Superaddition and Miracles

in

Locke’s Philosophy of Science and Metaphysics

By

Mashhad Al-Allaf

Professor of Philosophy

St. Louis University

USA

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Abstract:
The issue of superaddition is very important in considering Locke's philosophy. It has been the subject of a debate among scholars such as Michael Ayers, Margaret Wilson, Nicholas Jolley, and others. Wilson in her paper "Superadded Properties: The Limits of Mechanism in Locke", attempts "to show that Locke's official position is in conflict with another set of views that he espouses in the Essay, the Correspondence with Stillingfleet, and elsewhere."

In this paper I argue that the first thing needs to be emphasized is that Locke's account of miracles here is in a context that is primarily not metaphysical but epistemological. Therefore, although a quote like this

A miracle then I take to be a sensible operation, which, being above the comprehension of the spectatore, and in his opinion contrary to the established course of nature, is taken by him to be divine. (Works IX, 256).

is considered by some commentators and offered by Locke himself as a definition, in fact we need not actually consider it as a definition. Instead it emphasizes a condition under which someone would call something a miracle, namely, when it seems to contradict the course of nature. God can "superadd" thinking to matter is a suggestion along the same lines as that "God added motion to matter." Thus instead of considering that God has or could miraculously Superadded thought to matter, we can say that is epistemically possible that God has non-miraculously Superadded thought to matter.
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[What a darkness we are involved in, how little 'tis of Being, and the things that are, that we are capable to know. And therefore we shall do no injury to our knowledge when we modestly think with our selves, that we are so far from being able to comprehend the whole nature of the Universe, and all the things contained in it, that we are not capable of a philosophical Knowledge of the Bodies that are about us, and make a part of us: Concerning their secondary Qualities, Powers, and Operations, we can have no universal certainty. (IV.III.29)

"Darkness", "uncertainty", "incurable ignorance", "unknowability" are words that occur in the Essay many times in addition to the phrase "we know not what." Most of Locke's commentators associate "we know not what" with substance. However, "incurable ignorance" and "we know not what" may also refer to something else, including an explanation of phenomena in terms of miracles or the divine. As a matter of fact, in the Essay "we know not what" might be associated with numerous subjects, such as those of the causal relation between secondary qualities and primary qualities and between ideas and qualities or powers, the nature of motion, and the possibility of thinking matter, in addition to the topics that have occupied us concerning power, solidity, cohesion, and the very existence of matter. (In the later case, at least, "we know not what" might better be put as "we know not how," So as to avoid suggesting the standard view of Locke's substance as an underlying "thing.") For example, in Book IV, Chapter III, Section 12, after talking about our "Ignorance of the primary Qualities of the insensible Parts of Bodies, on which depend all their secondary Qualities" Locke mentioned yet another and more incurable part of Ignorance, which sets us more remote from a certain Knowledge of the co-existence...of different Ideas in the same Subject; and that is, that there is no discoverable connection between any secondary Qualities, and those primary Qualities that it depends on.

Locke also talked about God as making that connection:
'Tis evident that the bulk, figure, and motion of several Bodies about us, produce in us several Sensations, as of Colours, Sounds, Tastes, Smells, Pleasure and Pain, etc. These mechanical Affections of Bodies, having no affinity at all with those Ideas, they produce in us, (there being no conceivable connexion between any impulse of any sort of Body, and any perception of a Colour, or Smell, which we find in our Minds) we can have no distinct knowledge of such Operations beyond our Experience; and can reason no otherwise about them, than as effects produced by the appointment of an infinitely Wise Agent, which perfectly surpass our Comprehensions. (IV.III.28)

