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LOCKE ON SUBSTANCE

Han-Kyul Kim

Introduction

Our world is populated by many different kinds of things, such as oaks, swans, horses, elephants, and men. Locke refers to these as 'particular sorts of Substances' in the chapter of the *Essay* entitled '*Of our Complex* Ideas *of Substances*' (2.23). Such ordinary-sized natural objects, however, depend on the insensible particles that compose them – which he calls 'atoms' or 'corpuscles' – for their existence. The particular sorts of substances can thus be considered 'substances' only in such a looser sense that they are nevertheless considered basic members of the world (though not the most basic stuff), each having a distinctive atomic structure from which the set of their characteristic qualities flow. Clearly, this looser way of speaking stands in contrast to the stricter account of 'three sorts of Substances' that Locke put forth in the chapter '*Of Identity and Diversity*' (2.27), including 'God', 'Finite Intelligences' (or 'Finite Spirits'), and '*Bodies*'. The third sort refers to the fundamental stuff of the world, viz., 'Particle[s] of Matter' that constitute the particular sorts of substances. E.J. Lowe (2005, 61) describes the three sorts as 'the only genuine substances' for Locke.

Locke, however, devotes far more of the *Essay* to the particular sorts than to the three sorts. Whereas the latter are more metaphysically laden sorts, the former include the ordinary-sized natural objects. Furthermore, he refers to the much-contested 'substratum' with regards to the latter, but not the former – as a support for the bundle of qualities displayed in a given substance. It should also be noted that Locke's list of the particular sorts includes 'men'.[1] In regard to this nobler sort, he draws a further classification – such as 'the Substance of spirit' and 'the Substance of the body' – only in terms of their nominal essence. As we shall see, a naturalistic approach can be found in his account of the human-related sorts as well. In this chapter, I shall explore how Locke develops a theory of substance in the *Essay* that is less metaphysical and more naturalistic and epistemically humble than those of his rationalist contemporaries.

1 Particular sorts of substances, substrata, and a functionalist reading

The particular sorts of substances undergo constant changes over time. In Locke's own example, an oak grows 'from a Plant to a great Tree', and a colt 'grow[s] up to a Horse, sometimes fat,

sometimes lean' (2.27.3). Even when no apparent change is observed at the macroscopic level, the insensible particles that constitute the objects are 'taken away' and new ones 'added' (2.27.3) continually. By contrast, the three sorts of substances undergo no such temporal change. First, God is 'without beginning, eternal, unalterable' (2.27.2). The second and third sorts suffer no change in their simple nature either, though they may undergo some change in what Descartes would call their 'modes' or their extrinsic properties.

By the second sort, 'Finite Spirits' (or 'Finite Intelligences'), Locke seems to refer to a spirit qua spirit, perhaps an immaterial substance. In the *Essay*, his use of the term 'spirit' (or 'intelligence') is not confined to the human mind.[2] The second sort may refer to a non-human immaterial mental substance. We shall return to this matter in Section 3. At any rate, the simple nature of an immaterial spirit undergoes no change, though it may have a different set of modes (e.g., wills or thoughts) at different times. Likewise, the third sort, each atom, depends on nothing other than itself, to the extent that it is 'the same with it self . . . and must continue [so], as long as its Existence is continued' (2.27.3). By its physically simple nature, each particle can preserve its own identity over time, while bearing a different set of extrinsic properties at different times, such as location, speed, and direction of motion.

Here, the question arises as to why Locke put forth the metaphysically laden, three sorts of substances at the start of 2.27, a significant chapter of the *Essay*, in which his main aim is to suggest a solution to the identity-over-time problem, a topic actually irrelevant to any of the three sorts. Locke's list of the three sorts of substances, it should be noted, appears only in the second section of 2.27. From the third section onwards, he explores the main topic, i.e., identity-over-time. While an oak tree in my garden has undergone a series of gradual changes over many years, for example, I can nevertheless legitimately say that the 'same' tree has existed in that place over the years. What then justifies the use of the term 'same' here? It is indeed the main question raised by Locke in 2.27. As is well known, he pursues the same question with regard to the identity of a person later in the same chapter.

