

## **‘The Body I Call “Mine”’: A Sense of Bodily Ownership in Descartes**

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**Abstract:** How does Descartes characterize the peculiar way in which each of us is aware of our bodies? I argue that Descartes recognizes a sense of bodily ownership, such that the body sensorily appears to be *one’s own* in bodily awareness. This sensory appearance of ownership is ubiquitous, for Descartes, in that bodily awareness always confers a sense of ownership. This appearance is confused, in so far as bodily awareness simultaneously represents the subject as identical to, partially composed by, and united to her body, without distinguishing these relations. Finally, the appearance of ownership is grounded in multiple other ways in which the body sensorily appears: namely, in the fact that the body appears to be inescapable, modified by bodily sensations, and an object of special concern.

**Key Words:** Descartes, sense of bodily ownership, embodiment, sensory perception, contents of perception

### **INTRODUCTION**

In bodily awareness, you are aware of a single human body — the body that you normally think of as *your own* — in a manner that differs from the awareness you have of other material things, including other human bodies. You are aware of this body ‘from the inside’, and there is a way that this body sensorily appears to you from this perspective. Suppose, for example, that you are lying on a yoga mat with your eyes closed, and this body appears to you to have a *certain size*, a *characteristically human shape*, and a *certain position*, as well as being *warm* and *relaxed*. Your bodily awareness would then convey or represent to you that there is something with these properties.<sup>1</sup>

Contemporary philosophers disagree about how to characterize the peculiar way in which the body sensorily appears to the subject in bodily awareness, and, more specifically, about whether the body sensorily appears as *one's own*, or, put first-personally, as *mine*. That is, they disagree about whether there is a sensory appearance of *bodily ownership*. Following de Vignemont's (2015) taxonomy, we may distinguish three main options here:

- (i) *Eliminativism*: There is no sensory appearance of bodily ownership, but only judgments of ownership.<sup>ii</sup>
- (ii) *Reductionism*: There is a sensory appearance of bodily ownership, and this appearance is grounded in various other properties the body sensorily appears to have.<sup>iii</sup>
- (iii) *Inflationism*: There is a sensory appearance of bodily ownership, and this appearance is *not* grounded in any other properties the body sensorily appears to have.<sup>iv</sup>

At stake here is whether the body can sensorily appear to have the first-personal property of *mineness*. Eliminativism denies any sensory appearance of *mineness*, but is compatible with the body appearing to have various other properties. The disagreement between the reductionists and the inflationists is downstream from the more basic question as to whether there is a sensory appearance of bodily *mineness* at all.

Our grasp of ourselves as having bodies is important for Descartes. But it is unclear whether he holds that the first-personal property of *mineness* is represented exclusively at the level of judgment, or whether he holds that the body can sensorily appear to be *mine* as well. In other words, it is unclear whether Descartes is an eliminativist about the sensory appearance of bodily ownership, or is some form of reductionist or inflationist. Consider, for example, the following passage from *Meditation 6*:

As for the body which by some special right I called ‘mine’, I judged not without reason that this body, more than any other body, belonged to me. For I could never be separated from it, as I could from other bodies; and I felt all my appetites and emotions in, and on account of, this body; and finally, I was aware of pain and pleasurable ticklings in parts of this body, but not in other bodies external to it. (AT VII 76/CSM II 52)

This passage is ambiguous. Carriero (2009) reads this passage as implying that the content *this body is mine* is ‘the product of reasoning’, rather than something we ‘simply perceive’ through bodily awareness, which suggests that there is no sensory appearance of ownership for Descartes (p. 389).<sup>v</sup> But, as I argue below, this passage can also be interpreted as *describing* rather than denying the sensory appearance of bodily ownership. Given that this and similar passages admit of multiple readings, we need a more detailed understanding of Descartes’s accounts of sensory experience and the nature of judgment to adjudicate between these readings.<sup>vi</sup>

In this paper, I argue that Descartes recognizes a sensory appearance of bodily ownership, and that he rejects eliminativism in favor of reductionism. In a bit more detail, I argue that Descartes accepts:

*Sense of Bodily Ownership:* In bodily awareness, the body sensorily appears to the subject as *belonging to her*, or, equivalently, as *her own*. Put first-personally, in bodily awareness, the body sensorily appears to me as *belonging to me*, or, equivalently, as *mine*.

The sensory appearance of bodily ownership is ubiquitous, for Descartes, in that bodily awareness always confers a sense of *mineness*. This appearance is confused, in that bodily awareness simultaneously represents the subject as being identical to, partially composed by, and united to the body, without clearly distinguishing these relations. Finally, the appearance of ownership is grounded in multiple other more fundamental ways in which the body appears:

namely, in the body's appearance as inescapable, as modified by bodily sensations, and as a special object of concern.<sup>vii</sup> Other commentators attribute *Sense of Bodily Ownership* to Descartes.<sup>viii</sup> This paper goes beyond existing readings, however, by providing a systematic interpretation of Descartes's account of the experience of embodiment. This paper motivates, and defends one solution to, an exegetical puzzle about whether Descartes accepts *Sense of Bodily Ownership*, while also clarifying his account of the scope, content, and structure of this experience.

The plan is as follows. In section one, I motivate the importance of bodily ownership for Descartes by examining its role in *Meditation 1*, and I explain why someone might be tempted to interpret him as rejecting *Sense of Bodily Ownership*. In sections two and three, I argue that Descartes nevertheless accepts *Sense of Bodily Ownership*, and, hence, rejects eliminativism. In sections four and five, I argue that Descartes accepts reductionism rather than inflationism. In section four, I argue that the sensory appearance of bodily ownership is ubiquitous, confused, and grounded. In section five, I explain what, for Descartes, grounds the appearance of bodily ownership.

## 1. BODILY OWNERSHIP

Bodily ownership looms large in the *Meditations*. The skeptical arguments in *Meditation 1* focus on raising doubts not merely about the existence of the external world, but about the meditator's connection to one element of this world: her body.<sup>ix</sup> Although not typically emphasized by commentators, the skeptical arguments in *Meditation 1* single out the meditator's judgments of bodily ownership as requiring special skeptical attention — both the particular judgment 'this whole body is **mine** [*totumque hoc corpus meum esse*]' (AT VII 18/CSM II 13, emphasis mine), and the generic judgment 'a body is **mine**'.<sup>x</sup>

Descartes's skeptical attack begins with a series of arguments directed at the meditator's beliefs 'acquired either from or through the senses' (AT VII 18/CSM II 12).<sup>xi</sup> The first skeptical argument suggests that because the senses sometimes deceive they are never to be wholly trusted (AT VII 18/CSM II 12). This argument does not undermine all her sense-based opinions, however. Among the beliefs that survive are the meditator's judgments that 'these hands' and 'this whole body are **mine** [*totumque hoc corpus meum esse*]' (AT VII 18/CSM II 12-3, emphasis mine). Both the madness hypothesis and the dream argument target these judgments of bodily ownership. The madness hypothesis imagines people whose experiences lead them to say 'that their heads are made of earthenware, or that they are pumpkins, or made of glass' (AT VII 19/CSM II 13). The dream argument is introduced as a more palatable version of the madness hypothesis, and also focuses on the meditator's judgments of ownership:

Suppose then that I am dreaming, and that these particulars — that my eyes are open, that I am moving my head, and stretching out my hands — are not true. **Perhaps, indeed, I do not even have such hands or such a whole body at all** [*nec forte etiam nos habere tales manus, nec tale totum corpus*]. (AT VII 19/CSM II 1, emphasis mine)

Like the madness hypothesis, the dream argument provides reason to doubt the judgment that 'this whole body is mine', by raising the possibility that the meditator is mistaken about the kind of body ('such a whole body [*tale totum corpus*]'), and, hence, which body, is her own. Indeed, the subsequent painter analogy — which suggests that dreams recombine things we encounter in waking life — provides further evidence that the dream argument is specifically focused on raising doubts about the meditator's judgments about her body, since the experiential atoms the meditator initially mentions are all body parts: 'at least these general kinds of things — eyes,

head, hands and the body as a whole — are things which are not imaginary but are real and exist’ (AT VII 20/CSM II 18).

Neither the madness hypothesis nor the dream argument raises doubts about the generic judgment that the meditator has a body of some kind or another. Madness, as the meditator describes it, results from damage to the brain, which assumes that she has a brain vulnerable to damage.<sup>xii</sup> The dream argument presupposes that the meditator is ‘a human being [*homo*] who sleeps at night, and regularly has all the same experiences while asleep as madmen do when awake’ (AT VII 19/CSM II 13). Dreaming is an operation of embodied human beings, not disembodied minds (AT XI 173/CSM 104). Since both madness and dreaming presuppose that the meditator has a body in some sense, neither raises doubts about her generic judgments of bodily ownership.<sup>xiii</sup>

The evil deceiver hypothesis, in contrast, does not assume that the meditator is embodied. When the meditator loses the external world, and her body along with it, she finds a way of doubting the judgment that she has a body of any kind (AT VII 21/CSM II 14). This point comes out nicely in the closing paragraph of *Meditation 1*:

I will suppose therefore that not God, who is supremely good and the source of truth, but rather some malicious demon of the utmost power and cunning has employed all his energies in order to deceive me. I shall think that the sky, the air, the earth, colors, shapes, sounds and all external things are merely the delusions of dreams which he has devised to ensnare my judgment. *I shall consider myself as not having hands or eyes, or flesh, or senses, but as falsely believing that I have all these things.* (AT VII 22/CSM II 15, emphasis mine)<sup>xiv</sup>

The evil deceiver calls into doubt the meditator's judgments of bodily ownership by raising doubts about whether there are any bodies to be had.

