Locke, God, and Materialism

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1. Introduction

Early modern philosophers discussed several versions of materialism. One distinction between them is that of scope. Should one be a materialist about animal minds, human minds, the whole of nature, or God? Hobbes eventually said 'yes' to all four questions, and Spinoza seemed to several of his readers to have done the same. Locke, however, gave different answers to the different questions. Though there is some debate about these matters, it appears that he thought materialism about God was mistaken, was agnostic about whether human minds were material, and was inclined to think that animal minds were material.[1] In giving those answers, Locke famously suggested the possibility that God might have "superadded" thought to the matter of our bodies, giving us the power of thought without immaterial thinking minds. He thus opened up the possibility of materialism about human minds, without adopting the sort of general materialist metaphysic that Hobbes, for example, had proposed.

This paper investigates Locke's views about materialism. I focus on the discussion in *Essay* 4.10. There Locke – after giving a cosmological argument for the existence of God – argues that God could not be material, and that matter alone could never produce thought.[2] I have two main aims. The first is to place Locke's arguments in a debate. This is partly a matter of identifying the targets of Locke's arguments. More broadly, however, I wish to show the interaction between Locke

[1] On Locke on animals' minds, see Downing (2015) and Squadrito (1991).
[2] I focus on the *Essay*. This focus includes concentrating on the sorts of views about God that Locke presents and argues for in the *Essay*, views about God one that can arrive at in philosophy, independently of revelation.

and four other philosophers: Hobbes, Spinoza, Descartes, and Cudworth.[3] My second main aim is then to propose a detailed reading of Locke's arguments. As part of this, I argue for a view about the structure of the chapter and its arguments, and for an interpretation of the important argument of *Essay* 4.10.10 as being about the causation of perfections. Finally, I extend my interpretation into discussions of superaddition. The reading of 4.10 that I propose is not merely consistent with what Locke said elsewhere about superaddition. It also provides reasons to favour one particular understanding of what superaddition is.[4]

2. Before Locke

Though Locke's discussion is not filled with explicit references to other philosophers, *Essay* 4.10 was an intervention in an existing debate. It is there that I begin, by thinking about four philosophers writing before Locke: Hobbes, Spinoza, Descartes, and Cudworth.

2.1 Locke's materialist targets

Hobbes and Spinoza were not the exclusive targets of Locke's arguments in *Essay* 4.10, but they did hold – or could plausibly have been taken by Locke to hold – views that are targeted.[5] So, at least, I will argue later. To enable me to do that, I talk in this section about Hobbes and Spinoza themselves. This will also help give us a sense of what early modern materialist views looked like.

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[3] Downing (2007, 378) says "Locke's central concern in E 4.10 is to eliminate Hobbes's God", and while Locke surely was concerned with that view, he had other important targets and concerns. I engage below with the reading of *Essay* 4.10 offered by Ayers (1991), in a chapter that notably emphasizes the relevance of Cudworth.

[4] Space does not permit consideration of a further question that has seen recent discussion (Downing 2015; Jolley 2015), of whether Locke in some sense inclined towards materialism, despite his official agnosticism.

[5] Locke owned some works of Hobbes's, including most relevantly the 1651 edition of *Leviathan* (Harrison and Laslett 1971, #1465, p.155). He also owned several of Spinoza's works: the book on Descartes' *Principles*, the *Tractatus Theologico-Politicus*, and the *Opera Posthuma* (Harrison and Laslett 1971, #2518, p.223, #2742-4, p.238).

Hobbes was a materialist about the human mind. Consider, for example, the story presented in the early chapters of *Leviathan*. There Hobbes tells the reader about sense, memory, imagination, reason, the passions, and the intellectual virtues, all the while only considering the mind as a corporeal thing.[6] It is unclear exactly what Hobbes thought the relationship between material motions and psychological states was. But it is absolutely clear that Hobbes thought there was no incorporeal intellect of any sort, and that all human cognition could be accounted for by the workings of the corporeal imagination and the power of language. Indeed, his story about the entire natural world makes no reference to incorporeal substances.[7]

The question of whether Hobbes was also a materialist about God has a more complicated answer. In earlier texts, until at least the 1651 English *Leviathan*, Hobbes said that we could only think of God as the cause of the world. Talk about God that appears to give descriptions of his attributes must instead be doing something else, say being an act of praise. Hobbes even appears to have endorsed a sort of cosmological argument for the existence of God.[8] At that stage God was, for Hobbes, a mysterious first cause. In later texts however, Hobbes said that God was a body of a special sort, a "pure, simple, indivisible spirit corporeal".[9] That is, Hobbes came to be a materialist about God.

Hobbes provides a clear and important example of an early modern materialist, but was not the only one. In particular, we should also consider Spinoza as an example. He might seem an odd example, especially as there is a tradition of interpreting Spinoza as an idealist.[10] However, there is

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[6] In this paper I use 'material' and 'corporeal' interchangeably.
[7] On Hobbes's materialist psychology see Gert (1996). On the development of Hobbes's materialism see Duncan (2005a; 2005b).
[8] For Hobbes's reasoning about a first cause, see for example *Leviathan* 12.6. What exactly Hobbes believed about the first cause is a matter of continuing discussion (Holden 2015; McIntyre 2016; Abizadeh 2017).
[9] EW 4.313. For recent discussions of Hobbes's corporeal God view, see Gorham (2013) and Springborg (2012).
[10] On the history of idealist interpretations, see Newlands (2011a; 2011b).

also a tradition of reading him as a materialist. This way of reading Spinoza was present – perhaps prevalent – in England in Locke's time.[11] Several of Spinoza's early English readers understood him to think there was exactly one substance (which he called God) that was material in the same way that familiar bodies are (just larger). Spinoza, thus understood, was a materialist about all creatures, nature as a whole, and God as well.

Henry More offered such a materialist interpretation in 1679, saying that "Spinoza means by God nothing more than infinite matter necessarily acting by itself".[12] There are later examples of materialist readings in the Boyle lectures of John Harris (from 1698) and Samuel Clarke (from 1704). Thus Harris wrote that "He [Spinoza] makes God to be the same with Nature, or the Universe, to be Corporeal and an absolutely necessary Agent".[13] Clarke wrote that, according to Spinoza, "the whole and every part of the material world is a necessarily existing being, and that there is no other God but the universe".[14] Beyond the Boyle lectures, William Carroll – an unusual case, because he thought Locke was a Spinozist – described the relevant view as "The Eternal Existence of one only Cogitative and Extended Material Substance".[15]

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[11] Colie (1963). Though Colie (1963, 187) wants to assimilate Cudworth to this approach to Spinoza, that move is questionable. When Cudworth clearly is commenting on Spinoza's view in the *True Intellectual System*, he is arguing against views about religion found in the *Tractatus Theologico-Politicus* (Cudworth 1678, 656, 707).

[12] More (1991, 78). More's discussions of Spinoza can be found in his *Opera Omnia* (More 1679, 2.1.563-635). The second, focused on the *Ethics*, is translated in More (1991).

[13] Harris (1698, 7th sermon, p.6). Harris had a fairly complex understanding of Spinoza's materialism. He certainly saw that Spinoza's view was different from Hobbes's, but he nevertheless thought Spinoza was a sort of materialist.

[14] Clarke (1998, 20).

[15] Carroll (1706, ii. On Carroll, see Brown (1996) and Lennon (1993, 327-9, 376). Carroll (1706) begins with a general argument that Locke is a Spinozist materialist, which is based on earlier parts of the *Essay*, and is then used to help interpret 4.10. In that argument, Carroll claims that for Locke (1) there is only one underlying substance in the world, (2) this substance is material, and (3) other things, which we might usually take to be substances, are mere collections of modifications. Carroll has some textual grounds for saying (1) and (3), based on *Essay* 2.13 and 2.23, but even by those generous standards (2) seems rather a stretch.

