. They must be two things of different kinds since they do coincide.

Kaufman terms Chappell's interpretation, which holds that a mass and an organism can be non-identical coinciding things of different kinds, the "Coincidence Interpretation" of Locke. Kaufman writes that in order to defend Locke's account as coherent, the defender of this interpretation must be able to explain what the two different kinds are, exemplified by a mass and an organism, that allow them to coincide. The obvious answer, he concedes, is that those two kinds are simply "mass" and "organism," respectively. These names are indicative of two different

nominal essences that happen to pick out, at a particular time, the same sensible object. Yet the great difficulty, according to Kaufman, is that Locke's discussion of the real and nominal essence of substances does not allow an organism and the mass constituting it at a given time to be of different "kinds" at all because they share the same "individual real essence" and two x and y of the same individual real essence cannot differ with respect to any of their nominal essences.

Locke presents his view of essence as an alternative to the view held by the Aristotelians who "suppose a certain number of those Essences, according to which, all natural things are made, and wherein they do exactly every one of them partake, and so become of this or that *Species*" (III.iii.17). Locke insists instead that "The other, and more rational Opinion, is of those, who look on all natural Things to have a real, but unknown Constitution of their sensible Parts, from which flow those sensible Qualities, which serve us to distinguish them one from another, according as we have Occasion to rank them into sorts, under common Denominations. (III.iii.17)

There is thus a key distinction for Locke between real and nominal essence. Real essence refers to that unknown constitution of corpuscular parts in nature from which observable qualities spring.¹ Yet we group the observed objects of our experience under certain names that emphasize different observable characteristics that we take to be important or noteworthy. For example, anything we consider to be a sample of the metal "gold" will display a certain color, malleability, solubility in *aqua regia*, etc. (III.vi.6). We human language users designate these characteristics as the necessary "properties" associated with the nominal essence of "gold." Locke believes there is some corpuscular feature or features at the level of the real essence

¹ Locke is clearly partial to corpuscularian explanations of qualities at the level of real essence although Locke's philosophical commitment to corpuscularianism as the only possible characterization of real essence has been challenged, for example by Lisa Downing in "Locke's Ontology." Kaufman assumes that Locke is committed to a corpuscularian understanding of real essence, and this can be assumed for the sake of this paper's argument as well.

of a sample of gold that account for its observable characteristics. Interestingly, Locke is not committed to the claim that manifestation of the same observable qualities in two objects necessarily implies that the same (qualitatively) underlying real essence is the basis of them (Kaufman 521). Two samples of malleable metal, even if we call them by the same name (a name whose nominal essence includes malleability as a property) may, for all we know, have quite different real essences that make their malleability possible (Kaufman 521).

This much Kaufman agrees with. Yet he interprets Locke's understanding of the disconnect between real and nominal essences to entail a reductive formation of nominal essences, that is, the set of properties associated with any nominal essence that may be applied to a sensible object must be a subset of the properties associated with that object's "individual real essence":

Nominal essences are the "Workmanship of the Understanding" (3.3.14) according to Locke. Among the reasons for this label is that despite the fact that the qualities included in the nominal essence are produced by the individual real essence of a body, it is we who decide which qualities to include in the nominal essence. Thus, Locke believes that in the formation of nominal essences, both we and the individual real essence play the crucial roles. (Kaufman 518)

While we have the choice of which qualities to include as necessary properties of a nominal essence, these properties will, according to Kaufman, be a subset of the qualities of the individual real essence of a substance to which the name can be applied; "Given Locke's commitment to corpuscularianism, nothing other than the individual real essence of an individual could serve as the basis for the observable qualities which go into the creation of the nominal essence of a kind" (Kaufman 518). Given that "kinds" are a class of nominal essence, Kaufman concludes, "Necessarily, for any x and y, if x and y have the same individual real essences, then for any kind K, either (i) both x and y are members of K or (ii) neither x nor y are

members of K." (527) This is true, argues Kaufman, because whatever qualities would be required for membership in a given kind (as necessary properties of the nominal essence associated with it), two individuals x and y of the same real essence will both either display or fail to display these qualities.