These passages from *Meditation 1* are ambiguous as to whether Descartes recognizes a sensory appearance of bodily ownership. The skeptical arguments of *Meditation 1* are directed at the meditator's beliefs 'acquired either from or through the senses', which might suggest that the meditator judges that a body is *her own* on the basis of a sensory appearance with this very content (AT VII 18/CSM II 12). Descartes's clarification of what he means by 'acquired either from or through the senses' recommends caution, however:

From the senses: i.e. from sight, by which I have perceived colors, shapes, and such like. Leaving aside sight, however, I have acquired everything else through the senses, i.e. through hearing; for this is how I acquired and gleaned what I know, from my parents, teachers, and others. (AT V 146/CSMK III 332)

Given that beliefs based on testimony count as acquired 'through' the senses, we cannot draw any straightforward inferences about the contents of the meditator's sensory experience from the contents of her previous beliefs, since we do not always sense the meaning of what we are told.

When Descartes revisits the meditator's judgments of ownership in *Meditation 6*, we discover similar ambiguities. We have seen this passage before, but it is worth reconsidering:

As for the body which by some special right I called 'mine', I judged [*arbitrabar*] not without reason that this body, more than any other body, belonged to me. For I could never be separated from it, as I could from other bodies; and I felt all my appetites and emotions in, and on account of, this body; and finally, I was aware of pain and pleasurable ticklings in parts of this body, but not in other bodies external to it. (AT VII 76/CSM II 52)

Again, this passage admits of multiple readings. As I will argue below, I think we should interpret this passage as describing rather than denying the sensory appearance of ownership. Carriero (2009, p. 389), however, reads this passage as suggesting an eliminativist view, according to which the first-personal property of *mineness* is represented exclusively at the level of judgment, and does not figure in the way the body sensorily appears to the meditator.

For the purposes of motivating our exegetical puzzle, let me explain why someone might read this passage as supporting an eliminativist view, as Carriero proposes. The meditator notes that it was ‘not without reason’ that she judged that ‘this body, more than any other body, belonged to [her]’ (AT VII 76/CSM II 52). One might think that if this judgment were based on a sensory appearance of bodily ownership, the meditator would cite this appearance as part of her justification for her judgment of ownership, in roughly the same way that it would be natural to cite an apple’s red appearance to justify one’s judgment that the apple is red. But, instead, the meditator tells an elaborate story about what justified her judgment that a body belonged to her: because she could never be separated from this body, because she experienced bodily sensations in this body, and so forth. This justification describes various ways in which the meditator’s body sensorily appears to her, but, curiously, makes no mention of a sensory appearance of bodily ownership. The only instance of *mineness* occurs within the meditator’s judgment. This omission might lead someone to conclude that Descartes denies any appearance of bodily ownership.<sup>xv</sup> Indeed, it is unclear why anyone would posit a sensory appearance of bodily *mineness* if it weren’t involved in justifying judgments of bodily ownership.<sup>xvi</sup>

In addition to this reading of the ‘special right’ passage, there are systematic considerations that might lead someone to think that Descartes rejects *Sense of Bodily Ownership*. A sensory appearance of bodily ownership – or, better, bodily *mineness* – is a



sensory form of self-awareness. By self-awareness, I just mean a representation or perception with first-personal content, whose canonical linguistic expression involves an instance of the first-person pronoun ‘I’ (*ego/je*) and related expressions like ‘me’ (*me/moi*), ‘myself’ (*me/moi-même*), and ‘mine’ (*meum/mien*).<sup>xvii</sup> Thus, a sensory appearance of a human body as *mine* would be a form of self-awareness.<sup>xviii</sup> But some commentators argue that, for Descartes, self-awareness is necessarily intellectual, so that only the pure intellect can represent something as *mine* or as *belonging to me*.<sup>xix</sup> In *Meditation 2*, for example, the meditator writes:

it still appears — and I cannot stop thinking this — that the corporeal things of which images are formed in my thoughts, and which the senses investigate, are known with much more distinctness than this puzzling ‘I’ which cannot be pictured... (AT VII 29/CSM II 20)<sup>xx</sup>

The ‘I’ cannot be ‘pictured’ or sensorily appear. Instead, it is only ‘when I turn my mind’s eye upon myself’ — that is, when I use the pure intellect — that I am able to ‘understand’ and ‘perceive myself’ (AT VII 51/CSM II 35). This suggests that only the pure intellect could represent that a human body is *mine* or *belongs to me*, by relating this body to the ‘puzzling “I” which cannot be pictured’ (*ibid.*). Someone might thus conclude that there cannot be a sensory form of self-awareness, and, therefore, no sensory appearance of bodily ownership. In short: this argument suggests that the first-personal property of *mineness* just isn’t a sensory quality.

## **2. JUDGMENTS AND PERCEPTIONS OF BODILY OWNERSHIP**

The texts we have looked at thus far are somewhat ambiguous as to whether the body can sensorily appear to have the first-personal property of *mineness* for Descartes, and I have indicated why an eliminativist reading might seem tempting. Nevertheless, I think Descartes accepts *Sense of Bodily Ownership*. Upon closer inspection, the meditator’s judgments of bodily

ownership presuppose a sensory appearance of ownership. The argument goes like this. The meditator judges that a human body *belongs to her*. But, for Descartes, judgment consists in the will's assent to perception, such that a judgment inherits its content from the perception to which the will gives its assent (AT VII 37/CSM II 26).<sup>xxi</sup> Someone's judgment that there is something white and round in front of her, for example, might consist in her will's assent to a visual perception as of something white and round, whereas her judgment that  $2+2=4$  consists in the will's assent to an intellectual perception that  $2+2=4$ . More generally, a judgment that  $p$  implies a perception that  $p$ .<sup>xxii</sup> Hence, the meditator's judgment of bodily ownership implies a corresponding perception of bodily ownership.

Descartes, however, recognizes three kinds of perceptions or ideas: intellectual, sensory, and imaginative (AT VII 38/CSM II 26).<sup>xxiii</sup> The meditator's judgment of bodily ownership implies that she has a perception of a body as *her own*, without settling which of the three kinds of perception is in play. Sensory and imaginative perceptions are 'certain special modes of thinking' that depend on the mind's union with the body (AT VII 78/CSM II 54).<sup>xxiv</sup> Intellectual perception, in contrast, depends on the mind alone. '[W]hen the mind understands,' Descartes argues, 'it in some ways turns towards itself and inspects one of the ideas which are within it' (AT VII 73/CSM II 51).<sup>xxv</sup> These different forms of perception represent objects in different ways. Intellectual perception is a non-imagistic form of representation, whereas sensory perception and imagination are imagistic (AT VII 72/CSM II 50). So the question for Descartes is not so much whether there is a perception of bodily ownership, but what kind of perception underlies the meditator's judgment that a body is her own.

Although the 'puzzling "I"' passage from *Meditation 2* might suggest that the relevant perception must be intellectual, there is ample textual evidence that the meditator's judgments of

bodily ownership consist in the will's assent to sensory perceptions of bodily ownership (AT VII 29/CSM II 20). In *Meditation 6*, for example, the meditator introduces her review of her former sense-based judgments by saying that she 'will go back over all the things which, as they were perceived by the senses, [she] previously thought to be true' (AT VII 74/CSM II 51). The first perception she mentions is a sensory perception of bodily ownership:

First of all then, I sensed that **I had a head** [*sensi me habere caput*], **hands, feet, and other limbs** making up the body which I regarded as part of my self or perhaps even as my whole self. (AT VII 74/CSM II 51-52, emphasis mine)

The meditator had a sensory perception of herself as having 'a head, hands, feet, and other limbs', and then formed a judgment of bodily ownership by assenting to this perception.

In this passage, Descartes is clear that a sensory perception underlies the meditator's previous judgments of bodily ownership, though he does not here specify the sensory modality. Later in *Meditation 6*, he argues that sensations of pleasure, pain, hunger, and thirst teach us that we have a body, which suggests that the internal senses or bodily awareness are primarily responsible for this perception (AT VII 80/CSM II 56).<sup>xxvi</sup>

So Descartes recognizes sensory perceptions of bodily ownership, and he attributes these perceptions to bodily awareness. We are now only a short step away from *Sense of Bodily Ownership*. A sensory perception, for Descartes, is one of the representational mental states that he refers to as 'ideas' in *Meditation 3*, and which are 'as it were images of things' (AT VII 37/CSM II 25). Sensory perceptions exhibit or represent their content to the mind, in such a way that their content sensorily appears to the subject. 'I am now seeing light, hearing a noise, feeling heat. But I am asleep, so all this is false,' the meditator writes. 'Yet I certainly *seem* to see, to hear, and to be warmed [*videre videor, audire, calescere*]. This cannot be false; what is called

‘having a sensory perception’ is strictly just this’ (AT VII 29/CSM II 19). The sensory perception of the sun, for example, is what ‘makes the sun appear very small’ (AT VII 39/CSM II 27).<sup>xxvii</sup> The sensory perception of red results in a sensory appearance of red (AT VIII A 32/CSM I 216). In general: a sensory perception that *p* implies a sensory appearance that *p*. Thus, the fact that Descartes recognizes a sensory perception of bodily ownership implies a corresponding appearance, which typically underlies and provides the material for judgments of bodily ownership. In bodily awareness, the body sensorily appears to the subject as *belonging to her*, or, equivalently, as *her own*. And that is what *Sense of Bodily Ownership* says.