What does identity-over-time consist in? Before Locke, this question was not so seriously considered among scholastic Aristotelians, who explained the identity of an individual substance by appealing to the 'substantial form' allegedly instantiated in it. The Lockean individual substances have no such metaphysical elements in themselves. Instead, their identity consists in the organizational sameness of the parts over time. Locke must have felt the need to explain more clearly the exact nature of the newly emerging philosophical problem, to which his chapter aims to provide a solution. This may explain why he mentions the three sorts of substances at the start of the chapter, despite the fact that the chapter's main topic relates less to them than to the ordinary-sized objects – namely, the particular sorts of substances.

Locke is no bundle theorist. There must be some support, he believes, for the bundle of qualities displayed in a particular sort of substance. It is inconceivable that a quality or set of qualities can exist on its own without 'some common subject' (2.23.4). Such a common subject or support is identified with a 'substratum', whose role is to 'unite' the set of qualities: they are 'all united together in an unknown *Substratum*' (2.23.37). It is identified *only* in terms of its unifying role, which is also its *sole* role: 'if any one will examine himself concerning his *Notion of pure Substance in general*, he will find he has no other *Idea* of it at all, but only a Supposition of he knows not what support of such Qualities' (2.23.2).

As I suggested elsewhere (2015, 2019), substrata can be viewed as 'functional' entities. This term was not used by Locke himself; it is a more modern term, widely used in metaphysics and philosophy of mind, associated with the theory called 'functionalism', in which an object of some kind is identified and characterized by reference to a set of typical roles it plays for that kind, regardless of what intrinsic nature occupies the role. My use of the term 'function' with

regard to Locke's substrata can be justified by reference to the following passage from 2.13.19: 'So that of *Substance*, we have no *Idea* of what it is, but only a confused, obscure one of what it does'. Here, 'what it does' can be taken as referring to its functional feature, as opposed to its intrinsic feature that plays the role – namely, 'what it is'. Our idea of a substratum is thus 'obscure' and 'relative' (2.23.3) inasmuch as we only know what it *does* (its role), but not what the *doer* (the role-player) intrinsically is.

This functionalist reading should be differentiated from the so-called bare substratum reading of Locke's view on substratum, advocated by A.S. Pringle-Pattison (1924), Gerd Buchdahl (1969), and Jonathan Bennett (1971, 1987), among others. On this long-standing interpretation, an object's qualities are supported by a naked bearer – 'a subject in which a set of properties is instantiated while itself being property-less or bare or unqualified in some problematic way', in Bennett's words (1987, 199).[3] According to the functionalist reading, any role-realizing activity must be performed by a positively natured property. This applies to any potential realizer of the unifying role as well. The role of uniting an object's qualities into a single thing must be played by some natured property. Although a naked substratum may be logically conceivable, it cannot actually exist in the Lockean world. For him, to be is to be natured – namely, for anything 'granted to have a being' is 'in nature, of which we have no ideas' (*Works* IV, 18). In the Lockean world, no such naked being can be given the role of unifying the bundle of qualities. Locke often refers to a super-human being when referring to the intrinsic nature of things in themselves: 'what *Idea* [other Species of Creatures] may receive of [the inmost Constitutions of Things], far different from ours, we know not' (4.3.23). This reference to higher intelligent beings is meant to imply that, though unknown to *us*, the intrinsic constitutions of things are positively natured, never bare.

Notably, Michael Ayers (1975) identifies substrata with real essences. Locke himself sometimes ascribes the unifying role to real essences as well, describing them as 'an unknown Support and Cause of [the] Union' of various qualities (3.6.21). Given this, substrata may appear to be either redundant entities or else reducible to real essences; but in my view, there is a significant difference between them.