Consider also the case of motion. Locke brings God in here too. This is because Locke regards matter as totally lacking in causal power. Thus in Book IV, Chapter X, Section 10, in the course of talking about God's existence, Locke asked: "Is it possible to conceive it can add Motion to itself, being purely Matter, or produce any thing?" This seems to imply that, apart from some sort of divine addition, material things are incapable of real interaction, not to mention motion. And, as we have previously seen, Locke holds that bodies are in fact incapable of real action. Through their motion, they are incapable of doing anything more than passing on a power received from elsewhere, and ultimately from the only original source of active power, God:

[T]he Motion it [Matter] has, must also be from Eternity, or else be produced, and added to Matter by some other Being more powerful than Matter; Matter, as is evident, having not Power to produce Motion in itself. (IV.X.10)

Locke also talks about the possibility of a power in matter to perceive and think. In Book IV Chapter III, Section 6, Locke said: "We have the idea of Matter and Thinking, but possibly shall never be able to know, whether any mere material Being thinks, or no," clearly asserting that it is impossible for us, by the contemplation of ideas independently of revelation to discover "whether Omnipotency has not given to some System of Matter fitly disposed, a power to perceive and think":

It being, in respect of our Notions, not much more remote from our Comprehension to conceive that God can, if he pleases, superadd to Matter a Faculty of Thinking, than that he should superadd to it another Substance, with a Faculty of Thinking; since we know not wherein Thinking consists, nor to what sort of Substance the Almighty has
been pleased to give that Power, which cannot be in any created Being, but merely by
the good pleasure and Bounty of the Creator. (IV.III.6)

That God can "superadd" thinking to matter is a suggestion along the same lines as that "God
added motion to matter." Both reflect the fact that there is no Lockean appeal to the Boylean
corpuscular hypothesis or mechanism for an explanation even of what are (or might be) purely
material events. (Whatever must be added to it to make it possible, motion is presumably a
material event for Locke. Similarly, as Ayers has argued in his [1981, 218] what Locke is
considering in the case of thinking is not the superaddition of non-material phenomena to a part
of the material body, but rather the very power of the latter to engage in a physical activity of
thinking.)

The issue of superaddition is very important in considering Locke's philosophy. It has been the
subject of a recent debate between Michael Ayers and Margaret Wilson. Wilson in her paper
"Superadded Properties: The Limits of Mechanism in Locke" (1979), attempts "to show that
Locke's official position is in conflict with another set of views that he espouses in the Essay, the
Correspondence with Stillingfleet, and elsewhere." (144) Wilson takes Locke's official position to
be "not just that a body's secondary and tertiary qualities derive from its primary qualities."
Rather he holds specifically that the former qualities--and indeed all of a body's Powers and
Operation--flow from the primary qualities of the body's insensible corpuscles or inner
constitution, in other words, from its real essence. (143) Notwithstanding Locke's official, or
Boylean, position--which Ayers will call a "dogmatic" Boylean position--Wilson argues that
Locke does not consistently maintain that all of a body's properties stand in comprehensible
relations to its Boylean primary qualities or can be said to flow from them. In fact "At the
minimum Locke claims that some presumed properties of matter...cannot be the natural
consequences of the operation of Boylean corpuscles. We must rather regard them as
'Superadded' or 'annexed' to such operation by God" (144). This indicates, according to Wilson,
two things. First, it shows the extent to which Locke grasped the limitations of the explanatory
capacities of Boylean mechanism, from both philosophical and scientific points of view. Wilson
sees that the capacities of Boylean principle are not restricted to areas implicated in the "mind-
body problem," "but also extend to phenomena that unequivocally fall within the range of
physics. The most explicit case is that of gravity" (1979, 148). Second, the superaddition makes
the phenomena in question miraculous rather than natural.
In his *Essay* Locke maintained that impulse is the only way in which bodies operate: "bodies operate by impulse, and nothing else" (II.VIII.2). Thus action at a distance is impossible. However, Wilson rightly notes that after reading Newton's *Principia* Locke became convinced of the reality of gravitational attraction. Thus Locke wrote in *Some Thought Concerning Education*:

