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# PUTTING THE GHOST BACK IN THE MACHINE: AN EXPLORATION OF SOMATIC DUALISM

BY

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**Abstract:** In this article, I explore various views on which mind–body dualism is true, but the soul is located in the body. I argue that this sort of dualism (which I call ‘somatic dualism’) once was a not-uncommon view in the philosophy of mind. I also argue that it has the resources to reply to some of the problems thought to affect Cartesian dualism.

## *1. Introduction*

Suppose one is an eternalist. An eternalist believes that there is a four-dimensional spacetime manifold. Times are all equally real, and in this time is space-like. Now suppose one is an eternalist-dualist. On standard Cartesian dualist accounts, the soul is outside of space, but not outside of time. But this is a notion that it is very difficult for the eternalist to make sense of. Time is a fourth dimension to the three spatial dimensions, and entities that are in time are in spacetime and thus in space. Perhaps the first move one might be tempted to make is to think of the soul as entirely outside of spacetime. But this sort of view begins to sound a great deal like Boethius’ God. Surely the soul is a temporal entity. It experiences events in time, as Kant stressed.

There is another way to go here: Put the soul in spacetime. I will call this sort of view – a view on which souls are spatial but immaterial – *somatic dualism*. I want to investigate some forms of somatic dualism in this article. I will try to show that putting souls in space not only helps the eternalist be

*Pacific Philosophical Quarterly* 100 (2019) 624–641 DOI: 10.1111/papq.12251

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a dualist, but it also helps with other problems (such as the pairing problem and problems of interaction) that have been thought to plague traditional Cartesian dualism.

## 2. *Some forms of somatic dualism through history*

It is easy to read the history of dualism through a Cartesian lens. Of course, Descartes thought that the soul wasn't located in space. Anything located in space for Descartes is extended, and anything extended is a physical body, and physical bodies aren't capable of consciousness or thought. But there are other types of (non-Aristotelian) dualisms throughout history.<sup>1</sup> For instance, Augustine seems to have held that the soul is an extended simple located where the body is. He says in *On the Immortality of the Soul*:

Indeed, every mass which occupies a place is not a separate whole in each of its parts, but the whole consists of all the parts. Consequently one part of such a whole is in one place, and another in another. But the soul is present as a whole not only in the entire mass of a body, but also in every least part of the body at the same time (Augustine, 1938, ch. XVI).

In a letter to Jerome, Augustine says:

[The soul] pervades the whole body it animates, not by a local distribution of parts, but by a certain vital influence, being at the same moment present in its entirety in all parts of the body (Augustine, 1875, Letter CLXVI, sect. 4).

Somatic dualism was a widespread view in early modern Britain. For instance, Henry More (1925) also thought of the soul as an extended simple entity in space. He says, '[11.] So the *Immediate Properties* of a *Spirit* or *Immaterial* [sic] Substance are *Penetrability* and *Indiscerptibility* [indivisibility].<sup>7</sup> Immediately following this, he defends the notion of a penetrable, extended substance. He then says,

12. ...For a man can no more argue from the *Extension* of a Substance that it is *Discerptible*, then that it is *Penetrable*; there being as good a capacity in *Extension* for *Penetration* as *Discerption*) I conceive, I say, from hence we may easily admit that some *Substance* may be of it self *Indiscerptible*, as well as others *Impenetrable*; and that as there is one kind of Substance, which of it's [sic] own nature is *Impenetrable* and *Discerptible* [matter], so there may be another *Indiscerptible* and *Penetrable* [mind] (More, 1925, Axiome IX, pp. 63–65).

Isaac Newton thought that minds were immaterial simple entities that are located in space. In *De Gravitatione*, he says,

No being exists or can exist which is not related to space in some way ... [C]reated minds are somewhere ... And just as we understand any moment of duration to be diffused throughout

all spaces, according to its kind, without any thought of its parts, so it is no more contradictory that Mind also, according to its kind, can be diffused through space without any thought of its parts (Newton, 1962, pp. 136–137).

Samuel Clarke thought that the soul was present in a part of the brain. In his third letter to Leibniz he says,

11. The soul of a blind man does not for this reason not see because no images are conveyed (there being some obstruction in the way) to the sensorium where the soul is present. How the soul of a seeing man, sees the images to which it is present, we know not: but we are sure it cannot perceive what it is not present to; because nothing can act, or be acted upon, where it is not.

12. God, being omnipotent, is really present to everything, essentially and substantially. His presence manifests itself indeed by its operation, but it could not operate if it was not there. The soul is not omnipresent to every part of the body, and therefore does not and cannot itself actually operate upon every part of the body, but only upon the brain, or certain nerves and spirits, which, by laws and communications of God's appointing, influence the whole body (Leibniz and Clarke, 1956; see also Leibniz-Clarke Correspondence, Letter 4, l. 37).

