

Consciousness and the Prospects for Substance Dualism

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Abstract

There has in recent years been a significant surge of interest in non-materialist accounts of the mind. Property dualists hold that all substances (concrete particulars that persist over time) are material, but mental properties are distinct from physical properties. Substance dualists maintain that the mind or person is a non-material substance. This article considers the prospects for substance dualism given the current state of the debate. The best known type of substance dualism, Cartesian dualism, has traditionally faced a number of objections, but many contemporary philosophers have sought to avoid these by formulating novel versions of the view. I identify three central claims held in common by all forms of substance dualism, consider recent arguments for these claims, and assess how successfully different types of substance dualism respond to the traditional objections. I argue that most contemporary forms of the view still face one or more of three major challenges, from bundle theories of the self, from the recently developed “phenomenal concepts strategy”, and from worries about explanatory simplicity.

1. Introduction

The last several years have seen a significant surge of interest in various types of non-materialist accounts of the mind, a rise so marked that one recent collection of essays on the topic by prominent philosophers proclaims “the waning of materialism” (Koons and Bealer 2010). Perhaps the most important distinction within the great variety of non-materialist views which have been proposed is between those which espouse some form of property dualism and those which advocate some form of substance dualism. Property dualism is, in short, the claim that mental properties are distinct from physical properties. Among contemporary philosophers, such a view is often combined with substance physicalism, the idea that all substances are physical, where a substance, as the notion is most commonly used, is a concrete particular that persists over time and bears properties. Substance dualism, on the other hand, is the view that the mind or person is a non-material substance, a substance that cannot be identified with any material substance. Substance dualism has generally been viewed as a stronger doctrine than property dualism, since on most views the former entails the latter, but not vice versa. This article will consider the prospects for substance dualism given the current state of the debate, focusing especially on arguments broadly concerning the nature of consciousness, as opposed for instance to arguments based on intentionality (for the latter, see e.g. Meixner 2010). Although recent substance dualists have shown considerable ingenuity in defending novel versions of the view, I will nonetheless highlight three significant challenges such views still face.

2. Cartesian Dualism, its Difficulties, and Some Alternatives

The conception most commonly associated with the term “substance dualism” is no doubt that of Descartes. Though there is controversy as to what exactly Descartes’ view

was, what is commonly referred to as Cartesian dualism is the view that the mind or self is an immaterial substance distinct from material substances, and possessing characteristics wholly distinct from those of material substances: whereas material substances are spatial, divisible, and unthinking, minds are thinking, non-spatial, and indivisible, and do not possess any material properties.¹ On this view, substances of the two types interact causally, but no immaterial substance depends for its existence on the existence of a material substance, nor vice versa, so the self can survive the death of the body.

Cartesian dualism has traditionally faced a number of powerful objections. Of the many difficulties that have been raised, I will here focus on four.²

1. *The Interaction Problem* – This objection was first raised by Princess Elizabeth of Bohemia, with whom Descartes corresponded.³ The worry is, in short, that if as Descartes maintains the mind or self is immaterial and non-spatial, it becomes quite mysterious how it could interact causally with the body, which is material and located in space.
2. *The Pairing Problem* – Jaegwon Kim has raised a different causal problem (2005, pp. 78–85; see also Foster 1991). If two guns are fired simultaneously and a person is killed, in order to determine which gun was causally efficacious, we would look to the two guns' spatial relations in regard to the person involved. But suppose there were two Cartesian souls X and Y, both of which engage in an identical act of will, following which an arm in a certain body A rises. If X and Y are non-spatial, what relation could there be which would serve to pair either X or Y with A, so as to make it the case that one of them and not the other caused the raising of A's arm?
3. *Psychophysical Dependence* – It has often been argued that the Cartesian view has a hard time accounting for neuroscientific evidence that the natures of different mental states depend very closely on neural processing (Hasker 1999, 2001; McGinn 2000; Lycan 2009). If the mind is really capable of functioning independently of the brain, so this objection goes, how can these apparent psychophysical dependencies be explained?
4. *Explanatory Problems* – Another central challenge to the Cartesian picture is a set of worries concerning the explanatory role of the view. The most commonly expressed objection of this kind is that the Cartesian view violates one version of Ockham's Razor, which holds that one should not posit entities beyond those necessary to explain the relevant evidence. The argument is that it is unnecessary, in order to explain the facts of mental life, to postulate the existence of an immaterial substance (Churchland 1984; Lycan 2009; Koons and Bealer 2010).⁴