> It is evident, that by mere matter and motion none of the great phenomena of nature can be resolved: to instance but in that common one of gravity, which I think impossible to be explained by any natural operation of matter, or any other law of motion, but the positive will of a superior Being so ordering it. (184)

Also in his correspondence with Stillingfleet Locke said:

> It is true, I say, 'that bodies operate by impulse and nothing else.' And so I thought when I write it and yet can conceive no other way of their operation. But I am since convinced by the judicious Mr. Newton's incomparable book, that it is too bold a presumption to limit God's power, in this point, by my narrow conceptions. The gravitation of matter towards matter, by ways inconceivable to me, is not only a demonstration that God can, if he pleases, put into bodies powers and ways of operation, above what can be derived from our idea of body, or can be explained by what we know of matter, but also an unquestionable and everywhere visible instance, that he has done so. And therefore in the next edition of my book I shall take care to have that passage rectified. (*Works IV*, 467-68)

Based on these passages, Wilson says: "I take this pronouncement about gravity to be an indication that the powers of a body are not fully derivable, even in principle, from the primary qualities of its insensible particles" (1979, 148). Also for Wilson, the first passage indicates that "gravity is just an illustration of the general truth that the phenomena of nature are not in general intelligible through Boylean concepts alone" (1979, 148) and "it follows from Locke's account that a body has its powers to produce ideas only *because of* the divine acts of annexation" (147). Thus gravity as a non-natural power, or as Locke said a power "impossible to be explained by any natural Operation of Matter," cannot be derived from the real essence of any material body. Thus it might be considered a standing miracle.
Two kind of interpretation might be considered here as opposing Wilson's: Ayers and Nicholas Jolley. I will briefly discuss the latter and then discuss Ayers account of this problem. Jolley pointed out that the suggestion of a "standing miracle" was first ascribed to Locke by Leibniz. Jolley also thinks that "such an interpretation, however, does not square very well either with Locke's rationalistic model of explanation or with his own conception of miracles" (Jolley 1984, 61). He remarks that Leibniz (and I assume he is implying here Wilson too) misrepresents Locke's treatment of the two cases, i.e., the case of gravity and thought as Superadded to matter. The fact that Locke himself does suggest a parallel, Jolley asserts, stems from Locke's purpose to stress that God's omnipotence transcends our finite capacities of understanding. Thus Locke's consideration of "the case of gravity is strictly epistemological: it gives one grounds for caution in asserting what God can and cannot do. But Leibniz writes as if Locke is saying that the fact of God's annexing attraction to matter allows us to infer that he could similarly annex thought, and this is a misreading" (1984, 65). According to Jolley, the two cases need to be considered separately for a better understanding of Locke's philosophy: gravitational attraction is an established fact, while nothing that Locke says implies that the superaddition of thought to matter is even metaphysically possible. Here Jolley refers to a passage, already quoted by Ayers (1981), from Locke's apologist Samuel Bold, who said that for Locke "there is no demonstrative proof either that (God) can, or that he cannot Superadd a power of thinking to some system of matter fitly disposed" (Jolley 1984, 65 footnote # 25, quoted from Ayers 1981, 224). More generally, Jolley suggests that we need to distinguish several possible situations:

1. God has miraculously Superadded thought to matter.
2. God could miraculously superadd thought to matter.
3. It is epistemically possible (i.e. for all we know) that God has miraculously Superadded thought to matter.
4. It is epistemically possible that God has non-miraculously Superadded thought to matter.
5. It is epistemically possible that God could non-miraculously superadd thought to matter.

Jolley thinks that Leibniz attributes (2) and sometimes (1) to Locke, whereas Jolley says that "Locke's position is best represented by (4)" (1984, 66), although some of Locke's remarks suggest the weaker (5). Thus Jolley concludes that Leibniz was doubly wrong in his reading of
Locke: in introducing the issue of the miraculous, and in mistaking an epistemic for a metaphysical possibility.