Clarke, like Augustine, More, and Newton, thinks that the soul is a simple. To Anthony Collins he writes,

And the only thing required in the present case is to conceive that God can create a finite substance which shall not, like the solid, rigid, determined extension of matter, consist of parts which are actually so many distinct beings independent of each other for their existence, but be a substance perfectly and essentially one, so that to suppose any division of it shall necessarily infer a destruction of the essence of that substance (Clarke and Collins, 2011, p. 107, the letter to Anthony Collins).

Richard Price (1883) follows Clarke in locating the soul in space. In reply to Joseph Priestly, he says,

Dr. Priestly ... argues on the supposition, that, according to the ideas of modern metaphysicians, spirit can have no relation to place, and is incapable of being present any where. This seems to me a mistake ...

As far, therefore, as Dr. Priestly combats a notion of spirit that has no relation to space, and exists no where, he combats an absurdity and contradiction which deserves no regard – What is the nature of the relation of spirit to space, or in what *manner* it is present in space, I am utterly ignorant. But I can be sure that, if it exists at all, it must exist *somewhere*, as well as at *some time* (Price and Priestly, 1883).

One last somatic dualist was John Fearn.<sup>2</sup> Fearn thought that Thomas Reid didn't take common sense seriously enough in his denying of the extension of the soul. It is obvious, Fearn thought, that our perceptions of color are extended in space. So it must be that the immaterial mind is extended, as well (e.g. Fearn, 1820, p. 34). In talking about the debate between materialists and dualists in the philosophy of mind, he says,

[T]he *immediate reason* of the controversy in question is a certain *assumption* which BOTH PARTIES therein have been *equally forward to adopt*, as a truth altogether unquestionable; namely, that *if our sensations are extended*; or, which is the same thing, *if the mind itself is extended*; it must in this case be a MATERIAL ESSENCE: While if the mind be a material essence, at all, it is certain that it cannot be a *simple principle*, but must be a *mere mode*, the result of an organisation of material atoms, and, consequently, a thing GENERABLE and CORRUPTIBLE (Fearn, 1820, pp. 20–21).

The problem, as he sees it, is that there is a ‘third party’ here, what I am calling somatic dualism, that is ignored in this debate. Fearn’s view as to the location of the soul in space changes. At first he thinks that the soul is a sphere (spherule) inside the skull (Fearn, 1812, ch. 7 ff.) In later work he abandons this view. Throughout he thinks that the soul is an immaterial extended thing in space.

So there are ample historical precedents for somatic dualism, and it is perhaps striking that it is a view that isn’t typically considered today in evaluations of types of dualism. In the next section, I’ll set out and examine different varieties of somatic dualism.

### 3. *Some varieties of somatic dualism*

In this section, I will set out different types of somatic dualisms, and reasons that would lead one to adopt particular varieties of somatic dualism. My goal here is mainly exploratory; I want to lay bare the logical space around types of somatic dualisms. But I will give reasons for preferring one sort of somatic dualism over another, and the reader will know where my allegiances lie.

There are seven sorts of somatic dualism I will investigate in this article. These are delineated by answers to two questions: a) Does the soul have parts? and b) Where is the soul located? Varieties A-C are views on which the soul is an extended simple. Varieties D-F are views on which the soul has parts. Variety G is a view on which the soul is a point-sized simple.

**Variety A:** The soul has no parts and the soul is co-located with (part of?) the brain.

**Variety B:** The soul has no parts and the soul is co-located with the body.

**Variety C:** The soul has no parts and the soul exists in a region of space larger than the body that overlaps wholly the body.

**Variety D:** The soul has parts, and the soul is co-located with (part of?) the brain.

**Variety E:** The soul has parts, and the soul is co-located with the body.

**Variety F:** The soul has parts, and the soul exists in a region of space larger than the body that overlaps wholly the body.

**Variety G:** The soul is a point-sized simple, and is located somewhere in the body (probably in the brain).

As we've seen, Augustine seems to hold to Variety B, and Clarke to Variety A. Fearn (1812) holds to Variety D. I will call Variety C and F 'field views', as with each the soul is a sort of field that overlaps and extends beyond the region of space the body occupies. I will call Varieties B and E 'body-soul' views.

So, what do the different varieties each have going for them? To begin, obviously there is a close connection between brain states and mental states. Causing brain events can cause mental events. This might lead one to think that the soul is where the brain is. Or, suppose one thinks that if there is a brain with the right sort of properties, there is a soul that emerges from it (see Hasker, 1999). This also might lead one to think that the soul is located where the brain is. Varieties A and D look plausible on these sorts of considerations.

Variety G will look plausible if one thinks that the soul is simple, but that it isn't an extended simple (presumably because such things are metaphysically impossible), and is spatially located (perhaps as a reply to various difficulties that are thought to saddle Cartesian dualism). We will return to each of these considerations later.

Suppose one thinks that phenomenal states like pains exist only in a mind.<sup>3</sup> It is not implausible to think that I have pains in regions of the body outside my head. Currently I have a pain in my hand. We then conclude that my soul exists in my hand, and by extension throughout my body. Varieties B and E, body-soul versions of somatic dualism, look plausible on these sorts of considerations.

