I. Introduction

It is easy to get the impression that Cartesians like Descartes and Malebranche think that sensory representation of the world is just bad representation of the world. After all, they persistently describe our sensory grasp of the world as “obscure” and/or “confused.” One of the problems with sensory representation is supposed to be that it confuses mind and body, representing what are in fact properties of mind as if they were properties of body. I have in mind the aspects of sensory experience that involve secondary quality sensations and bodily sensations. When my senses represent the ocean as blue, salty, and bracingly cold, or my swimming arms as aching, they are effectively projecting mental properties (sensations) onto bodies. As Malebranche colorfully puts it: “the soul spread[s] itself onto all the objects it considers, clothing them with what it has stripped from itself” (*Search* I.12.5, OCM I 138/LO 58).¹ This projection results in a systematic misrepresentation of the world. And that, of course, is an epistemological disaster. We tend to believe what we see, hear, and feel, and so we tend to have a lot of false beliefs about the world, such as that the ocean is blue, salty, and bracingly cold, and that our arms are aching, in just the way they sensorily appear to be.² Here is a taste of Malebranche’s negative campaign against the senses:

I shall teach you that the world you live in is not at all as you believe it to be, because actually it is not as you see it or sense it. You judge on the basis of the relation of your senses to all the objects surrounding you, and your senses beguile you infinitely more than you can imagine…there is no precision, no truth in their testimony. (*DM* I, OCM XII 30/JS 4)³
The senses, it seems, are nothing but epistemic troublemakers. And so these Cartesians repeatedly urge us to withdraw from the senses and rely on the intellect’s clear and distinct perceptions in its search for truth about the world.⁴

And yet, for all their trouble, the senses play an important role in the life of the embodied human mind: they help to keep it alive. Descartes maintains that, properly understood, the senses “have been given to me by nature in order to signify to the mind what is beneficial or harmful to the composite of which it is a part” (M⁶, AT VII 83/CSM II 57). This enables us to interact with bodies in a way preserves our embodied well-being.⁵ Malebranche similarly insists that the senses were “given to us for the preservation of our body” (Search I.5.1, OCM I 76/LO 23).⁶ The job of the senses, in other words, is to guard the body by notifying us of beneficial and harmful changes in it and by alerting us to beneficial and harmful effects that bodies in the local environment may have on it.

It is hard to see how a faculty that so grossly misrepresents the world can be left to such an important task. Making matters even more puzzling, it seems to be precisely senses’ misrepresentation of the corporeal world, their projection of sensations onto it, that is supposed to enable them to do their job. On this point Malebranche is explicit:

…if the mind saw in bodies only what is really in them, without sensing in them what is not in them [i.e., without the projective error], it would only love them and make use of them with great pain; thus it is almost necessary that bodies appear pleasant by producing sensations that they themselves lack. (Search I.5.1, OCM 73/LO 21)

And again:

Light and colors had to appear spread out over objects so that we could distinguish them without difficulty. Fruit had to appear infused with flavors in order for us to eat them with pleasure. Pain had to be related to the pricked finger so that the vivacity of the feeling would make us draw back. (DM IV.16, OCM XII 100/JS 63)⁷
Notice that Malebranche does not simply say that the misrepresentation is useful for our embodied self-preservation. He says that it is necessary, or at least almost necessary (comme nécessaire). The implication here is that the mind could not keep the body alive, or at least could not do so very well, if it had only the intellect’s clear and distinct perceptions to work with. Malebranche is not going out on a Cartesian limb here. Descartes insists in Meditation 6 that rapid motions in the fibers of the foot give rise to the sensation of pain in the foot because “nothing else would have been so conducive to the continued well-being of the body” (AT VII 88/CSM II 60): nothing else, not even a clear and distinct intellectual perception of the actual motions in the foot. So despite its inherent confusion, or rather because of it, the senses are able to do something that the pure intellect cannot: represent the world in a way that allows the mind to navigate its body safely through a world of objects that can impact its body for good and ill.

There is, then, a division of cognitive labor in the life of embodied Cartesian mind:

The human being is composed of two substances, mind and body. Thus it has two entirely different sorts of goods to distinguish and look for, those of the mind and those of the body. God has also given him two very sure means to discern these different goods: reason for the good of the mind, the senses for the good of the body. (DM IV.20, OCM XII 104/JS 66)

And again:

I recognize by reason that justice is a good thing; and I know [savoir] by the sense of taste that a certain fruit is good. The beauty of justice is not sensed; the goodness of fruit is not cognized [connaître] (Search I.5.1, OCM I 72/LO 21)

As these passages suggest, the senses and intellect are directed to different objects. Whereas the intellect is our guide to the natures of things, to morality, and, above all, to God, the senses are our guides to self-preservation.8

All this raises some questions. What is it about sensory representation, or indeed about the projection of sensations onto bodies, that makes it so suited to the task of self-
preservation? Why couldn't we get by with clear and distinct intellectual perceptions? The only hint we get from Descartes and Malebranche is the repeated suggestion that the senses represent the corporeal world narcissistically: they show us what bodies are like not as they are in themselves, but as they are related to us and, in particular, to our self-preservation. Neither says exactly what this is supposed to mean. Elsewhere I explore this claim in the context of spatial perception. Here I explore what this claim means for our sensory experience of secondary qualities and bodily sensations. How is it that projecting these sensations onto res extensa shows us the relation that bodies have to our own bodily well-being?

My strategy is to engage in some Cartesian phenomenology. I explore some of the distinctive features of sensory representation, available from inside sensory experience, that result from the projection of sensations onto bodies. These features include (1) the representation of secondary quality sensations and bodily sensations as having some bodily location; (2) the representation of bodily sensations in particular as having a location on or in my body in particular; (3) the representation of bodies in an affective or attention-getting manner; (4) the representation of bodies as different in kind rather than degree, or quality rather than quantity; and (5) the representation of bodies as pleasant or unpleasant, and so as worthy of pursuit or avoidance. These are features that our sensory representation of the corporeal world has, but intellectual representation lacks. They are features that give content to the claim that the senses represent bodies as they are related to our own bodies. And they illustrate why a Cartesian might reasonably think that sensory representation is especially suited to the task of guarding the body.

II. Preliminaries

Some preliminaries are in order. First, I focus in this essay on Descartes and Malebranche. I choose Descartes because he launches the idea that the senses are directed to self-
preservation and offers some suggestive remarks about how they manage to perform this task while in some sense misrepresenting the world. I choose Malebranche because he develops this Cartesian idea in considerable detail. I do not mean to suggest that Descartes and Malebranche agree on the details, or that, where Malebranche develops ideas beyond Descartes, he always develops them in a way Descartes would have endorsed. The two differ greatly in their analysis of the underlying metaphysics of sensory perception, and they differ many details of the sense perceptual process. It is my contentions, however, that on the present topic Malebranche captures the spirit of Descartes’ thinking about sensory experience.

Second, the language of perception comes with philosophical baggage, and so I want to clarify my terminology. It is easiest to do this by reviewing the basics of a Cartesian account of sensory processing. Descartes famously divides the sense perceptual process into three stages or ‘grades’ (O/R 6, AT VII 436-439/CSM II 294-296). The first grade is purely physical: it includes the mechanical stimulation of the sense organs and consequent stimulation of the brain. The second grade includes “everything in the mind that results immediately from the fact that it is united to a corporeal organ thus affected” (O/R 6, AT VII 437/CSM II 294). If I’m looking at a grapefruit, this grade will include the conscious presentation of an elliptical yellow patch in the visual field. I will call this a ‘sensation.’ In using the term ‘sensation’ I do not mean to be taking a stand on whether this mental state is representational or nonrepresentational; I call it a ‘sensation’ simply to indicate that it belongs to the senses in the strictest sense. The third grade of sensory processing includes a host of unnoticed judgments. Some of these judgments correct for the perspectival distortion at the earlier stage so that, for example, the grapefruit will now be represented as a yellow sphere that is spatially distant from me. I will call these sorts of judgments psychological judgments because they merely help to explain why things look (sound, smell,
feel, taste) the way they do. They play a role in constructing the sensory world. In Descartes’ hands, the third judgmental stage includes another kind of judgment, for example, the judgment that there really is something out there that is spherical and yellow. This latter sort of judgment accounts not for why things look (sound, smell, feel, taste) as they do, but for why we believe things are as they sensorily appear. For this reason I will call them epistemic judgments. Psychological judgments, then, result in the world looking (sounding, smelling, etc.) a certain way; epistemic judgments result in our having beliefs about the way the world is.\textsuperscript{12}