In fact the first reply to Wilson's suggestion might be by Ayers. Ayers argues that what Locke means is only that we may be unable to conceive the rational, purely mechanical, connection between primary qualities and sensory ideas, matter and thought, motion, gravity, etc., but not that there is no such connection as a wholly natural fact:

When Locke says of a causal power unintelligible to us that 'we are fain to quit our reason, go beyond our ideas, and attribute it wholly to the good pleasure of our Maker', he means, not that we have to postulate a miracle, 'arbitrary' in the modern sense and so unintelligible to any intellect, but that we can say no more about it than what is true of every power whatsoever: its exercise is thanks to God. (Ayers 1975, 100)

In other words, Ayers thinks that commentators have mistaken an epistemological point for an ontological one.

In his 1981 paper, in order to maintain Locke's naturalism and mechanism, Ayers criticizes Wilson. He argues that the act of superaddition shouldn't be taken in terms of what is miraculous. Speaking of the causality of sense perception, for example, Ayers holds that for Locke there is no reason to regard the causality in question as other than direct and natural; indeed, "Locke in general seems to think, not just that it is more impressive when God brings things about without contravening the order of nature, but that, whatever God does, he cannot really bring about what is naturally impossible" (Ayers 1981, 220). This is because bringing about the naturally impossible, according to Ayers, means to break a necessary connection, where Locke's paradigm for impossibility and necessity is geometrical: bringing about the physically impossible would be like bringing about a triangle the angles of which do not equal two angles. There would be a contradiction in it. However, in the case of thinking matter, Locke says:

I see no contradiction in it, that the first eternal thinking Being should, if he pleased, give to certain Systems of created senseless matter, put together as he thinks fit, some degrees of sense, perception, and thought. (IV.III.6)
Thus Ayers concludes, against Wilson, that Locke's talk of superaddition does not detract from his naturalism and mechanism. Also, Ayers thinks that Locke carefully avoids defining a miracle as an event contrary to the nature of things, because according to this definition we should never know when a miracle has taken place. Thus Locke "prefers to understand a miracle as an event contrary to the normal course of our experience, such that in its context it is a purposive manifestation of divine power" (1981, 221). According to this notion of a miracle, no conflict arises in the first place between a belief in miracles and a belief that God cannot do the naturally impossible.

According to Ayers, all the properties or powers of a body are supposed by Locke to flow from its essence in a way similar to that in which the properties of a triangle flow from its definition. This is precisely what makes this existence natural. Thus bringing about the physically impossible would be like bringing about a triangle the angles of which do not equal two right angles. In fact, however, the necessary connections in question are by Ayers' own admission divinely superadded to mere matter. So how does Ayers understand terms such as "natural, possibility," and "necessary connection" here? Apparently, Ayers thinks that God's acts of superaddition define what is natural in the first place. That is why God's action cannot contradict what is natural. But why should we say that God's action define what is natural?

Locke does not in fact talk about what is contrary to nature. However, he does talk about what is contrary to reason. This might be relevant to Ayers' position, especially since Ayers speaks of connections which are "natural" and even "mechanistic" in Locke as connections which are rationally intelligible. Now Locke thinks that if we have come to the conclusion that something is contrary to reason then we should not in fact suppose it to be true even in the face of the suggestion that it is a matter of revelation; if we judge it is contrary to reason then we are entitled to reject it:

Because the natural ways of Knowledge could settle them there, or had done it already, which is the greatest assurance we can possibly have of any thing, unless where GOD immediately reveals it to us: And there too our Assurance can be no greater, than our Knowledge is, that is a Revelation from GOD. But yet nothing, I think, can, under that Title, shake or over-rule plain Knowledge; or rationally prevail with any Man, to admit it for true, in a direct contradiction to the clear Evidence of his own Understanding. For since no evidence of our Faculties, by which we receive such Revelations, can exceed, if equal, the certainty of our intuitive Knowledge, we can never receive for a Truth any
thing, that is directly contrary to our clear and distinct Knowledge,...And therefore, no
Proposition can be received for Divine Revelation, or obtain the Assent due to all such, if
it be contradictory to our clear intuitive Knowledge. (IV.XVIII.5)

Our judgment that something is contrary to reason is sufficient to judge that it is not a revealed truth; this may be why Ayers thinks that if something is contrary to nature then it is not imputable to God.