However, in one regard Variety E has an advantage over Variety B. When I feel pain, I (usually) feel it in particular parts of my body. If the soul has parts, as in Variety E, then I can explain why I feel pain in my knee but not my arm: The part of my soul in my knee feels pain, but not the part in my arm. This sort of maneuver isn't available if one thinks the soul is simple.<sup>4</sup>

I think, though, that if one finds the above considerations telling in favor of Varieties B and E, she should find the following reasoning telling in favor of Varieties C and F. People can have phantom pain, and just as it seems plausible to say that there now is pain that is located in my hand, it seems plausible to say that there is pain located in the space where the amputated limb used to be. Compare these two exchanges: 'Where is the pain? It's in my hand.' 'Where is the pain? It's where my hand would be if I still had one.' If one thinks that phenomenal states like pain exist only in a mind, one may arrive at the view that the mind exists there where the limb used to exist. Furthermore, we know that people who aren't amputees can feel sensations in regions of space where there exists only a rubber hand (the 'rubber hand

illusion'). So, one might reason, the mind must exist there, as well. This leads to a view on which the mind is a sort of field in the vicinity of the body.

Here is a quick argument that we shouldn't think that the pain exists in the space where the limb used to be. Suppose we have a case of phantom pain, and we say that the pain is located in the space where the limb used to be. Now, someone else puts her hand into that region of space. Why doesn't she feel the pain, too?<sup>5</sup> She ought to feel it if it's located there in space.

One also might be worried about this reasoning that extends the reach of the soul with respect to other sensory modalities, however. In particular, consider the case of sound. Suppose I'm in a concert hall, and am far from the orchestra. I hear a violin play. The sound from the violin appears to be far away from my body, say, 50 m from me at 11 PM. Surely we don't want to say that my soul exists 50 m from my body.

There may be room for the body-soul or field theorist to push back on the example. She might say that it is certain that the pain is in the hand, or is in the space where the hand appears to be. It is transparent to the mind that the pain is located there. However, it just appears that the sound is located 50 m away. That is just the source of the sound, and the brain represents it as being 50 m away. In some cases, phenomenal appearances are deceptive as to the location of a quale. In other cases, phenomenal appearances give us accurate information as to the location of a quale.

I'm inclined to think that the body-soul or field theorist has difficulties here. In some sense, it may be that it is somewhat clearer to me that the pain is in my arm than that the sound is 50 m away. But it's not substantially clearer. Once one makes the move that the sound just *appears* to be 50 m away, but is actually in the soul; it's difficult (so say I!) to avoid saying that the pain just appears to be in my arm, but is actually in my soul, which is located elsewhere (say, in my brain). So I'm inclined to think that there isn't strong justification for adopting a body-soul view or a field view. Or if there is strong justification, it won't come in the guise of locating qualia in space.

### 3.1. SIMPLE SOULS?

We've just considered various reasons for locating the somatic soul either in the brain, or in the body, or around the body. What about the question of the simplicity of the soul? Historically, the principal argument for the simplicity of the soul has been considerations from the unity of consciousness. Consciousness comes in a unified manifold, and this manifold can't occur in a substance with parts. The substance's parts can't 'sum to' a unified consciousness. So the mind must be simple. This sort of argument goes back to Augustine (1938, ch. 16), Leibniz (1965, sect. 17), Clarke (Clarke and Collins, 2011, p. 53, letter to Dodwell), and especially Kant in the Second Paralogism (Kant, 1965).<sup>6</sup>

I want to look at two representative examples of this sort of argument, that of Kant and of William Hasker (1999, 2010). Kant's argument is the classic statement of a unity of consciousness argument, and Hasker has done the most in contemporary times to develop and defend this sort of argument. I will argue that both arguments are unsound. I will grant for the sake of this discussion that there is a unity of consciousness (see Bayne and Chalmers, 2003, and Hasker, 2010 for discussion). What I will reject is that it is necessary to posit a simple mind to explain this phenomenon.

Perhaps the most famous unity of consciousness argument is that of Kant in the Second Paralogism:

Every composite substance is an aggregate of several substances, and the action of a composite, or whatever inheres in it as thus composite, is an aggregate of several actions or accidents, distributed among the plurality of substances. Now an effect which arises from the concurrence of many acting substances is indeed possible, namely, when this effect is external only (as, for instance, the motion of a body is the combined motion of all its parts). But with thoughts, as internal accidents belonging to a thinking being, it is different. For suppose it be the composite that thinks: then every part of it would be part of the thought, and only all of them taken together would contain the whole thought. But this cannot consistently be maintained. For representations (for instance, the single words of a verse), distributed among different beings, never make up a whole thought (a verse), and it is therefore impossible that a thought should inhere in what is essentially composite. It is therefore possible only in a single substance, which, not being an aggregate of many, is absolutely simple (A 352).