There is no direct evidence that Locke understood Spinoza in this way. However, this materialist reading was a prominent part of the discussion of Spinoza in Locke's place and time.[16] It would not be surprising if Locke had held it too, and it would actually be surprising if he was not at least aware of such readings.[17]

2.2 Some Cartesian views

Locke barely mentions Descartes' name in the *Essay*, but frequently engages with Cartesian ideas there.[18] *Essay* 4.10 is no exception. It is clearly critical of Descartes, but also relies on views that Locke shares with Descartes. Descartes had presented two arguments for the existence of God that began by thinking about the idea of God. Here I focus on one of them: the argument that thinking about possible causal explanations of our idea of God shows that God must exist. Two features of the argument are particularly useful to think about when approaching *Essay* 4.10: the hierarchy of perfection that Descartes relies on, and the associated principles about the causation of perfections.[19]

Descartes' hierarchy is a rather rough one, telling us simply that an infinite substance is more perfect than a finite one, which is more perfect than modes or accidents.[20] Some have found suggestions that Descartes might have thought there was a more fine grained hierarchy, with finite

[16] Most of the texts cited in the previous paragraph were published after Locke's *Essay*. I cite them to provide evidence of the prevalence of the reading, not of the influence of any one author on Locke. Indeed, there is apparently no record of Locke owning a copy of More's *Opera Omnia*, the one of these texts that was published before the *Essay*, though Locke did own several of More's other works (Harrison and Laslett 1971, #2043-2047a, p.192).

[17] Materialist readings of Spinoza are not just a curiosity of early modern England, but have persisted. For two rather different examples, beyond these early modern English ones, see Bennett (1984, ch. 4, especially 81) and some of the debates described in Kline (1952).

[18] Locke, unsurprisingly, owned several books of Descartes's (Harrison and Laslett 1971, #601a-608, p.101; #2451, p.218).

[19] Descartes sometimes talks instead of a hierarchy of reality, most notably in the Third Meditation. It appears however that these hierarchies are equivalent for Descartes: something that is more real is also more perfect, and vice versa. The hierarchy of perfection appears in both the *Discourse* (AT 6.34, CSM 1.128) and the *Principles* (Principles 1.18, AT 8A.11-2, CSM 1.199).

[20] See the Second (AT 7.165, CSM 2.117) and Third (AT 7.185, CSM 2.130) Sets of Replies.

minds being more perfect than finite bodies, and more complex bodies more perfect than less complex ones.[21] However, the evidence for this is far from overwhelming. More fine-grained hierarchies of perfection are clearly possible, but Descartes never presented one.

Descartes uses his view about the hierarchy of perfection together with a view about the causation of perfection. Roughly speaking, he believes that a less perfect thing cannot cause a more perfect one. If such causation did take place, the additional perfection in the effect would have been (objectionably) caused by nothing. In Descartes' picture, nothing a hypothesized less perfect cause did could count as an adequate explanation for the existence of that increased amount of perfection.

Descartes was not the first person to propose such principles. Nor was he the last. As we will see in the next section, they were important for Cudworth. I will argue that they were also important for Locke.

In Descartes' case, there was a further complication. Descartes did not just claim that it was impossible for less perfect things to cause the existence of more perfect things. He also claimed that it was impossible for less perfect things to cause the existence of thoughts of more perfect things. This is why, according to Descartes, only the perfect being is a possible causal explanation of our idea of the perfect being. This further complication has its own puzzles, but happily they need not detain us here, except to note that Locke clearly rejected this view. Locke thought we perfectly well could, as finite beings with experience of the finite, construct an idea of a perfect being (*Essay* 2.23.34-6).

Finally in this section, as we will later be considering Locke's discussion of whether God is corporeal, we should note that Descartes himself considered the same issue, albeit briefly. *Principles of Philosophy* 1.23 says that "God is not corporeal and does not perceive by means of the senses as we do, nor is he the originator of sin". The first part of the section argues for the claim than God is not

[21] Della Rocca (2008, 239).

corporeal: bodies, Descartes notes, are divisible, which indicates their imperfection; but God is perfect; so God is not divisible, and thus not corporeal.

2.3 Cudworth

Hobbes, Spinoza, and Descartes are each in their own way criticized in *Essay* 4.10. The case of Cudworth is rather different. For it appears that thinking about what Cudworth said drove a lot of what Locke was doing in 4.10. Locke did not share Cudworth's method of discussing philosophical problems by discussing the views of ancient Greek philosophers. But Locke did discuss a number of the same topics, views, and arguments that Cudworth discussed. Knowing this background in Cudworth helps explain otherwise puzzling aspects of Locke's approach.

Locke's knowledge of Cudworth's *True Intellectual System*, and its apparent connections to the discussion of 4.10, are well known.[22] In this essay I will refer in particular to one section of the *True Intellectual System*, in which Cudworth discusses "the *Achilles* of the *Atheists*; their *Invincible Argument*, against a Divine *Creation* and *Omnipotence*; because *Nothing could come from Nothing*".[23] This section's discussion of principles about causation, and their consequences for how we think about God, is particularly relevant to Locke's chapter. Indeed, Locke himself noted this section and its attention to creation *ex nihilo* as one of four themes from the *True Intellectual System*.[24]

In the section, Cudworth discusses the principle that nothing can come from nothing, and its relevance to debates about atheism and theism. He first identifies three senses in which he thinks

[22] Locke owned a copy of the *True Intellectual System* (Harrison and Laslett 1971, #896, p.119). On Locke and Cudworth, see Ayers (1991, 2.169-83). Ayers (1991, 2.314), following von Leyden (1948) also notes a possible connection to Pierre Nicole's *Discours sur l'existence de Dieu*, which Locke had translated (Nicole 2000). However, not only is Nicole's discussion considerably less detailed than Cudworth's, it also lacks key elements that are prominent in the *True Intellectual System* and *Essay* 4.10, including the emphasis on creation *ex nihilo* and getting something from nothing.

[23] Cudworth (1678, 738-67).

[24] "Their argument ex nihilo nihil p. 64 answered p. 738" (Note of Saturday 18 February 1682, published in Locke 1936, 118).

it is true that nothing can come from nothing. First (P1), no thing that begins to exist can do so without an efficient cause, which is distinct from itself.[25] Secondly (P2), "Nothing can be Efficiently Caused or Produced, by that which hath not in it at least Equal, (if not Greater) Perfection, as also Sufficient Power to Produce the same".[26] This is clearly related to the Cartesian principle we saw before. The third good sense is about material rather than efficient causes. Thus (P3), "in all Natural Generations and Productions out of Preexistent Matter, (without a Divine Creation) there can never be any New Substance or Real Entity brought out of Non-Existence into Being".[27] Only divine creation can produce a new substance.

Despite his belief in those senses of the principle, Cudworth denied other senses. In particular he denied (P4), the view that no real entity can ever be made to exist which did not previously exist.[28] Against the most general notion that nothing can come into being, Cudworth argues from experience. We come to have new thoughts, for example. So the principle has to be restricted to "Substantial Things". Still, Cudworth thinks even this revised (P4) this is not well grounded, and offers a sort of diagnosis of why people believe it, including the claims that people confuse senses of the principle, that they over-generalize from what is true of artificial things, which are always made from pre-existing matter, and that they overgeneralize from that fact that we and other imperfect created beings lack the power to create new substances.

The further arguments of that section, beyond the initial discussion of principles, have a complex overall structure that I cannot hope to capture here. I do, however want to pick out one example.

Cudworth at one point considers an atheist view according to which (1) only new modifications, not new substances can be made; (2) matter is the only substance; and (3) everything

[25] Cudworth (1678, 738-9).
[26] Cudworth (1678, 379).
[27] Cudworth (1678, 740).
[28] Cudworth (1678, 746).

else in the world is made out of matter.[29] Here we see how, for Cudworth, atheism and materialism are intertwined issues. We also see an example of his thought that the denial of creation *ex nihilo* is a central issues for his opponents – claim (1) is denying the possibility of creation *ex nihilo*, as indeed was (P4).