Malebranche adopts the basic structure of Descartes’ account, but he carefully distinguishes the two kinds of judgment that Descartes conflates in the third stage of sensory processing. He distinguishes natural judgments that help to explain why things look (sound, smell, feel, taste) the way they do from free judgments that account for our believing that things are as they look (sound, smell, feel, taste). Natural judgments are natural in the sense that they are hard-wired into our perceptual systems; they are made “in us and for us” but not “by us” and even “despite us” (\textit{Search} I.9.3, OCM I 199-120/LO 46).\textsuperscript{13} Free judgments, by contrast, are ultimately in our volitional control even if they are made habitually.\textsuperscript{14} They are proper judgments, involving the will’s affirmation of what is perceptually represented to the mind, and they result in beliefs. Malebranche’s distinction between natural and free judgments, then, is the same as my distinction between psychological and epistemic judgments.

Finally, I will use the terms ‘sensory perception’, ‘sensory representation’, and ‘sensory experience’ interchangeably to refer to the constitutive result of second-grade sensations and natural or psychological judgments. It excludes epistemic judgments that result in beliefs about the way the world is.
III. A Cartesian Phenomenology of Perception

I said above that the success of the senses as guardians of the body turns on the projection of secondary quality sensations and bodily sensations onto bodies. There are two sides to the projective error. First, the senses represent colors, odors, pains, and the like as properties of bodies rather than properties of mind. Second, the senses represent colors, odors, pains, and the like rather than merely size, shape, position and motion, as among the properties of body. In both of these respects, sensory representation differs from intellectual representation, which represents colors, pains, etc. correctly as properties of mind (that is, as sensations), and represents, again correctly, only size, shape, position and motion as among the properties of body. Thus for any given sensory representation, there should be in principle two corresponding intellectual representations; for example, corresponding to a sensory representation of pain in the foot there should be (a) an intellectual perception of pain in the mind\textsuperscript{15} and (b) an intellectual perception of the fibers of the foot moving very rapidly.\textsuperscript{16} Both aspects of the projective error are key to understanding the success of the senses, and I’ll consider each in turn.

III.A. Representing Colors and Pains as Properties of Body

III.A.1. Bodily Location

The first and most obvious thing to note about sensory representation is simply the fact that it indeed represents secondary qualities like color and odor, and bodily sensations like tickles and pains, as properties of body (or at least as having a spatial location). Colors are sensorily represented as being on the surfaces of walls, bananas and backpacks. Odors are represented as being in (or at least emanating from) flowers and cakes. Heat is represented as a property of fire, cold of ice. Flavors are represented as belonging to foods. The same
is true of bodily sensations: pains are represented as being in the knee, head or neck, thirst in the throat, hunger in the stomach, tickles on the back of the knee, and so on.

Descartes and Malebranche are not blind to this phenomenological fact. Descartes admits that we “see light as if it were in the sun” and “feel a pain as if it were in our foot” (Principles I.67, AT VIII 33/CSM I 217). Malebranche does too:

…our eyes represent colors to us on the surface of bodies and light in the air and in the sun; our ears make us hear sounds as spread through the air and in the bodies that reverberate; and if we believe what the other senses report, heat will be in fire, sweetness in sugar, odor in musk, and all the sensible qualities in the bodies that seem to exude them or diffuse them. (Elucidation 6, OCM III 55-56/LO 569)

Descartes and Malebranche bemoan this fact about sensory representation insofar as it leads us to form false beliefs about the fundamental nature of bodies, viz., that bodies are colored, sonorous and filled with pain in just the way they sensorily appear to be. But neither denies that the senses represent things that way. Nor do they think there is anything we can do to change it. We can combat the urge to make epistemic or free judgments that bodies are colored and painful in just the way they sensorily appear to be, and this is one of the goals of the Meditations and the Search After Truth. But even if we succeed in withholding these epistemic judgments, bodies will continue to look colored and feel painful. Malebranche is especially insistent about this:

It should not be imagined that it is up to us to affix the sensation of whiteness to snow or to see it as white, or to affix the pain to the pricked finger rather than to the thorn that pricks it. All of this occurs in us but without us and even in spite of us as the natural judgments I spoke of in the ninth chapter. (Search I.11.3, OCM I 133/LO 55)

Bodily location is part and parcel of our sensory representation of secondary qualities and bodily sensations.

Bad as it is for Cartesian metaphysics, Descartes and Malebranche insist that it is a good thing for our survival that God gave us sensory representations that (mis)locate these
qualities on or in bodies. Leaving us to fend for ourselves armed with nothing but purely intellectual perceptions that represent colors and pains as properties of mind would not guarantee our survival, but surely hasten our demise.

Why? Suppose your foot is being consumed by fire. On this occasion, the foot’s fibers move violently and a pain sensation is produced in your mind. You, having only an intellect to work with, perceive quite clearly and distinctly that the pain is a property of your mind. This cognitive state of affairs would not incite you to get your foot out of the fire. Indeed, it would surely steal all attention away from the foot, whose increased motions are hardly of interest compared to the searing pain of the mind. The same sort of thing goes for secondary quality sensations. Perceiving colors to be sensations of the mind would not enable us to distinguish objects one from another, but only states of mind from one another. This is hardly helpful for distinguishing ripe from unripe bananas. As for flavors, we might delight in the pleasant pineapple-mango sensations of the mind, but this would in no way incite us to eat the fruits sitting on the table. By representing secondary quality sensations and bodily sensations as properties of bodies, the senses direct the mind’s attention to bodies, where it is most needed.

Perhaps I am underestimating the intellect’s resources. After all, one might argue, if the intellect can perceive that the violent motions in the fibers of the foot are causing the pain sensations in the mind, then doesn’t it have all the information it needs to preserve its body? Insofar as it is interested in putting an end to the pain sensations, it will direct us to do something about their bodily causes, like pull our foot out of the fire to stop the commotion. Similarly, if we like pineapple-mango sensations, the intellect will direct us to ingest whatever fruits will cause those sensations. This route to self-preservation might be a little indirect, but wouldn’t it be effective?
In short: no. In Malebranche’s case, there is the problem that the intellect will not perceive violent motions in the foot as the cause of pain sensations because they are not the cause of these sensations. One of the benefits of withdrawing from the senses and employing the intellect alone is supposed to be that we will stop believing that bodies have the causal power to affect us and discover the true cause of our sensations (among other things): God. If the intellect directs us to the true cause of our sensations, then it will direct us to God. This fact about Malebranchian causation theory might only be a glitch, though. So long as the intellect can recognize that a natural law holds between violent motions in the fibers of the foot and pain sensations, then it should be able to make the appropriate judgments concerning self-preservation, wherever the causal efficacy comes from.

But there is another problem. Violent motions in the foot’s fibers constitute only one link in a long chain of causes (or, for Malebranche, occasions) that result in the mind’s pain sensations. On the basis of what would the intellect identify the motions in the foot as the relevant link on which to take action? If the intellect is chiefly interested in stopping the pain, it might make the most sense to go after its most immediate and sufficient cause, viz., the motions in the brain. The natural laws that God has instituted between mind and body, after all, are laws between types of sensations and types of motions in the brain, not motions in the foot (or any other part of our body). Similarly, color sensations, according to Descartes and Malebranche, are supposed to help us distinguish object surfaces; that’s why they are sensorily represented on the surfaces of objects. But why would the intellect, which perceives only a causal chain running from surface textures to light to eyes to brain, target the surface textures as the relevant link to attend to as the cause of the color sensations? What makes one link in the chain stand out is that the sensations are naturally (by God’s institution) represented as located at one or another bodily link. What reliably causes sensations in the mind are events in the brain. What sensations draw our attention to
are bodies further down the causal chain. Sensory representation, then, already has a leg up on intellectual representation where self-preservation is concerned.