Though some contemporary philosophers have defended the Cartesian view in the face of these problems, many have instead turned to different forms of substance dualism. We will consider in more detail later how these views seek to avoid the problems facing the Cartesian view, but it will be helpful at the outset to have a sense of the alternatives. Many of these alternatives adopt what might be called *compound substance dualism*, the view that mental substances, while distinct from physical substances, nonetheless possess, at least while embodied, some of the properties of material things – at least spatial location, and perhaps others as well.⁵ Within compound substance dualism, however, it is helpful to distinguish two broad classes of views. On the one hand are what I will call *survivalist* views, which hold that mental substances possess most or all material properties contingently, so that it is metaphysically possible for a person to survive death, either disembodied or re-embodied. This class of views includes many versions of what is commonly called *emergent substance dualism*, the view that mental substances come into existence when physical systems (e.g. the brain) reach a sufficient level of complexity

(Hasker 1999, 2001; Toner 2008; Zimmerman 2010, 2011). It would also include views such as Taliaferro's (1994) *integrative dualism*, which holds that a mental substance, at least while embodied, possesses the material properties of the body and is closely integrated with it, but may nonetheless persist independently of the body.

A different variety of compound dualism is involved in what I will refer to as *survival-neutral* accounts, that is, views which are non-committal on the question of survival. While accounts of this kind may not reject the possibility that a person could survive after the death of the body, neither do they view this possibility as established by the arguments for substance dualism, or on any other grounds. Lowe's *Non-Cartesian Substance Dualism*, another type of emergentist view, is one such position (Lowe 1996, 2008, 2010). On this account, the person, while distinct from his or her body, nonetheless possesses many (though not all) of its attributes. Baker (2000, 2001) defends a different version of this view, according to which the person is distinct from the body but is nonetheless wholly constituted by it, in the way a statue is constituted by the lump of bronze of which it is made.

In spite of this variation in contemporary forms of substance dualism, it is nonetheless plausible to view all types of substance dualism as committed to three central claims.⁶ First, there is what I will refer to as *The Non-Materiality Claim*, the claim that mental events, states, or properties are in no sense identical with physical events, states, or properties. This is a more general thesis shared by both property dualism and substance dualism. Second is what I will call *The Substance Claim*. Substance dualists hold that the subject of these mental events, states, and properties is a substance, a concrete particular enduring through time, which is not reducible to the mental items themselves. This is in contrast with a more Humean "bundle theory" according to which what appears to us as the subject of experience is not an irreducible particular but is logically constructed out of appropriately related mental events, states, or properties. Finally, there is *The Non-Material Substance Claim*. This is the view that the substance in question is not identical to any material substance (e.g. the body or any of its parts).

In what follows I will consider some of the arguments for each of these claims, focusing primarily on the third one, since that is the claim distinctive of substance dualism. I will then return to the question of whether the various types of substance dualism we have discussed can adequately respond to the above difficulties.

3. *The Non-Materiality Claim*

There are a number of arguments which have been presented in recent years for holding that mental events, states, or properties are not identical to physical events, states, or properties, both in support of property dualism and in (partial) support of substance dualism. Since these arguments have received widespread attention elsewhere, I will discuss them only briefly here, along with the most prominent contemporary materialist response.

The arguments in question aim most immediately to support what I will refer to as strong, as opposed to weak, property dualism. Weak property dualism, which is commonly associated with non-reductive physicalist views such as some versions of functionalism, rejects the view that mental types or kinds are identical with physical types or kinds, or alternatively the identity of mental and physical properties.⁷ But it is nonetheless often regarded as a species of physicalism, since it accepts either the identity of token mental events – dated mental occurrences in particular subjects – with token physical events, or the supervenience of mental properties on physical properties. Supporters of

the latter approach often conjoin property dualism with a supervenience account of physicalism; according to perhaps the most widely accepted version of this view,

(S) physicalism is true if and only if any metaphysically possible world that is a physical duplicate of our world is a duplicate of our world simpliciter (including in all mental properties), or includes such a duplicate as a proper part.⁸

By contrast, strong property dualism rejects not only type identity, but also the token identity of mental events with physical events and/or the supervenience of mental properties on physical properties.