Against the view summarized by (1)-(3), Cudworth offers several reasons. One objection is that this view has things being made without efficient causes. They clearly have material causes. But they do not, Cudworth thinks, have efficient ones – all there is is matter, and there is no "*Active Principle*".[30] Secondly, and even if we ignore that (say by allowing matter to be self-moving) matter and motion together could not produce any new thing. For this to happen would be "would be to bring Something out of Nothing, in the Impossible Sense".[31] I take it that the relevant sort of impossibility here has to do with (P2): matter and motion are simply not perfect enough to give rise to sense and knowledge. Thus, a principle about the causation of perfections drives this aspect of Cudworth's rejection of materialism.[32]

3. The early sections of *Essay* 4.10

I want to use *Essay* 4.10 to talk about Locke's approach to materialism, but that is probably not what the chapter is best known for. Its most famous topic is, I suppose, Locke's argument for the existence of God, which he presents in the first six sections. Locke argues that each person has

[29] Cudworth (1678, 757).
[30] Cudworth (1678, 758). On Cudworth and others using the notion of activity to argue against materialism, see Duncan (2016). There is a question of whether such arguments are ultimately versions of the perfections argument, with activity being a perfection. There is at least a structural similarity, with a hierarchy (active being superior to passive) and a related principle of causation (whereby active things can cause passive things, but not vice versa).
[31] Cudworth (1678, 758).
[32] That rejection (and thus, the principle) suggest to Cudworth an argument for the existence of God: "Either there is a God, or else Matter, must needs be acknowledged, to be the only Self-Existent thing, and all things else whatsoever, to be Made out of it; But it is Impossible that all things should be made out of Sensless Matter: Therefore is there a God" (Cudworth 1678, 764).

intuitive knowledge (the highest sort) of their own existence, and can have consequent demonstrative knowledge (the second highest sort) of the existence of an eternal being.[33]

That basic argument for God's existence is a sort of cosmological argument. It manages to be noticeably Cartesian while departing from Descartes' own cosmological argument. Locke and Descartes both proceed by observing something we know of, and then looking for a causal explanation of that thing. In Descartes' case, that thing is the idea of a perfect being. In Locke's case, it is each individual's knowledge of their own existence: "it is beyond question, that man has a clear perception of his own being; he knows certainly, that he exists, and that he is something" (*Essay* 4.10.2). Though Descartes was the only philosopher ever to think about our knowledge of our own existence, there does appear to be a notable echo of the *cogito* here.

Nevertheless, there is also notable anti-Cartesian material early in the chapter. Section 7 criticizes the practical utility of arguments for the existence of God that depend crucially upon an idea of God. Locke does not consider the quality of the arguments themselves. But he does say that

> it is an ill way of establishing this truth, and silencing atheists, to lay the whole stress of so important a point, as this, upon that sole foundation: and take some men's having that idea of God in their minds, (for 'tis evident, some men have none, and some worse than none, and the most very different,) for the only proof of a Deity (*Essay* 4.10.7).

This seems to be directed at Descartes.[34] The claim is not that it's bad to give an argument for the existence of God that begins from the idea of God, but that it's bad to rely only on such arguments. Descartes, with his two arguments from the idea of God, seems to have done just that.[35]

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[33] It is well known that there is a gap (or at least a very significant unstated premise) in Locke's argument. For some discussion and references, see Lascano (2016, 471-3).

[34] One might suggest that Locke's criticism also applies to Cudworth, who gives at one point a cosmological argument that focuses on the explanation of the existence of the idea of God (Cudworth 1678, 766-7). However, Cudworth seems also to be concerned there with the causal explanation of understanding more generally, and elsewhere endorses a more general version of the

Locke's argument for the existence of God appears late in the *Essay*. In book 1, Locke had rejected the claim that religious knowledge was innate. In book 4, he was finally in a position to give his own account of religious knowledge, including knowledge of the existence of God. That placement of the argument for the existence of God is in contrast to Descartes' procedure. Descartes gave arguments for the existence of God as part of *first* philosophy, in the *Meditations* and early in the *Principles*. For Descartes, one ought, if proceeding systematically, to start by proving God's existence and move forward from there. Spinoza, meanwhile, said it was a mistake to start by thinking about natural things without contemplating the "divine nature".[36] That methodological thought is reflected in the structure of the *Ethics* — one ought to start out thinking about the general nature of things, including the divine nature, then understand particular things within that general framework. Locke seems to do exactly the opposite.

That is not to say that Locke's *Essay* before 4.10 is a purely secular thing, making no reference to God. Indeed, quite the opposite seems to be true.[37] Locke appears to rely on the existence of a providential God who designed the world when making various arguments, from book 1 onwards.[38] One might then suggest that Locke was in *Essay* 4.10 proving what he earlier

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cosmological argument (see for example Cudworth 1678, 727). The constant focus on arguments from the idea of God seems not be be present in Cudworth as it is in Descartes.

[35] Descartes gave a third argument, which might seem less focused on the idea of God – see, e.g., proposition III in the geometrical presentation at the end of the Second Replies (AT 7.168-9, CSM 2.118-9). However, that argument is much less prominent, and still involves our possession of the idea of God.

[36] *Ethics* 2p10s.

[37] Several commentators have argued that religious commitments are fundamental to Locke's views in the *Two Treatises* (Dunn 1969; Waldron 2002; Sigmund 2005). On the *Essay*, see Ashcraft (1969, 194) and Ayers (1991, 1.123-4).

[38] Here are several examples, just from book 2: the argument about whether the mind is always thinking relies on a belief about what God would not do, which is grounded in a view about the wisdom of God (2.1.15); the argument of 2.2.3 relies on a claim about "the Wisdom and Power of the Maker"; the discussion of pain in 2.7.4 notes a "new occasion of admiring the Wisdom and Goodness of our Maker"; the "proper Functions" of the sense organ considered later in the section provide another example, for they are the functions for which it was intended and designed by God; 2.21.48 on determination and freedom has an argument "else he would be under the determination

relied upon. It is not clear, however, that Locke can do that, or that he tries to. Even if all the arguments of *Essay* 4.10 work, they show the existence of God, and something about his attributes. Locke does not try to prove claims about God's wise and providential design of the world. This was not a Cartesian attempt to put everything on a new, firm foundation.

One further question about the early sections of *Essay* 4.10 is how much Locke thinks he has established in them. Clearly he thinks he has shown, by his argument which he reiterates at the end of 4.10.7, that there is a first cause, which is an eternal being. This knowledge is demonstrative, and thus of a high level of certainty: "we more certainly know that there is a GOD, than that there is any thing else without us" (*Essay* 4.10.6). But how much are we supposed to know, at this point, about what God is like? On the one hand, Locke has argued that God is the most powerful and most knowing being (*Essay* 4.10.4-5).[39] On the other, as we will see, he begins soon afterwards to defend his view against the suggestion that the first cause is actually incogitative. So perhaps we should say, Locke thinks at this point that he has shown that God is a thinking being, but recognizes that this position is not (yet) beyond criticism.

4. Against an incogitative first cause

4.1 The overall argument of 4.10.9-10

Essay 4.10.9 tells us there are two sorts of beings in the world "that Man knows or conceives": incogitative beings, and cogitative or thinking ones. Here Locke presumes that the incogitative beings are corporeal, but not that the cogitative ones are incorporeal.[40] Locke then argues, principally

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of some other than himself" that appears to rely on the view that God would not have placed us in such a situation (see 2.21.53 and 2.21.65); and 2.23.12 on what the "infinite, wise Contriver of us" has done on designing our senses and faculties.

[39] He also says in section 5 that that senseless matter cannot put sense, perception, and knowledge into itself.

[40] Compare *Essay* 2.23.15, where Locke contrasts material substances with immaterial thinking spirits.

in section 10, that the eternal being must be a cogitative being. Ignoring the details for a moment, this is an unsurprising consequence of earlier arguments. If God is the most knowing being, as Locke took himself to have shown by section 6, then God must in some way be thinking. If we grant Locke further that there are only two sorts of beings we know of – the cogitative ones and the incogitative material ones – then God will be in the former category.

Taking things this way, the main task of 4.10.9-10, indeed 9-12, is to answer the question, could the first cause have been an incogitative material being? Locke's answer is a firm 'no'.