As I see it, Locke's epistemic humility about substrata has a different basis than his epistemic humility with respect to real essences. The former concerns what actually occupies the unifying role *in a particular sort of substance*, whereas the latter is directed ultimately at the solid particles and thus concerns the intrinsic nature of the *world* in general. There are several definitions of 'real essence' in the *Essay*. Among them, the following is fairly similar to what we now call 'intrinsic nature': a thing's real essence is '[its] particular constitution, which every Thing has within itself, without any relation to any thing without it' (3.6.6). Locke describes 'real essence' elsewhere as 'the very being of any thing, whereby it is, what it is' (3.3.15) and by virtue of which each individual thing can be what it is. At times, he describes a thing's real essence by reference to its causal role, by suggesting that it is that 'on which [not only] these Qualities, [but also] their Union, depend' (3.6.6). This is what he refers to, in his correspondence with Edward Stillingfleet, as 'internal essence' (*Works* IV, 26). This general sense of 'real essence', however, is not necessarily confined to the ordinary-sized objects; it is applicable to the solid particles as well, that compose them. Locke holds that 'there is something in solid substance [that is, each solid particle] . . . that we do not understand' (*Works* IV, 465). We are thus incurably ignorant about the intrinsic nature of the fundamental stuff of the world, namely 'the greatest Instruments of Nature' (4.3.25). Locke's epistemic humility with respect to real essences, directed ultimately at the basic particles of the world, thus runs deeper than that of substrata.[4]

Unlike Ayers, Lowe identifies the substratum of a given object with 'that very object' (2005, 70). Lowe views a whole system of atoms to be involved in playing the role of uniting the

qualities that the system displays. However, this reading would end up neglecting the fact that Locke regards a substratum as a *component* of an individual substance rather than as the substance itself. What Locke regards as unknown is the substratum qua occupant of the unifying role, not the whole substance.[5] Lowe's reading of Locke's notion of substrata can be fruitfully compared with C.B. Martin's, who views an object's substratum as 'something *about* the object' (1980, 6) – namely, an *aspect* of it, or a *way* it is, so that '[t]he relation between substrata and [the] properties [that they support] . . . stands between things *about* or ingredients *of* objects and not between objects themselves' (1980, 7). On Martin's account, a substratum is not a physical part of the given object. The screen of a laptop, e.g., is a part of it, but can also be *an object* by itself when detached from the laptop's other parts. By contrast, a substratum cannot exist on its own by any means. According to Martin, a substratum is not a 'property' either, for every property must be borne by a substance, and a substratum is not borne by anything other than itself. It depends on the object of which it is a substratum only in the sense that it is an *aspect* of that object.

Interestingly, Lowe (2005, 72–73) uses the term 'role' in his characterization of Martin's reading, which he says 'in some ways resembles' his own: 'Martin's suggestion is that a Lockean substratum is neither an object nor a property, but, rather, is what it is *about* an object that plays the role of bearing (or supporting) the object's properties'. In Martin's discussion, however, the functionalist viewpoint that I suggest is not fully developed. Martin would have to say that the bundle of qualities is another *aspect* of the given object, and that one aspect (the bundle of qualities) depends on another aspect (the substratum). But it would make little sense for one aspect to *depend* on another, given that an aspect is a selective and partial consideration of the whole. Locke's claim that a substratum is the support for an object's qualities seems, however, to designate the former as ontologically more basic than the latter. Lowe's description of Martin's interpretation thus more accurately characterizes my own reading than Martin's.

2 The substances of spirit and body: a nominalist reading

Locke's functionalist account of substrata includes his further classified substances, such as 'the Substance of spirit' and 'the Substance of the body', with regard to men. He posits a substratum in each, but his doing so shouldn't be taken as a commitment to metaphysical dualism. In this section, I argue that for Locke, the spirit-body distinction is just nominal, and the dual substrata should be viewed under his nominal dualism. That is to say, such a supposed support for mental qualities should not be taken as an immaterial substance.