We can see much overlap between Kant's argument and the unity of consciousness argument put forth by William Hasker (1999, 2010). He explicitly draws from Leibniz and Kant in producing his own argument (Hasker, 2010, p. 175). Quoting from Hasker (2010, p. 182), here is a summary of his argument.

1. I am aware of my present visual field as a unity; in other words, the various components of the field are experienced by a single subject simultaneously.
2. Only something that functions as a whole rather than as a system of parts could experience a visual field as a unity.
3. Therefore, the subject functions as a whole rather than as a system of parts.
4. The brain and nervous system, and the entire body, is nothing more than a collection of physical parts organized in a certain way. (In other words, holism [the view that an object is something 'over and above its parts'] is false.)<sup>7</sup>
5. Therefore, the brain and nervous system cannot function as a whole; it must function as a system of parts.
6. Therefore, the subject is not the brain and nervous system (or the body, etc.).



7. If the subject is not the brain and nervous system then it is (or contains as a proper part) a non-physical mind or 'soul'; that is, a mind that is not ontologically reducible to the sorts of entities studied in the physical sciences. Such a mind, even if it is extended in space, could function as a whole rather than as a system of parts and so could be aware of my present visual field as a unity.
8. Therefore, the subject is a soul, or contains a soul as a part of itself.

Both of these arguments trade on the claims that (i) something with parts (like the brain) is nothing 'over and above' its parts, and (ii) a collection of objects isn't capable of thought or consciousness. Let's take both of these claims in turn. First, is, say, a brain nothing 'over and above' the cells that compose it? Presumably, if the brain *is* something over and above the cells that compose it, it would have causal powers the cells don't have. But is this the case? Call the brain 'BRAIN' and let 'CELLS' be a plural referring term that picks out the cells that compose BRAIN. Suppose BRAIN is taken out of the skull and put on a scale. The reading on the scale changes. Now, what causes this change? One might think that it is obviously BRAIN that causes this change. However, CELLS also is causally sufficient to move the reading on the scale. (So, dismantle BRAIN such that one has a pile of cells. Don't destroy any cells. CELLS still exists, and BRAIN doesn't. Put CELLS on the scale, and the scale's reading will change the same amount it did in the first example.) So far, it looks like if one accepts the existence of macroscopic objects with parts, one has to accept causal overdetermination in each case of such an object. Furthermore, the overdetermination doesn't end at the level of cells. Presumably at each level of decomposition there will be causal overdetermination. So far, we've still a view that is consistent with holism.

But suppose one doesn't like largescale causal overdetermination of the sort we've witnessed here. Then one may be tempted by the view that the things like brains have causal powers that their parts don't have. This would be a holistic view. So when BRAIN is put on the scale, it is BRAIN that causes the change in the scale's reading, rather than CELLS, or anything else at lower levels of decomposition. But what about the argument above, that CELLS has causal powers in virtue of the fact that if you dismantle BRAIN and put CELLS on the scale, the scale will move? The proponent of this sort of view will have to say something like this: In virtue of CELLS composing something, CELLS becomes causally epiphenomenal. But as soon as CELLS no longer composes something, CELLS acquires causal powers. The same will go for the atoms that compose CELLS, and down to quarks and electrons. The idea, then, is that only the object at the highest level of composition has causal powers.<sup>8</sup>

This view strikes me as implausible. That entities have causal powers should have nothing to do with whether they compose something else. Rather, causal powers should supervene on the intrinsic properties of the



entities themselves. So I'm inclined to reject a view on which BRAIN has causal powers CELLS doesn't, and thus to reject holism. But doesn't this leave one open to the unity of consciousness arguments? I don't think so. Let's start with Kant's argument. Kant seems to think that if a thing with parts thinks, that the thought will be divided up among the parts of the thing that do the thinking. But why think this? Suppose one is a materialist and thinks that the brain does the thinking. Why think that the thought is distributed across parts of the brain? It certainly is the case that different parts of the brain contribute to the existence of the thoughts the brain thinks. So perhaps I couldn't have a particular sensation without my amygdala. But that's no reason to think that part of the sensation is *in* my amygdala. This is just to say that the amygdala contributes to the existence of the sensation. But the sensory field is something had by the entire brain, and isn't spread across its parts. I think that this is one route for the person who thinks the mind is a composite entity to take.

Suppose that the thought *is* distributed across parts of the brain. (Maybe one worries that the first response comes too close to holism.) Why think that there then is a problem getting a unified field of consciousness? Why can't the materialist say something like this: 'Just as the parts of the brain sum to a single entity, the brain; the parts of the visual field sum to a single entity, the visual field. That is how we get the unified visual field out of parts of the field as distributed across the brain.'

I imagine the following response. 'Composition is an unrestricted relation that happens whenever objects exist. But surely you don't get a unified visual field no matter the properties of the parts of the brains and the relations between them. You can't take a functioning brain, put it in a blender, and then expect it to produce a unified visual field. To see this sort of point, take a photograph (a physical one!) and cut it into thin strips. There is an object that the strips compose no matter how the strips are arranged. But the strips have to be in the right relation to each other to compose a photograph. This shows that composition is a promiscuous relation, certainly more so than the relation between parts of the brain that compose the visual field. So the comparison between composition and parts of the visual field summing to a whole is illicit.'