Locke's framing here is, I note, rather similar to a way Cudworth explains the debate between atheists and theists, with both accepting that something has existed from eternity, but disagreeing about what that is:

> since Something certainly Existed of It self from Eternity, but other things were Made, and had a Beginning, (which therefore must needs derive their being from that which Existed of It self Unmade,) here is the State of the Controversie betwixt Theists and Atheists, Whether that which Existed of It self from all Eternity, and was the Cause of all other things, were a Perfect Being and God, or the most Imperfect of all things whatsoever, Inanimate and Sensless matter.[41]

That is just one example of the ways in which Locke's discussion in this chapter is guided by Cudworth's discussion.[42]

Beyond the rather broad argument above, there are other arguments in 4.10.10 against incogitative matter producing a thinking intelligent being. These are not, I suggest, aimed at the view that there is a corporeal thinking God. Rather, they are aimed at someone who grants Locke the central goal of his cosmological argument, but suggests that the first cause is an incogitative, rather

[41] Cudworth (1678, 727).
[42] Perhaps Locke's thought that everyone, including atheists, agreed that there was an eternal being helps explain the apparent weakness of his initial cosmological argument.

than a cogitative being. Thus, when Locke argues in this section that incogitative matter could never produce thought, he is arguing that it could never be the efficient cause of thought, not that it could never be the underlying stuff from which thought emerged.

Michael Ayers reads that claim rather differently, taking Locke to have previously established that the eternal being is cogitative, then argued in 4.10.10 that it cannot also be corporeal.[43] Thus Ayers's discussion is phrased in terms of what can flow from the essence of matter. That, I am arguing, is not what is going on in 4.10.10, in contrast with later sections. Ayers, however, moves in his discussion from a passage in 4.10.10 to a passage in 4.10.16, as if they were addressing the same issue.[44] I hope to show that, though there clearly are connections between the two discussions, the aims of the arguments are importantly different.

Why read 4.10.10 as I suggest? First, it makes this section fit sensibly after the distinction between cogitative and incogitative matter. Secondly, it helps avoid a puzzle that otherwise arises – if one takes 4.10.10 to be arguing against the possibility of a corporeal thinking God, then one has to explain why Locke argues against the very same view in sections 13-17. Thirdly, one reason why Locke is concerned with the efficient causation of a thinking being is that this is central to his initial argument in the chapter – Locke's cosmological argument focuses on the causation of the existence of the thinking being giving the argument.[45]

The final part of 4.10.10 might seem not to fit my characterization, for Locke there mentions what would happen "if matter were the eternal first cogitative Being". This should not distract us from the above point. Locke has been arguing that bare incogitative matter could not produce thinking beings. That leads him to say that the only way matter could produce thinking beings, is if it itself already contained thought. Thus he ends up considering, briefly, what fundamentally thinking

[43] Ayers (1991, 2.174ff).
[44] Ayers (1991, 2.177-8).
[45] Moreover, Locke in the *Essay* tends to use 'produce' to describe a relationship of efficient causation, which suggests he is doing the same here.

matter might be like, and offering a quick argument against that notion, based on considerations of individuation.[46] Even then, however, he returns to the main point of the section: that the first cause must be a cogitative being. I cannot deny the existence of this digression, but it is a digression.

Was Locke was attacking some philosopher in particular by objecting to the view that the first cause might be incogitative? Hobbes is one possibility. As we saw above, his works of the 1640s and 1650s, Hobbes believed in a first cause, but had no fundamentally thinking things in his ontology. So it would be plausible to think that his first cause was supposed to be an incogitative being, and that the incogitative being must somehow be the ultimate cause of the thinking beings in the world. This is very far from a watertight identification of one of Locke's targets, but is an interesting possibility.

4.2 The main argument of *Essay* 4.10.10 is not an inconceivability argument

If we look more closely at 4.10.10, we find Locke arguing first that matter itself "cannot produce in it self so much as Motion", then that even if matter has motion added to it, it could never produce thought. That Locke denies these two things is clear. But why?

There is textual evidence for reading Locke as giving inconceivability arguments here, arguments that rely on a move from 'X is inconceivable' to 'X is impossible'. He says, for instance, that:

> For Example; let us suppose the Matter of the next Pebble, we meet with eternal, closely united, and the parts firmly at rest together, if there were no other Being in the World, Must it not eternally remain so, a dead inactive Lump? Is it possible to conceive it can add Motion to itself, being purely Matter, or produce any thing? Matter then, by its own Strength, cannot produce in itself so much as Motion: The Motion it has must also be from Eternity, or else

[46] Stuart (2013, 253-6) discusses the argument involving individuation.

> 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 (4.10.10).

This appears simply to turn on a claim about what it is "possible to conceive". Later, and similarly, Locke writes "I appeal to every one's own Thoughts, whether he cannot as easily conceive Matter produced by nothing, as Thought to be produced by pure Matter, when before there was no such thing as Thought, or an intelligent Being existing?" (4.10.10). That is, it looks as if Locke argues from the premise that it is inconceivable that bare matter give rise to motion, or moving matter to thought, to the conclusion that it is impossible that bare matter give rise to motion, or moving matter to thought.

It would however be surprising to find Locke giving such arguments, for he cautions against using inconceivability arguments, in particular against using them to reach conclusions about the nature of the human mind. Earlier in book 4, he rejects the arguments of those:

> Who, either on the one side, indulging too much to their Thoughts immersed altogether in Matter, can allow no existence to what is not material: Or, who on the other side, finding not Cogitation within the natural Powers of Matter, examined over and over again, by the utmost Intention of Mind, have the confidence to conclude, that Omnipotency it self, cannot give Perception and Thought to a Substance, which has the Modification of Solidity (4.3.6).

Both of these errors are described as resulting from:

> An unfair way which some Men take with themselves; who, because of the inconceivableness of something they find in one, throw themselves violently into the contrary Hypothesis, though altogether as unintelligible to an unbiassed Understanding (4.3.6).

That is, Locke cautions against establishing materialism or dualism about the human mind on the basis of an inconceivability argument.[47] At the very least he thinks one should not base either view on a simple inconceivability argument, one that makes the move from inconceivability to impossibility without offering any further support for the impossibility claim.[48]

If Locke were giving simple inconceivability arguments in 4.10.10, he would be making the same sort of arguments he criticizes elsewhere (and not far away, at that). They would not be exactly the same arguments, but they would be using the same sort of inconceivability claims in the same sort of way, and would indeed be about similar topics. It is thus highly implausible that Locke in 4.10.10 is just giving an inconceivability argument against incogitative matter producing thought.

4.3 The main argument of 4.10.10 is an argument about the causation of perfections

Is there more we can say about the argument of 4.10.10? Does Locke have some other reason for his impossibility claims in 4.10.10, one that might supplant or support the inconceivability claims?

For a clue to this, we might look at Cudworth. In his discussion of "the Achilles of the Atheists", Cudworth offers an argument similar to that of *Essay* 4.10.10:

> if Matter as such, have no Animal Sense and Conscious Understanding, Essentially belonging to it, (which no Atheists as yet have had the Impudence to assert) then can no Motion or Modification of Matter, no Contexture of Atoms, Possibly beget Sense and Understanding, Soul and Mind; because this would be to bring Something out of Nothing, in the Impossible Sense, or to suppose Something to be Made by It self without a Cause.[49]

[47] On these criticisms, see Duncan (2012, 271-8).
[48] Locke even emphasizes the weakness of a reliance on inconceivability arguments later in Essay 4.10 itself: "it is not reasonable to deny the power of an infinite being, because we cannot comprehend its operations. We do not deny other effects upon this ground, because we cannot possibly conceive the manner of their production" (4.10.19).
[49] Cudworth (1678, 758).

Cudworth argues that matter and motion cannot give rise to sense and understanding. He supports this claim, as we have seen, with his discussion of the principle that you cannot get something from nothing. In particular, Cudworth thinks the atomic materialism he is discussing violates a principle about the causation of perfections. Sense and understanding are more perfect than motion and the modifications of matter, so the latter cannot cause the existence of the former.

Cudworth's argument relies on a hierarchy of perfection, and a principle about what can cause what, given their levels of perfection. There is good evidence that Locke has something similar in mind in 4.10.10. Look at how Locke ends the section:

> Since therefore whatsoever is the first eternal Being must necessarily be cogitative; And whatsoever is first of all Things, must necessarily contain in it, and actually have, at least, all the Perfections that can ever after exist; nor can it ever give to another any perfection that it hath not, either actually in it self, or at least in a higher degree; It necessarily follows, that the first eternal Being cannot be Matter (4.10.10).[50]

Here Locke is giving something like Cudworth's argument. Of course, one might take Locke to be giving two arguments in the section, one based on inconceivability and the other on degrees of perfection. I suggest it makes more sense to think of the section as unified. The reasoning about perfection is, on this reading, the underlying support for the claims of inconceivability. (Thus we cannot conceive of the less perfect causing the more perfect, because such causation is impossible.) If we read the section this way, we also avoid concluding that Locke here gave the sort of simple inconceivability argument he criticized elsewhere.