Locke coined the term 'nominal essence' in the *Essay*, defining it as 'nothing but the *abstract* Idea' of a kind '*to which the Name is annexed*' – so that 'every thing contained in that *Idea*, is essential to that Sort' (3.6.2). While an individual substance of a particular sort has its own essence by virtue of which it is what it is (which Locke calls a 'real essence'), every member of a kind has something in common, viz., 'the *Essence* of each *Genus*, or *Sort*', which is, in his account, nothing but an abstract idea. While Locke's account of the nominal essences of ordinary natural kinds (e.g., water, gold, horses, and men) has been much discussed, his mind-body nominalism has been largely overlooked. The fact that Locke applies his account of nominal essence to the broader categories of mentality and materiality has seldom been acknowledged.[6]

A nominal essence can be considered a semantic (rather than physical or metaphysical) entity which describes a set of characteristic roles that an individual substance must satisfy in order to be classified as a member of a certain kind.[7] For example, 'the *nominal Essence* of [*Horse*]' is thus 'that complex *Idea* the word [*Horse*] stands for' (3.6.2). Is a horse, however, a purely *physical* being like a piece of gold or stone, or does it have *mentality* like us? Such questions are concerned with what Locke refers to as '[*t*]*he primary* Ideas *we have peculiar to Body*, as

contradistinguished to Spirit' (2.23.17). Significantly, Locke allows for nominal essences of this more general type that covers a multitude of species (perhaps all the natural species, in the case of materiality) which thus correspond to such higher-level abstract ideas – namely, the ideas of mind and body. Accordingly, the dual substrata posited in the human-related sorts should be viewed under his nominal dualism, wherein the spirit-body distinction is simply drawn by reference to such abstract ideas that spell out the characteristic roles of mentality and physicality.

To begin with, let us consider the following passage, in which Locke allows a substratum for each set of qualities – mental and physical:

> [B]y supposing a Substance, wherein *Thinking*, *Knowing*, *Doubting*, and a power of Moving, *etc.* do subsist, *We have as clear a Notion of the Substance of Spirit, as we have of Body*; the one being supposed to be (without knowing what it is) the *Substratum* to those simple *Ideas* we have from without [i.e., by sensation]; and the other supposed (with a like ignorance of what it is) to be the *Substratum* to those Operations which we experiment in ourselves within [i.e., by reflection].
>
> *(2.23.5)*

In this passage, Locke refers to substrata with regard to the two types of features, positing one for each type. That is, the mental features (e.g., the powers of thinking, knowing, doubting, and moving) require a substratum for themselves, separate from the substratum required for the physical features.

Unlike Cartesian dualists, however, Locke seems to draw this distinction only in terms of their nominal essence. He often refers to human psychological tendencies as the ground for the dualistic beliefs that were widespread at the time, such that 'we are apt to think' that our own mental activities are 'Actions of some other *Substance*, which we call *Spirit*' (2.23.5). In his further account, it is by supposing a support for the mental operations or activities 'which we experiment in our selves within' that '[*w*]*e have . . . a Notion of the Substance of Spirit*', while our '[*Notion*] of *Body*' is obtained from supposing a support for the 'simple ideas we have from [the physical qualities of external objects]' though sensation (2.23.5). Accordingly, the dual substrata are posited by reference to the two types of mental events: first, reflection, and second, the occurrence of simple ideas in us caused by external physical objects.

While the simple ideas of sensation (such as those of colours, smells, tastes, and sounds) are caused by 'External, Material things' (2.1.4), reflection is a faculty by which one perceives the operations of one's own mind, so that the simple ideas of reflection do not represent the external world in the way that those of sensation do – 'having nothing to do with external Objects' (2.1.4). The main function of reflection is to observe the 'manner' (2.1.4) of the operation of the mind as well as the occurrence of some passion such as satisfaction and uneasiness. The ideas of reflection are thus 'distinct *Ideas*' from those of sensation that 'we [receive] from Bodies affecting our Senses' (2.1.4). Locke derives the distinction between the ideas of mind and body from the fact that sensation supplies the materials for our idea of corporeality, whereas reflection supplies the materials for our idea of mentality. This approach to the spirit-body distinction prevails throughout 2.23. Let us explore Locke's nominal dualism in more detail.