Kaufman finds this result incompatible with the claim that an oak tree and the mass of matter constituting it at a given time can be two distinct things of different kinds:

[T]he defender of the Coincidence Interpretation needs to establish that Locke held that two things that are composed of numerically-identical material parts arranged in a numerically-identical manner at a time can be of different kinds. That is, the defender of the Coincidence Interpretation of Locke must show that two things with the same individual real essence can differ with respect to at least one of their nominal essences. When stated in this way, the problem seems intractable... (521-2)

Yet Kaufman errs in thinking that the formation of nominal essences involves merely picking and choosing from among the qualities of some one individual real essence, such that all the properties of a nominal essence must be a subset of properties of just one "individual real essence." Locke makes no such claim explicitly, and his description of our "complex ideas" of substances encourages an outright rejection of this supposition. The nominal essence of an "oak tree" can include properties such as those describing its growth and behavior over time that are not properties of any one "individual real essence." The properties of an individual real essence at time t are not exhaustive of all the possible properties of nominal essences that could characterize a substance whose real essence is, at time t, that individual real essence. It is for this reason that two different nominal essences, with different sets of necessary properties, can intelligibly be applied, at time t, to a sensible object of some one individual real essence.

Strictly speaking, phrases like "oak tree" and "mass of matter" directly signify

not material objects, according to Locke, but ideas: "Words in their primary or immediate Signification, stand for nothing, but the *Ideas* in the Mind of him that uses them" (III.ii.2). "Oak tree" and "mass of matter" in particular are examples of Lockean complex ideas, and more specifically, substances². Locke explains that the necessary properties associated with the nominal essences of substances are themselves whatever ideas we see fit to associate for the sake of identifying substances in ways we find useful or desirable:

The measure and boundary of each Sort, or *Species*, whereby it is constituted that particular Sort, and distinguished from others, is that we call its *Essence*, which is nothing but that *abstract Idea to which the Name is annexed*: So that every thing contained in that *Idea*, is essential to that Sort. This ... I call it by a peculiar name, the *nominal Essence*, to distinguish it from that real Constitution of Substances, upon which depends this *nominal Essence*, and all the Properties of that Sort ... (III.vi.2).

The complex ideas of substances are, according to Locke, built up of simple ideas. These simple ideas include not only primary and secondary sensible qualities like extension and color but also active and passive "powers" (II.xxiii.7). Locke explicitly insists that "*active Powers* make so great a part of our complex *Ideas* of natural Substances" (II.xxi.2). Yet powers are features that may not necessarily be reducible to the properties of any one individual real essence because they refer to abilities to "make, or... receive... change" (II.xxi.2). "I confess *Power* includes in it *some kind of relation*," Locke writes, "a relation to Action or Change" (II.xxi.3). Kaufman takes one individual real essence to be one particular corpuscularian arrangement of particles. Thus the exercise of a power may actually require a change from one individual to another at the level of real essence. For example, the idea of an oak tree can include powers like the ability to grow in height, the ability to take

² Kaufman agrees that these two things should be considered substances although he notes that certain other scholars have disagreed. Locke constantly refers to other organisms like men, horses, and swans, as prime examples of substances (II.xxiii.3, II.xxiii.14).

up water and nutrients from the soil and the ability to drop its leaves in the Fall. An oak tree remains the same tree after absorbing iron and magnesium from its soil overnight. Yet strictly speaking, the corpuscularian real essence of the tree before and after is quite different. Exercise of this power requires change from one "individual real essence" to another and so this power cannot be reduced to the features of one individual real essence. Yet this power can be one of the properties of the nominal essence of an "oak tree."