The driving force of the argument of 4.10.10 is Locke's view that a being with less perfect features cannot cause more perfect features to exist in the world. The argument is not independent

[50] Norris (1690, 30) notices this passage, commenting: "God then, even according to him, is all Beings; or, has the whole Plenitude of Being. And I wonder that this Principle had not led this Sagacious Person further". Further, that is, towards Norris's own view.

of Locke's claims about the inconceivability of an incogitative being causing the existence of thinking ones. Rather, the views about perfection and causation support the inconceivability claims, ensuring that Locke is not giving the simple sort of inconceivability argument that he himself criticizes.

4.4 Locke's hierarchy of perfections

I argued above that a hierarchy of perfection plays an important role in Locke's thinking in *Essay* 4.10. There is evidence throughout the *Essay* of Locke's belief in such a hierarchy. Consider this passage from a little later in Book 4:

> Observing, I say, such gradual and gentle descents downwards in those parts of the Creation, that are beneath Man, the rule of Analogy may make it probable, that it is so also in Things above us, and our Observation; and that there are several ranks of intelligent Beings, excelling us in several degrees of Perfection, ascending upwards towards the infinite Perfection of the Creator, by gentle steps and differences, that are every one at no great distance from the next to it (*Essay* 4.16.12).

Locke aims here to emphasize the gradual nature of the differences between beings, or kinds of beings, but these are gradual differences within a hierarchy, the highest point of which is "the infinite perfection of the Creator".

More generally, the *Essay* illustrates Locke's commitment to two related hierarchies of perfection: a hierarchy of beings, and a more fundamental hierarchy of features of those beings. The hierarchy of beings stretches from God, to spirits which are superior to us, to us, to other animals, and on down. Those are the ways in which kinds of things generally line up, but we should think of

Locke's hierarchy of beings as fundamentally a hierarchy of individuals, not of kinds.[51] Locke thinks that human individuals are usually more perfect than non-human animals, but he is not committed to that always being the case.[52] That hierarchy of individuals itself depends, however, upon a hierarchy of features.

I agree with Ayers that the hierarchy of features is what is basic for Locke. It is less clear to me that this is, as Ayers claims, a modification of Cudworth's view.[53] Certainly sometimes Cudworth talks as if he believes in a hierarchy of features: notice for example the important roles of sense and understanding in the passage quoted above. One can – in fact one ought to – grant Ayers that Cudworth believes some features belong to substances of one kind, some to substances of another, and there are sharp divisions between the kinds. None of that, however, stops the hierarchy of features being prior to the hierarchy of beings.

God is atop Locke's hierarchy of beings. He has "perfect Wisdom" (*Essay* 1.4.21). More generally, the "Degrees or Extent, wherein we ascribe Existence, Power, Wisdom, and all other Perfection, (which we can have any Ideas of) to that Sovereign Being which we call God" are "all boundless and infinite" (*Essay* 2.23.34). The perfect being's features are perfections or excellencies, each of which he has to that boundless extent. Moreover God "is infinitely more remote, in the real excellency of his nature, from the highest and perfectest of all created beings, than the greatest man, nay purest seraph, is from the most contemptible part of matter" (*Essay* 3.6.11). As we see there, Locke talks about spirits which are inferior to God but superior to us: "Cherubims, and Seraphims, and infinite sorts of Spirits above us" (*Essay* 4.3.17).[54]

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[51] Various puzzling questions threaten to arise. For example: given that individuals of a species can have different levels of perfection, does Locke's view about the causation of perfections commit him to the view that children cannot be more perfect than their parents?
[52] See for example *Essay* 3.6.26.
[53] Ayers (1991, 2.172).
[54] For further examples, see *Essay* 2.10.9, 2.23.36, 3.6.12, 3.1.23, 4.3.17, and 4.17.14.

Humans rank below angels in the hierarchy of perfection, but above many other creatures. The reason for our place in the hierarchy of beings is our mental capacities' place in the hierarchy of features. Humans have "the perfection of rational thinking" (*Essay* 2.1.16). Memory is another perfection, though it may be possessed in a greater degree by higher beings: "For who can doubt, but God may communicate to those glorious Spirits, his immediate Attendants, any of his Perfections, in what proportion he pleases, as far as created finite Beings are capable" (*Essay* 2.10.9). God's perfection here is omniscience, and the memory of created beings is their lesser version of this. Meanwhile, the power of abstraction is another excellency that non-human animals lack (*Essay* 2.11.5). More generally, "the most excellent Part of his [God's] Workmanship" is "our Understandings" (*Essay* 4.18.5).[55]

It is clear that Locke was committed to hierarchies of perfection. That itself does not commit him to the principle about causation and perfection that is needed for the argument of *Essay* 4.10.10. Locke was familiar with such principles from the work of Cudworth and Descartes. Moreover, something of the sort had already been at work earlier in the chapter, when Locke argued in sections 4 and 5 that the first being must be the most powerful, and also knowing and intelligent. Locke's stated principle in section 4 is that "whatever had its Being and Beginning from another, must also have all that which is in, and belongs to its Being from another too. All the Powers it has, must be owing to, and received from the same Source". Received from is key here – Locke wants to rule, out, for example, the case in which an unthinking first cause gives rise to a thinking being. How exactly he proposes to do that is not exactly clear in section 4, but the reasoning about perfection that becomes more explicit later would make sense of that too.[56]

[55] See also *Essay* 2.1.15, 2.9.4, 2.23.5, 4.4.15, 4.14.2, and Locke (1823, 4.460-3).

[56] For Locke here, as for other advocates of such principles, there seems to be an underlying commitment here to a causal model of the transmission of perfections from cause to effect. The

5. Corporeal Gods

5.1 The aims of 4.10.13-17

By the end of *Essay* 4.10.10, Locke thinks he has ruled out the view that the first cause is incogitative. A question remains though – what if God is both cogitative and material? As Locke puts the issue: "perhaps it will be said, that though it be as clear as demonstration can make it, that there must be an eternal Being, and that being must also be knowing; yet it does not follow, but that thinking Being may also be material" (*Essay* 4.10.13). Sections 13 through 17 respond by arguing against the view that there is a corporeal cogitative God.

Locke's first objection to the corporeal God view is in section 13, where Locke suggests that people who think this will tend to slide towards thinking there is just matter and no God, even though this is not really their considered view. He also argues, quickly, that these people ought to acknowledge an eternal immaterial thinking being. If (i) they think there can be matter without thought, then (ii) they think there is no necessary connection between matter and thought, and so (iii) the previous demonstration of an eternal thinking being does not show there's a corporeal God, just a God, and (iv) supposing God to be corporeal is to no purpose. Locke does not take those thoughts to settle the issue though. Instead he distinguishes and considers three versions of the corporeal God view. The question used to distinguish the options seems to be, how could a corporeal first being be a thinking being? Thus the options are: that every particle of matter thinks; that just one atom thinks; and that the corporeal God is a material system, the thought of which emerges from the structure and motion of its parts. Ultimately, Locke thinks that none of these options is acceptable. Thus, the guiding question of these sections is, could the first cause be a cogitative material being? Locke's answer to this is another firm 'no'.

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perfection that is received by the effect may be a weaker version of that in the cause, but can never be greater, for where could that extra perfection have come from?