One prominent argument that has been used to support both strong property dualism and substance dualism is the knowledge argument.⁹ Jackson (1982) asks us to consider Mary, a future neuroscientist who, from her situation in a completely black and white room, has gained knowledge of all of the physical facts underlying human color perception. When she leaves her room, Jackson supposes, she will gain knowledge of, for instance, what it is like to see red. But since she already knew all of the physical facts about color perception, these facts about her qualia cannot be physical facts. Facts about qualia must thus be non-physical facts.

Another type of argument is based on the purported conceivability of situations that violate supervenience physicalism.¹⁰ According to one such argument, it is conceivable that there could be a zombie, a being physically identical to me, but who has no conscious experience at all. But, so the argument goes, what is conceivable – at least in the right kind of way¹¹ – is metaphysically possible. And if it is metaphysically possible that there could be beings who are physically identical to me but who differ in their conscious experience, supervenience physicalism as defined by (S) is false.

Physicalists have responded to these arguments in a variety of ways, but for present purposes I will concentrate on what is perhaps currently the most widely accepted reply, what is often referred to as *the phenomenal concepts strategy*.¹² According to this approach, there are two irreducibly different ways of grasping conscious states. When we attend to what it's like to feel a current pain by introspection, we use phenomenal concepts; when we consider a pain state from an "external" point of view, for instance as a state of the subject's nervous system, we are employing non-phenomenal concepts. This irreducible duality of concepts may lead us, it is said, to think that these two modes of access reveal two distinct properties, one mental and one physical, but in fact they are simply two modes of access to a single physical property of the nervous system. The above arguments simply highlight the fact that these two kinds of concepts are inferentially isolated from each other, in that we cannot infer what it is like to feel pain from the knowledge that pain is c-fiber stimulation, nor vice versa. Because of this inferential isolation, Mary does in fact learn something when she leaves her black and white room, but what she gains is not knowledge of a new, non-physical property, but just a new way of conceiving of a physical property. Similarly, while zombies are conceivable, this does not entail that they are metaphysically possible; their conceivability is explained by the inferential isolation of phenomenal concepts from non-phenomenal concepts.¹³

4. The Substance Claim

Contemporary substance dualists are not always very explicit about how they view the ontological status of substances in general, and there are a number of different accounts that might be given. Substances might be viewed as simply bundles of compossible or coexemplified properties or property instances. They might be seen as collections of

properties tied together by a “substratum”, a bare particular without positive characteristics. Or they might be seen as simply irreducible: “substance” might be a basic ontological category irreducible to properties or properties plus substrata.¹⁴ In general, however, substance dualists have tended to regard mental substances as something more than just bundles of mental properties, opting for one of the two latter views; traditionally the debate has been *between* substantival and bundle theories of the self. It is thus on this debate that I will thus focus here. I cannot survey the broader debate in any detail, but will only discuss what is perhaps the most prominent argument which has been offered recently on the substance side.

The core of this argument is well expressed by Foster, who claims that “our very conception of the mental seems to be the conception of how things stand with a subject” (Foster 2001, p. 17). Just as it is not possible to understand what it would be for there to be motion without a thing that moves, so we cannot understand what it would be for there to be pain without a subject who is in pain. Lowe (1996) has offered a more fully developed version of this type of argument, which he derives from Strawson (1959). Since bundle theories view the person as nothing more than a collection of token mental events or states, he maintains, they require that it be possible to specify identity conditions for these mental tokens independently of reference to a person. But this, he argues, cannot be done. A particular experience of pain by a particular person cannot be individuated either qualitatively or by time of occurrence, since two qualitatively indistinguishable occurrences of pain could occur at the same time. What must be added, to individuate this particular pain, is that it is the pain of a particular person. Peacocke has argued, to the contrary, that what must be added is rather a reference to the particular causes and effects of the pain token (Peacocke 1983, pp. 176ff.). But Lowe argues that the requisite causal conditions themselves cannot be individuated independently of reference to a person. Among the causal conditions for experiencing a certain pain, for instance, are the facts that the *person* in question must be awake, paying attention, and so on.