There are other problems with the proposal that knowing the bodily causes of sensations is sufficient for the intellect to preserve the body, and I will turn to them below.

III.A.2. Distinguishing My Body from External Bodies

There are important differences between secondary quality sensations and bodily sensations in respect of their being represented as properties of body. Whereas secondary qualities are represented as being located in all sorts of bodies in the local environment, bodily sensations are represented as being located in only one body. That one body is not any old body. It is my body. I see colors all over the place: on walls, on clothing, on my toenails, on my skin. Ditto for sounds, smells, odors, heat and cold. But I feel tickles, pains, hunger and thirst, along with proprioceptive and kinaesthetic sensations, as being located in my body, and in my body alone. Cases of phantom pain are no exception. These pains are still represented as being located within the limits of one's own body. The problem here is that the limits of one's own body are misrepresented.

The relationship between bodily sensations and my body is a particularly intimate one. It is arguably through bodily sensations that I come to identify one body in particular as mine, or even as part of me, in the first place. Bodily sensations confer a phenomenological sense of ownership or self-identity on the body in which they are felt to occur. When I step on a nail, I do not simply feel pain-in-this-particular-foot but rather pain-in-my-foot or pain-in-a-part-of-me. And this is something unique to bodily sensations. Secondary quality sensations do not confer a sense of ownership much less self-identity on the bodies they are sensorily represented as inhering in. Neither do primary quality sensations, nor, I'll argue, intellectual perceptions.
As I read them, both Descartes and Malebranche make this point. The details of their accounts, however, differ. According to Malebranche, this sense of ownership is derived from the “strong” and “lively” character of bodily sensations. All sensations are, in fact, modifications of our mind, and so they are all ours (modifications of us). In our embodied state, however, sensations are represented as properties of body. For very strong and absorbing sensations, Malebranche argues, “the soul can hardly prevent itself from recognizing that they belong to it in some way” (Search I.12.5, OCM I 138-139/LO 58). As a result, when the soul is affected by them the soul “judges not only that this body exists, but moreover that it belongs to us” (DM V.7, OCM XII 118/JS 78). This is surely a bad argument: we have many strong and lively sensations (of loud noises or bright colors) that do not result in the experience that the body in which they appear to be located is ours. It must be something else about the experience of pains and tickles (and proprioceptive and kinaesthetic sensations) that accounts for the sense of ownership.

Descartes offers a different, and better, account. The sense of bodily ownership is derived, at least in part, from the peculiar perspective of bodily sensations. In experiencing a bodily sensation, I encounter a body from the inside or interoceptively. “What could be more internal than pain?” Descartes asks rhetorically (AT VII 77/CSM II 53; italics mine). In the sensory experience of secondary qualities, by contrast, I encounter bodies observationally or exteroceptively (from the outside). Of course, I can have a sensory experience of my body interoceptively or exteroceptively, but it is only in the former that I experience my body as mine or as me. If I’m looking at the color and shape of my own hand, I encounter it much as I do any other body, from the outside. It is only insofar as my visual experience is coordinated with internal bodily sensations of my hand (as I move it and flex it) that I identify the hand I see as mine. It is not part of the visual representation as such.
Descartes suggests this distinction between interoceptive and exteroceptive perception in the Meditation 6 argument for the union of mind and body. The familiar pilot-in-a-ship passage runs as follows:

Nature teaches me, by these sensations of pain, hunger, thirst and so on, that I am not merely present in my body as a pilot is present in a ship, but that I am very closely joined and, as it were, intermingled with it, so that the body and I compose a single thing. For otherwise, when the body is hurt, I, who am nothing other than a thinking thing, would not on that account feel pain, but would perceive the damage through the pure intellect, just as a pilot perceives through sight if something in his ship is broken. (AT VII 81/CSM II 56)

What distinguishes the bodily experience of pain from the visual experience that a pilot uses to assess the damage to his ship is that the experience is interoceptive rather than observational. Both are sensory. Both are egocentric and perspectival. Both are obscure and confused by Cartesian lights. These characteristics, then, cannot be the ones that suggest my union with body. But I feel what’s going on in my body from the inside, whereas the pilot merely observes what’s going on in his ship.25 Similarly, a mind associated with but not united to a body observes (not visually, but intellectually, and so non-perspectivally and clearly-and-distinctly) what’s going on in the body. The unique interoceptive character of pain, tickles, hunger and the like provides a phenomenological basis for my belief that am united to the body, so that it is peculiarly mine or a part of me.

From the point of view of Cartesian metaphysics, bodily sensations are a menace, since they easily lead us to the mistaken belief that mind and body form a single substance, when, as a matter of Cartesian fact, they are two distinct substances that are united in some special way. (Mind and body may form a single thing, viz., a human being or mind-body union, but not a single substance.26) From the point of view of bodily self-preservation, however, it is a very good thing that bodily sensations have this character. In order to tend to its needs, I must pick my body out from others and have a special concern for it. That is
what is accomplished by sensing it phenomenologically to be mine or part of me. If I were
to perceive my body as just one among many others, I would have no special concern for it.
Perceiving the destruction of a foot is one thing. I can take an interest or not. Perceiving the
destruction of my foot or me, on the other hand, commands my concern. And here is
where the narcissism of sensory representation begins: one thing the Cartesians mean when
they say that the senses represent the world as it is related to my body, then, is that the
senses, through bodily sensation, represent one body in particular as mine, or me.

The intellect, for its part, fails to single out any particular body as my body or as part
of me. It represents all bodies as substances distinct from me, a mind. At most, the intellect
might represent my body as one that has a unique causal (or occasional) effect on me. It
may, in other words, notice that events in this brain are regularly followed by sensations in
me. But there is nothing in the nature of that to suggest that this body belongs to me, or is
a part of me. Indeed insofar as the intellect identifies this body as the persistent cause of
involuntary sensations, especially unpleasant ones, it might reasonably choose to assist in its
destruction. The destruction might initially create a few extra unpleasant sensations, but in
the long run this might be a small price to pay for freedom from any further annoyances.
This seems to be one of Malebranche’s worries about having only intellectual perception:

If the soul perceived only what happens in the hand when it is being burned, if it saw in it only
the motion and separation of some fibers, it would hardly take any notice; it might even
take some whimsical and capricious satisfaction from it, like those fools who amuse themselves
by breaking everything in their frenzies and debauchery. Or just as a prisoner would
hardly be bothered if he were to see the walls enclosing him being demolished, and would even
rejoice in the hope of soon being freed, so too if we perceived only the separation
of the parts of our body when we were being burned...we would...be very content to see it
destroyed. (Search I.10.5, OCM I 127-128/LO 51-52)
Equipped with only clear and distinct intellectual perceptions, the destruction of my body would not be experienced as my destruction, but only as the destruction of something to which I am causally (or occasionally) subjected.

But maybe there is another way for the intellect to appreciate that one body in particular is of special interest to it. The causal (or occasional) relation between mind and body works in both directions: the body gives rise to sensations in the mind, but the mind in turn initiates motions in the body. If the intellect were limited to moving just one body in particular, it might have a way of recognizing that body as in some way its own, even if it would not identify with it. The mind, however, is not limited to moving just one body: I can voluntarily move a book from one place on my desk to another. The obvious retort here is that I can move the book only mediately, by way of first moving my hand. My body, the argument goes, is the one that I can move immediately, the one over which I have direct control. This argument still has problems in the Cartesian context. The Cartesian mind cannot move the hand immediately or directly. It can move the hand only mediately by first moving the “principal part” of the brain to which it is united, which will in turn result in animal spirits being direct through a complex causal network of nerves and muscles to the hand. The question, then, is whether the intellect has a way of determining where along the mediate causal chain emanating from the principal part of the brain its own body stops and external bodies begin. (The problem becomes especially thorny if I use a tool to manipulate other external bodies, or wear an artificial limb, for here external bodies become a functional extension of my body.) What most obviously determines the limits of my body along the cause chain are bodily sensations: where the bodily sensations stop, so does my body. But to these the pure intellect has no access.
III.B. Representing Colors and Pains as Properties of Body

So far I’ve looked at the ways to underwrite the claim that the senses facilitate self-preservation by representing colors and pains as properties of body (rather than as properties of mind). I turn now to the corresponding claim that it helps to represent these qualities, and not simply size, shape, position, and motion, as properties of body.

