The Momentariness of Simples

ROY W. PERRETT

I

Consider the following familiar line of thought. Most of the objects in our immediate experience are composed of parts, and many of those parts are in turn composed of yet smaller parts, and so on, and on... But this process of decomposition cannot be endless: at some point we must come down to those fundamental impartite objects out of which all partite things are composed. These fundamental impartite objects are the metaphysical simples, the mereological atoms of the system.

In the history of Western philosophy something like this line of thought has been endorsed by many distinguished thinkers from Democritus through Leibniz, Russell and Wittgenstein, up to Peter van Inwagen. It is also endorsed by the classical Indian Buddhist philosophers of the various Abhidharma schools. Inevitably, all simples theorists accept a certain degree of immutability of the simples, for without any fixed atoms no rational analysis of complex phenomena is possible. But whereas many Western defenders of the existence of simples have supposed them to be enduring, even eternal, entities, the Buddhist philosophers consider the simples of their metaphysical system (the entities which they call *dharmas*) to be merely momentary existents.

Of course, many contemporary philosophers are sceptical about the actual existence of metaphysical simples, momentary or non-momentary. What reason, they ask, do we have to believe that there really are any such entities? I begin by considering briefly this question before going on to argue that insofar as we have good reason to believe in simples, then we also have good reason to believe in their momentariness. In other words, I defend the truth of a conditional thesis: if there are simples, they are momentary. I remain (officially) agnostic, however, about the truth of the antecedent of that conditional.

II

The line of thought I sketched at the very beginning contained both a thesis about the existence of simples and a gesture towards an

doi:10.1017/S0031819104000361 ©2004 The Royal Institute of Philosophy

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

argument for that thesis. The thesis in turn admits of both weak and strong interpretations. A *locus classicus* for all of this is the opening of Leibniz's *Monadology*:

> The *monad* ... is nothing but a simple substance which enters into compounds; *simple*, that is to say, without parts. And there must be simple substances, because there are compounds; for the compound is nothing but a collection or *aggregatum* of simples.[1]

Writing over two hundred years later, Russell grounds his own logical atomism in a similar line of thought:

> When I speak of 'simples' I ought to explain that I am speaking of something not experienced as such, but known only inferentially as the limit of analysis.... But I confess it seems obvious to me (as it did to Leibniz) that what is complex must be composed of simples, though the number of constituents may be infinite.[2]

Implicit in such passages, however, are two distinct claims about simples. The weak claim is that the following thesis is contingently true.

> *The Simples Thesis*: There exist impartite metaphysical simples of which all partite things are composed.

This thesis makes an interesting substantive claim and it certainly seems to capture something that all simples theorists want to assert about the actual world.

Sometimes, however, simples theorists seem to want also to assert a rather stronger version of the Simples Thesis. Thus in the passages just quoted both Leibniz and Russell seem committed to the following, modally strengthened version of the Simples Thesis.

> *The Necessity of Simples Thesis*: Necessarily, there exist impartite metaphysical simples of which all partite things are composed.

Obviously, if the Necessity of Simples Thesis is true, then the actual world contains simples. Note too that it is this stronger thesis that the regress argument I sketched at the beginning is presumably supposed to establish: i.e. there is supposed to be some *logical* incoherence in the notion that there could be an infinite regress of partite parts. Call this regress argument

[1] G. W. Leibniz, *Philosophical Writings*, ed. G. H. R. Parkinson (London: J. M. Dent & Sons, 1973), 179.

[2] Bertrand Russell, *Logic and Knowledge* (London: Allen & Unwin, 1956), 337.

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

> *The Decomposition Regress*: The process of decomposition of partite things into their parts cannot be endless; at some point we must come down to those fundamental impartite objects out of which all partite things are composed.

But precisely why is such infinite decomposition supposed to be impossible? As Russell makes explicit, it is not just because there might otherwise be an infinity of parts. Rather it must be because the partite objects possess properties which are ontologically dependent upon the existence of simples.