Locke was clearly not averse to understanding even our "simple ideas" to be indicative of change over time. For example, Locke's short list of our simple ideas of primary qualities includes not only figure and extension, which can intelligibly characterize objects in given instants, but also motion (II.viii.9). A simple idea of motion, derived from experience as Locke's empiricism requires, would not be formed on the basis of an observation occurring at one given instant; a Lockean idea of motion must be an idea of something occurring over a span of time. Since even simple ideas can involve a sense of processes occurring over time, the complex ideas of substances built up from simple ideas can legitimately reference processes occurring over periods of time. A characteristic "constant regular motion" is in fact one of the ideas Locke himself lists as a component of our idea of the Sun, a prime example of a substance (II.xxiii.6). Thus when Locke states that the complex ideas of substances are collections of "*Ideas...* observed to exist united together," Locke is not saying that all of the component ideas of a substance must exist together in one place and time such that the observable qualities they are based upon are enabled by the features of one individual real essence (II.xxiii.6). The characteristics of a named substance need not all be qualities of some instantaneous individual real essence of that substance.

Granted, since motion is a primary quality, it characterizes substance at the level of real essence. Yet when Kaufman speaks of "individual real essence," he is

speaking of the real essence of a substance at some given instant. An "oak tree" and the "mass of matter constituting it at time t" share the same real essence only in that they share an "individual real essence" at some one time t. This in itself casts doubt upon Kaufman's interpretation since the primary qualities are qualities of substance at the level of real essence (II.viii.15). Yet the instantaneous "individual real essence" would not even in principle be capable of displaying one of the primary qualities, namely that of motion. Locke clearly thinks motion is a quality. Yet if the characteristics of all substances (as properties of their nominal essences) are subsets of the qualities of one of their individual real essences, and no one individual real essence can itself possess the quality of motion, then how could Locke describe the substance of the Sun as having the quality of motion? If Kaufman is correct, then the *Essay* is even more deeply confused than Kaufman realizes. One might attempt to defend Kaufman's interpretation by appealing to the distinction between determinate and determinable qualities; one individual real essence might not be moving but it has whatever corpuscularian features are requisite for the ability to move. Yet this in itself does not explain how the complex idea of the "Sun" can include a determinate "constant regular motion, at a certain distance from us," as one of its simple ideas (II.xxiii.6). What is important to take away from this discussion of the quality of motion is that Locke makes room for even simple ideas to refer to processes occurring over spans of time; a simple idea of a quality or power need not be descriptive of some sensible object in a given instant.

Locke thinks we can and do form our ideas of substances on the basis of whatever observed features of nature we wish, even incorporating ideas of change over time into our ideas of substances. All of those constituent simple ideas forming the complex idea of a substance then become the essential properties of the substance's nominal essence; "The *Essence* of any thing, in respect of us, is the whole complex *Idea*, comprehended and marked by that Name" (III.vi.21). Thus, so

long as powers like the capacity for growth and the ability to absorb nutrients from the soil are parts of our idea of a substance like an "oak tree," those powers can be necessary properties of the substance's nominal essence. We may refer to the "mass of matter" constituting an oak tree at a given time to indicate a different complex idea of substance, in which no powers for behavior over time are included. Any properties included in the nominal essence of the "mass of matter constituting the oak tree at time t" make reference only to qualities that intelligibly characterize the object at that one instant. Thus the nominal essences of an "oak tree" and "the mass of matter constituting the oak tree at time t" are two non-identical sets of properties that can be applied to a sensible object that, at time t, has some one underlying real essence.

This interpretation of Locke according to which the properties of a nominal essence characterizing a substance need not be a subset of properties of any one of the substance's instantaneous "individual real essences," is consistent with a corpuscularian understanding of the basis of observable characteristics. Any observed quality or power that is included as a property of a nominal essence is still explicable in terms of qualities of the corpuscularian real essence. The ideas of certain powers will be derived from observations over intervals of time. Yet these ideas of power will be based on a series of observations of qualities at different instants. For example, the observation that a tree has grown a foot in height will consist of a collection of instantaneous observations of the color and shape of the tree. If the color and shape observed at two distinct instants are characterized by the proper difference, then the tree is understood to have grown. These instantaneously observed qualities have their basis in the qualities of some individual real essence. Yet a tree one foot and two feet in height are not the same corpuscularian individual. To identify a growing tree as one substance and to attribute to it the power of growth is to identify a property of the "tree" that is not a property of any one individual real

essence, even though all the qualities enabling us to form the idea of such a power over time must be qualities of real essences.