Let me run through this argument one more time. Given Descartes’s analysis of judgment, if there is a judgment of bodily ownership, then there must be a corresponding perception of ownership. There is textual evidence that the perception in question is sensory, and a sensory perception of bodily ownership implies a sensory appearance of ownership.

The crucial step in this argument is the claim that judgments of bodily ownership typically consist in the will’s assent to a *sensory* perception of ownership. We shall now see that Descartes frequently posits sensory perceptions of ownership when he is trying to explain why people typically (and pre-philosophically) believe that they are material creatures, either wholly or in part. He uses this explanation in the *Meditations* and *Sixth Replies*,<sup>xxviii</sup> which were published together in 1641, in his correspondence with Princess Elizabeth of Bohemia in 1643, in the *Principles of Philosophy* published in 1644, as well as in the unfinished *Search for Truth*, which was not published in Descartes’s lifetime and whose date of composition is unknown.

*(a) What Did You Previously Believe Yourself To Be?*

Let us start with the *Meditations*, published in 1641. After establishing with certainty that she exists in *Meditation 2*, the meditator asks what she previously took herself to be. Her initial

answer is ‘a human being’ and, more specifically, ‘a rational animal’ (AT VII 25/CSM II 17). She rejects this traditional definition, however, because it is too theoretical, and because it threatens to entangle her in ‘subtleties’ about ‘what an animal is’ and ‘what rationality is’ (*ibid.*). Instead, the meditator proposes ‘to concentrate on what came into my thoughts spontaneously and quite naturally whenever I used to consider what I was’ (AT VII 25-6/CSM II 17). In other words, the meditator will try to get a handle on her previous self-conception by concentrating on the perceptions that arose ‘spontaneously and quite naturally’ in her mind, and which provided the material for many of her previous beliefs about herself. These include perceptions of bodily ownership:

Well, the first thought to come to mind was that **I had** [*me habere*] a face, hands, arms, and the whole mechanical structure of limbs which can be seen in a corpse, and which I called the body. (AT VII 26/CSM II 17, emphasis mine)

The meditator formerly believed herself to have a body, because she gave her assent to a perception of having a body. It is not yet clear, however, what kind of perception we are dealing with.

As we saw above, there are three main options: sensory, imaginative, or intellectual. We can rule out the pure intellect as the source of the meditator’s perception of bodily ownership, because the meditator is only now discovering this faculty. The meditator’s claim that these perceptions came into her thoughts ‘spontaneously and naturally’ might suggest that they are sensory, since, in *Meditation 3*, Descartes refers to sensory perceptions as ‘adventitious’ ideas, which ‘do not depend on my will, and hence...do not depend simply on me’ (AT VII 38/CSM II 26; cf. AT VII 79/CSM II 55).<sup>xxix</sup> But this feature of sensory perceptions fails to distinguish them

from imaginative perceptions, since imaginative perceptions also occur independently of our will in dreams (AT VII 39/CSM II 27).

So the meditator's judgment that she had a body consists in the will's assent to a perception of bodily ownership, and the perception is either sensory or imaginative. Either way, the meditator's self-conception can be traced back to a sensory perception of bodily ownership. If the perception is sensory, then we are done: Descartes recognizes a sense of ownership. If the perception of bodily ownership is imaginative, then we may point out that the imagination is restricted to recycling and recombining content previously represented by the senses (AT VII 394/CSMK III 186).<sup>xxx</sup> The generic content 'a body is mine' could not be generated through any process of recombination, unless the sensory input for this process of recombination includes a sensory representation of *mineness*. Given that the senses are restricted to representing bodies, it follows that a sensory representation of *mineness* would be a sensory representation of *a body as mine*, and Descartes would recognize a rudimentary sense of bodily ownership (AT VII 79/CSM II 55).<sup>xxxi</sup>

The meditator revisits her previous self-conception in *Meditation 6*, and she is more explicit that a sensory perception of bodily ownership explains her previous conception of herself as a material being. At this point in the *Meditations*, the meditator provides a more general review of her previous beliefs, and she proceeds on the assumption that most of these beliefs were based on the senses. We have already seen this passage, but it is worth reconsidering in context:

First of all then, I sensed that **I had a head** [*sensi me habere caput*], **hands, feet, and other limbs** making up the body which I regarded as part of my self or perhaps even as my whole self. (AT VII 74/CSM II 51-52, emphasis mine)

The meditator previously believed that her body was ‘part of [her] self’ or perhaps even her ‘whole self’ because she sensed that she had a body.

In *Meditation 6*, the meditator’s project is not merely to call her previous sense-based opinions into doubt, but to reevaluate them, and to ‘consider what [she] should now believe about them’ (AT VII 74/CSM II 51). This leads to the rehabilitation of the senses. Because a non-deceiving God gave her senses to her, the meditator reasons that the senses must contain ‘some truth’ (AT VII 80/CSM II 56). The meditator proceeds to isolate what her senses teach her by nature, as opposed to the beliefs she arrives at through her own reasoning, since only the former come with any divine guarantee (Simmons, 2014, p. 265). The first sensory teaching of nature, the clearest and most compelling, is that she has a body:

There is nothing that my own nature teaches me more vividly [*expresse*] than that **I have a body** [*habeam corpus*] which is damaged when I feel pain, which needs food and drink when I am hungry or thirsty, and so on. So I should not doubt that there is some truth in this. (AT VII 80/CSM II 56, emphasis mine)

The meditator’s belief that a body belonged to her, which was called into doubt in *Meditation 1*, is now reinstated. This sensory teaching of nature presupposes a sensory perception of bodily ownership.

The teachings of nature are inclinations to form judgments: in this case, a judgment of bodily ownership. Whereas a judgment that *p* consists in the will’s assent to a perception that *p*, an inclination to judge that *p* is grounded in a persuasive or compelling perception that *p*. Clear and distinct perceptions, for example, are irresistibly compelling: we cannot help but assent to them (AT VII 65/CSM II 45).<sup>xxxii</sup> Sensory perceptions are also persuasive and incline the will to affirm their content, though not to the same degree as the clear and distinct perceptions of the

intellect.<sup>xxxiii</sup> In general, however, an inclination to judge that *p* is grounded in a compelling perception that *p*. Given that Descartes's 'sole concern' in his discussion of the teachings of nature is 'with what God has bestowed on me as a combination of mind and body', i.e. with sensory perceptions, we may infer that the teachings of nature are dispositions to judge based on compelling *sensory* perceptions that provide the contents for these teachings.<sup>xxxiv</sup> Hence, the teaching of nature that *a body is mine* implies a sensory perception that *a body is mine*.

The 'teaching of nature' passage says that the sensory perception of bodily ownership contains 'some truth'. Descartes reiterates this point in his correspondence with Princess Elizabeth of Bohemia, two years later in the summer of 1643. Descartes argues that the senses inform us that we are in fact embodied. '[T]he notion of union,' Descartes explains, is something 'which everyone invariably **experiences** [*éprouve*] in himself without philosophizing, such that he **knows** that he is a single person with body and thought' (AT III 694/CSMK III 228, emphasis mine). He even claims that 'what belongs to the union...is known **very clearly** [*tres-clairement*] by the senses' (AT III 691-2/CSMK III 227, emphasis mine). We experience ourselves as compounds of mind and body in 'the ordinary course of life and conversation, and abstention from meditation and from the study of the things which exercise the imagination' (*ibid.*). But if the senses represent us as compounds of mind and body, then presumably the senses represent us as *having* bodies.

Still, the sense of bodily ownership can mislead us by suggesting that we are more tightly bound to our bodies than we really are. Descartes highlights this danger in the *Principles*, published in 1644. In *Principles* I.11-12, Descartes argues that 'our mind is better known than our body,' but acknowledges that 'this fact does not come to be known to all alike', because some people do not distinguish themselves from their body (AT VIIIA 8-9/CSM I 196):



Although they may have believed that they were more certain of their own existence than anything else, they failed to realize that they should have taken ‘themselves’ in this context to mean their minds alone. They were inclined instead to take ‘themselves’ to mean only their bodies — the bodies which they saw with their eyes and touched with their hands and to which they incorrectly attributed the power of sense-perception... (AT VIII A 9/CSM I 196-7)

Even once someone has gone through the *cogito* and recognized the certainty of the proposition ‘I exist’, she may still fail to recognize the immateriality of the *I*, because she is inclined to identify herself wholly with her body. Although Descartes is not explicit about the ground of this inclination, we may surmise that it is sensory, given his claim that people are inclined to identify with the bodies they perceive by means of the senses.<sup>xxxv</sup>

Finally, when Descartes revisits this material in the unfinished *Search for Truth*, he argues that people ordinarily believe that they are material creatures because of a sensory perception of bodily ownership. In this work, the dramatic monologue of the *Meditations* becomes a dialogue, with the naive Polyander speaking for the ordinary person:

When in reply to your question [what did I formerly believe myself to be?], I said that I was a *human being*, I was not actually thinking of all the scholastic entities which I knew nothing about and had never heard of, and which, so far as I am concerned, subsist only in the imagination of those who have invented them. *I was thinking, rather, about the things we see, touch, perceive with our senses, and experience within ourselves* – in a word, about things which even the most simpleminded of men know just as well as the greatest philosopher in the world. *Undoubtedly I am a certain whole made up of two*

*arms, two legs, one head, and all the other parts which make up what we call the human body...* (AT X 517/CSM II 411-412, emphasis mine)<sup>xxxvi</sup>

Like the meditator, Polyander investigates his former beliefs about himself by turning to the perceptions that provide the contents for these beliefs. Whereas *Meditation 2* was ambiguous about whether these perceptions were sensory or imaginative, Polyander is clearly talking about sensory perceptions, viz. ‘the things we see, touch, perceive with our senses, and experience within ourselves’ (*ibid.*). These sensory perceptions represent Polyander to himself as ‘a certain whole made up of two arms, two legs, one head, and all the other parts which make up what we call the human body...’ (*ibid.*).