Locke might seem just to be working through possible things one might think in this realm, but there were, in fact, a number of philosophers of the time who believed that God was corporeal. Hobbes, as we saw earlier, held in the 1660s that God was an intelligent corporeal spirit. Whether or not Locke in fact had Hobbes in mind, he was an actual philosopher who believed in a cogitative corporeal God. One might well suspect that Locke also had Spinoza in mind here. As I argued previously, the materialist reading of Spinoza was a notable one in Locke's place and time. If Locke held it too, as he might have done, one might see these arguments against a corporeal cogitative God as aimed in part at Spinoza. They are not aimed solely at him, for Locke is also criticizing philosophers who believe that God is cogitative and corporeal, but nevertheless distinct from the created world. Still Spinoza, like Hobbes, might have been a more or less contemporary philosopher whom Locke had in mind. Moreover, although Locke may well have thought that Hobbes and Spinoza believed in corporeal Gods, his argument against corporeal God views does not proceed by interpreting their texts and objecting to the views he finds there. That's not often a way Locke proceeds in the *Essay*, even when he does seem to have targets in mind. Instead, Locke proposes his own categorization of ways that corporeal God views might work, and then opposes each sort of view. All this being so, it portrays Locke's target too narrowly to say that "Locke's central concern in E 4.10 is to eliminate Hobbes's God".[57] Hobbes was a target, but Spinoza plausibly was one too, and other versions of the corporeal God view were also considered.

5.2 Against corporeal God views on which some matter is essentially and irreducibly thinking

In section 14, Locke considers the view that every particle of matter thinks, and has always done so. He notes that his opponents are unlikely to accept this, because it involves many eternal thinking beings, not one single corporeal God: "there would be as many eternal thinking Beings, as there are

[57] Downing (2007, 378).

Particles of Matter, and so an infinity of Gods". If the corporeal God theorist is aiming for a view on which there is a corporeal God, one single first thinking being, Locke seems right that holding this position is not a good option for them, as there is nothing to distinguish any one of the particles as the corporeal God.[58] Despite that, Locke does suggest that this is the best way for his opponents to explain how the corporeal God can think.[59] On other versions of their view, not all matter can think. Thus the question arises of how some of it can, if it cannot all do so.

One way to avoid the apparent problem about an infinity of thinking beings would be to hold that only one particle of matter, one "atom" as Locke says, could think. Locke distinguishes and rejects two versions of this view in 4.10.15.

The first version holds that the single thinking atom was the first being, and that it produced the rest of matter. Locke notes that there is creation *ex nihilo* on this account, and argues that the materialist should reject this option because they reject such creation. Indeed, it's striking how much Locke takes the materialists he's engaging with to be worried about creation *ex nihilo*. However, creation *ex nihilo* is not obviously something that either Hobbes or Spinoza was much concerned about.

Hobbes, for example, mentions creation several times in *Leviathan* without discussing its nature. There is some discussion of creation in Hobbes's work on Thomas White's *De Mundo*, but there he raises problems about White's account, not creation itself.[60] Spinoza, meanwhile, does criticize talk of creation *ex nihilo*, but he does this only to argue that the 'ex' is misleading, its use suggesting that there is a thing called 'nothing' from which new things have been created. He argues

[58] The question of whether God is unique arises in Locke's correspondence with van Limborch (Locke 1976, letters 2340, 2395, 2413). Compare Spinoza: letters 34-6; then, in his book on Descartes' *Principles*, part 1 proposition 11 on there being only one God, the alternative demonstration of proposition 16, against God being corporeal, and chapter 2, "Of God's Unity", of part 2 of the "Appendix concerning Metaphysical Thoughts".
[59] This too echoes a move we saw Cudworth make, granting his opponent that all matter is fundamentally thinking, but arguing that this does not solve their philosophical problems.
[60] Hobbes (1973, 364-6; 1976, 385-8). Note Pasnau (2011, 22-7 and 31-3).

that one should instead understand creation as the "activity in which no causes concur except the efficient".[61] Now, Spinoza did creation, at least as others understood the notion. Maybe Hobbes even did so too. But the discussion and rejection of creation is not a key argumentative move for them, as Locke presents it as being for atheists.

Locke's thought that materialists are concerned with creation *ex nihilo* is explained by the way Cudworth had frames the debate for Locke. As we saw above, Cudworth clearly portrays materialists as concerned with this issue. For example, one version of the atheist argument Cudworth discusses is: "By God is alwayes Understood, a Creator of some Real Entity or other out of Nothing; but it is an Undoubted Principle of Reason and Philosophy, an Undenyable Common Notion, That Nothing can be made out of Nothing, and therefore there can be no such Creative Power as this".[62] That is, creation *ex nihilo* is a violation of the principle that you cannot get something from nothing, and so one should not believe in a divine creator. Cudworth rejects that, obviously. But he repeatedly emphasizes, in the section on the Achilles of the atheists, the question of the possibility of creation.[63]

The second version of the single atom view holds that all matter is eternal, but that only one atom of it can think. This avoids the alleged problem about creation, but there is now a question as to why this one atom can think when the other parts of matter cannot. Locke says this is absurd, and that there is no reason to say it – even if this might be possible, why think it is true?

In addition, Locke seems to argue that all matter has the same nature, so there cannot be one atom with a different nature: "Every particle of Matter, as Matter, is capable of all the same Figures and Motions as any other; and I challenge any one in his Thoughts, to add any Thing else to one above the other" (4.10.15). It is unclear, however, why one should not say that the special atom, as

[61] The discussion is in the chapter (X) on creation in the "Appendix concerning Metaphysical Thoughts" to Spinoza's book on Descartes' *Principles* (Spinoza 1985, 1.333-9).
[62] Cudworth (1678, 738).
[63] Creation *ex nihilo* continued to be an aspect of the debate about atheism in the Clarke-Collins correspondence (Clarke and Collins 2011, 245-6).

matter, "is capable of all the same Figures and Motions as any other" atom, but because it is also thinking matter, is also capable of thought. Consider an analogy: a dog, as an animal, is a living thing, but as a dog is capable of barking. Locke may well be right that it is hard to find reasons and evidence for the one thinking atom view, but his explicit arguments against it appear problematic.[64]

5.3 Against the view that the corporeal God is a material system

The above versions of the corporeal God view take some or all matter to be fundamentally and irreducibly thinking. That was an unusual choice for an early modern materialist.[65] The more obvious, mechanistic approach was to say that that a properly organized material system gave rise to thought. In *Essay* 4.10.16 Locke discusses a version of that view, on which the organization of a material system is used to account for the thought of the first being, the corporeal God. Locke disapproves:

> to suppose the eternal thinking Being, to be nothing else but a composition of Particles of Matter, each whereof is incogitative, is to ascribe all the Wisdom and Knowledge of that eternal Being only to the juxta-position of parts; than which, nothing can be more absurd. For unthinking Particles of Matter, however put together, can have nothing thereby added to them, but a new relation of Position, which 'tis impossible should give thought and knowledge to them (*Essay* 4.10.16).

[64] A defender of Locke might argue as follows: the additional thought of the one atom cannot be an accidental feature of it, for then there would be no explanation of the thought's presence; so it must be an essential feature; but then it must belong to all matter. (Superaddition would be different, and not ruled out by this argument, for in the superaddition case, thought's presence in a body would be accidental but explained.) This argument relies however on a non-Lockean view of essences. One can apparently say, on Locke's view, that both the thinking atom and the rest of matter are matter, because they share the nominal essence of matter, even though they also differ in an important way.

[65] Though she was not a corporeal God theorist, Margaret Cavendish had proposed a view of matter as fundamentally thinking in several works. Cudworth (1678, 137-8) commented briefly on her view.

According to Locke, the wisdom, knowledge, and thought of the eternal being cannot be explained by the arrangement of the parts of a material being. Indeed, Locke thinks that no amount of wisdom, knowledge, and thought, no matter how small, could be explained this way – it is not the high degree of God's possession of these features that is at issue. Why not?

I suggest that thoughts about degrees of perfection are again at work in the background here, supporting the impossibility claim. Reading the argument in this way, Locke's claim of absurdity would be explained. This argument would be like that in section 10, though there would still be a difference between them. The argument in section 10 was about the efficient causation of thought. This argument appears to be about a synchronic grounding relation, which one might want to distinguish from efficient causation. Locke seems inclined to assimilate the two cases though. Indeed, his final comment about a new relation of position, a rearrangement of the particles, not giving thought to them, suggests an inclination to think about this as an efficient causation case.