Thus Dan Kaufman is incorrect when he states that Locke is committed to the claim that given any x and y which share the same individual real essence (at any instant) and given any kind K , x and y are either both members of K or both not members of K . An "oak tree" and the "mass constituting it at time t " share, at time t , the same individual real essence. Yet the non-identical sets of properties associated with each of these nominal essences need not be subsets of the properties of that one individual real essence. The nominal essence of an "oak tree" includes powers to perform behaviors over intervals of time while the nominal essence of the "mass constituting the tree at time t " includes no such powers. The two different nominal essences of these "things" constitute their different "kinds." We can therefore coherently say, against Kaufman's objection, that an oak tree and the mass constituting it at a given instant are two distinct things of different kinds, coinciding in space and time at that instant. The alleged contradiction between Locke's views on identity and his views on real and nominal essence can be resolved.

The realization that Locke thinks that nominal essences can include properties that are not properties of any one individual real essence at some given instant helps us to make much better sense not only of Locke's remarks on spatiotemporal coincidence and kinds but of the entire Chapter XXVII of Book II, on "Identity and Diversity." Locke's conceptions of the nominal essences of substances and of the persistence conditions for individuals over time are directly linked. Locke realizes that the identity of a substance like an oak tree or a horse cannot consist in corpuscular sameness over time (II.xxvii.3). He explains that a tree is considered the same tree even as it grows from a small seedling to a large tree and a horse remains the same horse throughout its lifetime even while it gains and loses weight (II.xxvii.3). The identity of these substances remains the same "though, in both these

Cases, there may be a manifest change of the parts" (II.xxvii.3). Locke realizes this entails there must be some difference between the oak tree, whose identity remains stable over time, and the particular mass of matter that constitutes it at some given time:

[That difference] seems to me to be in this; that the one is only the Cohesion of Particles of Matter any how united, the other such a disposition of them as constitutes the parts of an Oak; and such an Organization of those parts, as is fit to receive, and distribute nourishment, so as to continue, and frame the Wood, Bark, and Leaves, *etc.* of an Oak, in which consists the vegetable Life. (II.xxvii.4)

Locke is not arguing here that what makes something an oak tree and not a mere mass of matter is some one precise arrangement of parts that enables life at that moment as opposed to some jumble of particles that does not, because at any instant, as Locke notes, there will be one arrangement of mere matter that constitutes the tree (II.xxvii.4). He is instead drawing attention to the differences between our ideas of "masses" and of "oak trees." A mass is simply a collection of particles at some instant. Yet our idea of a tree entails certain abilities which Locke calls collectively the "disposition" to "continue" to support the same life over time. The exact parts of a tree may change but something that remains a tree must continue to "receive, and distribute nourishment." Continued possession of certain powers through time, as parts of the very idea of an oak tree, is intimately tied to its identity: "existing constantly from that moment both forwards and backwards in the same continuity of insensibly succeeding Parts united to the living Body of the Plant, it has that Identity, which makes the same Plant" (II.xxvii.4). As we have seen, Locke takes every constituent idea of our complex idea of a named substance to be a necessary property of its nominal essence (III.vi.21). Locke also notes that "Existence" is the key to a thing's identity; a thing is the same thing so long as it continues to exist (II.xxvii.3). We can easily answer the question about what it takes

for a named substance to continue to exist by referring to the properties of its nominal essence. An object must continue to display the qualities, and powers, associated with the nominal essence applied to it in order to retain its identity as that substance.

Thus for Locke, identity is relative to some nominal essence; this is a key aspect of his theory of identity: "such as is the *Idea* belonging to that Name, such must be the *Identity*: Which if it had been a little more carefully attended to, would possibly have prevented a great deal of that Confusion..." (II.xxvii.7). If we accept Kaufman's interpretation of Locke, then we cannot make sense of even the broadest aspects of Locke's theory of identity. For according to Kaufman, Locke must hold that the properties of nominal essences are qualities observable at some one instant (Kaufman 530). If this is true, then Locke should have no reason to say that an oak tree and the mass constituting it at a given time are different things with different names at all because their observable qualities in that one instant will be exactly the same. The things identified by the names "tree" and "mass" do indeed have different identities according to Locke because they have different persistence conditions. Given that Lockean identity is relative to nominal essence, their identity is easily accounted for when we realize that different persistence conditions are entailed by their different nominal essences which, in the case of the tree, include powers governing characteristic behaviors over time, and for the mass, a lack thereof.