Polyander’s claim that he experiences himself as *being* a body is not obviously equivalent to saying that he experiences himself as *having* a body. But if we think of *Sense of Bodily Ownership* as saying that the subject sensorily appears to stand in an intimate relation to a single human body, then Polyander’s sensory experience as of being a body will count as a version of *Sense of Bodily Ownership*, since identity is an intimate relation indeed.

*(b) Has Descartes Contradicted Himself?*

Someone might object that Descartes has contradicted himself in positing a sensory appearance of *having* a human body, since, as we saw in section one, there is also textual evidence that self-awareness is the unique province of the intellect, and that the senses are incapable of representing a human body as *mine*. (Recall the ‘puzzling “I”’ passage from *Meditation 2*.) The objection, then, is that Descartes’s endorsement of *Sense of Bodily Ownership* conflicts with his pronouncements about the respective powers of the senses and intellect.

Descartes can reply to this objection by appealing to his distinction between the self *qua* mind, and the self *qua* human being.<sup>xxxvii</sup> Descartes sometimes uses the first-person pronoun narrowly to refer to the mind or thinking substance. In *Meditation 3*, for example, he writes:

as regards my parents, even if everything I have ever believed about them is true, it is certainly not they who preserve me; and **in so far as I am a thinking thing** [*me quatenus sum res cogitans*], they did not even make me; they merely placed certain dispositions in the matter which I have always regarded as containing **me, or rather my mind, for that is all I now take myself to be** [*me, hoc est mentem, quam solam nunc pro me accipio*].

(AT VII 50/CSM II 35)

There are also passages, however, where Descartes uses the first-person pronoun more broadly to refer to the composite of mind and body, i.e. the human being or union. In the *Replies*, for example, he contrasts these narrower and broader uses of the first-person:

in inquiring about what caused me, I was asking about myself, not **in so far as I consist of mind and body** [*mei, quatenus consto mente & corpore*], but **only and precisely in so far as I am a thinking thing** [*praecise tantum quatenus sum res cogitans*]. (AT VII 107/CSM II 77)

my supposition there [in the *Meditations*] was that no other human beings were yet known to me, and moreover **I was considering myself not as consisting of mind and body but solely as a mind** [*necque meipsum ut constantem mente & corpore, sed ut mentem solam, considerarem*]. (AT VII 142-143/CSM II 102, emphasis mine)

With this distinction in hand, we may then argue that when Descartes claims in *Meditation 2* that the ‘puzzling “I”’ cannot be grasped by the senses, he is referring only to the self *qua* mind, which leaves open the possibility that the self *qua* union can figure in the contents of sensory

perception (AT VII 29/CSM II 20). Given the many passages we looked at above, Descartes does not merely leave this possibility open, but embraces it: we have sensory experiences of ourselves as *unions* or *composites* of mind and body, and, hence, as *having* bodies.

### 3. BODILY OWNERSHIP AND THE THREE GRADES OF SENSE

Descartes's discussion in the *Sixth Replies* of the three grades of sense provides additional evidence that he recognizes a sensory appearance of bodily ownership (AT VII 437/CSM II 294).<sup>xxxviii</sup> I will start by reviewing the three grades, before explaining how they apply to bodily awareness. The first grade of sensory response is purely physiological, and includes the mechanical stimulation of the sense organs and resulting motion in the pineal gland. The second grade is psycho-physiological. It includes:

all the immediate effects produced in the mind as a result of its being united with a bodily organ which is affected in this way. Such effects include the perceptions of pain, pleasure, thirst, hunger, colors, sound, taste, smell, heat, cold, and the like, which arise from the union and intermingling of mind and body' (AT VII 437/CSM II 294)

I will call these perceptions 'sensations', given Descartes's claim that only these second-grade effects 'should be referred to the sensory faculty, if we wish to distinguish it carefully from the intellect' (AT VII 437/CSM II 295). When someone looks at a piece of wax, for example, second-grade sensations make her aware of a two-dimensional white patch in her visual field.

The third grade of sensory processing is purely psychological. It includes a host of habitual judgments, typically unnoticed, which Descartes refers to the intellect (AT VII 437-438/CSM II 295). Some of these judgments correct or enrich second grade sensations. When someone sees the ball of wax, for example, the third grade includes judgments that transform her second grade sensation of a white patch into a sensory experience as of something white and

round located some distance away from her. I will call these judgments *constructive*, since they help construct the way the world sensorily appears to the subject. I use *sensory experience* and *sensory perception* to refer to the overall conscious result of the second grade sensations and third-grade constructive judgments, and which offers content for the will's consideration.

Sensory experiences are often accompanied by another type of judgment: namely, the will's assent to (or dissent from) sensory perception, resulting in a belief or commitment that things are a certain way. I will refer to this type of judgment as *epistemic*, because we are epistemically culpable for these judgments.<sup>xxxix</sup>

The nature of the constructive judgments at the third grade of sense is somewhat unclear.<sup>xl</sup> For our current purposes, their nature is less important than the role they play in explaining the way things sensorily appear. Whether constructive judgments are operations of the imagination, pure intellect, or will, these judgments inject their contents into the sensory appearances. Third-grade constructive judgments explain, for example, why a straight stick looks bent in water. They explain why the sun looks smaller than the earth, even to 'astronomers who have established by argument that the sun is several times smaller than the earth' (AT VII 440/CSM II 296; cf. AT VIIIA 37/CSM I 220). More generally, constructive judgments explain the sensory appearance as of a world of three-dimensional objects, as opposed to a two-dimensional mosaic of color and light corresponding to the retinal image.

Although Descartes introduces the three grades of sense with a visual example, this analysis applies just as much to bodily awareness, or, in Descartes's terminology, to the internal senses.<sup>xli</sup> Suppose, for example, that someone is lying on a yoga mat with her eyes closed, and is aware of her body 'from the inside'. The first grade of sensory response is again purely physiological, and consists in the mechanical stimulation of nerves that detect changes in one's

own body, culminating in the mechanical stimulation of the pineal gland. In *Principles* IV.190, for example, Descartes posits two main internal senses — natural appetite and passions — corresponding to two discrete ‘groups of nerves’ connecting the pineal gland to our ‘internal parts’ (AT VIII A 316-317/CSM I 280).<sup>xlii</sup> The second grade of sensory response includes the special category of ‘internal sensations’ that Descartes associates with the internal senses, and which human subjects typically experience uniquely in their own bodies — viz. sensations of hunger and thirst, pleasure and pain, as well as primitive feelings of joy and sadness (AT VIII A 316-7/CSM I 280-1).<sup>xliii</sup> The subject’s bodily awareness also includes third-grade constructive judgments that supplement and enrich the second-grade sensations. More specifically, the third grade includes constructive judgments about how *the subject* is related to her body. Or so I will argue.

After distinguishing the three grades of sense Descartes appeals to constructive judgments to explain why it is so hard to be a dualist. He confesses that he initially found it difficult to accept the conclusion ‘that the human mind is really distinct from the body’ (AT VII 440/CSM 296):

I was compelled to accept these results because everything in the reasoning was coherent and was inferred from quite evident principles in accordance with the rules of logic. But I confess that for all that I was not entirely convinced; I was in the same plight as astronomers who have established by argument that the sun is several times larger than the earth, and yet still cannot prevent themselves from judging that it is smaller, when they actually look at it. (AT VII 440/CSM II 296)

Even to astronomers who know better, the sun looks smaller than the earth in virtue of various constructive judgments that they cannot help making. Similarly, even to an avowed dualist like

Descartes, his mind appears to be more tightly bound to his body than the real distinction would allow, in virtue of constructive judgments. Descartes traces these recalcitrant sensory appearances back to judgments made in early childhood:

From infancy I had made a variety of judgments about physical things in so far as they contributed to preserving the life which I was embarking on; and subsequently I retained the same opinions I had originally formed of these things. But at that age the mind employed the bodily organs less correctly than it now does, and was more firmly attached to them; hence, it had no thoughts apart from them and perceived things only in a confused manner. Although the mind was aware of its own nature and had within itself an idea of thought as well as an idea of extension, it never exercised its intellect on anything without at the same time picturing something in the imagination. *It therefore took thought and extension to be one and the same thing, and referred to the body all the notions which it has concerning things related to the intellect.* (AT VII 441/CSM II 297)<sup>xliv</sup>

In early childhood, the mind took itself to be ‘one’ with its body. Once this judgment became habitual, it became woven into the third-grade of bodily awareness and became a constructive judgment, resulting in a sensory appearance of being ‘one’ with the body. Assuming, then, that a sensory appearance of being one with the body is sufficient for an appearance of having a body, *Sense of Bodily Ownership* follows.