Leibniz took such a line in his correspondence with Arnauld, arguing that an aggregate derives its reality from the elements of which it is composed and hence it cannot be that those elements too are aggregates:

> For every entity by aggregation presupposes entities endowed with a true unity, for it only takes its reality from the reality of those of which it is composed, so that it will not have any at all, if each entity of which it is composed is itself an entity by aggregation.[3]

This is an intriguing argument, but one that is difficult even to begin to assess without knowing much more about exactly what a 'true unity' might be.

In any case, the critics of simples will urge, there is no need for us to puzzle about this obscure Leibnizian notion when there is already at hand an independent argument against the Necessity of Simples Thesis, an argument that proceeds from the spectre of what David Lewis calls 'atomless gunk'.[4] A hunk of atomless gunk is an infinitely divisible object which has no mereological atoms as parts: i.e. all its parts are proper parts. This seems a conceivable possibility, in which case there is a possible world composed only of material objects composed of such gunk. But the Necessity of Simples Thesis claims that there cannot be such a possible world. Hence the Necessity of Simples Thesis is false.[5]

Personally, I am persuaded of the possibility of a gunk world and hence I reject the Necessity of Simples Thesis. Of course, it is still

[3] Leibniz, *Philosophical Writings*, 66.

[4] Cf. David Lewis, *Parts of Classes* (Oxford: Basil Blackwell, 1991), 20.

[5] The claim that atomless gunk is both possible and incompatible with the Necessity of Simples Thesis is defended in Theodore Sider, 'Van Inwagen and the Possibility of Gunk', *Analysis* **53** (1993): 285–9. (Sider's specific target is the version of mereological atomism developed in Peter van Inwagen's *Material Beings* (Ithaca: Cornell University Press, 1990), but his argument is obviously generalizable.)

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

open to the simples theorist to respond that such a gunk world is not really possible, arguing perhaps that a gunk world is in fact inconceivable, or perhaps instead that conceivability is not a reliable guide to possibility in this case. But now the debate about the Necessity of Simples Thesis threatens to degenerate unsatisfyingly into a metaphysical impasse, with each side simply reiterating their differing modal intuitions. In other words, it seems that we will be faced with a situation where neither the affirmation nor the denial of the Necessity of Simples Thesis is clearly justifiable. I conclude, then, that either we have good reason to believe that the Necessity of Simples Thesis is false, or else we have no reason to believe it is true. Obviously, either option is bad news for friends of the Necessity of Simples Thesis.

III

Of course, the falsity of the Necessity of Simples Thesis does not entail the falsity of the Simples Thesis, which is only supposed to be a contingent truth. It might still be that the latter thesis is true and that the actual world is a simples world. But how is the simples theorist to support such a claim? The truth of the Necessity of Simples Thesis would have given us a straightforward argument for the Simples Thesis, but the Necessity of Simples Thesis seems false. Moreover, the Decomposition Regress is even less persuasive as an argument for the Simples Thesis than it is as an argument for the Necessity of Simples Thesis. So if we reject both the Decomposition Regress and the Necessity of Simples Thesis, how might we begin to argue for the contingent truth of the Simples Thesis?

Well, we might start by first taking up Leibniz's suggestion that we need to admit simples because they best explain the partite objects' possession of properties which are ontologically dependent upon the existence of simples. But since we have rejected the Necessity of Simples Thesis, the dependence relation here must involve some sort of non-logical dependence.

It might seem that one possible candidate for the job is *supervenience*: i.e. perhaps the partite objects and their properties supervene upon the properties of the simples and hence we need to posit simples to explain the existence of such partite objects and their properties. Here, as elsewhere, supervenience is understood to be a determinative relationship between properties that does not require correlations between them. And the difficulty here, as elsewhere, is

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

making sense of this *sui generis* relationship. In particular, insofar as supervenience entails necessary coextension, it may be hard to have supervenience without reducibility. After all, if property A supervenes on property B, this can be a good reason for identifying A and B.[6] But if that is so, then it seems that we are just back with some version of the already rejected Necessity of Simples Thesis.