III.B.1 The Affectiveness of Sensory Representation

First, Descartes and Malebranche insist that sensory representation is more affective than any purely intellectual representation. That is because sensations are more affective than intellectual ideas. Descartes describes sensations as “more vivid and prominent [expressae] and, in their own way, more distinct than any of the ideas I formed deliberately through meditating [i.e., purely intellectual ideas]” (M6, AT VII 75/CSM II 52). Malebranche writes that sensations “modify [modifier] and affect [toucher] that soul more than the simple ideas of pure intellection” (Search III-i.4.3, OCM I 408/LO 213). He further speaks of sensations of sensations “stirring” or “rousing” the mind (réveiller), of “penetrating” the mind (pénétrer), and of their being “closer” (plus proches) and more “present” (plus présentes) to the mind than intellectual ideas.

What does all this mean? At the very least, it means that sensations have a psychological impact on the mind. They draw the mind’s attention in a way that intellectual ideas do not. “The sensible affects and stirs us,” Malebranche writes, “while the intelligible puts us to sleep” (Search I.19.1, OCM I 182/LO 82). For Malebranche it means more than that. To say that sensations are affective means that sensations actually alter or modify the mind; they are modifications of the human mind itself. Intellectual ideas, by contrast, reside in the mind of God; they are not modifications of the human mind but objects of its intellectual perceptions. Thus:
The mind applies itself infinitely more to those things that affect [touchent] it, that modify [modifient] it, and that penetrate [pénètrent] it, than to those that are present to it but that do not affect it and do not belong to it. In a word, it is it occupies itself much more with its own modifications than with simples ideas of objects, which ideas are something different from itself (Search VI-i.2, OCM II 251/LO 412).

For present purposes, I ignore the metaphysical complication that Malebranchean sensations are but intellectual ideas are not modifications of the human mind. I focus on the psychological result (affirmed also by Descartes) that sensations draw the mind’s attention more than intellectual ideas.

Anyone who has tried to write a philosophy paper with a headache can attest to the claim: in the battle between the senses and pure intellect, the senses typically win out for the mind’s attention. Descartes complains that it is difficult to attend to what is not present to the senses or even to the imagination (Principles I.73, AT VIII 37/CSM I 220). And Malebranche regretfully notes:

It often happens that when one is very attentive to metaphysical speculations, one is distracted from them because some sensation unexpectedly turns up in the soul that is even closer to it, so to speak, than these [metaphysical] ideas...The buzzing of a fly, or any other little noise—supposing that it is communicated to the principal part of the brain so that the soul perceives it—is capable of preventing us from focusing on the abstract and lofty truths despite all our efforts, because no abstract idea modifies the soul as sensations do. (Search III-i.4.3, OCM I 407-408/LO 213).35

The senses thus “fasten the soul [appliquent extrêmement l’ame] to what they represent to it” (Search I.18.1, OCM 177-178/LO 79-80).36

There is some ambiguity here. When Malebranche says that the senses “fasten the soul to what they represent to it,” is he claiming that the senses direct the mind’s attention to the sensations themselves, and so to the mind of which they are modifications, or to the bodies of which they appear to be modifications? Malebranche does think that through “inner sensation” (sentiment intérieur) or “consciousness” (conscience) we are more aware of our
sensations than we are of our intellectual or pure perceptions, i.e., the modifications of mind that are directed to intellectual ideas in the mind of God (Search I.1.1, OCM I 42/LO 2).

But what he has in mind in the passages quoted above is that the senses draw the mind’s attention to the bodies of which sensations appear to be modifications. He writes: “pain or a burning sensation strongly directs the soul to the parts of our body” (Search I.11.3, OCM I 133/LO 55, italics mine). 37

What is important for present purposes is not simply that sensations draw our attention to bodies more aggressively than lofty abstract intellectual thoughts about God, justice, and philosophy. More important is that they draw the mind’s attention more than any corresponding intellectual thoughts about the very same bodies. Malebranche writes that sensations of pleasure and pain are “modifications of our soul that it feels in relation to its body and that affect it more than the cognition of movement in the body’s fibers, all of which forces the soul to take careful note of them” (Search I.10.5, OCM I 128-129/LO 52, italics mine). If the choice is between feeling pain in the foot and having the corresponding intellectual perception of rapid motion in the foot’s fibers, the pain is the one that will direct the mind’s attention where it is needed.

But the story is more complicated than that. It is not simply that the senses call our attention to bodies better than the intellect through its affective sensations. Within the sensory domain, some sensations are more affective than others, and so they direct our attention to some bodies more than others. If I am looking at a painting and suddenly develop a cramp in my foot, all my attention is diverted from the painting to my foot. Malebranche divides sensations into three basic categories according to their affective strength. Most bodily sensations, including pains, tickles, and extremes of hot and cold, are categorized among the “strong and lively sensations” that “startle and forcefully rouse the mind” (Search I.12.4, OCM I 137/LO 57). It is hard to ignore them; they “distract our
thought from other things” (Search I.11.3, OCM I 133/LO 55). Most secondary quality sensations, including those of color, moderate sounds, odors, moderate heat and cold are categorized among the “weak and languid sensations” that have comparatively little effect on the mind, and so attract relatively little attention. In between are sensations of strong light and noises, and presumably sensations of especially strong flavors and odors as well, that rouse the soul but not with the urgency of tickles and pains. The differences here are merely a matter of degree, and Malebranche is perfectly willing to admit that what starts out as a weak and languid sensation can become quite strong and lively, thereby eventually commanding attention, as, to borrow his own example, the light of a distant torch is brought closer and closer to the eyes. The result is a sensory representation of the corporeal world in which some things stand out in relief against others, thereby drawing the mind’s attention to some parts of the corporeal world more than others.\textsuperscript{38}

I mention this complication because it is clearly part of Malebranche’s attempt to make sense of the ways in which sensory representation is especially conducive to self-preservation. By and large, the Malebranchean theory goes, what stands out phenomenologically is what is most salient to our bodily needs at the moment. When very affective pains are present, they command attention over all else. And rightly so since they alert us all is not well with the body of greatest concern. Moderately affective gustatory and tactile sensations alert us to bodies that have already made contact with our body and so are immediate poised to affect our bodies for good or ill but have not already done so. Color and sound sensations, for their part, merely help us discriminate bodies in the local environment, most of which have not yet made contact with us and so less of an immediate reward or threat.\textsuperscript{39} Here, then, we can add another to dimension to the narcissism inherent in sensory representation: the senses highlight those parts of the corporeal world that are most important to me, i.e., what I need to know about in order to preserve myself.
As for intellectual perception, if it is not affective, it is also non-discriminating. It provides a disinterested view of things: it is, in effect, an equal-opportunity representer of bodies. What we would get through an intellectual representation of the world, were we capable of it, would be a representation of res extensa in all its microscopic, mechanistic detail, and perhaps a representation of the macroscopic world that it constitutes, without the dramatic highlighting that sensory representation includes. Our attention would naturally be divided over the whole thing. Attention in the world of the intellect is not drawn; it must be applied. This is not a point that Descartes makes, except insofar as he thinks that intellectual perception is more active than sensory perception, but it is one that Malebranche is especially concerned about. The Search is largely a lesson in how to turn our attention toward clear and distinct intellectual ideas in the face of sensory distractions. With an intellectual representation of the world, one has to decide where to direct one's attention. And for a finite intellect, at least, it cannot be applied equally to all things at once. This cognitive predicament would not serve us well. It would be sheer luck that we happened to decide to check in on the part of res extensa that constitutes our foot at just the time it is being consumed by a fire. (Never mind that we wouldn't recognize it as ours or, as I'll argue in a moment, recognize the motions as bad.) In sensory representation, the decision is made for us.