Nature seems to be defined for Ayers by the real essences of things, comparable to the essence of triangle in the sense that the ways in which those things are able to operate flow from or follow from the essence in the way that the properties of a triangle flow from its essence. This can also be a way that Ayers could arrive at the conclusion that, in bestowing on bare matter certain "Superadded" powers (such as motion or gravity) or perhaps bestowing on organized bodies certain "Superadded" properties (such as the power to think), God could not be acting contrary to nature, namely, because by those actions he is actually creating the natures of things (for example, physical bodies as opposed to bare matter). Thus Ayers emphasizes Locke's talk about the supposedly miraculous phenomena in question as surpassing our ideas of things, rather than going beyond the their actual natures or real essences. Thus even in Locke's reply to Stillingfleet quoted by Wilson:

The gravitation of matter towards matter, by ways inconceivable to me, is not only a demonstration that God can, if he pleases, put into bodies powers and ways of operation, above what can be derived from our idea of body, or can be explained by what we know of matter, but also an unquestionable and every where visible instance, that he has done so. (Works IV, 467-68)

As for the concept of a "miracle," as we saw, Ayers considers only two possibilities:

a. A miracle is what contradicts the order of nature.
b. A miracle is what seems to contradict the order of nature.
According to Ayers: Locke "carefully avoids defining a miracle as an event contrary to the nature of things...He prefers to understand a miracle as an event contrary to the normal course of our experience" (Ayers 1981, 221). In fact in the opening paragraph of his *A Discourse of Miracles* Locke said that to talk about miracles without defining what one means by this word "is to make a show, but in effect to talk of nothing" (*Works* IX, 256). Then he gave his definition:

A miracle then I take to be a sensible operation, which, being above the comprehension of the spectatore, and in his opinion contrary to the established course of nature, is taken by him to be divine. (*Works* IX, 256).

The first thing that needs to be emphasized is that Locke's account of miracles here is in a context that is primarily not metaphysical but epistemological. Therefore, although the quote above is considered by some commentators and offered by Locke himself as a *definition*, in fact we need not actually consider it as a definition. Instead it emphasizes a condition under which someone would call something a miracle, namely, when it *seems* to contradict the course of nature. This emphasis is perhaps also taken wrongly by J.J. MacIntosh in his article "Locke and Boyle on Miracles and God's Existence" (1994, 203). MacIntosh lists as necessary conditions of some event actually *being* (and not simply being taken to be) miraculous:

1. a 'sensible operation,'
2. 'above the comprehension of the spectatore',
3. in the observer's 'opinion contrary to the established course of nature', and
4. taken by the observer to be divine.

What Locke said about a miracle as 'contrary to the established course of nature' might be held as clear evidence against Ayers' view. However, the fact that Locke suggests that what is in question is dependent upon the observer's opinion, may seems to fit Ayers' view of a miracle as only what *seems* to contradict the established course of nature. But there is a passage where Locke clearly said that a miracle does contradict the established course of nature, namely, in his *Reasonableness of Christianity*: "For though it be as easy to omnipotent power to do all things by an immediate over-ruling will, and so to make any instruments work, even contrary to their nature, in subserviency to his ends; yet his wisdom is not usually at the expense of miracles" (*Works* VII, 84-85). Ayers explains away this passage by saying that even here, where the context is theological rather than philosophical, Locke stresses that God does constantly "bring about his
purposes by means operating according to their [thing's] natures" (*Works* VII, 85, quoted by Ayers 1981, 221).