An alternative candidate for the job is *causal* dependence: i.e. the partite objects and their properties are causally dependent upon the existence of simples and hence we need to posit simples to explain the existence of such partite objects and their properties. Moreover, if causation plausibly involves some sort of non-logical necessity, then perhaps we can also even capture some of the modal intuition behind the original Necessity of Simples Thesis, but with the necessity involved now being only causal necessity.

This move also chimes in rather well with a familiar test that entities must pass to gain admission to many philosophers' ontologies.

> *The Causal Criterion:* An entity is to be counted real if and only if it has causal powers.[7]

The criterion here is an epistemically motivated one, with the leading idea being that there is no good reason to postulate entities that have no causal powers. Perhaps such entities are logically possible, but we can never have any reason to think them actualities. So if there are particulars that are impartite simples, they too must have causal powers in order for us to be justified in supposing that they exist. Moreover, since the powers of particulars are determined by their properties, we only have reason to admit into our ontologies those properties which bestow power.

This Causal Criterion has a long history in Western philosophy. Thus David Armstrong cites approvingly a passage from Plato's

[6] Cf. John Bacon, 'Supervenience, Necessary Coextension and Reducibility', *Philosophical Studies* **49** (1986): 163–76.

[7] Advocates of some version of the Causal Criterion include: David Armstrong, *A Theory of Universals* (Cambridge: Cambridge University Press, 1978), 5; Hartry Field, *Realism, Mathematics and Modality* (Oxford: Basil Blackwell, 1989), 68; Brian Ellis, *Truth and Objectivity* (Oxford: Basil Blackwell, 1990), 22; Keith Campbell, 'Selective Realism in the Philosophy of Physics', *The Monist* **77** (1994): 27–46; Colin Cheyne, 'Existence Claims and Causality', *Australasian Journal of Philosophy* **76** (1998): 34–47. Critics of the Causal Criterion include: Graham Oddie, 'Armstrong on the Eleatic Principle and Abstract Entities', *Philosophical Studies* **41** (1982): 285–95 and Mark Colyvan, 'Can the Eleatic Principle be Justified?', *Canadian Journal of Philosophy* **28** (1998): 313–36.

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

Sophist (247d–e) in which the Eleatic Stranger suggests that causal power is the mark of being:

> I suggest that anything has real being, that is so constituted as to possess any sort of power either to affect anything else or to be affected, in however small a degree, by the most insignificant agent, though it be only once. I am proposing as a mark to distinguish real things, that they are nothing but power.[8]

It is interesting to note that the Indian Buddhist simples theorists also invoke a version of the Causal Criterion: for them the mark of reality is causal efficacy (*arthakriyākāritva*, the power of making become). And their reasoning in favour of such a criterion of existence is much the same as that of Plato and Armstrong: metaphysically, the quest for ultimate reality is the quest for the causes that ultimately produce effects; epistemologically, nothing can be known which is not capable of producing a change in the knower. Thus causal efficacy is the test of the real.

Finally, perhaps we can plausibly avoid the Decomposition Regress, if we add a further hypothesis: that the causal powers which simples possess are intrinsic to those simples, in the sense of being part of their essence or nature. Thus while the existence of partite wholes is ontologically dependent on the causal powers of their simple parts, the causal powers of those impartite parts are among their essential properties and hence ontologically independent of the existence of yet further parts. Of course, if we understand the notion of essence as involving a kind of *de re* necessity, then it seems this hypothesis might threaten to return us to the already rejected Necessity of Simples Thesis. But it is both possible and important to distinguish a property's being part of something's essence from that property holding necessarily of that thing.[9] Instead, think of an object's essential properties as those that underlie and explain many of the object's other properties.[10] Then our regress-blocking hypothesis is that the simples' causal powers are essential properties which underlie and explain not only the properties of the partite objects that the simples compose, but also the simples' own other properties.