Section 17 offers a further argument against the view of God as an organized material system. Either, Locke says, the parts of that system are at rest or they are in motion. If they are at rest, then this system cannot think any more than an atom can: that is, merely having a number of atoms, or even a structure of them, cannot introduce thought. The second option is that (some of) the parts of the system are in motion. Against that, Locke offers an argument that turns on the regulation and guiding of motion. The core idea is that thought cannot be produced by unguided motion – how could the parts possibly move in the right way if they do not know which way to move?

Here Locke does not quite argue that it would be impossible for such a system to think. Rather he argues that, even if it were able to think, it would not be able to think well – there would be no rationality or wisdom in such a system. Locke's reason concerns the regulation of motion. Even according to the materialist, only the right motions will produce thoughts. But, Locke argues,

the right motions will only be produced if the matter is suitably guided. That guiding cannot happen in this particular materialist picture though, for there is nothing to guide the particles of the system.

Locke is once again echoing Cudworth, among others. The idea that matter needs some external, immaterial guide to produce the features of the world we live in is a prominent one in the *True Intellectual System*. Indeed it is Cudworth's central reason for the existence of plastic natures, the immaterial beings he thinks guide the workings of the material parts of the created world Cudworth.[66] Moreover, there are again connections to Descartes: consider Descartes' comment in the First Meditation on what we would be like as epistemic agents if there were no God.[67] According to Descartes, if I am merely the result of a chance combination of material objects, I should expect to be extremely imperfect epistemically, no good at all at forming true beliefs about the world. I would, that is – and here we see the connection to Locke – not be able to think well, if I were such an unguided material system.

6. Superaddition

The arguments of *Essay* 4.10 are just part of Locke's discussion of materialism. We might hope that considering those arguments will help us better understand another part of that discussion, what Locke says about the superaddition of thought to matter. In this section I argue that they do help us in this way. First, I show how Locke's discussion in 4.10 is consistent with his discussion elsewhere of superaddition, given my reading of 4.10. Secondly, I argue that my reading of 4.10 gives us an argument for one particular understanding of superaddition.

[66] Cudworth (1678, 146-82).
[67] AT 7.21; CSM 2.14.

6.1 Consistency

One might wonder whether there is a tension between the arguments of *Essay* 4.10, which oppose some sorts of materialism, and the comments of 4.3.6, which argue for the possibility of another sort.[68]

Think back first to 4.10.10, and the argument about the causation of perfections. Notice that the principle about perfection and causation that is so important in 4.10.10 generates no objection to God superadding thought to matter. In the superaddition case, God, the most perfect being, would be the efficient cause of the presence of this lesser perfection in us, which is entirely consistent with what is said in 4.10.10. The argument of 4.10.17 against God being a material system is also relevant. Here again, there is nothing that rules out superaddition. Locke argues that an undesigned corporeal system could not think wisely. A corporeal system to which God superadded thought would not be subject to this criticism. However exactly we take superaddition to work, it will involve God deliberately creating the thinking material being, and thus the presence of a guiding mind.

Superaddition is also, slightly surprisingly, consistent with Cudworth's principles in this area. Consider the relevant sense of the principle about not getting something out of nothing: "Nothing can be Efficiently Caused or Produced, by that which hath not in it at least Equal, (if not Greater) Perfection, as also Sufficient Power to Produce the same".[69] This is consistent with the superaddition of thought to matter, if in that case we understand God as the efficient cause of thought in thinking matter. Thus even Cudworth's ordering of perfections, and his causal principle, do not rule out superaddition. Cudworth may not himself have seen that possibility, but Locke did.[70]

6.2 Beyond consistency

[68] As Bolton (2015, 344) notes, this sort of worry goes back at least as far as Stillingfleet.
[69] Cudworth (1678, 339).
[70] I take Locke to be seeing a possibility that Cudworth did not see, in contrast to Ayers (1991, 2.169-83) who has Locke modifying Cudworth's view to create this possibility.

Those points about consistency are worth noting, but limited. I want to argue, however, that there are stronger connections between the discussion of *Essay* 4.10 and the issue of superaddition, and that Locke's views about perfection and causation suggest a particular reading of what superaddition is.

The secondary literature on Locke contains several readings of his views on superaddition. One central question on which they differ is this: "did Locke claim that some bodies have powers which do not flow from their nature, or real essence" (Connolly 2015, 53)?[71] That is, does Locke think that a feature superadded to a body flows from its nature (in a way in which he seems to think other features do) or not?[72]

If one thinks that superadded features do not flow from bodies' natures, the question arises of where these features – most relevantly, the power of thought in a material thinking thing – come from.[73] In the simplest version of this view, the answer, quite directly, is God. Thus this has been called a 'voluntarist' understanding of superaddition: the explanation lies in God's will. One might have a more complex version of this view that appeals to laws of nature, but that is itself, in this context, a roundabout way of talking about God's acts of will.

On a non-voluntarist reading of superaddition, by contrast, the explanation for the presence of the superadded features lies in the nature of the thing to which the features are superadded. This can work in different ways: perhaps God changes the nature in superadding the features, or perhaps he merely arranges the parts of the thing appropriately.[74]

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[71] In this section I ignore various distinctions (between natures and inner constitutions and real essences, between the natures of individuals and of kinds) that do not affect the point at issue.
[72] The case of superaddition I am most concerned with is one that Locke says is possible, the superaddition of thought to the matter of human bodies. In writing to Stillingfleet, Locke seems to consider motion to be superadded to matter, as indeed are "the properties of a rose, a peach, or an elephant" (Locke 1823, 4.460). On this view there is a good deal of known actual superaddition, not just possible superaddition, in the world.
[73] For the view that superadded features do not so flow, see Wilson (1999, 196-214).
[74] For such views, see Ayers (1981) and Downing (2007).

The views about perfection and causation Locke relied on in 4.10 make a difference to which reading we choose here. In case of the superaddition of thought to matter, the voluntarist reading of superaddition explains the presence of a perfection, thought, in terms of the actions of God. That does not violate Locke's views about the hierarchy and causation of perfections. The non-voluntarist reading, however, explains the presence of the superadded perfection in terms of the underlying, less perfect, features of the body, and that does appear to violate Locke's views about what can give rise to what. Strictly speaking, perhaps it would not violate the principle about causation that is in play in 4.10.10, which is about diachronic efficient causation, as the superaddition case is plausibly an instance of synchronic grounding explanation. However, as we saw in looking at 4.10.17, Locke uses a similar principle in thinking about what is apparently a synchronic grounding explanation. That principle is apparently violated on the non-voluntarist reading of superaddition.

This argument is not entirely decisive. At least two responses are possible. First, if what God does to an object's nature in superadding is not just to arrange corpuscles differently, but to give matter a different nature, then perhaps one might say that this new nature is perfect enough to give rise to thought. But it is hard to see how Locke could say that, unless the nature itself involved thought. Secondly, and more generally, the defender of the non-voluntarist reading might say that God, in superadding thought to bodies by changing their natures, is still the efficient cause of the presence of thought, even though he is causing it by means of changing the nature. If one could identify God as the cause in this case, then there would be no violation of Locke's views about perfection. I suspect that Locke's comments about the causation of perfection are just not precise enough to determine whether God or the nature of the body is to be identified as the cause of the perfection, for the purpose of assessing whether the principle is violated. But I note that identifying God as the relevant cause in this case is liable to lead one to identifying God as the responsible cause

of all change in the world, even in those cases in which one might want to say human beings were responsible. So this second response is not without its potential difficulties.

Thus, though there is some room for response, it remains plausible that the non-voluntarist reading of the superaddition of thought to matter commits Locke to the existence of a violation of his principles about the causation of perfections. One's reading of superaddition probably ought not to commit Locke to that inconsistency. So a voluntarist reading of superaddition – one on which God is directly involved as the efficient cause of the presence of thought, something that does not violate Locke's views about causation and perfection – is to be preferred.

7. Conclusion

I hope to have established four things in this paper. The first is something about Locke's context and targets. Thus, Spinoza might well have been a target as well as Hobbes, the whole discussion is thoroughly shaped by engagement with Cudworth, and the chapter has a mixture of Cartesian and anti-Cartesian aspects. The second is a view about the structure of the chapter. Most basically, there are places where Locke is arguing against an incogitative first cause, and other places where he is arguing against a cogitative corporeal one, and we should take care to understand these as different arguments. The third is an interpretation of Locke's arguments, especially the first of those two, as relying on a view about the causation of perfections. The fourth, then, is that that interpretation constrains what we say about superaddition, pushing us towards a 'voluntarist' reading.[75]

[75] [Acknowledgments footnote]

References

Abizadeh, Arash. 2017. "Hobbes's Agnostic Theology before *Leviathan*". *Canadian Journal of Philosophy* 47: 714-37.