Malebranche is willing to say flat out that intellectual perception of the corporeal world would be hopeless as an aid in preserving our bodies for just this reason:

If we had to examine all the relations that the bodies surrounding us have to the current dispositions of our body in order to judge whether, how, and how much we should interact with them, this would divide--what am I saying!, this would completely fill the capacity of our mind. And surely our body would be no better off. It would soon be destroyed by some involuntary distraction. For our needs change so often, and sometimes so suddenly, that for us not to be surprised by some vexing accident would require a vigilance of which we
Part of the problem here is simply that we don’t have the intellectual capacity to monitor the condition of our body and the (potential) impact on it of all bodies in the surrounding environment. There’s just too much to keep track of for finite minds like ours. But I think Malebranche is talking about more than a capacity problem here. Even if the intellect could represent it all, it would not represent the world in a way that would be useful for survival because, in part, it doesn’t represent some parts of the world as more salient than others. The slightest interest we might take in one part of the world (say, because we’ve noticed a new star or became curious about the constitution of chocolate) would leave us vulnerable to the potentially harmful goings on in another. And that is not a recipe for survival.

III.B.2 The Qualitative Character of Sensory Representation

Another prominent feature of sensory representation is its qualitative character: bodies appear sensorily to differ in quality or kind and not merely in quantity or degree. Descartes notes that while the bodily causes of sensation typically differ very little, they result in sensations that are “completely opposite” (Principles IV.191, AT VIII 318/CSM I 282 and Treatise, AT XI 144/CSM I 103). Malebranche makes the same point:

Although all these changes in our fibers really consist only in motion, which generally varies only in degree, the soul of necessity regards them as essential changes. (Search I.10.5, OCM I 126/LO 51)

By “essential changes,” Malebranche seem to have in mind changes in quality or kind. So, for example, surfaces with different microscopic textures that put different degrees of rotational spin on the particles of light that hit them are sensorily represented as red and green. Foods constituted by differently shaped particles that glide across the tongue at different angles are
sensorily represented as sweet and sour. Body parts whose fibers are moving more and less violently are sensorily represented as tickling and painful.\textsuperscript{42}

From the point of view of Cartesian metaphysics, the qualitative character of sensory representation misleads us not only into believing falsely that bodies have these various sensory qualities, but also into believing that bodies differ in nature or essence from one another. (Their differing in nature or essence is what accounts for their qualitatively different sensory qualities, the reasoning goes.\textsuperscript{43}) The Cartesians, of course, insist that all bodies have the same essence, extension, and that their properties are restricted to modifications of it. If the intellect were in charge, it would faithfully represent bodies in this way. Even so, Descartes and Malebranche insist that the qualitative representation of bodies that we have through the senses is important (even necessary) for self-preservation. Why?

Malebranche insists that it is easier and so faster to distinguish objects that are represented as being qualitatively different than it is to distinguish objects that are represented as differing only in quantity or degree.\textsuperscript{44} It is easier and faster to distinguish objects sensorily by their color, say, than it would be to distinguish them intellectually by the details of their surface textures and the slight differences in rotational spin that they put on the incident particles of light. Naturally, ease and speed are of the essence when our lives are at stake. Sensory representation, then, is supposed to be more efficient than intellectual representation.

I’m not convinced that this is a good argument for a Cartesian to make. Within the sensory domain, discriminating objects qualitatively may be easier and faster than discriminating them quantitatively. It’s an empirical question. But if the alternative is \textit{intellectual} perception of the quantitative features of objects (even the microscopic features of them), then why should this be difficult or slow? Wasn’t the lesson of Descartes’ Meditation 6 exercise with the chiliagon supposed to be that although the sense-based imagination may
have a hard time distinguishing a 999-sided figure from a 1,000-sided figure, the intellect has no trouble with it at all?

Perhaps Malebranche's point is rather that there is just too much quantitative information in the world for a finite intellect like ours to keep track of. Certainly one finds that sort of claim over and over again in the texts. In that case, the problem is not with the way the intellect represents the world, but simply with its limited capacity in the human being. Sensations are, as Malebranche frequently suggests, a kind of shorthand that condenses a lot of information into cognitively digestible packages.

I think there is more to qualitative representation than efficiency. Consider the full passage from which the last quotation was taken:

[The soul] must be advised of all [the body’s] changes and must be able to distinguish those that are agreeable to our body’s constitution from those that are not, because it would be of no use to know them absolutely and without this relation to its body. Thus, although all these changes in our fibers really consist only in motion, which generally varies only in degree, the soul of necessity regards them as essential changes. For though they vary in themselves very little [i.e., only in degree], changes in motion must always be taken as essential changes in relation to the preservation of the body. (Search I.10.5, OCM I 126-127/LO 51; italics mine)

The motions must be taken as essential changes in relation to the preservation of the body because they are essential changes in relation to the preservation of the body. And this is something that the intellect is ill-equipped to represent. The senses, by contrast, are especially suited to represent these changes. Let me illustrate.

When I stick my foot in the fire, the fibers of my foot start moving more violently and eventually rupture. The intellect represents my foot as a hunk of res extensa. As such these changes are merely changes in degree of motion and distance between the fibers. The senses, by contrast, represent my foot as part of a human body (indeed my body) that uses its feet to get around. As such, the increased motions and ruptures constitute a change from
health to damage. And that is an essential change, a change in quality or kind. The intellect and senses are tracking different things, motion and health respectively. The same holds secondary quality sensations: the difference between a fresh egg and rotten egg, insofar as they are simply extended things, is largely a matter of degree; but relative to the preservation of the body, they differ essentially, one being nutritious and the other noxious. The intellect represents them as differing in degree while the senses, through flavor and odor sensations, represent them as essentially different and prompt different behavioral responses to two eggs.\textsuperscript{45}

If I’m right, then the problem with intellectual representation is not simply that it would be overwhelming, that it would contain too much information for our finite minds to cope with, and so be an inefficient means for getting around in the world. The problem is that it provides the wrong \textit{kind} of information for helping the mind navigate its body through the world. It tells us about the intrinsic properties of bodies and about their spatial and perhaps mechanical relations to each other. It may even tell us about the mechanical effects that external bodies have on the body that happens to be our own. But it does \textit{not} tell us how those effects bear on the well-being of our bodies considered as \textit{human} bodies with a functional integrity to maintain. This is something that the senses do:

\begin{quote}
It would be useless for the soul to know \{the disturbances that objects excite in the fibers of our flesh\}, and it would not be thereby enlightened in order to judge whether the things surrounding us were capable of destroying or maintaining the body’s equilibrium. But it feels affected by sensations that differ essentially and that, marking precisely the qualities of objects in relation to its body, make it sense promptly and acutely whether these objects are capable of doing it harm.  
\textit{(Search I.10.5, OCM I 127/LO 51)}
\end{quote}

The intellect informs the mind about the body insofar as it is an extended substance. The senses inform the mind about the body insofar as it is a part of the mind-body union. I shall have more to say about this in the next section.
III.B.3 The Pleasure and Displeasure of Sensory Representation

If we are to survive, we need to do more than parse the corporeal world into qualitatively different parts with some salient highlights. The end is action. For action, we need to be informed about our current bodily conditions and the impending effects of external bodies in such a way that we can assess them as beneficial or harmful. That is supposed to be the function of the senses. Recall Descartes:

[Sensory perceptions], properly speaking, have been given to me by nature only to signify to the mind what is beneficial or harmful [commoda vel incommoda] to the composite of which it is a part. (M6, AT VII 83/CSM II 57)

Armed with information about benefit and harm, we can take action. So how do the senses manage to represent bodies as beneficial or harmful? In short: by the pleasantness or unpleasantness of sensations.