Section 22 begins with the following statement: 'Let us *compare* then our complex *Idea* of an immaterial Spirit, with our complex *Idea* of Body, and see whether there be any more obscurity in one, than in the other, and in which most'. When Locke uses the term 'immaterial Spirit', he contrasts body and spirit at the level of the complex ideas that we have of them. In 2.23.15, he distinguishes the way in which we form the idea of matter from the way we form the idea of spirit. We acquire the idea of matter 'by putting together the *Ideas* of coherent solid parts, and

a power of being moved', whereas the idea of 'immaterial Spirit' is formed 'by putting together the *Ideas* of Thinking, Perceiving, Liberty, and Power of moving themselves and other things'. Here, the term 'immaterial' is thus simply an adjective used in contrast to 'material'. The idea of immateriality is a complex idea constructed by our mental processes. In this passage, there is again no sign that the thing that has the power of thinking (which we call 'mind') and the thing that has the power of solidity or of being moved (which we call 'body') are metaphysically distinct.

The difference between the Lockean ideas of mind and body does not ipso facto imply a difference in reality, as those ideas are 'superficial *Ideas* of things' (2.23.32). Locke further explains how one 'frame[s] the complex *Idea* of an immaterial Spirit' as follows:

> For putting together the *Ideas* of Thinking and Willing, or the Power of moving or quieting corporeal Motion, joined to Substance, of which we have no distinct *Idea*, we have the *Idea* of an immaterial Spirit; and by putting together the *Ideas* of coherent solid parts, and a power of being moved, joined with Substance, of which likewise we have no positive *Idea*, we have the *Idea* of Matter.
>
> *(2.23.15)*

Here, the term 'immaterial' is used to mean 'mental' (as a functional feature) rather than 'non-physical'. Hence, the meaning of the term as used in this sense has a natural basis, insofar as the fact that we are endowed with dual ways of viewing the world is itself part of the natural world.

Hence, when Locke uses the term 'immaterial Spirit' in Sections 15, 21, 22, 31, and 32 of 2.23, he does not mean to imply that spirit and body are substantially or metaphysically distinct. Rather, as used in these Sections, the term 'immaterial Spirit' serves only to highlight the difference between our ideas of body and spirit. When he uses the term 'immaterial' in the *Essay*, and in his correspondence with Stillingfleet, he tends to use it in one of three ways. Most commonly, he uses it in reference to the human mind, in the context of contrasting the categories of mentality and materiality (but with no commitment to substance dualism). This usage of the term 'immaterial' is most frequent in 2.23. At other times, Locke uses the term to refer to God, angels, or other super-human spirits. Occasionally, however, he uses it to refer to the Cartesian immaterial mind, for the purpose of making a point against it. Examples of this last usage are concentrated in 2.27, where Locke uses the term 'immaterial substance' several times in criticizing '*Cartesians*' who 'place thinking in an immaterial Substance only' (2.27.12).

However, the following passage might be taken as evidence that Locke is committed to substance dualism: 'I agree the more probable Opinion is, that this consciousness is annexed to, and the Affection of one individual immaterial Substance' (2.27.25). I do not take this passage to imply that Locke is a substance dualist. In my reading, by 'the more probable Opinion', he just means the *more widely held, widespread* or *popular opinion* of his time; i.e., the opinion that the majority of people (himself excluded) see as more readily acceptable or credible, and not the one *more likely to be true*. Locke takes it as given that the immateriality of the soul is the more popular view among his contemporaries. But he also claims in his correspondence with Stillingfleet that the immateriality of the soul cannot be proved or demonstrated 'from natural reason' (*Works* IV, 474), stating that:

> if your lordship means by a spiritual an immaterial substance, I grant I have not proved, nor upon my principles can it be proved, (your lordship meaning, as I think you do, demonstratively proved) that there is an immaterial substance in us that thinks.
>
> *(*Works *IV, 33)*

Accordingly, that to which Locke assents is simply *the historical fact* that the immateriality of the soul is the more popular opinion of his time. At no point does he concede, however, that this opinion is thus most likely true.[8]

In my reading, Locke's nominal dualism drifts neither towards substance dualism nor property dualism. There are, however, still some passages of the *Essay* that appear to suggest a form of substance dualism, such as when Locke talks about 'some Spiritual Being within me' and 'an immaterial thinking Being' in the following passage:

> Every act of sensation, when duly considered, gives us an equal view of both parts of nature, the Corporeal and Spiritual. For whilst I know, by seeing or hearing, *etc.* that there is some Corporeal Being without me, the Object of that sensation, I do more certainly know, that there is some Spiritual Being within me, that sees and hears. This I must be convinced cannot be the action of bare insensible matter; nor ever could be without an immaterial thinking Being.
>
> *(2.23.15)*