In reply, we should note that, even if we grant the universal composition (or mereological universalism) implied in the response, composition as a *kind* of entity isn't promiscuous in the way the response states. Call each third of a table 'A', 'B', and 'C.' If universal composition is true, there always will be an object composed of A, B, and, C. But that there is a *table* composed of A, B, and C depends on the properties had by A, B, and C and the relations between them. With our photograph that is cut into thin strips, call each of the strips, a, b, c...etc. Now, there always will be something that a, b, c... compose. But the strips need to have the right properties (distribution of colors on their surfaces, for example) and need to be in the right

relation to each other to compose a photograph. To return to the brain, perhaps the parts of the visual field as they are spread across the brain are akin to the strips if they are jumbled together in a random order. Or, perhaps the parts that make up the visual field have properties and bear relations to one another such that they produce a unified visual field. The photograph example shows that we *can* get a unified field from discrete parts, so long as they have the right properties and are related to each other in the right way. Kant (or the proponent of Kant's argument) gives us no reason to think that the field as spread out in the brain is (or would be) jumbled such that no unified visual field would result. Indeed, it's very difficult to see how such an argument would go.

I don't think that Hasker's argument fares any better. In particular, what is the argument for:

2. Only something that functions as a whole rather than as a system of parts could experience a visual field as a unity?

From what I can tell, there is no argument for 2 anywhere in Hasker's text. 2 doesn't strike me as at all evidently true. Hasker seems to think that the only way to get unity out of a composite mind is to accept holism. (Indeed, Hasker [2010, p. 182] thinks that 4 is the premise that the materialist will contest.) What is the materialist alternative to holism? I take it it would involve something like the reply above to Kant. So, the materialist could respond in one of two ways. Either (i) she may insist that there is no reason to think that the parts of the visual field are distributed across the parts of the brain. The visual field is had not by the parts of the brain, but by the brain itself, a single entity. It is true that parts of the brain are necessary for parts of the visual field. So, maybe if one lesions part of my brain, I lose the left half of my visual field. But that isn't to say that part of the visual field is located in that part of the brain. The brain is the subject of the visual field, not its parts. Or (ii) (perhaps (i) sounds too close to holism) she may grant that the parts of a visual field are distributed across the parts of the brain. But, just as the parts of the brain sum to a single entity, the brain; the parts of the visual field sum to a single entity, the visual field. As we saw with Kant, what will matter here is that the parts of the field have the right properties and stand in the right relations to each other. But there is no conceptual *a priori* reason to think that they couldn't be (*pace* Hasker). Again, the photograph-in-strips example shows that you can get a unified field from parts. So Hasker would need to show that the parts of the field don't have the right properties and/or don't bear the right relations to each other to sum to a unified visual field. And he hasn't done that.<sup>9</sup>

I don't think that either Kant's argument or Hasker's argument from the unity of consciousness to the simplicity of the soul work. Neither force the materialist to say that the visual field is distributed across parts of the brain.

And, if the visual field were so-distributed, there is no argument that there can't be a unified field made of the parts of the field. So I don't think that they would keep the dualist from saying that the soul's parts are such that they produce a unified visual field.

There are, so far as I can tell, no other arguments for the simplicity of the soul that are remotely plausible.<sup>10</sup> The unity of consciousness argument is, as we've seen, deep and interesting. But it's unsound. Most arguments that purport to be arguments for the simplicity of the soul are actually arguments for the immateriality of the soul. But immateriality doesn't entail simplicity.

### 3.2. COMPOSITE SOULS?

The principal argument for the soul's having parts goes something like this. Suppose the soul is co-located with the brain.<sup>11</sup> Surely the soul then has parts. For the brain has parts, and the soul is co-located with it.

This argument, were it sound, would tell against the possibility of extended simple substances. For extended simples are co-located with a region of space, and the region of space has parts.<sup>12</sup> But extended simples seem to be possible.<sup>13</sup> (Indeed, if string theory is right, they're ubiquitous, as strings are extended simples.) So we can't infer from the fact that the soul is co-located with the brain that the soul has parts.

What can we take from this investigation of the simplicity of the soul? I think the lesson is that one may adopt a view on which the soul is simple, or one on which the soul has parts. The arguments don't compel one either way. More generally, what can we take from the assessments of Varieties A-G? There are no knockdown arguments, I think, for any of the views over the other. But I do think that if one finds arguments for a body-soul view compelling, one should find arguments for a field view compelling. And, from the violin case, I'm skeptical of all these sorts of arguments. So, were I to accept somatic dualism, I'd prefer a view in which the soul is located in the brain. I am slightly inclined to go with the simple soul view over the composite view. But I've no real arguments for this preference. I believe that the extended simple view (over the point-sized simple view of Variety G) fairs better with the pairing problem, as we will see below.