Ashcraft, R. 1969. "Faith and Knowledge in Locke's Philosophy", in J. Yolton (ed)., *John Locke: Problems and Perspectives* (Cambridge: Cambridge University Press) 194-223.

Ayers, Michael. 1991. *Locke*. London: Routledge.

Bennett, Jonathan. 1984. *A Study of Spinoza's Ethics*. Indianapolis: Hackett.

Bolton, Martha Brandt. 2015. "Locke on Thinking Matter". In Matthew Stuart (ed.), *A Companion to Locke* (Chichester: Blackwell) 334-53.

Brown, Stuart. 1996. "Locke as Secret 'Spinozist': the Perspective of William Carroll". In Wiep van Bunge and Wim Klever (ed.), *Disguised and Overt Spinozism around 1700* (Leiden: E.J. Brill) 213-34.

Carroll, William. 1706. *A Dissertation upon the Tenth Chapter of the Fourth Book of Mr. Locke's Essay, Concerning Human Understanding. Wherein That Author's Endeavours to Establish Spinoza's Atheistical Hypothesis, more especially in that Tenth Chapter, are Discover'd and Confuted*. London.

Clarke, Samuel. 1998. *A Demonstration of the Being and Attributes of God, And Other Writing*s. Edited by Ezio Vailati. Cambridge: Cambridge University Press.

Clarke, Samuel, and Anthony Collins. 2011. *The Correspondence of Samuel Clarke and Anthony Collins, 1707-08*. Edited by William L. Uzgalis. Peterborough, ON: Broadview.

Colie, Rosemary. 1963. "Spinoza in England, 1665-1730". *Proceedings of the American Philosophical Society* 107: 183-219.

Connolly, Patrick. 2015. "Lockean Superaddition and Lockean Humility". *Studies in History and Philosophy of Science* 51: 53-61.

Cudworth, Ralph. 1678. *The True Intellectual System of the Universe*. London.

Della Rocca, Michael. 2008. "Causation without Intelligibility and Causation without God in Descartes", in Janet Broughton and John Carriero (ed.), *A Companion to Descartes* (Malden, MA: Blackwell) 235-50.

Descartes, René. 1984. *The Philosophical Writings of Descartes*. Translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch. Cambridge: Cambridge University Press.

Downing, Lisa. 2007. "Locke's Ontology". In Lex Newman (ed.), *The Cambridge Companion to Locke's Essay* (Cambridge: Cambridge University Press) 352-80.

———. 2015. "Locke's Choice Between Materialism and Dualism". In Paul Lodge and Tom Stoneham (ed.), *Locke and Leibniz on Substance* (New York: Routledge) 128-45.

Duncan, Stewart. 2005a. "Hobbes's Materialism in the Early 1640s". *British Journal for the History of Philosophy* 13: 437-48.

———. 2005b. "Knowledge of God in *Leviathan*". *History of Philosophy Quarterly* 22: 31-48.

———. 2012. "Toland, Leibniz, and Active Matter", *Oxford Studies in Early Modern Philosophy* 6, 249-78.

———. 2016. "Materialism and the Activity of Matter in Seventeenth-Century European Philosophy". *Philosophy Compass* 11 (2016) 671-80.

Dunn, J. 1969. *The Political Thought of John Locke*. Cambridge: Cambridge University Press.

Gert, Bernard. 1996. "Hobbes's Psychology". In Tom Sorell (ed.), *The Cambridge Companion to Hobbes* (Cambridge: Cambridge University Press) 157-74.

Gorham, Geoffrey. 2013. "The Theological Foundations of Hobbesian Physics: A Defense of Corporeal God". *British Journal for the History of Philosophy* 21: 240-61.

Harris, John. 1698. *The atheistical objections against the being of a God and his attributes fairly considered and fully refuted in eight sermons*. London.

Harrison, John and Peter Laslett. 1971. *The Library of John Locke*. Second edition. Oxford: Clarendon Press.

Hobbes, Thomas. 1839. *The English Works of Thomas Hobbes*. London: Bohn.

———. 1973. *Critique du De Mundo de Thomas White*. Edited by Jean Jacquot and Harold Whitmore Jones. Paris: Vrin.

———. 1976. *Thomas White's De Mundo Examined*. Translated by Harold Whitmore Jones. London: Bradford University Press.

———. 1994. *Leviathan*. Edited by E.M. Curley. Indianapolis: Hackett.

Holden, Thomas. 2015. "Hobbes's First Cause". *Journal of the History of Philosophy* 53: 647-67.

Jolley, Nicholas. 2015. *Locke's Touchy Subjects*. Oxford: Oxford University Press.

Kline, George 1952. *Spinoza in Soviet Philosophy*. New York: Humanities Press.

Lennon, Thomas. 1993. *The Battle of the Gods and Giants*. Princeton: Princeton University Press.

Lascano, Marcy. 2016. "Locke's Philosophy of Religion". In Matthew Stuart (ed.), *A Companion to Locke* (Chichester: Blackwell) 467-85.

Locke, John. 1823. *The Works of John Locke*. London. Reprinted by Scientia Verlag Aalen, 1963.

———. 1936. *An Early Draft of Locke's Essay, Together with Excerpts from his Journals*. Edited by R.I. Aaron and Jocelyn Gibb. Oxford: Clarendon.

———. 1975. *An Essay Concerning Human Understanding*. Edited by P.H. Nidditch. Oxford: Clarendon.

———. 1976. T*he Correspondence of John Locke*. Edited by E.S. de Beer. Oxford: Clarendon.

McIntyre, R.W. 2016. "Concerning 'men's affections to Godward': Hobbes on the First and Eternal Cause of All Things". *Journal of the History of Philosophy* 54: 547-71.

More, Henry. 1659. *The Immortality of the Soul*. London.

———. 1679. *Opera Omnia*. London.

———. 1991. *Henry More's Refutation of Spinoza*. Edited and translated by Alexander Jacob. Hildesheim: G. Olms.

Newlands, Samuel. 2011a. "Hegel's Idealist Reading of Spinoza". *Philosophy Compass* 6/2: 100-108.

———. 2011b. "More Recent Idealist Readings of Spinoza". *Philosophy Compass* 6/2: 109-119.

Nicole, Pierre. 2000. *John Locke as Translator: Three of the Essais of Pierre Nicole in French and English*. Edited by Jean S. Yolton. Oxford: Voltaire Foundation.

Norris, John. 1690. *Christian Blessedness, or, Discourses upon the Beatitudes of our Lord and Saviour Jesus Christ … to which are added, Reflections upon a late Essay concerning Human Understanding*. London.

Pasnau, Robert. 2011. *Metaphysical Themes 1274-1671*. Oxford: Oxford University Press.

Sigmund, P.E. 2005. "Jeremy Waldron and the Religious Turn in Locke Scholarship". *Review of Politics* 67, 407-18.

Spinoza, Benedict. 1985. *The Collected Works of Spinoza*. Edited and Translated by E.M. Curley. Princeton: Princeton University Press.

Springborg, Patricia. 2012. "Hobbes's Challenge to Descartes, Bramhall and Boyle: A Corporeal God". *British Journal for the History of Philosophy* 20: 903-34.

Squadrito, Kathleen. 1991. "Thoughtful Brutes: The Ascription of Mental Predicates to Animals in Locke's *Essay*". *Diálogos* 58: 63-73.

Stuart, Matthew. 2013. *Locke's Metaphysics*. Oxford: Clarendon.

von Leyden, W. 1948. "Locke and Nicole". *Sophia* 16: 41-55.

Waldron, J. 2002. *God, Locke, and Equality*. Cambridge: Cambridge University Press.

Wilson, Margaret Dauler. 1999. *Ideas and Mechanism*. Princeton: Princeton University Press.

Woolhouse, R.S. 1993. *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth-Century Metaphysics*. London: Routledge.