Foster’s and Lowe’s arguments appear to leave open, however, at least two replies. First, it might be doubted whether it is really unintelligible that there could be a pain without there being a person who is in pain, or that my pain might simply be ascribed to my body. Such a perspective is common to a wide variety of critiques of substantival views of the self, from Hume’s (1978), to James’ (1981), to contemporary Buddhist accounts (Siderits 2003, Siderits, Thompson, and Zahavi 2011). (For a response along these lines to Strawson’s original argument, see Williams (1973), pp. 64–70). Second, even if it were conceded that we cannot coherently think of pain without a substantial subject who is in pain, it is open to the opponent to adopt an error theory, that is, to hold that although we are for whatever reason constrained to think of experience in terms of substantial subjects, we nonetheless have good reason to believe that there are no such entities, or at any rate no sufficient reason to posit them. To my mind, more work needs to be done to defend a substantival view of the self against worries of this kind; this constitutes the first of the challenges facing contemporary substance dualists that I will emphasize here.

5. *The Non-Material Substance Claim*

Even if it is granted that the apparent subject of mental occurrences is a substance, there remains the further question of whether this substance is material or non-material. We should now consider some of the arguments that have recently been given for the

substance dualist option. Many – though not all – of these arguments could be used to support any version of substance dualism, and so I will here largely consider them as arguments for substance dualism in general.

A number of contemporary substance dualists have pursued a type of modal argument which traces its ancestry to Descartes. This argument is based on the *conceivability of disembodiment*. Taliaferro (1994, p. 173ff.), for instance, offers an argument of this kind in support of his “integrative dualism”:

1. It is conceivable that I could exist without possessing a body, in the sense that one can coherently and without intellectual negligence imagine this possibility.
2. What is conceivable in this sense is metaphysically possible.
3. It is metaphysically possible that I could exist without possessing a body.
4. I possess a modal property that my body does not, namely the metaphysical possibility of existing without my body.
5. If two things are numerically identical, they share all their properties in common.
6. I am distinct from my body.

In support of the crucial first premise, Taliaferro offers considerations such as the apparent intelligibility of body-switching thought experiments, and the idea that out-of-body experiences present at least a coherent possible state of affairs.

Arguments of this kind have been criticized on a number of grounds. Most prominent in contemporary debates are questions about whether conceivability entails possibility.¹⁵ As a number of authors have pointed out, there seem to be clear cases in which this entailment fails. For instance, it seems *prima facie* conceivable both that Goldbach’s conjecture and its negation are true, but it is only possible for one of these to be true. Taliaferro, like other proponents of this entailment, seeks to avoid this problem by placing constraints on the kind of conceivability (“without intellectual negligence”) that entails possibility. But this weaker entailment principle has also been widely doubted. Lowe (2010), for instance, rejects the argument from the conceivability of disembodiment on the grounds that even if we concede that disembodiment is in the relevant sense conceivable, we simply cannot *know* whether it is possible – whether, that is, there is some reason that precludes this possibility of which we simply haven’t thought.¹⁶

Another type of argument descended from Descartes turns on the supposed simplicity, unity, or indivisibility of the self. A recent version of this argument is presented by Hasker (1999, 2001, 2010). On this argument, my visual experience at any moment is a unity in the sense that its elements are experienced simultaneously by a single subject, which must thus function as a whole rather than a system of parts. But since the brain, the nervous system, and the body form an organized collection of physical parts, their function must be that of a system of parts. Hence the subject of experience cannot be identical to any or all of these material things. Lowe (2010) has objected that indivisibility arguments of this kind ultimately beg the question by assuming that I do not have parts.¹⁷

Lowe himself however offers a different defense of substance dualism, which holds that I cannot be identified with either my body or any of its parts, because I have persistence conditions different from these material substances (Lowe 2001, 2006, 2010). This argument seems ultimately to be based, like the disembodiment argument, on a conceivability claim (Lowe 2001, p. 142). I am not identical with my nervous system because it is conceivable, and plausibly possible, that all of the cells of my nervous system could be gradually replaced with electronic circuits, and yet I would still exist at the end of this process. So too, I cannot be identified with any other part of my body or with my body as a

whole, because I could survive the replacement of every part of my body by artificial substitutes. Since I could survive this replacement, but my biological body and its parts could not, I am not identical to them. Lowe does not, it should be emphasized, take this argument to be capable of supporting Cartesian dualism – though it is also not inconsistent with that position – for he does not take it to provide any grounds for thinking it is possible for me to exist without *some* body. He instead uses the argument to support his Non-Cartesian Substance Dualism. For recent criticism of the persistence argument, see Ninan (2009).