Once we realize that Descartes’s use of the term ‘judgment’ is ambiguous between constructive and epistemic judgments, we can diagnose both the appeal and the mistake of the eliminativist reading of Descartes. Descartes’s tendency to describe our grasp of our relation to our bodies in judgmental terms – for example, in the ‘special right’ passage – suggests that he denies a sensory appearance of bodily ownership *only on the assumption that there is an*

*opposition between judgments and sensory appearances.* But Descartes rejects this assumption. When he is talking about *constructive* judgments, there is no opposition between judgments of ownership and the sensory appearance of ownership, since constructive judgments are partially constitutive of the appearances. Descartes's tendency to describe our grasp of our relation to our body in judgmental terms is thus compatible with this grasp *also* being sensory.<sup>xlv</sup>

#### 4. CLARIFYING SENSE OF BODILY OWNERSHIP

Thus far, I have argued that Descartes accepts *Sense of Bodily Ownership*, and rejects eliminativism about the sensory appearance of bodily ownership. In this section and the next, I will argue that he rejects eliminativism in favor of reductionism. I will bring out the richness of Descartes's account of our experience of embodiment by clarifying the scope and content of this experience. For Descartes, the sensory appearance of bodily ownership is (a) ubiquitous, in that bodily awareness always confers a sense of bodily ownership, (b) confused, in that bodily awareness simultaneously represents the subject as standing in multiple relations to her body, without clearly marking the difference between these relations, and (c) grounded, in that the sensory appearance of bodily ownership depends on more fundamental ways in which the body appears.

*(a) Does Bodily Awareness Always Confer a Sense of Bodily Ownership?*

Assuming that bodily awareness can represent the body and its parts as *one's own*, we may ask whether bodily awareness always confers a sense of bodily ownership, or only sometimes does.<sup>xlvi</sup> At stake here is whether bodily awareness always includes an element of self-awareness, viz. of *mineness*. Descartes goes for the former option.<sup>xlvii</sup> He holds that if someone experiences a body or one of its parts through bodily awareness, she will inevitably experience this body as *belonging to her*. Descartes commits himself to this position in *Passions* I.22-25. In



this context, he distinguishes three kinds of perceptions that ‘come to the soul by means of the nerves’: ‘we refer some to external objects which strike our senses, others to our body or to certain of its parts, and still others to our soul’ (AT XI 345/CSM I 336-7). This three-way distinction is between (1) perceptions belonging to the external senses, (2) perceptions belonging to the internal senses or bodily awareness, and (3) passions in the strict sense. Consider, then, Descartes’s description of the second group of perceptions belonging to the internal senses:

The perceptions we refer to our body or to certain of its parts are those of hunger, thirst, and other natural appetites. To these we may add pain, heat, and the other states we sense **as** being in **our** limbs, and **not as** being in objects outside us [*que nous sentons comme dans nos membres, & non pas comme dans les objets qui sont hors de nous*]. (AT XI 346-347/CSM I 337, emphasis mine)

Descartes is explaining what is distinctive about bodily awareness, as compared to the external senses and passions of the soul, and he suggests that a *defining* feature of bodily awareness is that it represents its distinctive qualities ‘**as** being in **our** limbs [*comme dans nos membres*]’ (*ibid.*, emphasis mine).<sup>xlviii</sup> Whenever we feel ‘hunger, thirst, and other natural appetites’ as well as pain and heat, we experience these states as being in *our* body. From this it follows that bodily awareness invariably represents its characteristic qualities as ‘instantiated in our own apparent body,’ to borrow Dokic’s (2003, p. 325) apt phrase.

(b) *What Kind of Ownership?*

*Sense of Bodily Ownership* claims that a perceiver sensorily experiences a body as *belonging to her*, or, equivalently, that a perceiver experiences *herself as having* a body. But how should we characterize the relevant kind of *belonging* or *having*? There are many different kinds of ownership, and it is unclear which of them is relevant to the sense of bodily ownership.<sup>xlix</sup> A

bicycle is mine if it is my legal property, for example, and I have certain rights to its disposition and use. I have a sibling just in case my parents have another child, but of course my brother and sisters are not my property. A hand is mine in one sense when attached to the rest of my body and responsive to my will, whereas it belongs to me in a different sense after being cut off and I am carrying it to the hospital on ice. A bodily action is mine if I am its author, and I am responsible for it. A thought is mine in one sense if I so much as grasp its content, whereas a thought becomes mine in a much deeper sense if I give my assent and commit myself to it. These various flavors of ownership do not obviously have much in common apart from positing a subject's special or privileged relation to something. So there are many things we could mean when we say that the perceiver sensorily experiences herself as *having* a body.

Descartes complicates matters by describing the subject's experienced relation to her body in at least three ways. He suggests that a human being sensorily experiences herself as *having* a body in so far as she experiences herself (1) as a *composite whole* of which the body seems to be a *part*,<sup>1</sup> (2) as *identical to* or as *being* the body,<sup>li</sup> and (3) as *united to* the body.<sup>lii</sup> We might wonder how all three of these characterizations can apply, since someone cannot *be* both partly composed by *and* identical to her body. My suggestion is that the sense of bodily ownership is a confused representation – literally, a con-fusion of perceptions – that simultaneously represents all three of these relations at once in such a way that they blur together from the subject's sensory point of view. In other words, the sense of bodily ownership runs together partial composition, identity, and union.<sup>liii</sup> Although someone cannot stand in all three of these relations to her body, there is no contradiction in supposing that someone is represented in all of these ways, so long as one or more of the representations is erroneous.

Someone might object as follows. If the sense of bodily ownership is this confused, then it cannot possibly be correct or veridical, since its contents are contradictory. Again, someone cannot be both partly composed by and identical to her body. This proposal would then seem to be in tension with Descartes's *Meditation 6* claim that the sense of bodily ownership contains 'some truth' (AT VII 80/CSM II 56), as well as his repeated claims to Elizabeth that the union is *known* through the senses (AT III 691-2/CSMK III 227; see also AT III 694/CSMK III 228). In response to this objection, we may note that even if the sense of bodily ownership is incoherent, this sensory appearance may still include some truth: just not the whole truth and nothing but the truth. It is then the job of the intellect to tease apart the three relations represented by the senses, and to decide which of them actually obtain, which is one of the main tasks of *Meditation 6*.<sup>liv</sup>

*(c) Is the Sense of Bodily Ownership Fundamental?*

Next, we may ask whether Descartes is a reductionist who holds that this confused appearance of ownership is grounded in other more fundamental ways in which the body appears, or an inflationist who denies this. An analogy will help clarify this question. Consider a perceiver looking at a hot burner on the stove. For the purposes of discussion, let us suppose that the burner looks both *red* and *hot* to her.<sup>lv</sup> There is an asymmetry between the ways the perceiver's visual experience represents these properties. The visual appearance of heat is grounded in the appearance of red, whereas the visual appearance of red is not grounded in any other ways in which the burner appears. The burner just looks red.<sup>lvi</sup> The dispute between the inflationist and the reductionist, then, is about whether the sense of bodily ownership is more like the visual appearance of red or heat. For the inflationist, the sensory appearance of ownership is on all fours with the visual appearance of red, and not grounded in any more basic ways in which the body appears. For the reductionist, in contrast, the sensory appearance of ownership is more

like the visual appearance of heat, in being grounded in other more fundamental appearances. De Vignemont (2007, pp. 439-43), for example, defends a reductionist account, according to which the sense of bodily ownership is grounded in the experience of controlling a particular human body: a subject experiences a body as *her own* in virtue of experiencing herself as *acting through and with* this body.<sup>lvii</sup>

Descartes too is a reductionist about the sense of bodily ownership, but with a twist. Rather than identifying a single, unified ground for the sense of bodily ownership, Descartes suggests that the confused sense of ownership is grounded in multiple other ways in which the subject sensorily appears to be related to the body. The key passage, again, is the ‘special right’ passage in *Meditation 6*:

As for the body which by some special right I called “mine”, I judged [*arbitrabar*] not without reason that this body, more than any other body, belonged to me. For I could never be separated from it, as I could from other bodies; and I felt all my appetites and emotions in, and on account of, this body; and finally, I was aware of pain and pleasurable ticklings in parts of this body, but not in other bodies external to it. (AT VII 76/CSM II 52)

Recall that, for Descartes, constructive judgments contribute to the way things sensorily appear. Thus, despite the judgmental flavor of this passage, we may read Descartes as describing the structure of the sense of bodily ownership, and, more specifically, as specifying more basic features of the way the body sensorily appears *in virtue of which* the body sensorily appears to *belong* to the subject.

Let’s take a closer look at this aspect of Descartes’s account.

## 5. THREE GROUNDS OF OWNERSHIP

In the ‘special right’ passage, Descartes identifies three more basic features of the way the bodily sensorily appears that ground the confused sense of bodily ownership: viz. the fact that the body sensorily appears (a) to be inescapable, (b) to be modified by bodily sensations like pleasure, pain, natural appetites, and emotions, and (c) to require attention and concern.<sup>lviii</sup> The task for this section is to flesh out each of these strands.