A stronger point that might be raised against Ayers' interpretation is that the passage on which he relies is from a context in which Locke was talking about miracles used to support revelation after God had already established a particular *order* of nature:

> To know that any revelation is from God, it is necessary to know that the messenger that delivers it is sent from God, and that cannot be known but by some credentials given him by God himself. Let us see then whether miracles, in my sense, be not such credentials, and will not infallibly direct us in the search of divine revelation. (*Works* IX, 257)

This context is completely different from the context in which Locke talks about the act of superaddition, because talk about superaddition in Locke is part of his view regarding certain divine actions involved, or that might have been involved, prior to the existence of bare *matter* to bodies of various kind, or from the existence of certain kinds to other kinds, thus establishing a particular order of nature in the first place. Thus:

> The idea of matter is an extended solid substance; wherever there is such a substance, there is matter, and the essence of matter, whatever other qualities, not contained in that essence, it shall please God to superadd to it. For example, God creates an extended solid substance, without the superadding anything else to it, and so we may consider it at rest: to some parts of it he superadds motion, but it has still the essence of matter: other parts of it he frames into plants, with all the excellencies of vegetation, life, and beauty, which are to be found in a rose or a peach-tree, &c. above the essence of matter in general, but it is still but matter: to other parts he adds sense and spontaneous motion, and those other properties that are to be found in an elephant. Hitherto it is not doubted but the power of God may go, and that the properties of a rose, a peach, or an elephant, Superadded to matter, change not the properties of matter; but matter is in these things matter still. (*Works* IV, 460)
Ayers concludes that Locke's official position is neither a dogmatic Boylean mechanism, as Wilson asserts, nor an appeal to standing miracle. Rather, it is an agnosticism shared with Newton and Gassendi. This is because, again, Locke's primary analysis is on the contrast "between reality and our ideas of it" (1981, 222) rather than between what is natural and supernatural. In any case Ayers' interpretation of Locke does not offer much consideration of the problem of cohesion. In fact it would seem that superaddition, as Ayers understands it, is not relevant to that, problem, since cohesion makes matter possible in the first place, whereas superaddition adds something to the existing matter. Perhaps, however, Ayers missed that point because he tended to think of cohesion as a problem only between corpuscles that are made of matter, rather than as a problem that concerns the very existence of that matter in the first place. The explanation of that cannot be in terms of a "real essence" produced by God, i.e., in terms of God modifying the essence of matter into a real essence, because we are talking of getting to matter in the first place. If as I have argued, the question of how matter is possible in first place is the same as the question of the internal cohesion within every corpuscle, and not only between them, then the question couldn't possibly be answered in the way that Ayers responds to the problem of the other phenomena he was dealing with, namely, by trying to show that, even though they involve an act of the divine will, nevertheless they are perfectly natural. The strategy that he uses to show that even though they involve the divine will, they are perfectly natural phenomena, couldn't be extended to the problem of internal cohesion, because the problem of internal cohesion is the problem of how matter is possible in the first place. That problem cannot be dealt with in terms of superaddition, because superaddition presupposes that we already have matter, and God modifies that matter into a more specific essence. In that case, we might insist that the phenomena in question are natural precisely because they flow logically from the nature or essence thus created, just as certain things flow logically from the nature or essence of triangle. However, this is nothing in Locke's philosophy for cohesion to flow from, beyond the divine will in its action of bestowing it upon something (inconceivable to us) that would somehow be spread out in space without yet being anything material at all. In any case, the fact is Locke did not explicitly appeal to the divine will to explain cohesion. Why not, when he was so willing to appeal to God in the case of other mysteries? An answer might be that in fact Locke did have something like Ayers' general strategy in mind for reconciling the natural with the supernatural, realized the strategy would not apply to the problem of internal cohesion, and just didn't want to have to admit that the very existence of matter is already a miracle.
Bibliography