Though space does not allow me to consider their arguments here, several philosophers have recently supported substance dualism by comparison with property dualism: some (e.g. Schneider 2012) have argued that substance dualism is entailed by property dualism, others (e.g. Zimmerman 2010) that it is at any rate no less plausible. (For a response to Zimmerman, see Mackie 2010.)

I note finally one response to which all of the main arguments we have considered seem vulnerable, and which I would argue represents a second major challenge facing contemporary substance dualists. This is a response based on something akin to the phenomenal concepts strategy. From the perspective of this strategy, it might be argued that even if it is conceivable that I could exist without a body, or that I could survive the replacement of all parts of my body, this conceivability can be fully explained by the fact that the phenomenal concept “I” is inferentially isolated from the non-phenomenal concepts of the body and its parts. These conceivabilities thus give us no good reason to suppose that the envisioned scenarios are in fact possible. So too, the fact that the subject appears to introspection unified or indivisible gives us no reason to deny that it is some physical thing; the phenomenal concept of the self simply represents it differently from the way the non-phenomenal concepts of the body and its parts represent it.

6. Overcoming the Challenges

Let’s now consider, more specifically, how each of the types of substance dualism discussed at the outset might seek to overcome the difficulties facing Cartesian Dualism. I will focus initially on the first three of these problems, all of which have to do with causation, and will then turn to the fourth, the explanatory problem.

Firstly, how might advocates of Cartesian dualism itself respond to the causal challenges? Cartesians have sometimes responded to the interaction problem by advocating something akin to a Humean view of causation (Lycan 2009). But a more common response has been that while it is alleged that we have no good model of how psychophysical causation would work, there is nothing stopping us from viewing this type of causation as a brute fact with no further explanation. As Foster suggests, if the causation is direct, there can be no question of any intervening mechanism.¹⁸ Such a response has, of course, the disadvantage of positing a brute, inexplicable relation to account for psychophysical interaction, whereas materialism relies on causal relations which, however puzzling they might be, are of the same kind as those that underlie all physical causation.¹⁹ Kim (2005), for instance, rejects this response as “inadequate and unsatisfying”, as it concedes that the central notion on which Cartesian dualism relies, that of the union of mind and body, is simply unintelligible.

As to the pairing problem, several recent authors have argued, contra Kim, that spatial relations are not in fact necessary to secure the required pairings between minds and bodies. Foster, for instance, maintains that it would suffice to ensure that an event in Smith’s body caused an event in his mind rather than, say, Jones’ mind, if there were psychophysical laws which were restricted in their scope to particular persons (Foster

1991, p. 167). Since this solution takes psychophysical pairings to be established by fundamental natural laws, it in effect posits these pairings as themselves constituting brute, inexplicable facts. The possibility of appealing to the inexplicability of the pairing relation is also entertained by Goetz and Taliaferro (2011, p. 138).

On the problem of psychophysical dependence, one response available to Cartesians is to argue that while the mind may depend on the brain for information and for many of its functions, even complex reasoning, some mental functions are independent of the nervous system (see e.g. Lycan 2009). Critics have questioned, however, whether neuroscientific evidence leaves *any* room for mental functions that are brain-independent. Hasker views this problem as an insurmountable one for Cartesian views. The difficult question, he suggests, is “why should *consciousness itself* be interrupted by a blow to the head, or a dose of medicine?” (2001, p. 112).