Richard Aaron (1971, 143) makes particular reference to this passage in his interpretation of Locke as a Cartesian dualist. But Locke's term 'spirit' here acquires its meaning only through the introspective mode of experience. In his correspondence with Stillingfleet, Locke regards the capacity of thinking as what we experience by 'experiment[ing] in our selves' (*Works* IV, 33). The perception (through reflection) of the action or mode of thinking within ourselves is the 'proof of a thinking substance in us, which in my sense is a spirit' (*Works* IV, 33).

Furthermore, the phrase 'an immaterial thinking Being' in the foregoing passage can be taken as referring to a *non-human* entity. In my reading, when Locke says that mental activities 'cannot be the action of bare insensible matter' (2.23.15), the 'bare insensible matter' refers to systems of corpuscles that are *not* fitly disposed. On Locke's view, only systems of matter that are 'fitly disposed' can have the power of thought (4.3.6). When Locke accounts for the possibility of thinking matter, he appeals to the possibility that God grants the power of thought to a suitable organization of corpuscles. The phrase 'immaterial thinking Being' might thus be taken as referring to a divine agency that sets up a rule regarding what kinds of corpuscular systems will be capable of giving rise to mentality.

3 Immaterial substance

What is an immaterial substance like? Locke seems to think it is not necessarily mental. If God wants to render an immaterial substance capable of thought, he must thus add the power of thought to it.[9] Let us consider the following quotation, where Locke mentions an immaterial substance qua immaterial substance:

> God has created a substance; let it be, for example, a solid extended substance: is God bound to give it, besides being, a power of action? that, I think, nobody will say. He therefore may leave [a substance] in a state of inactivity, and it will be nevertheless a substance; for action is not necessary to the being of any substance, that God does create. God has likewise created and made to exist, *de novo*, an immaterial substance, which will not lose its being of a substance, though God should bestow on it nothing more than this bare being, without giving it any activity at all. Here are now two distinct substances, the one material, the other immaterial, both in a state of perfect inactivity.
>
> *(*Works *IV, 464)*

Here, Locke speaks about God's creation of a 'bare' immaterial substance on which God bestows no activity, or none of the higher-level qualities, such as the power of thinking and will. In my reading, his use of this term does not imply a Bennett-style bareness, but only refers to an *inactive* state, in which no higher-level features have been instantiated, such as the power of thought, self-motion, or spontaneity.

According to Locke, it is not necessary for a substance to display such activities, for substances can be characterized only in terms of their dispositions, and the ascription of a disposition does not entail that the disposition is or will be manifested. One can thus ascribe fragility to a glass, e.g., even when it is not actually breaking, and indeed, even if it *never* actually breaks. The satisfaction of a condition that would be sufficient for the glass' fragility to manifest itself (e.g., its being struck with certain force) is a contingent matter. Even when a substance does not actually manifest its powers, those powers can consequently still be ascribed to it. This explains how God may leave a substance 'in a state of inactivity' while it is 'nevertheless [still] a substance'.

Locke goes on to suggest a metaphysically possible case in which two entirely distinct substances are each 'in a state of inactivity': one *material* and the other *immaterial*. Despite their inactivity, both created substances 'may each of them have their distinct beings, without any activity superadded to them' (*Works* IV, 465). Here, the term 'superadd' is significant, as its use in this passage suggests that a 'bare' substance, whether material or immaterial, is one wherein no higher-level features are realized. Each bare particle (or an aggregate of particles not yet suitably organized) is by itself incapable of realizing spontaneity, self-motion, or thought. When fitly disposed, in Locke's account (4.3.6), a system of matter is capable of thought. If God were to make a bare immaterial substance into a mental being, however, he would have to add the power of thought to it. If God wishes to create an embodied mind like humans, he may then go on to combine the resulting immaterial mental substance with a material substance.