Descartes and Malebranche both maintain that sensations are intrinsically pleasant or unpleasant. By that I mean that which types of sensation are pleasant and which are unpleasant is not arbitrary; it could not have been the case that pains or the nasty smell of rotten eggs be pleasant. Descartes relies on this point when he argues in Meditation 6 that God’s choice was not arbitrary in setting up the institution of nature between brain states and sensations: for every brain state (type) God chose that one sensation (type) that of all possible sensation (types) would be most conducive to the preservation of our bodily health (AT VII 87/CSM II 60-61). He could not have swapped pain-in-the-foot sensations for tickle-in-the-foot sensations with equal effect. Malebranche relies on the intrinsic pleasantness or unpleasantness of sensations when he argues that differences in our preferences for things must be accounted for by differences in sensation, not by differences in response to the same sensation. If you like the taste of saffron and I do not, it has to be because the saffron tastes different to you than to me. Why? Because a given sensation type
is intrinsically pleasant (or unpleasant) and so cannot elicit different responses (*Search* I.13.5, OCM I 149-151/LO 64-65).

By projecting intrinsically pleasant and unpleasant sensations onto bodies, the mind effectively represents them as pleasant and unpleasant. And through this representation we recognize things in the corporeal world to be beneficial and harmful to us. Here’s Descartes:

> From the fact that some of these [sensory] perceptions are agreeable to me and others disagreeable, it is quite certain that my body, or rather my whole self insofar as I am a composite of body and mind, can be affected by various beneficial and harmful bodies that surround it. (M6, AT VII 81/CSM II 56; italics mine)

Malebranche says the same:

> Through pleasure and pain, through agreeable and disagreeable taste, and by other sensations, [the senses] …quickly advise the soul of what ought and ought not to be done for the preservation of life. (*Search* I.5.1, OCM I 76-77/LO 23, italics mine)

What, then, is the connection between pleasantness and benefit, unpleasantness and harm? Malebranche explains: “pleasure and pain are the natural and indubitable marks of good and bad” (*Search* I.5.1, OCM I 72/LO 21). By projecting pleasant and unpleasant sensations onto bodies, the senses effectively represent those bodies as good and bad for us. Light tickles, for example, are naturally pleasant, and so “testifies to the strength the body with which [the mind] is closely joined” (*Principles* IV.191, AT VIII 318/CSM I 282). If pleasant and unpleasant sensory representations are evaluative, they are also motivational. Nothing prompts action like a delicious smell emanating from the kitchen or a painful injury in the knee. Thus Malebranche writes:

> it was fitting that the mind sense in bodies qualities that they do not have, so that it would decide…to unite itself to or separate itself from them according to the pressing needs of the machine, whose delicate springs require a vigilant and prompt guardian…these rewards interest it in the body’s preservation (*DM* IV.20, OCM XII 104/JS 67).
The senses, then, give us an intrinsically evaluative and motivational representation of the corporeal world.

These evaluative and motivational representations are, of course, relative. Different bodies have different needs, and the same body has different needs at different times. Accordingly, the world is sensorily represented somewhat differently from person to person, and from time to time. To borrow an example from Malebranche, a porter’s punch may feel pleasant to his colleague, but painful to a child. Similarly, a room that is comfortably warm to someone in robust health may feel inhospitably cold to someone who is ill or frail. And food that tastes appetizing when one is healthy and hungry may taste repulsive when one is ill or sated. This is because the conditions of the body have changed, and so the world around it, remaining intrinsically unchanged, nevertheless stands in a different relation to its well-being. Here then is yet another way in which Descartes and Malebranche may mean that the senses represent the corporeal world not as it is in itself, but as it is related to our self-preservation.  

So what’s wrong with the intellect on this front? The Cartesian intellect’s idea of body is the idea of extension (and its modifications). It does not represent bodies as good or bad, beneficial or harmful. That is because in and of themselves bodies are neither good nor bad, beneficial nor harmful. No modification of extension is intrinsically better or worse than another. Note the caution with which Malebranche presents his claim that pleasure and pain are marks of good and bad:

pleasure and pain are the natural and indubitable marks of good and bad, but this holds only for those things that, being neither good nor bad by themselves, cannot also be recognized as good or bad through clear and evident knowledge… (Search I.5.1, OCM I 72-73/LO 21).

There is nothing intrinsically bad or wrong about increased motions and ruptures in the fibers of my foot considered as a hunk of res extensa. Or take Descartes’ example: there is
nothing intrinsically bad or wrong about the dry throat of a dropsy patient insofar as it is considered simply as a hunk of res extensa (M6, AT VII 84-85/CSM II 58). Both the foot and the throat, considered in themselves, are bodies whose arrangement of mechanical parts are changing in a way determined by the laws of motion. The same holds for external bodies: there is nothing intrinsically beneficial or harmful about the corporeal constitution of an apple, or even of its causal impact on the body that ingests it, insofar as they are considered simply as extended things. Properties like bodily damage (health, nutritiousness, poisonousness, dehydration, etc.) don’t have a place in the world of Cartesian body because natural ends have no place in the world of Cartesian physics: there is no way my body, or any other body, should be. No ends, no good or bad. No good or bad, no benefit or harm. And so the intellect, reporting on body as res extensa, does not represent bodies as good or bad, beneficial or harmful.52

But even if the intellect does not represent the conditions of bodies as good or bad in themselves, couldn’t it represent them as good or bad in relation to something else? Maybe. But in relation to what? It would not represent conditions of bodies as good or bad in relation to God’s ends, since it has no access to God’s ends. (God himself may represent them as good or bad simply by willing them into existence or not, but this is not something a finite intellect could aspire to.) Nor would the intellect represent bodies as good or bad in relation to itself, since bodies are neither good nor bad for the intellect (Search I.5.1, OCM I 73/LO 21). But perhaps the mind can nevertheless represent bodies as instrumentally good or bad. Suppose that a finite mind decides that it wants to remove a book from the shelf. Not being God, it cannot simply will the book off the shelf. It has to make use of a body. But if the body under the intellect’s employ has a broken arm, it will not get the job done. The broken arm is not bad in itself, but it is bad instrumentally, insofar as it hinders the intellect’s desire to remove the book. And no doubt the intellect can represent it that way.
Note that in representing bodies as instrumentally good or bad, the intellect is representing the body as good or bad by means of what Descartes calls an ‘extrinsic denomination’. The intellect’s judgment that the body is damaged is exactly parallel to our judgment that a clock is broken and to the pilot’s judgment that his boat is damaged. It does not represent anything *in rerum natura*, but derives from a desire on the part of an agent who intends to use the body for some purpose (see *M*6, AT VII 85/CSM II 58-59). The problem is that these are not the sorts of goods and harms that the senses are representing. The senses are representing conditions of bodies that the union of mind and body render good and bad, not that the mind’s intentions render good and bad.

The senses do not report on the body considered simply as res extensa. They report on the *human* body, that is, on the body considered as an integral part of a mind-body union, and on the rest of the corporeal world insofar as it impacts that human body for good or ill. The human body, by contrast to mere res extensa, has an end in virtue of being a constitutive part of a mind-body union that has survival as its end. In order for the union to survive, the human body must maintain a certain functional integrity. If its parts are changed in such a way that that functional integrity is compromised, the body is damaged; if it is changed in such a way that it loses its functional integrity altogether, it dies, and with it the mind-body union dies.53 Thus while my burned foot does not count as injured insofar as it is simply a hunk of res extensa, it is injured insofar as it is a part of a mind-body union that uses its feet for getting around. Similarly, while the apple is not nutritious simply in virtue of having a certain arrangement of mechanical parts, it is nutritious relative to a human body that has to sustain itself by incorporating other suitable bodies into itself.

Although they do not have a place in Cartesian physics, properties like health, damage, and nutrition do have a place in Cartesian anthropology, that is in the context of the mind-body union.54
But can't the intellect simply represent the conditions of bodies as good or bad in relation to the mind-body union? Not exactly. The roadblocks differ for Descartes and Malebranche, in part because their treatments of the union differ, and I'll consider each briefly in turn.