Many contemporary substance dualists have viewed such defenses of Cartesianism in the face of its challenges as incurring too high a price, and have turned instead to various compound dualist views. Many advocates of the compound view tout, above all, its ability to avoid the interaction problem and the pairing problem by viewing mental substances as located in space, perhaps coinciding with the body, or the brain, or existing as a whole at each point of the body (Hasker 1999, 2001; Taliaferro 1994, 2001a,b; Goetz and Taliaferro, 2011; Lycan 2009). If the mind or person is located in space, it is said, it becomes easier to see how it could interact causally with the brain and the body, and could be paired with the appropriate body. As Goetz and Taliaferro point out, the notion that the soul is non-spatial was in fact a Cartesian innovation that differed from the traditional views of, for instance, Augustine and Aquinas, so such a view has precedent in tradition (p. 70ff.).

Kim, for his part, has maintained that the idea of locating souls in space creates more problems than it solves (Kim 2005). For instance, he asks, what are the grounds for taking a soul to be located at one point in space rather than another? We cannot appeal to the fact that there is causal interaction with a body at that point, on pain of circularity, but it is not clear what other plausible grounds there might be. Further, in order to solve the pairing problem, it will have to be the case that no more than one soul can occupy any spatial point. But if souls are subject to spatial exclusion in this way, why aren't they just material things, perhaps of a special sort? Goetz and Taliaferro (2011, pp. 140–46) have recently responded to the first of Kim's concerns by suggesting that the explanation of Smith's soul being co-located with his body is simply that that is where Smith is; spatial locations, they maintain, are themselves brute facts. As to the second point, they argue, the dualist could simply accept that more than one soul can be located in one space. Even if this is the case, if we have independent justification for believing in souls and in causal interaction, we will be justified in believing that the necessary pairing relations obtain between Smith's body and his soul, even if we cannot explain how this is so.

Note that Kim's worries seem to apply only to survivalist compound views, and not necessarily to survival-neutral views. On Lowe's view, for instance, the spatial properties of a mental substance just *are* those of the associated body, and since there is no supposition that the person could exist independently of some body, there is no worry about how something capable of being disembodied could be located in space.

One reason why some recent compound dualists have turned specifically to emergentist views is to circumvent the problem of psychophysical dependence. Hasker for instance maintains that if we view mental substances as arising only when material substances (such as the brain) reach a high enough level of complexity, it becomes natural to view all mental processes, including consciousness itself, as arising in dependence on the nervous system (Hasker 1999, 2001). He takes this account to be consistent with the

possibility that the person, once formed, persists after death. Once again, it seems that survival-neutral views such as Lowe's version of emergentism have an easier time dealing with this problem, since they are not committed to holding that the mind can function without a body.

Let's turn finally to the explanatory problems for substance dualism. One prevalent contemporary response to the objection that it is unnecessary to posit immaterial substances is that neither historically nor in current discussions do substance dualists view mental substances as hypothetical entities posited to explain the data of experience (Goetz and Taliaferro 2011, pp. 151, 155–56; Lycan 2009). The grounds for belief in them are rather *a priori* arguments based on first-person awareness of what experience is like – arguments such as those we have considered. Even if this response is accepted, however, it is not as clear that substance dualists – of a survivalist stripe, anyway – can so easily avoid a related explanatory challenge. One striking fact about survivalist substance dualists' responses to the causal challenges discussed above is the extent to which they tend to resort to brute, unexplained facts in order to accommodate psychophysical interaction. As we have seen, they often posit as inexplicable not only the causal relations between mental and physical substances themselves, but also the necessary pairing relations between these substances, and the spatial location of mental beings. It might thus be argued that the account of experience offered by such dualists is overall less simple than one which posits only physical substances. After all, even if *a priori* arguments form the initial grounds for the claim that there are mental substances, this claim also plays an important explanatory role by virtue of the requirement that it account for all the relevant facts about consciousness (including its causal situation), and thus the claim can be evaluated on general grounds of theoretical simplicity. It should be noted that some (e.g. Lycan unpublished manuscript) have recently argued that substance dualism is in this respect not worse off than strong property dualism. But at any rate, this explanatory difficulty represents, I think, another major challenge facing contemporary substance dualism.