*(a) The Body’s Inescapability*

The first strand is the body’s apparent inescapability, and, more specifically, the respect in which ‘I could never be separated from it, as I could from other bodies’ (AT VII 76/CSM II 52). We may distinguish two forms of inescapability. First and foremost, unlike other material things, we always have some awareness of our bodies. Other material things come and go. Our bodies are a constant presence. As Descartes tells Arnauld in the *Fourth Replies*, ‘we experience *constantly* through our senses’ the fact that we are ‘closely conjoined with the body’ (AT VII 228-229/CSM II 160).<sup>lix</sup> Indeed, Descartes suggests that sensory perception by means of the five familiar external senses always includes an element of bodily awareness, so that sensory awareness of other material things implies awareness of our own bodies.

Touch is the paradigm for the dependence of external perception on bodily awareness. When someone picks up a mug of tea, her tactile experience of the mug depends on the bodily sensations that she feels. She perceives the mug’s warmth through feeling a warm sensation spread through her hands, its solidity through feeling the mug press against her skin, and its shape by feeling the way she needs to shape her hand to grasp it. As Descartes writes in *Meditation 6*, the meditator perceives external objects by feeling the ‘various favorable or unfavorable ways’ in which her body is affected (AT VII 74/CSM II 52).<sup>lx</sup> Descartes generalizes this structure to the other external senses, and most notably to vision.<sup>lxi</sup> He argues in the *Optics*

that we see the locations of objects ‘exactly as we do by means of our hands’, as if the perceiver’s visual ray reached out to touch the objects that she sees (AT VI 169 134-135/CSM I 169). On this approach, seeing an object depends partly on feeling eyestrain, the felt position of one’s head and eyes, and so forth.<sup>lxii</sup>

In addition to its constant presence, the body appears to be inescapable in a further sense: as the perceptual origin relative to which the perceiver sees other material things.<sup>lxiii</sup> We have just seen part of this passage from the *Optics*, but it will be helpful to have more in view:

As regards position, i.e., the orientation of each part of an object relative to our body, we perceive it by means of our eyes exactly as we do by means of our hands... Thus it is ordained by nature to enable the soul not only to know the place occupied by each part of the body it animates relative to all the others, but also to shift attention from these places to any of those lying on the straight lines which we can imagine to be drawn from the extremity of each part and extended to infinity. (AT VI 169 134-135/CSM I 169)

Descartes defines the perceptual location (*la situation*) of the objects we see in body-relative terms. We see ‘the orientation of each part of an object relative to our body...exactly as we do by means of our hands’ (*ibid.*). When someone sees an object, like a palm tree, she sees its position relative to her body, as if the axes of visual space radiate outwards from the structure of her body. We see things as ‘lying on the straight lines which we can imagine to be drawn from the extremity of each part [of the body] and extended to infinity’ (*ibid.*). We see objects in front, above and below, and to the left and right of the body. The body is the origin of the visual field: the ultimate *here*, relative to which everything else looks to be over *there*. We can never get away from the body,

anymore than we can get away from ourselves, or the here and now. According to Descartes, then, this phenomenological inescapability helps ground the sense of bodily ownership.

*(b) The Body as Modified by Bodily Sensations*

The second partial ground of the sensory appearance of ownership is the experience of bodily sensations as being ‘in’ the body. As the meditator explains in the ‘special right’ passage, ‘I felt all my appetites and emotions *in*...this body...and finally, I was aware of pain and pleasurable ticklings *in* parts of this body, but not in other bodies external to it’ (AT VII 76/CSM II 52, emphasis mine). When someone stubs her toe, for example, she experiences ‘the sensation of a pain as occurring *in* the foot’ (AT VII 88/CSM II 60, emphasis mine). Although we might be tempted to interpret the ‘in’ in merely spatial terms, I suspect that Descartes is saying that we experience bodily sensations as modifications or states of the body. According to this reading, we experience pain as located in the foot derivatively, in virtue of experiencing pain as modifying or qualifying the foot.<sup>lxiv</sup> The main piece of textual evidence for this interpretation is that Descartes suggests that bodily sensations appear to be ‘in’ the body in the sense in which they really exist ‘in’ the mind, namely, as modifications of these substances. In *Principles* I.67, for example, Descartes uses the ‘in’ of modification when he writes that ‘we generally regard [pleasure and pain] not as being in the mind alone, or in our perception, but as being in the hand or in some other part of the body’ (AT VIIIA 32/CSM I 216).

Still, it is unclear why the sensory experience of a body modified by bodily sensations would confer a sense of bodily ownership upon this body. Answering this question requires another piece of the puzzle: namely, the fact that we also experience bodily sensations as *modifications or states of ourselves*. When someone stubs her toe and feels a stab of pain, she

experiences the pain as *her own*, or as one of *her modifications* or *states*. She is not simply aware that ‘there is pain going on’. She is excruciatingly aware that *she* is in pain. This awareness of the ownership of pain follows from the fact that consciousness, for Descartes, acquaints us not merely with the occurrence of our mental states, but also our possession or ownership of them. In being conscious of our mental states, we are aware of these states ‘as happening **within us** [*in nobis*]’ (AT VIII A 7/CSM I 195, emphasis mine). Moreover, in *Meditation 6*, the meditator notes that bodily sensations in particular are experienced as states or modifications of our selves:

In addition to pain and pleasure, I also sensed **within me** [*in me*] hunger, thirst, and other such appetites, and also physical propensities towards cheerfulness, sadness, anger, and similar emotions. (AT VII 74-74/CSM II 52, emphasis mine)

The meditator senses pain, pleasure, hunger and thirst as ‘in’ – i.e. as modifications of – herself. As the meditator rhetorically asks, ‘what could be more internal than pain?’ (AT VII 77/CSM II 53). Putting these two features of bodily sensations together, the perceiver experiences bodily sensations as modifying the body *and* as modifying herself. In other words, the perceiver experiences herself as having bodily modifications, or as having modifications in common with the body. Given that this experience represents a special relation between the perceiver and her body – viz. sharing a modification or state – this form of sensory confusion plausibly helps ground the sense of bodily ownership.<sup>lxv</sup>

*(c) The Body as Object of Concern*

The third and final ground of the sense of bodily ownership is the special importance the senses represent the body as having: viz. as precious and as calling for the subject’s concern.<sup>lxvi</sup> The meditator hints at this aspect of her bodily experience when she writes that ‘I felt all my appetites...*on account of* this body’, in so far as this passage suggests that the meditator’s bodily



sensations are oriented towards the body's good (AT VII 76/CSM II 52, emphasis mine).<sup>lxvii</sup>

This point comes out more clearly in *Passions* II.94, however. Descartes there argues that pleasurable bodily experiences represent the 'body's healthy condition and strength...as a good which belongs [to the soul] in so far as it is united with the body', whereas painful bodily experience 'represents [bodily damage and weakness] as evils which are always unpleasant to the soul' (AT XI 399/CSM I 362).<sup>lxviii</sup> When the perceiver stubs her toe, for example, she experiences the damage to her foot not merely as something bad, but as something bad *for her*. The famous 'pilot in a ship' passage in *Meditation 6* provides further evidence for the body's experienced importance:

Nature also teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a sailor is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that I and the body form one thing. If this were not so, I who am nothing but a thinking thing, would not feel pain when the body was hurt, but would perceive the damage purely by the intellect, just as a sailor perceives by sight if anything in his ship is broken. (AT VII 81/CSM II 56)

The pilot might believe that damage to his ship is bad for him if his livelihood depends on it. But a human perceiver's experience of damage to her body is markedly different. She *feels* that damage to her body is bad for her. She feels that she has skin in the game. As Carriero (2009) writes, 'what pain, hunger, and thirst do, in Descartes's view, is to witness the fact that the condition of my body *matters* to me' (p. 394). The perceiver's experience of the body's special importance for her is the third and final ground of the sense of bodily ownership.<sup>lxix</sup>

To sum up: Descartes holds that the overall sensory appearance of a body as *mine* is grounded in the three aspects of bodily experience described here: the body's appearance as

inescapable, as modified by bodily sensations, and as a special object of concern. Descartes is thus a reductionist who holds that the sense of ownership is multiply grounded.

## CONCLUSION

For Descartes, judgment consists in the will's assent to a perception. If there are judgments of bodily ownership, then there are perceptions of bodily ownership, and the texts show that the perceptions in question are sensory. Moreover, given Descartes's view that constructive judgments infuse their contents into the sensory appearances, his use of judgmental language to describe our relation to our bodies is compatible with his recognition of a sense of ownership. Descartes, then, holds that the body sensorily appears to be *one's own* in bodily awareness, or, put first-personally, as *mine*. One upshot of this reading is that Descartes recognizes a sensory form of self-awareness, in addition to the more familiar intellectual forms of self-awareness with which he is often associated.

Descartes presents a rich analysis of this appearance of ownership, according to which it is ubiquitous, confused, and grounded. The sensory appearance of ownership is ubiquitous in that when we are aware of a body part — like a foot — ‘from the inside’, the body part inevitably appears to be *one's own*. The relevant kind of ownership is confused, in that it blurs together partial composition, identity, and union. Finally, this confused appearance of bodily ownership is grounded in multiple other ways in which the body sensorily appears: as inescapable, as modified by bodily sensations, and as a special object of concern. The experience of embodiment is a tapestry woven from many different strands, and it is to Descartes's credit that he recognizes its complexity. According to Descartes, we experience ourselves as embodied subjects: not just mind, but flesh and blood too.<sup>lxx</sup>

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<sup>i</sup> In Siegel's (2010) terminology, these properties figure in the contents of bodily awareness, i.e. the accuracy conditions conveyed to the subject.