## 4. *On the advantages of somatic dualism over cartesian dualism*

There have been a number of objections to Cartesian dualism. Two serious (sorts of) objections are, *a priori* objections to the possibility of Cartesian mind-body interaction, and the so-called 'pairing problem' (Kim, 2001). I think that most of the somatic dualisms we've seen so far have the capacity to say something about each of these.

## 4.1. PROBLEMS OF INTERACTION

There are multiple concerns that people raise with respect to the possibility of Cartesian souls interacting with bodies. One claim is that it is impossible that something immaterial and material interact. (Such people presumably think that the notion of a theistic God is incoherent.) Obviously, somatic dualism has nothing to say here that the Cartesian dualist can't also say. But there is another concern people raise with Cartesian mind–body dualism that sometimes is run together with the first objection: The soul can't cause states in the body because the soul isn't extended. Or, the soul can't cause states in the body because it is outside of spacetime, and things outside spacetime can't causally influence things in spacetime. This sort of concern famously was raised by Princess Elisabeth of Bohemia against Cartesian mind–body dualism. Jaegwon Kim (2011, p. 48) states her objection in the following manner:

For anything to cause a physical object to move, or cause any change in one, there must be a flow of energy, or transfer of momentum, from the cause to the physical object. But how could there be an energy flow from an immaterial mind to a material thing? What kind of energy could it be? How could anything 'flow' from something *outside space* to something *in space* (italics Kim's).

Let us return to the first objection, that something immaterial can't influence something material. If one asks someone who puts forth this first objection what the problem with something immaterial causing states in something material, one often hears, 'But the soul is unextended and outside space and time. How can something like that cause neural events?') We see just that connection expressed in Kim's summary of Elisabeth's argument. Her main worry, as Kim represents it, is that the immaterial mind is outside space, and thus can't influence something in space.

Clearly somatic dualism allows the dualist to eschew this objection. For the somatic dualist, the soul is an extended entity that exists within spacetime. So the worry of something outside of space influencing something inside space doesn't arise. I think this is a significant advantage of somatic dualism over Cartesian dualism. At worst, the somatic dualist has an answer to one of the principal concerns around mind–body interaction. At best, because the root of various expressions of problems with mind–body interaction center on a non-spatial entity's interacting with a spatial entity, the somatic dualist has a reply to a wide range of interaction objections against mind–body dualism.<sup>14</sup>

## 4.2. THE PAIRING PROBLEM

In Kim, 2001, and elsewhere, Jaegwon Kim has raised what he calls 'the pairing problem' for mind–body dualism. Here is a statement of the problem from Kim (2001, p. 36):

Let us now turn to a situation involving nonphysical Cartesian souls as causal agents. There are two souls, A and B, and they perform a certain mental action, as a result of which a change occurs in a material substance M. We may suppose that mental actions of the kind involved generally cause physical changes of the sort that happened in M, and, moreover, that in the present case it is soul A's action, not soul B's, that caused the change in M. Surely, such a possibility must exist. But ask: What relation might perform the job of pairing soul A's action with the change in M, a relation that is absent in the case of soul B's action and the change in M? Evidently no spatial relations can be invoked to answer this question, for souls are not in space and are not able to bear spatial relations to material things. Soul A cannot be any 'nearer' to material object M, or more appropriately 'oriented' with respect to it, than soul B is.

Kim goes on to argue that there is no way of 'pairing' A and M, because they aren't spatially related.

Now, it's not clear to me that the Cartesian dualist has a serious problem here. Suppose, as is plausible (so say I!), that causation is a primitive, *sui generis* relation. Then it may just occur between A and M, and M and A; and not between B and M, and M and B. There may be no more answers to questions like, 'what makes it the case that A causes a state in M' than there are to questions like 'what makes it the case that the bat's striking the baseball caused the baseball to fly in the air?' Or, suppose we take laws of nature as primitive and analyze causation in terms of them. The Cartesian dualist may posit fine-grained laws of nature that connect A and M, and not B and M. So the Cartesian dualist has replies here. (There is much more to say here, but my aim in this article isn't to defend the Cartesian dualist.)

I think that the somatic dualist has various responses to the pairing problem available. She may avail herself of the two solutions the Cartesian used in the last paragraph. Or, she may appeal to the fact that the soul is a spatial entity, and claim its location vis-à-vis the body with which it interacts is what solves the pairing problem. The soul that interacts with my body is the soul that is in my brain, or somewhere inside my body, or located where my body is, or located such that it overlaps my body and some of the space around it.