7. Conclusion

Substance dualists have in recent years done much to clarify different versions of the position, the arguments which favor them, and how they might respond to some of the problems they face. My intention here, however, has been to draw attention to several areas in which substance dualism still seems vulnerable. Firstly, as we have seen, the phenomenal concepts strategy represents a powerful challenge not only to arguments for property dualism, but to many of the arguments for substance dualism as well. Second, for substance dualists who favor a non-reductionist or substratum view of mental substances, further work needs to be done to clarify why, even if we accept that mental properties are immaterial, we should not view the subject as merely a bundle of mental properties. This is one debt that such substance dualists incur that property dualists do not. And finally, even if we accept one or another of the responses to the causal challenges facing substance dualism, both Cartesian dualism and survivalist forms of compound dualism face the objection that they are theoretically less economical than materialist alternatives. Once again, this is an area in which further work would be beneficial.

Short Biography

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research include the philosophy of mind, the philosophy of perception (especially debates about conceptual vs. nonconceptual content), and theories of concepts; he also has a strong interest in Buddhist philosophy. He has published articles in such journals as *Philosophical Studies*, *The Journal of Aesthetics and Art Criticism*, and *Philosophy East and West*.

Notes

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¹ See Olson (2001) for consideration of the view that Descartes took persons to be compound substances, comprising both a mental substance (essentially) and a body (inessentially).

² For a longer list of objections, see Lycan 2009.

³ Descartes (1954), pp. 274–5.

⁴ For other types of explanatory challenge, see Lycan 2009. One objection I will not be able to consider here is what is often called the “exclusion argument” (Kim 1993, 2005); it is often taken as a threat even to non-reductive forms of physicalism, and I here focus mainly on objections peculiar to substance dualism.

⁵ I borrow the term “compound substance dualism” from Olson (2001).

⁶ I here draw on Foster’s (2001) characterization of his own form of substance dualism, though the three claims I articulate here are in some respects more general than his.

⁷ A classic source for non-reductive physicalism is Fodor (1980); for a recent defense, see Antony (2007); for a helpful overview of recent work, see Melnyk (2008).

⁸ For this formulation of physicalism, see for instance Jackson 1998, Chalmers 1996, Howell 2008. There has been considerable debate recently about whether weak property dualism is in fact compatible with physicalism, or really counts as a non-physicalist view. See Melnyk (2008) and Koons and Bealer (2010) for discussion of the recent debate.

⁹ The knowledge argument has been presented by Jackson (1982) in support of epiphenomenalist property dualism; by Chalmers (1996) in support of what he calls “naturalistic property dualism”; and by Foster (2001), Taliaferro (2011), and Goetz and Taliaferro (2011, pp. 147–51) in the service of substance dualism. Jackson himself has since recanted the argument (Jackson, 2003).

¹⁰ For the use of such arguments in support of property dualism see especially Chalmers (1996); for their use in the context of substance dualism, see for instance Taliaferro (1994).

¹¹ See Chalmers (2010) for discussion of some varieties of conceivability.

¹² There is considerable variation among different versions of the phenomenal concepts strategy; what I offer here is only an account of the central claims held by many proponents of the view. Among the most influential proposals of the view are those of Loar (1997), Tye (2000), Papineau (2002, 2007), and Sturgeon (2000). For a helpful overview of the approach, see Sundström (2011).

¹³ For objections to the phenomenal concepts strategy, see especially Chalmers (2007), Horgan and Tienson (2001), Tye (2009), and Sundström (2011).

¹⁴ For a helpful survey of accounts of the nature of substance, see Lowe (1988). See also Lowe (1998).

¹⁵ For a number of articles discussing this issue, see Gendler and Hawthorne (2007).

¹⁶ For other objections to the disembodiment argument, see for instance Goetz (2001), Zimmerman (1991), and Williams (1973), p. 70ff. For further defense of the argument, see Goetz and Taliaferro (2011), p. 90ff. and Taliaferro (1994), p. 211ff.

¹⁷ For further defense of the argument, see Goetz (2001).

¹⁸ For further discussion and defense of this approach, see Goetz and Taliaferro (2011). It has sometimes been argued that this was Descartes’ view. See for instance Goetz and Taliaferro (2011), p. 81ff., and Garber (2001).

¹⁹ For an argument that physical causation is itself no more fully explicable than Cartesian psychophysical causation would be, see Foster (1991), pp. 160–61.

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