Peter Alexander (1991, 208–209) takes the immaterial substance that Locke refers to in the preceding passage (*Works* IV, 464) to be an inherently passive substance, to which the active power of thought must thus be superadded. Alexander (1991, 216) hence attributes to Locke a derivative form of substance dualism wherein (in contrast to traditional, Cartesian dualism) the human mind is taken to be essentially passive. Alexander does not accept the naked substance reading, but instead interprets what Locke refers to as a 'bare' substance (whether material or immaterial) as one that is inherently passive or sentient. That is, Alexander reads a *bare material substance* as a bare particle, and a *bare immaterial substance* as the human mind. The notion of a *sentient immaterial substance* would make little sense, though, given that a sentient being of any type would need a material body (since 'sentience' means a capacity to be aware of the world through the senses). If some *immaterial senses* were to exist, then a sentient immaterial being might also exist. Even so, Locke would not identify the human mind with any variety of immaterial substance.

There is another case in which Locke uses the term 'immaterial'. While discussing God's omnipotence in his correspondence with Locke, Stillingfleet (1698, 149) refers to a case that bears some similarity to one involving what we would call a 'possible world': 'God can alter the Laws of Motion in *another System*'. Stillingfleet (1697, 78–79) takes it that '[God] may if he please, change a Body into an *Immaterial Substance*'. In his response, Locke expresses his agreement with Stillingfleet by affirming that, despite such a radical alteration, '[t]he same substance remains' (*Works* IV, 470). As Locke emphasizes, he is speaking here about a 'change' (of a material body into an immaterial substance), not a 'creation' (of an immaterial substance 'de novo'):

> [I]f the same substance remains not, body is not changed into an immaterial substance, but the solid substance, and all belonging to it, is annihilated, and an immaterial

> substance created; which is not a change of one thing into another, but the destroying of one, and making another 'de novo'.
>
> (Works *IV, 470)*

This passage suggests that the self-same quiddity can even play the roles of both the materiality and the immateriality.[10] For both Locke and Stillingfleet, however, the resultant 'immaterial substance' in this example would not be identified as a *mental* substance. As a dualistic essentialist, Stillingfleet would deny that God could change a material being into a mental one. By contrast, Locke would acknowledge that God could do so. But Locke would not regard an immaterial substance as *inherently mental*, allowing instead for the possible existence of non-mental immaterial substances.

Locke goes on to ask Stillingfleet,

> Now I crave leave to ask your lordship, why God, having given to this [immaterial] substance the faculty of thinking after solidity was taken away from it, cannot restore to it solidity again, without taking away the faculty of thinking?
>
> (Works *IV, 471)*

Here, Locke conceives of a series of divine acts (which seem to take place in the same world under the same laws of nature) such that: (1) God makes a material substance into an immaterial one by 'tak[ing] solidity away from it'; (2) God then gives the resulting immaterial substance the faculty of thinking; and (3) God makes the resulting immaterial mental substance into a material (mental) substance by 'restor[ing] to it solidity again'. This series of divine acts implies that the faculty of thinking can be given to any type of substance, material or immaterial. That is, Locke sees no contradiction in the idea of *any* type of substance – whether material or immaterial – being made a mental being.

Since the publication of the *Essay*, commentators have engaged in debates as to what Locke meant by contending that 'God can, if he pleases, superadd to [a system of] Matter [fitly disposed] a Faculty of Thinking' (4.3.6). His contemporary critics such as Stillingfleet and Leibniz took this remark as suggesting a materialistic view. As examined earlier, however, Locke regards it as epistemically possible for any type of substance, whether material or immaterial, to be granted the power of thought. While both cases are epistemically possible, however, not all epistemic possibilities are such that it is *reasonable* to believe that they are also metaphysically possible. My recent work (2019, Chapter 4) argues that Locke refers to a system of matter fitly disposed as the reasonable ontological ground for the human mind. Still, many commentators seem to think that Locke treats the notion of a system of matter endowed with thought as merely a hypothesis or an epistemic possibility. My recent work suggests, however, that Locke is committed to treating this case as something that it is reasonable for us to view as more than merely epistemically possible.[11],[12]

Notes

1 Locke's account of 'men' in 2.27 is focused on the biological dimension of human nature, as opposed to 'person' that represents its psychological dimension. In his list of the 'particular sorts of Substances' in 2.23, however, 'men' refers to individual humans endowed with both physical and mental features.