At the end of his paper, Kim considers the question of whether locating the soul in space would help with the pairing problem. He argues that it wouldn't help:

In any case, putting souls into physical space may create more problems than it solves. For one thing we need a principle way of locating each soul at a particular point in space (why can't we locate all the souls in the world in one place, say in this empty coffee mug on my desk, like the many angels on the head of a pin?). It obviously would beg the question to locate my soul where my body, or brain, is on the ground that my soul and my body are in direct causal interaction with each other. Second, if locating souls in space is to help with the pairing problem, it must be the case that no more than one soul can occupy an identical spatial point; for otherwise spatial relations would not suffice to uniquely identify each soul in relation to other souls in space ... [i]f souls are subject to spatial exclusion...why aren't souls just material objects...?<sup>15</sup>

... Moreover if a soul ... is at a geometric point, it is puzzling how it could have enough structure to account for all the marvelous causal work it is supposed to perform and explain the differences between souls in regard to their causal powers (Kim, 2001, pp. 44–45).

We should note that as stated, the only sort of somatic dualism that is threatened is Variety G. The other views either have a composite soul, or a soul that is an extended simple. However, I think that his reasoning can be brought to bear against the other types of somatic dualism we've examined. (More on this momentarily.)

So what should we make of Kim's reasoning above? First, the argument in the last section presumably would tell against any view on which the soul is simple and lacks parts (and thus structure). To the extent we understand what immaterial minds are, they are the sorts of things that contain an entirety of one's mental life. I don't see why the dualist can't say that the simple soul simply is the sort of thing that has the requisite mental states to count as a mind. This concern is similar to the question that is sometimes put to dualists: 'You say that there is no way to explain how a physical thing can think. So you posit an immaterial thing that thinks. But how can we explain how this immaterial thing thinks?'<sup>16</sup> The answer here simply is: the soul is a made-to-order thinking thing. It is the sort of thing capable of consciousness, and it is something that is capable of holding the entirety of an entity's mental states.

I find the first part of Kim's argument more convincing. The challenge is something like this: 'So you want to solve the pairing problem by locating the point-sized simple soul inside the body. Why should we think that each body contains one and only point-sized simple soul, and it is the one soul that interacts with that body?' Though Kim's point is put in terms of point-sized simple souls, we can extend it with the following challenge. 'So you want to solve the pairing problem with an extended immaterial soul. Why should we think that each body contains one and only one extended immaterial soul, and it is the one soul that interacts with that body?' I think that this is a serious challenge for the somatic dualist. As I see it, there two are answers the somatic dualist may give. Less plausibly, she may say that it's a primitive fact that one and only one soul is located within a body that is the one body that soul interacts with. This is potentially problematic for two reasons. First, how is this sort of fact primitive? It looks like it needs explanation. Second, if one is willing to accept this sort of primitive, why not just say that the unique causal connection between this soul and this body is itself primitive? This primitive is no worse than the location-based primitive, and it avoids the extra step of responding to the pairing problem by locating the soul uniquely in the body, and claiming the location fact is primitive. Admittedly, it isn't using the spatial location of the soul to solve the pairing problem. But the grounding for the soul's location in this case is dubious.

The second – and more plausible – answer the somatic dualist may give (and any sort of somatic dualist may give it), is that the soul emerges from

the brain or body. So the soul is caused to exist by a particular brain or body, and this is why this soul is located in this brain or body or around this body. Then she can use the location of the soul to solve the pairing problem.<sup>17</sup> So I think that emergent dualism has an important role to play in responding to the pairing problem.

I believe that the somatic dualist has a ready reply to the pairing problem if she believes the soul emerges from the brain or body. The non-emergentist isn't without answer, but it seems to me that the emergentist answer is preferable to the non-emergentist answers. Indeed, the best non-emergentist answer will be one of the two answers the Cartesian dualist might give.

More generally, I think that somatic dualism, and emergent somatic dualism in particular, should be taken as a serious alternative to Cartesian dualism because of its ability to respond to interaction problems and the pairing problem in a more satisfying manner than can Cartesian dualism.

### 5. *But is it dualism?*

Perhaps the reader has been wondering: is this really dualism that we've been considering? I am admitting the possibility of entities that are extended in space that aren't material. They can interact with the material world. The body may cause mental events in the soul, and the soul may cause neural events in the body. Why aren't they some strange kind of material thing? For Descartes, of course, anything extended is a material body. But I don't think that we need to follow Descartes in thinking this. The soul in Versions A-G is something like a ghost. A ghost exists in spacetime. It can cause events in the physical world (a human may see it, a human may feel a cold touch when it passes), and events in the physical world can cause states in the ghost (so maybe it is repelled by a religious item, or is sucked up by the Ghostbusters' Proton Pack). So why isn't the ghost physical? In short, because the ghost isn't subject to laws of nature in the way normal material objects are. The ghost can pass through walls, isn't subject to gravity, doesn't weigh anything if it steps on the scale, etc. In the case of the somatic soul, though it too can causally impact the physical and can be causally impacted by the physical, it also isn't subject to the laws of nature in the way normal material stuff is. It doesn't add anything to the weight of the body. It isn't subject to gravity. Even if it has parts, it isn't cut in half if a magic trick goes awry. It is metaphysically possible that it exist at a time in which there are no material objects. Thus, I conclude that ghosts are immaterial, as are somatic souls.