None of this, of course, is any evidence that the Simples Thesis really is contingently true. Rather, what I have offered are some

[8] Armstrong, *A Theory of Universals*, 46.

[9] See Kit Fine, 'Essence and Modality', *Philosophical Perspectives* **8** (1994): 1–16.

[10] Cf. Robert Nozick, *Invariances* (Cambridge, Mass.: Harvard University Press, 2001), 126.

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

conditions that plausibly would have to be satisfied for that thesis to be rationally accepted as contingently true. Thus if we affirm both the Simples Thesis and the Causal Criterion, then we have no good reason to suppose that there are simples unless we also suppose that such simples possess intrinsic causal powers. I have presented no arguments to show that there are (or are not) impartite entities possessing such causal powers. I do submit, however, that whether or not there is any evidence for the actuality of simples, we have good reason to believe that a world containing such simples would have to be a world containing impartite entities with intrinsic causal powers. What I now want to argue is that if there are any such causally efficacious impartite entities, then they must be momentary existents.

IV

As I have already indicated, the idea that the world is ultimately composed of causally efficacious but momentary simples is a classical Indian Buddhist theory.[11] But from the point of view of the Western philosophical tradition, this is a rather odd form of simples theory. Far more common among Western philosophers is the idea that the ontological independence of simples means that they must be enduring, even eternal, entities. Thus Leibniz claims of the monads:

> [T]here is no fear of dissolution, and there is no conceivable way in which a simple substance could perish in the course of nature. For the same reason there is no way in which a simple substance could begin in the course of nature, since it cannot be formed by means of compounding. Thus it may be said that monads can only begin and end all at once, that is to say they can only begin by creation and end by annihilation.[12]

Analogously, Wittgenstein claims of the objects of the *Tractatus* that they are simple, without parts, but can combine into complexes (2.02–2.0201). They are ungenerable and indestructible, because any world must contain the same objects as this one, and

[11] Defended most explicitly by the Sautrāntika school of Indian Buddhism. For more on the Indian context see Th. Stcherbatsky, *Buddhist Logic* (New York: Dover, 1962), Vol. 1, 79–118 and Satkari Mookerjee, *The Buddhist Doctrine of Universal Flux* (Delhi: Motilal Banarsidass, 1975), Ch. 1.

[12] *Monadology*, 4–6; Leibniz, *Philosophical Writings*, 179.

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

change is only an alteration in the configuration of objects (2.022–2.0231, 2.0271). The objects make up the unalterable and subsistent form, substance and content of the world (2.021, 2.023, 2.024, 2.025).

This is not the Buddhist philosophers' view of the matter; and they have some philosophically interesting arguments to the contrary. Indeed, the argument for the momentariness of simples that I wish to present here derives from an eleventh-century text by an Indian Buddhist philosopher called Ratnakīrti.[13] With a little licence, we can reconstruct Ratnakīrti's argument as a tree diagram (Figure 1): beginning from the proposition that some simple X exists, every branch of the tree terminates either in the proposition that X is momentary, or that (contrary to assumption) X does not exist.

The argument requires the truth of two background assumptions, both of which, in other contexts, many philosophers have found plausible. The first is the Causal Criterion: an entity is to be counted as existent just in case it has causal powers. The other is a version of the Principle of Sufficient Reason: there must be an explanation for an event occurring at the time it does occur, rather than at some other time.

Given these assumptions, then, Ratnakīrti's reasoning is roughly as follows. If a simple X exists, it must have causal powers and be causally efficacious. But then there must also be an explanation why X is causally efficacious at one time rather than another. And insofar as X is a simple whose causal powers are part of its essence or nature, that explanation must be in terms of the properties of X alone. But all of this can be true just in case X is a momentary existent. After all, the intrinsic causal potency of a non-momentary simple could not be held in abeyance: if a simple X does not discharge its causal potency in the first moment of its existence, then there could be no explanation in terms of its inherent nature why X was causally efficacious at a later time rather than an earlier time.