The thought makes intuitive sense that the ideas of a named substance's properties, its persistence conditions and its identity over time are all intimately linked. When we distinguish between "an oak tree" and "the mass of matter constituting it at time t," we do take ourselves to be making a meaningful distinction. Specifically, we take these things to be different because our ideas of them involve very different conceptions of their behavior over time. We realize that one same oak tree will be composed of very different arrangements of matter throughout its

lifetime. Yet when we refer to a mass of matter at time t , we are referring to something that is unique to one instant of time and which would not be the same "mass" given any modification of its parts. We would not bother to make such a distinction if we were not accustomed to thinking of trees as things that have identity and persist through time. Locke's willingness to account for oak trees and the masses constituting them at a given time as different things, thereby entailing different nominal essences, different persistence conditions, and different identities, should be considered a merit and not a fault of Locke's descriptions of essence and identity.

While Locke's accounts of nominal vs. real essence and the identity of substances do allow for one consistent theory, that theory has at least one major problem. Locke explicitly argues that every component simple idea of the complex idea of a substance is a necessary property of that substance's nominal essence (III.vi.2). Thus a substance can no longer be the same substance as soon as it ceases to display any of its necessary properties. Yet consider, for example, the idea of a "swan." According to Locke's own example, this idea includes, among other characteristics, "white Colour, long Neck, red Beak, black Legs" as well as "a power of swimming in the Water, and making a certain kind of Noise" (II.xxiii.14). Yet it is quite easy to imagine an object that ceased to display any one or even multiple of these characteristics which we would nonetheless continue to identify as a "swan." What is unclear is how many of these properties an object must cease to display before it ceases to be a swan. What is truly essential to a swan's continued identity is not so clear and simple as Locke's account would suggest.

One could attempt to salvage Locke's theory by objecting that we have not correctly identified our idea of a "swan" in general; these are characteristics of some or even most swans but they are not the essential characteristics that really make something a "swan" in our minds. Yet it is unclear that there is actually even one characteristic that every single example of what we would want to consider a "swan"

has in common, especially if we are looking for a set of characteristics not fully shared by any examples of some other named item we would want to distinguish as different like a "duck" or a "flamingo." This is certainly debatable, and anyway this theory makes major departures from the one actually offered by Locke who did suggest that all the usual characteristics that come into mind for a substance like a "swan" are necessary properties of the "swan" as a named sort. Thus while Locke's theory of the connection between a substance's identity and its nominal essence is at least consistent, it raises difficult questions that call its viability into doubt.

To conclude, while Kaufman accuses Locke of a gross inconsistency between his theories of the identity and essences of substances, his criticism hinges crucially upon a failure to recognize an important aspect of Locke's thinking on these subjects; Locke need not, and did not, hold that the properties associated with any one nominal essence must be a subset of the properties of the real essence, at some specific time t , of the sensible object to which the name is applied. Some individual real essence at a given instant can indeed be characterized by two different nominal essences with non-identical properties that can refer to behaviors occurring over differing spans of time. An awareness of this clarifies the alleged tension with the Coincidence Interpretation of Locke's remarks on spatiotemporal coincidence since one sensible object of one individual real essence at time t can indeed be associated with two different "kinds." Yet this awareness also sheds new light on basic aspects of Locke's theory of identity. For Locke, identity must be relative to some nominal essence; we must specify some named individual before we can ask, with respect to the necessary properties of that nominal essence, when its existence begins and when its existence ends. Locke can intelligibly distinguish between two things that have the exact same observable qualities at some given instant of time, like an oak tree and the mass of matter that instantaneously constitutes it, precisely because the nominal essences of two things can include properties that make reference to

characteristic behaviors that occur over time. Locke's accounts of real vs. nominal essence and the identity of substances are not only consistent, but reinforce each other in key ways.

Works Cited

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