Descartes is famously unclear (and possibly inconsistent) about just what the union of mind and body amounts to metaphysically. He is not unclear, however, about how it we are to gain epistemic access to it. He writes to Elizabeth:

> It does not seem to me that the human mind is capable of conceiving very distinctly and at once the distinction between the soul and the body and their union; for to do this it is necessary to conceive them as a single thing and at the same time to conceive them as two things; and this is absurd. (AT III 693/CSMK 227)

Interestingly, Descartes does not say that the solution is for the intellect to toggle between its clear and distinct conceptions of the distinction and the union. The intellect does not have a clear and distinct idea of the union. Descartes insists, here and elsewhere, that we must use the senses *rather than the intellect* to conceive the union. In this rare case, the senses outperform the intellect:

> What belongs to the union of mind and body is known only obscurely by the intellect alone…but it is known very clearly by the senses. (AT III 691-92/CSMK 227)

Thus when Descartes introduces to Elizabeth the three “primitive notions” concerning mind and body--one for conceiving things that pertain to the mind alone, one for conceiving things that pertain to body alone, and one for conceiving things that pertain to the union--it seems that the third primitive notion of the union is, at bottom, a *sensory* notion. Since it is *primitive*, it is not reducible to that of body alone or mind alone or to any simple conjunction of the two: “we go wrong when we try to explain one of these notions in terms of the other, for since they are primitive notions, each of them can be understood only by itself” (AT III 665/CSMK 218). If that is right, then any finite intellect equipped with only
clear and distinct intellectual ideas of mind and body (and no sensory ideas) cannot conceive
the union. And if it cannot conceive the union, it cannot conceive bodies and good or bad in
relation to the union.\textsuperscript{57}

Malebranche also claims that the intellect has only a confused grasp of things
pertaining to the mind-body union by comparison to the senses:

[In the first and second books of the Search] I concluded that it is morally impossible to know \textit{connaitre} by pure ideas of the mind the relations that bodies have with our own; that we should not reason in accordance with these pure ideas of the mind in order to know \textit{savoir} if an apple or stone is good to eat, but that we must taste them; and that although one can use one’s intellect to know confusedly the relations that external bodies have with our own, it is always safest to use the senses. (\textit{Search}, Conclusion of the First Three Books, OCM I 489/LO 261)

Still, for Malebranche the problem with the intellect conceiving the union (and therefore conceiving bodies as good or bad in relation to the union) is not first and foremost a cognitive one. As Malebranche depicts it, the mind-body union consists in nothing more than the laws of psycho-physiological correspondence established by God between the mind and body: “the entire alliance of mind and body known to us consists in a natural and mutual correspondence of the soul’s thoughts with the brain traces, and of the soul’s emotions with the movements of the animal spirits” (\textit{Search} II-i.5.1, OCM I 215/LO 102).\textsuperscript{58}

An intellectual conception of the union, then, should require only access to intellectual ideas of mind, body, and the psycho-physiological laws established by God. As it happens, Malebranche argues that finite human intellects do not have access to an intellectual idea of mind (it has only “inner sentiment” or “consciousness” of the mind),\textsuperscript{59} but there is nothing in to suggest that it unavailable to the finite intellect in principle. If there are problems with the intellect conceiving the union, they must lie elsewhere.

One problem is simply due to the finitude of any finite mind. To monitor the corporeal world for potential benefits and harms to the body and execute appropriate bodily
responses would require, Malebranche confidently estimates, infinitely many inferences and volitions. But “neither our soul nor even any finite mind could make in an instant the infinite number of inferences” that would be required to construct a perception of a single object based on what is occurring in our eye, brain, and body, even if it were equipped with a perfect knowledge of optics and geometry (Elucidation 17 §43, OCM III 346/LO 746). And even if the soul had the motive force to move bodies, it would take “an infinite number of volitions for the least movement of the body” (Elucidation 15, OCM III 228/LO 671).

Capacity, though, is not the only, or even the most important, problem.

From Malebranche’s point of view, the biggest problem is theological: “The goods of the body do not deserve the attention of a mind, which God made only for him” (Search I.5.1, OCM I 72/LO 21). Every intellect by its very nature is united to God: “the relation the mind has to God is so essential that it is impossible to conceive that God could create a mind without it” (Search Preface, OCM I 10/LO xix). Moreover, God is its proper object: “God alone is our light and the cause of our happiness…He alone should be the object of our mind’s attention” (DM IV.14, OCM XII 98/JS 61). But because God willed that the human mind also be united to a body with a certain harmony among its part that needs to be maintained, he had to provide the human mind with a means for attending to its needs. For this purpose he gave the human mind the senses, leaving the intellect free to contemplate God. Anything else would be inappropriate. Thus Malebranche writes of the first man:

Adam’s mind was not made for examining the motion and configurations of matter but to be continually attending to God… it would have been a disorder or an irregularity in a time when everything was necessarily perfectly ordered if he had been obliged to turn his mind from its view of the perfections of his true good in order to examine the nature of some fruit with regard to its nutritive value. (Search I.5.1, OCM I 74-75/LO 22)

The intellect, then, has a theological bar on conceiving body as good or bad in relation to the mind-body union.
The final problem is motivational. Even if the intellect could figure out that some conditions of the body are good insofar as they secure the continued existence of the union, something would be missing: the desire to care about the continued existence of the union. Malebranche suggests that we have pleasant and unpleasant sensations “in order to apply me to this body and interest me in its preservation” (Elucidation 15, OCM III 226-227/LO 670). We have seen him worry that an intellect deprived of sensations “would neither love objects nor make use of them without great pain” (Search I.5.1, OCM I 73/LO 21) and that it might even take a certain delight in the destruction of the body to which it is united (Search I.10.5, OCM I 127-128/LO 51-52). Perceiving that it somehow owns its body or can make special use of it is no guarantee that it will sustain an interest in it. If a pilot’s ship keeps breaking down, he might reasonably buy a new one rather than continue to invest himself in the current one. Sensations, by contrast, are able to motivate a sustained attachment to a particular body. I’ve argued above that they do that not only being pleasant and unpleasant, and so intrinsically motivational, but also by forging a phenomenological identity with the body so that the mind experiences the goods and harms of the body as its own.

Despite the differences in their analyses of the mind-body union, and in the problems facing the intellect’s attempt to conceive it, both Descartes and Malebranche quite clearly maintain that the senses have a unique ability to track the goods and harms that the union confers on its body.

IV. Concluding Remarks

If I’m right, sensory representation is not merely a matter of projective error, not merely a massive confusion of mind and body after all. (Though it looks that way to the intellect.) It constitutes an anthropocentric, even narcissistic representation of the world. In the case of bodily sensations, the senses represent bodies qua human bodies with a functional integrity
to maintain; they represent bodies as healthy, damaged, slightly out of whack, in need of nutrition, parched, quenched, and so on. What is more, through bodily sensations the senses represent that healthy or damaged body as my body. In the case of secondary quality sensations, the senses represent the external world as filled with macroscopic objects that we can readily distinguish and that bear some behaviorally salient relation to our human bodies; they represent external bodies as good and bad to eat, too hot to handle, pleasantly cooling, and so on. This is clearly a good thing even by Cartesian lights.

Descartes and Malebranche both have an interest in casting the senses in a negative epistemic light, for their chief aim is to convince their readers that they have an intellectual faculty through which they can arrive at metaphysical truths about the God, body, and (in Descartes’ case) mind. Moreover, they do think that we are lead to false beliefs through the senses. But they tend to overstate their case. Recall that Malebranche insists there is “no truth in their testimony” (DM I, OCM XII 30/JS 4). He frequently writes that the senses were given to us “only for the preservation of our bodies and not for the acquisition of truth” (Search I.10.5, OCM I 129/LO 52) as if truth and self-preservation are mutually exclusive. One might say that the senses lead us to false beliefs that are nonetheless useful; for example, while it’s not true that heat is in the body, it’s useful to think that it is. But, as I’ve argued, that is not in fact how Descartes and Malebranche actually portray sensory representation. In the details, they tend rather to qualify what it is that the senses are, perfectly correctly and even “exactly” and “precisely,” representing: not bodies as they are in themselves but bodies as they in relation to the preservation of our bodies; not “immutable truths that preserve the life of the mind” but “mutable things proper to the preservation of the body” (Search, Conclusion of the First Three Books, OCM I 488/LO 261). The lead us to true beliefs about these matters; for example, it is typically true that when my foot hurts there is something wrong with it.
Interestingly, when Descartes and Malebranche consider the senses in their proper context as guardians of the body, they give them (appropriate) epistemic approbation. Descartes is prepared to say not only that sensory perception is “sufficiently clear and distinct” insofar as it notifies us of potential and actual benefits and harms to the body (M6, AT VII 83/CSM II 57), but also that the senses “report the truth more often than not” in these matters (AT VII 89, italics mine/CSM II 61). Malebranche writes that the senses are “faithful witnesses…in respect of what concerns the good of the body and the preservation of life” (DM I, OCM XII 30/JS 4; italics mine). They lead us to judgments that are “quite correct if they are considered in relation to the preservation of the body” (Search LO 60; italics mine). And “the senses are very useful in knowing [connaître] the relations external bodies have to our own” (Search, Conclusion of the First Three Books, OCM I 488/LO 261). So long as we remain clear on what the senses are and are not informing us about, they have good epistemic credentials. There is, after all, some truth in their testimony.63