[13] Ratnakīrti's *Kṣaṇabhaṅgasiddhiḥ Vyatirekātmikā*. For a transliterated Sanskrit text and English translation, together with very helpful commentary and notes see A. C. Senape McDermott, *An Eleventh-Century Buddhist Logic of 'Exists'* (Dordrecht: D. Reidel, 1969), especially 41–3, 71–2. For a succinct presentation of the structure of Ratnakīrti's argument, to which I am indebted here, see Paul Williams, 'Indian Philosophy' in A. C. Grayling (ed.), *Philosophy 2: Further Through the Subject* (Oxford: Oxford University Press, 1998), 832–3.

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

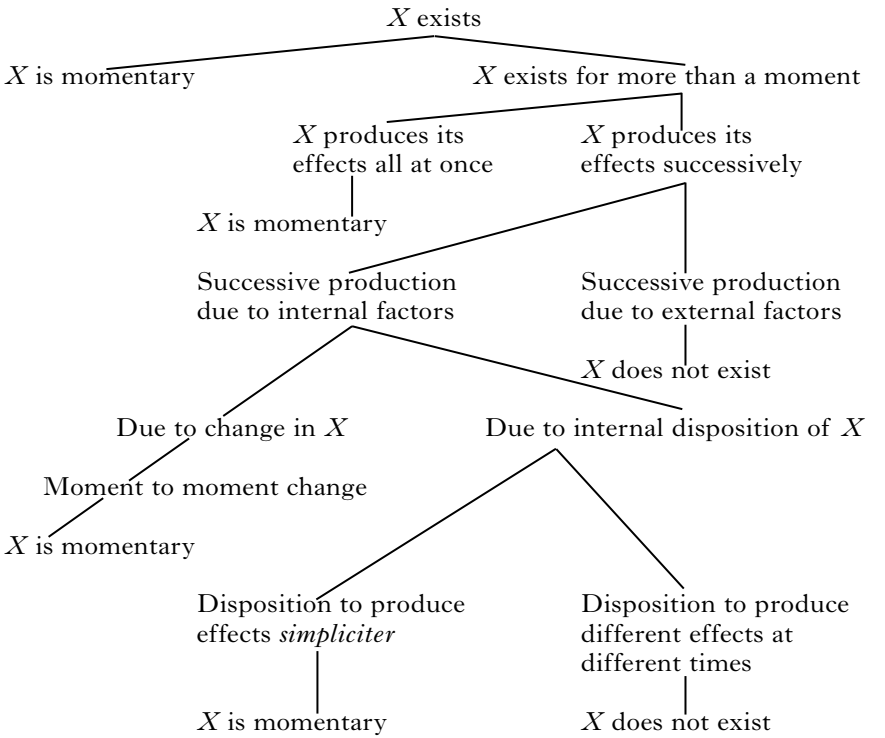


Figure 1 ***The Master Argument for Momentariness***

To be persuasive the argument needs setting out in a bit more detail. So let me now present more formally the *Master Argument for Momentariness* diagrammed in Figure 1. Let us begin by supposing of any simple X that it exists. Obviously enough, it must be that either X exists for only a moment, or it exists for more than a moment. If the first option is the case and X exists for only a moment, then clearly the doctrine of momentariness is true. If, on the other hand, the second option is the case and X exists for more than a moment, then either X produces all its effects in the first moment of its existence, or it produces its effects successively over time.

Suppose that X produces all its effects in the first moment of its existence. Then because existence is causal efficacy, X exists only for that first moment: i.e. X is momentary.

Suppose instead that X produces its effects successively over time. Then there are just two possibilities: either X's successive

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

production of its effects is due to factors internal to itself, or it is due to external factors.