2 In 3.6.11, Locke acknowledges the possibility of multiple mental sorts, viz., 'many *Species of Spirits*', lower or higher species than humans: 'It is not impossible to conceive, nor repugnant to reason, that there may be many *Species of Spirits*, as much separated and diversified one from another by distinct Properties, whereof we have no *Ideas*'. His inventory of mental natural kinds includes not only

super-human species (such as angels) but also some non-human animals, namely 'some Brutes' that 'seem to have as much Knowledge and Reason, as some that are called Men' (3.6.12).

3 On the other hand, many scholars have repudiated the bare substratum interpretation, including Ayers (1975, 1991), Martin (1980), Alexander (1991), Lowe (2005), Millikan (2015), and Kim (2015). Although they disagree with one another on many specific points, they concur that Locke's substratum is far more substantive than implied by Bennett's ascription of bareness.

4 Some scholars, e.g., Owen (1991) and Guyer (1994), argue that Locke's account of real essences is grounded in his account of nominal essences; according to my view, however, it is rather the postulation of substrata that follows from his account of nominal essences. There is a passage in the *Essay* where Locke says that '[real] *Essence*, even in this sense, *relates to a Sort*, and supposes a *Species*' (3.6.6). In reference to this passage, Guyer (1994, 133) has suggested distinguishing 'real essence' from 'real constitution', such that the former (real essence) should be taken as the ground of the qualities of a *sorted* substance, while the latter (real constitution) is that of an *unsorted* substance 'in no way depending upon our own mental activity (of classifying nominal kinds)'. For a similar observation, see Owen (1991).

5 Lowe's view is also inconsistent with Locke's claim that a substratum is an unknown support, as Lowe himself acknowledges: '[o]n this account, . . . substrata . . . are not, in general, "something we know not what" – for we know at least something of them in knowing some of their properties. Hence, I say, this view of substratum almost certainly cannot be attributed to Locke himself' (2005, 70–71). Lowe thus ends up proposing a theory of substrata that he thinks more defensible than Locke's, rather than a reading of what Locke himself thought: 'what we may be able to say is that it was open to Locke to adopt this view, consistently with many – even if not all – other important aspects of his philosophy' (2005, 71).

6 For further discussion of Locke's nominal dualism, please see my earlier works (2010, 2019) in which I discussed its historical significance as well as its relevance to modern debates.

7 In contrast, 'real essence' can be taken as the intrinsic property of an extra-ideal entity that occupies and implements the roles associated with that kind.

8 Nicholas Jolley observes that 'nowhere does Locke proclaim it as certain that the mind is a substance of a nature distinct from body' (1999, 81), and that 'his concept of a spiritual substance is weaker than one might imagine' (1999, 83). I support Jolley's contention that we should resist the temptation to read Locke as a substance dualist.

9 However, God is an immaterial substance, who is also capable of thought intrinsically. When I say that an immaterial substance is not essentially mental, it would thus be a *finite* immaterial substance.

10 For a further discussion of Locke on this matter, please see Kim (2019, Chapter 3).

11 It is beyond the scope of this chapter to further investigate Locke's account of the power of thought 'superadded' to a system of matter. In the recent work (2019), I argue that for Locke, the human mind is an 'emergent' feature that arises in some suitably organized system of material particles. On the mind-body issue, Locke has been taken as a materialist (Yolton 1984; Jolley 1999), a substance dualist (Odegard 1970; Aaron 1971; Alexander 1991), and a property dualist (Bennett 1994; Bermúdez 1996; Rozemond and Yaffe 2004; Pyle 2013; Stuart 2013). Clearly, these readings stand in conflict with one another. At times, these inconsistencies among commentators have been imputed to Locke as his own, turning this issue into somewhat of a puzzle. In the aforementioned recent work, I argue that his nominal dualism leads to neither substance dualism nor property dualism but to a naturalistic view that I refer to as 'emergentism'.

12 I would like to thank Jessica Gordon-Roth and Shelley Weinberg for their helpful comments on an earlier draft of this chapter.

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