<sup>ii</sup> Bermúdez, for example, argues that '[t]here are facts about the phenomenology of bodily awareness, and there are judgments of ownership, but there is no additional feeling of ownership' (Bermúdez 2011, p. 166; see also 2015). Bermúdez describes himself as offering a 'deflationary'

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account of the sense of bodily ownership, in so far as a subject's judgments of bodily ownership are grounded in the way the body sensorily appears. But the passage quoted here suggests that he denies any sensory appearance of ownership as such, and, hence, counts as an eliminativist in de Vignemont's (2015) taxonomy. In more recent work, Bermúdez similarly writes that 'the feeling of ownership is a philosophical fiction' (Bermúdez 2017, p. 121). I thus concur with Gallagher's observation that 'Bermúdez comes close to the eliminativist view' (Gallagher 2017, p. 3).

McDowell (2011) denies that bodily awareness involves sensory appearances of any kind, and so *a fortiori* an appearance of bodily ownership. Bermúdez and McDowell are thus very different kinds of eliminativists. Whereas Bermúdez holds that judgments of bodily ownership are grounded in the way the body sensorily appears in bodily awareness, McDowell denies that there are any such appearances. For the purposes of this paper, I focus on Bermúdez-style eliminativism.

<sup>iii</sup> De Vignemont, for example, argues that there is 'a distinctive phenomenology of ownership' (de Vignemont 2013, p. 643) that is grounded in the sensory experience of acting with and through a single human body (de Vignemont 2007, pp. 439-43). See also Martin (1992, pp. 201-2 and 212; 1995), Cassam (1994, pp. 51-6), Dokic (2003, p. 325), and de Vignemont (2017). Both the reductionist and a Bermúdez-style eliminativist – i.e. a deflationist – can agree that there is an awareness of bodily ownership grounded in various ways the body sensorily appears in bodily awareness, and they might even agree about which features of the sensory appearances are doing the grounding. But they will disagree about the nature of this grounded awareness: the reductionist holds that the awareness is a sensory appearance, whereas the Bermúdez-style eliminativist holds that it is a judgment. This dispute turns on how much information about the subject's relation to her body is built into the sensory appearances themselves.



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<sup>iv</sup> See, for example, Gallagher (2005, pp. 29 & 173-174; 2017).

<sup>v</sup> Carriero (2009, pp. 389-90) flirts with the eliminativist reading of Descartes, without fully endorsing it.

<sup>vi</sup> I would like to thank an anonymous reviewer at the *European Journal of Philosophy* for suggesting this way of framing the issue.

<sup>vii</sup> This aspect of my reading might be of interest to someone unmoved by my arguments against the eliminativist reading of Descartes, and, more specifically, someone who interprets Descartes as a Bermúdez-style deflationist, since they might take these features of bodily experience to ground not the overall appearance of bodily ownership, but judgments of bodily ownership instead.

<sup>viii</sup> See, for example, Williams (1978, pp. 278-279), Schmitter (1994), Baker and Morris (1996, pp. 135-137), Shapiro (2003, pp. 233-5), Brown (2006, pp. 80-83; and 2007, pp. 280-281), Simmons (2008, pp. 90-91; 2014, pp. 269-70; and 2017, p. 18), Marion (2013, pp. 69-70), and Curley and Koivuniemi (2015).

<sup>ix</sup> Following the now common convention, I refer to Descartes's fictional meditator as 'she' and 'her' to distinguish this character from the historical Descartes.

<sup>x</sup> See, for example Frankfurt (1970, pp. 50-51), Wilson (1978, p. 12), Curley (1978, p. 47), Broughton (2002, p. 62), Hatfield (2003, p. 75), and Larmore (2014, pp. 55-58). Marion (2013), Lennon and Hickson (2014) and Butler (2015) are important exceptions here. Descartes's focus on the meditator's relationship to her body makes sense given that one of the main tasks of the *Meditations* is to help the meditator reconceive of this relationship, and, more specifically, to help her conceive of herself in a non-bodily way.

<sup>xi</sup> See also AT V 146/CSMK III 332.

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<sup>xii</sup> As Broughton (2002, p. 64) points out. Cf. AT VI 141/CSM I 172.

<sup>xiii</sup> Butler (2015) makes a similar point.

<sup>xiv</sup> See also AT VII 24/CSM II 16.

<sup>xv</sup> In other words, this passage suggests that Descartes is a Bermúdez-style deflationist.

<sup>xvi</sup> For discussion, see Bermúdez (2015, p. 39).

<sup>xvii</sup> There are of course other things that we might mean by self-awareness. Martin (1995), for example, uses a more restrictive notion of self-awareness that requires not merely first-personal content, but first-personal content that exhibits immunity to error via misidentification.

<sup>xviii</sup> As de Vignemont notes, the sense of bodily ownership includes ‘the first-person’ or ‘self-referentiality’ (de Vignemont 2015).

<sup>xix</sup> As Secada writes, ‘Cartesian self-awareness is self-understanding. “I exist” and “I think” are expressions of the same intellectual grasp of my own existing essence’ (Secada 2000, p. 115, emphasis mine). See also Stout (1964, p. 259), Schmitter (1994, p. 351), and Hatfield (2003, pp. 133-4). These commentators do not explicitly describe themselves as attributing eliminativism to Descartes. But their insistence on the intellectual character of self-awareness commits them to denying a sensory appearance of bodily ownership.

<sup>xx</sup> See also AT VII 394/CSMK III 186, AT XI 344/CSM I 336, and AT VII 394/CSMK III 186.

<sup>xxi</sup> See also AT VII 56-7/CSM II 39, AT VIIIA 18/CSM I 204, and AT VIIIB 363/CSM 307. The term ‘perception’ is more or less interchangeable with ‘idea’, and refers to any representational mental state that offers content for the will’s consideration.

<sup>xxii</sup> I have formulated this point in propositional terms. But Descartes does not recognize any deep distinction between propositional and objectual contents. For him, there is no real

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difference between perceiving that *o is F* and perceiving *o as F*: these are just two different linguistic descriptions of a single mental phenomenon (AT III 395/CSMK III 186).

xxiii AT VIII A 17/CSM I 204.

xxiv AT VIII A 23/CSM I 209 and AT VIII A 41/CSM I 224.

xxv AT VII 385/CSM II 264.

xxvi There is a wrinkle here, since in *Principles* IV.191 Descartes associates pleasure and pain with touch (AT VIII A 318/CSM I 281-2), whereas in *Meditation 6* he associates pleasure and pain with the internal senses (AT VII 76/CSM II 53).

xxvii See also AT VII 440/CSM II 296 and AT VIII A 37/CSM I 220.

xxviii The *Sixth Replies* raises complications of its own, and I will postpone discussing them until the following section.

xxix AT VIII A 40/CSM I 223.

xxx AT VII 19-20/CSM II 13.

xxxi See also AT VII 29/CSM II 20, AT VII 434/CSM II 293, and AT XI 21-2/CSM I 87-8.

xxxii See also AT VII 59/CSM II 241, AT VII 148-9/CSM II 106, and AT III 64/CSMK III 147.

xxxiii Sensory perceptions can enjoy a high degree of clarity (AT VIII A 22/CSM I 208), and Descartes even suggests that sensory perceptions are ‘sufficiently clear and distinct’ when considered in relation to their proper biological function (AT VII 83/CSM II 57). See also AT VII 113/CSM II 81. Rickless (2005, pp. 315-8) catalogues many passages where Descartes describes sensory and imaginative perceptions as being clear and/or distinct.

xxxiv See, for example, Simmons (2014, pp. 264-5).

xxxv One curious feature of this passage is that Descartes suggests that people are inclined to identify with the bodies they perceive *through the external senses*, viz. sight and touch.

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<sup>xxxvi</sup> AT VIII A 9/CSM I 196-197.

<sup>xxxvii</sup> For helpful discussion, see, for example, Carriero (2009, pp. 81-97), Thiel (2011, p. 37), and Brown (2014).

<sup>xxxviii</sup> For more discussion of the three grades of sense than possible here, see, for example, Hatfield and Epstein (1979), Hatfield (1992), Wolf-Devine (1993), Simmons (2003a), and Ott (2017, ch. 5). I follow the terminological conventions established by Simmons (2003a; 2003b; and 2008).

<sup>xxxix</sup> Simmons (2003a) is the *locus classicus* for the distinction between constructive and epistemic judgments, though Wilson (1993, p. 175n.17) anticipates this distinction.

<sup>xl</sup> Descartes's claim that these judgments are to be referred to the intellect is odd, given his view that the will is responsible for judgment (AT VII 56-7/CSM II 39). Moreover, it is unclear whether Descartes is referring these judgments to the intellect in the broad sense (i.e. the understanding or faculty of perception/ideas/representation), or in the narrow sense (i.e. the pure understanding or faculty of intellection). I am sympathetic to Simmons's (2003a) suggestion that these third-grade judgments are associative or combinatorial acts of the imagination, but my current argument does not turn on this issue.

<sup>xli</sup> For illuminating discussion of the internal senses in Descartes, see Baker and Morris (1996, pp. 124-138) and Clarke (2003, pp. 67-71).

<sup>xlii</sup> See also AT XI 163-5.