We cannot coherently suppose it is due to external factors, for *ex hypothesi* X is a simple and its causal powers are intrinsic to it. Thus if the external factors are the cause of the effect, X itself is not the cause and hence it lacks causal powers and so does not exist.

We must suppose instead, then, that the successive production of effects might be due to factors internal to the simple X that is the cause. But then the internal factors for successive production must either be due to a change in X itself, or due to an internal disposition within X. The first option would mean that X would have to change from moment to moment (since existence is pragmatically equivalent to causal efficacy). But then each moment would produce a different effect and hence at each moment X would have to be a different entity. In other words, X would once again have to be momentary.

The only alternative option is to suppose that the internal factors for successive production must be due to an internal disposition within X. This route in turn leaves us with just two possibilities: either there is an internal disposition to produce the effects *simpliciter*, or else there is an internal disposition to produce different effects at different times. The former option would mean that all effects would be produced in the first moment, and therefore once again there would be momentariness.

The latter option, on the other hand, is incoherent. *Ex hypothesi*, X is a simple and its causal powers are intrinsic to it. Hence as a unitary permanent entity, X must have a capacity to produce its effects *simpliciter*—in which case we have momentariness. The only alternative is to suppose that X has no such capacity, in which case the cause could not exist at all. In other words, there is no sense to be made of the claim that a unitary cause produces effects all by itself *at different times*.

It may seem tempting to object that successive production might be due to *both* internal and external factors. But this also is not really an option open to us here, for we are supposed to be considering only simples possessed of intrinsic causal powers. Thus if there is an internal disposition in the cause to produce effects successively, it is in the *nature* of the cause to do so. And this cannot be the case if the production of the effects will not occur without a series of further extraneous factors.

Thus the upshot of the Master Argument for Momentariness is that any simple possessed of intrinsic causal powers must be a momentary entity. Hence insofar as we only have good reason to suppose that the Simples Thesis is contingently true of the actual

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press

world if the simples involved are entities with intrinsic causal powers, then we also have good reason to suppose that these simples must be momentary.

V

Presumably, many people will view this as a surprising and counterintuitive result. After all, most simples theorists have not been advocates of momentariness. As I indicated right at the beginning, I am only concerned to defend here the truth of the conditional thesis that if we have good reason to believe in simples, then we also have good reason to believe in their momentariness. I remain (officially) agnostic about the truth of the antecedent of that conditional. It does seem, however, that the Master Argument for Momentariness is valid. It also seems true that its premises have been, in other contexts, viewed as plausible by many philosophers. Of course, someone desperate to avoid the argument's conclusion might deny the Causal Criterion or the Principle of Sufficient Reason. But without the Causal Criterion we have even less reason to suppose that the Simples Thesis is true; and some version of the Principle of Sufficient Reason plausibly seems a presupposition of rational inquiry.

Of course, we might read the argument as pointing towards a *reductio* of the notion of a simple, at least insofar as that is understood as being the notion of an impartite entity possessed of intrinsic causal powers. Interestingly, this is roughly the moral that the rival Madhyamaka tradition of Buddhist philosophy draws. They argue that if a simple is supposed to be a momentary event or phenomenon capable of bringing about another by virtue of a causal power that is essentially part of its nature, then there are no such metaphysical ultimates. Causation is just regularity and the project of metaphysical foundationalism that is supposed to terminate in simples is just a search for a philosophical chimera.[14] To show all of this, though, is a much larger task than the modest one attempted here. In the meantime, however, the more modest conditional thesis established by the Master Argument for Momentariness is surely philosophically provocative enough to be of interest in its own right.

University of Hawai'i at Mānoa

[14] Cf. Nāgārjuna's *Mūlamadhyamakakārikā*, especially Ch. 1. For a translation and modern philosophical commentary see Jay L. Garfield, *The Fundamental Wisdom of the Middle Way* (New York: Oxford University Press, 1998).

https://doi.org/10.1017/S0031819104000361 Published online by Cambridge University Press