## 6. *Extending the account?*

It may also have occurred to the reader that the initial puzzle that motivated somatic dualism – the plight of the eternalist dualist – exists in a form for the eternalist-theist. Suppose one thinks that an atemporal God is incoherent, perhaps because of the fact that the God of Western theism interacts with temporal humans (answering prayers, smiting the wicked, etc.). Then one would want to think of God as a temporal being. If one is an eternalist, that means thinking of God as a spatial being. One way to think of God as a spatial being is to think of God as analogous to the extended immaterial mind. However, rather than being located in or around a body, God is diffused through all of spacetime. Most theists think that God's being omnipresent is a loose way of speaking: It's not that God is *literally* everywhere; rather, God has the power to cause events anywhere in space. However, on this way of thinking of God, God really *is* everywhere. Perhaps not surprisingly, Henry More, Samuel Clarke, Richard Price, and Newton held something like this view of divine omnipresence.

## 7. *Conclusion*

In this article, I've set out and explored various views on which mind–body dualism is true, but the soul is located in the body. Thus, this sort of dualism – somatic dualism – stands in contrast to Cartesian dualism, the sort of dualism that most everyone thinks of when they hear 'dualism.' In spite of its lack of recognition today as a serious philosophical alternative; somatic dualism historically has had some illustrious proponents, including philosophers like Augustine, Henry More, Isaac Newton, and Samuel Clarke. I think that somatic dualism deserves to be taken seriously by those attracted to dualism because it is a coherent view that affords the dualist replies to challenges to dualism not available to the Cartesian dualist.<sup>18</sup>

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### NOTES

<sup>1</sup> I focus on non-hylomorphic views in this article because I question the coherence of hylomorphic mind–body dualism.

<sup>2</sup> See Grandi, 2011, for discussion. Thanks to James Van Cleve for alerting me to this article and Fearn's views. Fearn, 1820, is an extended discussion and defense of somatic dualism. Thanks to Grandi for discussion of Fearn's views.

<sup>3</sup> Again, these sorts of considerations were discussed in early modern Britain. Samuel Clarke (see Leibniz and Clarke, 1956: Clarke Second Reply) thought that the mind can't perceive where it isn't located. The mind is located in the skull. Thus, immediate objects of perception aren't located out in the world outside the skull (as a direct realist might think). Thomas Reid (1878, E2 ch. 14) thought that Clarke held that the mind can't perceive where it isn't located because Clarke believed that in perception the mind acts on the immediate object of perception, or is acted on by the immediate object of perception. Furthermore, an object can't act in or be acted on at a place where it isn't located. Reid responded that the mind neither acts nor is acted on in perception, so that the truth of the 'no action at a distance' claim (which Reid accepted) doesn't entail that the immediate objects of perception aren't out in the world outside the body.

<sup>4</sup> Thanks to an anonymous reviewer whose question prompted this paragraph.

<sup>5</sup> Thanks to Gordon Barnes for suggesting an argument along these lines.

<sup>6</sup> It should be noted that Kant himself was at best ambivalent about this argument.

<sup>7</sup> This use of 'holism' comes from Van Inwagen, 1990.

<sup>8</sup> I take it the same will go for other sorts of properties had by the highest-level object that serve to make it something over and above its parts.

<sup>9</sup> There may be empirical questions as to how this works, but this is an issue for neuroscientists and not philosophers *qua* philosophers.

<sup>10</sup> For example, here is one. I am such that I am possibly simple. Necessarily, if x is possibly simple, x is necessarily simple. Therefore, I am simple. This argument is valid, of course. But the materialist is well within her rights in rejecting either premise, if not both.

<sup>11</sup> The argument can be adapted to work with other sorts of somatic dualism beyond Varieties A and D.

<sup>12</sup> Unless one is a supersubstantialist, of course. (There may be an argument against supersubstantialism from the possibility of extended simples here!)

<sup>13</sup> For discussion see McDaniel, 2007.

<sup>14</sup> I should note that the question of *where* the immaterial soul and body interact (famously for Descartes it was in the pineal gland) isn't addressed by this reply. We will return to this question later in the article.

<sup>15</sup> I should note that a view on which souls are tiny material objects was put forth by Chisholm (1989, ch. 13).

<sup>16</sup> We see this, e.g., in Locke's (private) reply to Thomas Burnet's *Remarks Upon an Essay Concerning Human Understanding*. In response to Burnet's arguing that he can't conceive of how something material can think (and thus we ought to be dualists), Locke writes, 'Pray tell us how y[ou] conceive cogitation in an unsolid created substance. It is as hard, I confess, to me to be conceived in an unsolid as in a solid substance.' See Porter, 1887, in Schouls, 1984.

<sup>17</sup> Note that the soul's emerging from a particular brain or body doesn't itself solve the pairing problem.

<sup>18</sup> Thanks to James Van Cleve, Gordon Barnes, William Hasker, Giovanni Grandi, and an anonymous reviewer from this journal for very helpful comments on this article.

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