<sup>xliii</sup> See also AT XI 346-347/CSM I 337, AT XI 144/CSM I 103, and AT XI 163-5. In the visual case, Descartes suggests that the second-grade sensations have a spatial articulation corresponding to the retinal image (AT 437/CSM II 295). It is unclear what kind of spatial articulation, if any, second-grade sensations would have in bodily awareness. Since the second-

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grade sensations include all the ‘all the immediate effects produced in the mind’, these second-grade sensations will presumably contain some information about the spatial structure of the perceiver’s body, given Descartes’s claim in the *Optics* that ‘it is ordained by nature’ that the soul ‘know the place occupied by each part of the body it animates relative to all the others’ (AT VI 135/CSM I 169; cf. AT XI 181).

<sup>xliv</sup> See also AT VIIIA 35-6/CSM I 218-9. Shapiro (2003, pp. 233-4) provides more discussion of the judgments of early childhood than possible here.

<sup>xlv</sup> As Simmons (2003a, pp. 566-7) points out, Scholastic Aristotelians used the term ‘judgment’ for *any* combination or division of ideas, a usage subsequently picked up by Arnauld and Nicole. If, following Simmons, we interpret Descartes as adopting this use of the term ‘judgment’, this would provide further evidence for the lack of opposition between judgments and sensory appearances, since sensory appearances involve combining various ideas, for example, the combination of the sensory idea of red with the idea of a sphere when we have a visual experience as of a red sphere.

<sup>xlvi</sup> Contemporary philosophers disagree about this. Martin (1992; 1995) and Dokic (2003), for example, hold that if someone experiences a body through bodily awareness, she will inevitably experience this body as belonging to her. See also Gallagher (2017, p.3). De Vignemont (2007; 2013), in contrast, argues that bodily awareness *sometimes* but does not always confer a sense of bodily ownership, by pointing to pathological cases where people report experiences of bodily disownership, and, thus, experience a body-part through bodily awareness without thereby experiencing this part as their own. The claim that bodily awareness *always* confers a sense of bodily ownership would seem to entail that there *is* a sense of bodily ownership. Bermúdez (2011, p. 162), in contrast, seems to draw the opposite inference, in so far as he interprets Dokic

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as denying that there is *any* sensory appearance of ownership. Given that Dokic is committed to the ubiquity of the sense of bodily ownership, it is plausible that the sensory appearance will not be ‘salient’ or distinct (Bermúdez 2011, p. 162; cf. Martin 1995, p. 270). But we should distinguish whether (i) there is a sensory appearance of ownership *at all*, and (ii) whether this sensory appearance is ‘salient’ (Bermúdez 2011, p. 162). Gallagher (2017, p. 2) makes a similar point.

<sup>xlvii</sup> Simmons (2008, p. 90) recognizes this point.

<sup>xlviii</sup> A structurally similar point applies to consciousness. Descartes suggests that, in being conscious of our thoughts, we are not merely aware that these thoughts are occurring, but that they are *our* thoughts, i.e. that they are occurring ‘within us’ (AT VIII A 7/CSM I 195).

<sup>xlix</sup> As Gallagher (2017, p. 1) argues, for example, the kind of ownership relevant to our experience of embodiment does not seem to consist in legal ownership, where this would be cashed out in terms of having various rights to the use and disposition of one’s body. See also Bermúdez (2017, pp. 120-1).

<sup>1</sup> AT VII 74/CSM II 51-52 and AT VII 445/CSM II 300.

<sup>li</sup> AT VII 441/CSM II 297, AT VIII A 9/CSM I 196-7, and AT X 517/CSM II 411-412.

<sup>lii</sup> AT III 694/CSMK III 228. Someone might object that being *identical* to a body is not a way of *having* a body. In response, we may note that the generic notion of *having* is broad, and includes all kinds of different relations. So why not identity? Cassam, for example, treats identity as a kind of having when he writes that, for the materialist, ‘the only sense in which each of us *has* a body is that each of us *is* a body’ (Cassam 2011, p. 140).

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<sup>liii</sup> Descartes illustrates the possibility of this kind of confusion in *Principles* I.46: a person's overall experience of feeling pain in the foot is a confusion of a painful sensation and a perception of the foot (AT VIII A 46/CSM II 208). See Simmons (2008) for extensive discussion.

<sup>liv</sup> This process of intellectual analysis will only take us so far, however, since the third ingredient in this confused experience — viz. the sensory perception of being *united* to the body — does not admit of any further analysis. In his correspondence with Elizabeth, Descartes claims that our notion of the union is 'primitive' (AT III 665/CSMK III 218), and can be 'understood only through itself' (AT III 666/CSMK 218). For insightful discussion, see Simmons (2017).

<sup>lv</sup> The assumption that the burner really *looks* hot is of course debatable, and I take no stand on whether it is correct. The example is purely illustrative.

<sup>lvi</sup> To be clear, there is presumably something — say, a particular state of the perceiver's brain, or perhaps the perceiver's relation to an instance of redness existing in extra-mental reality — in virtue of which the burner looks red to the perceiver. My point is simply that the visual appearance of redness is not grounded in anything internal to the appearances.

<sup>lvii</sup> There are difficult questions about how the non-fundamental appearances result from, are grounded in, or depend on, the fundamental appearances. But these questions seem to be local versions of a more general problem about how one set of items can be grounded in, or result from, another set of items. To be clear, the claim that the sensory appearance of ownership is grounded in more fundamental ways in which the body appears does *not* imply any particular analysis of the relevant kind of ownership. As De Vignemont writes, for example, '[o]n the agentive conception, the sense of bodily ownership is given by the sense of the spatial boundaries of one's body *as being under direct control*... This is not to assume that the sense of agency and the sense of bodily ownership are one and the same thing' (De Vignemont 2015).

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<sup>lviii</sup> We might wonder how the overall sensory appearance of bodily ownership is grounded in these three strands. Are the strands jointly necessary and sufficient? Is each strand singly sufficient, in which case the overall sense of bodily ownership would be overdetermined?

Unfortunately, Descartes does not say.

<sup>lix</sup> Simmons (2014, p. 270) recognizes this point as well.

<sup>lx</sup> See also AT VIII A 35/CSM I 218-219 and AT XI 6/CSM 82.

<sup>lxi</sup> In the *Optics*, Descartes compares seeing to the way a blind man explores his environment with a stick, which suggests that seeing should be understood on analogy to touching (AT VI 83-84/CSM I 153). See also AT VIII A 318/CSM I 281, and AT XI 5.

<sup>lxii</sup> See, for example, AT 141-144 and AT XI 160-62.

<sup>lxiii</sup> Simmons (2003b; 2008) documents the body-relativity of the external senses in Descartes, but she does not appeal to this kind of body-relativity to explain the sense of bodily ownership.

<sup>lxiv</sup> When I feel a potato chip stuck in my throat, I feel the chip to be located inside my body, but not as modifying my body. Saying that  $x$  is located inside the body posits a spatial relation, whereas saying that  $y$  modifies the body posits a metaphysical one. Failure to distinguish these two senses of ‘in’ can lead to all sorts of puzzles, as Noordhof (2001) shows.

<sup>lxv</sup> Simmons (2014, p. 270) hints at an account along these lines, which may suggest a change from Simmons (2008), where she emphasizes the distinctive spatiality of bodily sensations. See also Curley and Koivuniemi (2015). For recent discussions of what it’s like to feel pain in the foot, see, for example, Brewer (1995) and McDowell (2011, pp. 144-5).

<sup>lxvi</sup> See Shapiro (2003, pp. 233-5) and Carriero (2009, pp. 393-6) for readings of Descartes that emphasize our identification with the body’s good, as well as de Vignemont (2017) for a defense of the philosophical merits of this position.



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<sup>lxvii</sup> Alternatively, we might interpret the meditator’s claim that she experiences appetites and emotions ‘on account of’ the body as saying that she experiences appetites, emotions, and other bodily sensations as being caused by, or as arising from, the body. In *Principles* II.2, for example, Descartes writes that ‘we notice that pains and other sensations come to us unexpectedly; the mind is conscious that they do not proceed from itself alone, and that they cannot pertain to it merely by virtue of the fact that it is a thinking thing, but only by virtue of the fact that it is joined to some other, extended thing, which is called the human body’ (AT VIII A 41/CSM I 224; cf. AT VII 79/CSM II 51). See Rozemond (1998, pp. 174-5) for helpful discussion of this passage. I am happy to concede that a perceiver’s sensory experience of the body as causing her bodily sensations is an additional strand in the experience of bodily ownership. But I don’t want to lose sight of the meditator’s experiential identification with the body’s good.

<sup>lxviii</sup> See also AT XI 144/CSM I 102-3.

<sup>lxix</sup> In the ‘special right’ passage, Descartes does not mention the fact that we experience ourselves as having a distinctive form of control and power over the body, which we might have expected to be an important aspect of what grounds the sense of bodily ownership. This omission is curious given that Descartes has interesting things to say about the experience of bodily agency in his correspondence with Elizabeth, especially in his infamous analogy between heaviness and the soul’s power to act on the body, as Simmons (2017, pp. 24-31) demonstrates.

<sup>lxx</sup> Early versions of this material were presented at the Metaphysics and Epistemology workshop at Harvard University, the Conference on “Subjectivity, Selfhood, and Agency in the Latin and Arabic Traditions” at Uppsala University, and the NEH Seminar “Between Medieval and Modern” held at the University of Colorado: Boulder. I would like to thank the participants at

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