Short Titles and Abbreviations for Primary Texts

In the notes and text, I use the following abbreviations and short titles:

AT Descartes 1996. Cited by volume and page number. Translations are my own, but I have benefited by consulting Descartes 1972, Descartes 1984-85 and Descartes 1991.
CSM Descartes 1964-85.
CSMK Descartes 1991.
Discourse Discourse on Method/Discours de la Méthode in AT VI.
Elucidation Elucidation on the Search After Truth/Éclaircissements sur la Recherche de la Vérité in OCM III. Cited by elucidation number.
DM Dialogues on Metaphysics and on Religion/Entretiens sur la Métaphysique et sure la Religion in OCM XII. Cited by dialogue and part. Translations are my own, but I have benefited by consulting Malebranche 1997.
JS Malebranche 1997.
LO Malebranche 1980.
M Meditations on First Philosophy/Meditationes de Prima Philosophiae in AT VII. Cited by meditation.
O/R Objections and Replies to Objections in AT VII. Cited by objection/reply set.
Passions Passions of the Soul/Les Passions de l'Ame in AT XI. Cited by part and article.

Principles Principles of Philosophy/Principia Philosophia in AT VIII. Cited by part and article.

Search Search After Truth/Recherche de la Vérité in OCM I-II. Cited by book, part where applicable, chapter, and section as follows: I.i.1.1. Translations are my own, but I have benefited by consulting Malebranche 1980.

Treatise Treatise on Man/L’Homme de René Descartes in AT XI.

Bibliography


1 See also Search I.12.3, OCM I 136-127/LO 57; Elucidation 10, OCM III 152-154/LO 626-628 and DM III.12, OCM XII 75/JS 41. For an explanation of abbreviations, short titles, and citation forms, see “Short Titles and Abbreviations for Primary Texts” at the end of the essay. Descartes never uses such explicitly projectivist language, but consider the following passage from O/R 4: “[The mind] took thought and extension to be one and the same thing, and referred to the body all the notions which it had concerning intellectual things…there was nothing that I cognized with sufficient distinctness, and there was nothing I did not suppose to be corporeal; however, in the case of those very things that I supposed to be corporeal, the ideas or concepts which I formed were often such that they referred to minds rather than bodies” (AT VII 441/CSM II 297; see also Principles I.66-71, AT VIII 32-36/CSM I 216-219; and O/R 4, AT VII 233-235/CSM II 163-164).

2 A Cartesian may grant that it is true that the ocean is blue, salty and bracingly cold in some sense, but it is nevertheless false that it is blue, salty, and bracingly cold in just the way it sensorily appears to be. For the target propositions to be true, we would have rethink what it is for the ocean to be blue, salty, and bracingly cold: either these properties must be understood as modifications of extension (blue, e.g., is a certain microscopic surface texture) or they must be understood as dispositional properties of bodies to produce distinctive sensations in the mind.

3 See also Search Preface, OCM I 19/LO xxv and Search I.10, OCM I 122/LO 48.

4 In what follows I use the term ‘intellect’ to refer to what is perhaps more precisely referred to as the ‘pure intellect’ or ‘pure understanding’. In this sense it is one of several faculties of thought, along with the senses, imagination, and will. The term ‘intellect’ is sometimes used by the Cartesians more generically to refer to the mind in general, or to the mind’s cognitive faculties in distinction from the will. A related terminological point: I use the terms ‘mind’ and ‘soul’ interchangeably. This is not without risk. Descartes prefers the term ‘mind’ but Malebranche prefers the term ‘soul’, typically reserving ‘mind’ to refer specifically to the intellectual faculty of the soul. For consistency, I will typically translate Malebranche’s l’esprit and l’esprit pur as ‘intellect’ rather than ‘mind’.


6 See also Search I.5.3, OCM I 78/LO 24; Search I.10.5, OCM I 129/LO 52; Search I.20.1, OCM I 186/LO 85; Search II-iii.6.2, OCM I 276/LO 195; Search III-i.1.2, OCM I 385/LO 200; Search Conclusion to the First Three Books, OCM I 488-492/LO 261-263; and DM XII.2, OCM XII 280-281/JS 219.

7 See also Search I.5.1, OCM I 70/LO 19 and Search III-i.1.3, OCM I 385/LO 200.

8 I do not mean to suggest there is no cross-over. The intellect may be necessary for practical means-ends reasoning and for deliberating about which ends to pursue when. The senses clearly assist in natural philosophical investigations according to both Descartes and Malebranche.
See Descartes, see his letter to More, 5 February 1649, AT V 271/CSMK 362 and Principles II.3, AT VIII 41/CSM I 224. In Malebranche, see Search I.6, OCM I 79/LO 25; Search I.18.1, OCM I 178/LO 80; Search Conclusion of the First Three Books, OCM I 488-489/LO 261; Elucidation 6, OCM III 63/LO 574; DM IV.13, OCM XII 98/JS 61; and DM XII.2, OCM XII 280-281/JS 219. I borrow the description of sensory representation as “narcissistic,” which I find particularly apt, from Akins 1996.

10 See Simmons 2003b.

11 There is a good deal of dispute about whether second-grade sensations have primary quality aspects: do sensations really include the presentation of elliptical patches in the visual field or merely punctiform color sensations? For a defense of the view that they do include a primary quality aspect, see Simmons 2003a.

12 This distinction between psychological and epistemic judgments is treated in some detail, though without these labels, in Atherton 1990, ch. 1.

13 See also Search I.11.3, OCM I 133/LO 55 and Elucidation 17 §43, OCM III 345/LO 746. Indeed, Malebranche is loathe to call them judgments at all, preferring to think of them as “compound sensations” (Search I.9.3, OCM I 116/LO 45 and Search I.14.1, OCM I 156/LO 68).

14 For Malebranche’s distinction between natural and free judgments, in addition to the passages cited in the previous note, see Search I.10.6, OCM I 130/LO 52 and Search I.14.2-3, OCM I 156-161/LO 68-70.

15 Descartes and Malebranche famously differ in their estimation of the human intellect’s ability to represent secondary quality sensations and bodily sensations as properties, or in Cartesian terminology ‘modes’, of mind. Descartes maintains that we have a proper clear and distinct intellectual perception of them as modes of mind (see, e.g., Principles I.68, AT VIII 33/CSM I 217). Malebranche denies this, maintaining that we lack a clear and distinct idea of the mind, and that we therefore have only an epistemically inferior ‘inner sentiment’ or ‘consciousness’ of these sensations as modes of mind. God, by contrast, presumably does have intellectual perception of these sorts of sensations as modes of mind by way of his clear and distinct idea of the mind. For Malebranche’s disagreement with Descartes on this matter, see Search III-ii.7.4, OCM I 451-453/LO 237-239; Search IV.11.3, OCM II 97/LO 319; and Elucidation 11, OCM III 163-171/LO 633-638.

16 I assume for present purposes that the relevant intellectual representations of bodies are representations of particular existing bodies constituted by microscopic parts that are modified by only size, shape, position, and motion. It is a vexed question whether Descartes and Malebranche do and/or should admit into their theories of human cognition any intellectual perception of particular existing bodies (as opposed to merely the abstract nature of body in general). As will become apparent from the quotations I present below, Descartes and Malebranche both seem to take hypothetical intellectual perceptions of particular existing bodies as the relevant comparison in this context, and so I will too.

17 See also Principles I.68, AT VIII 33/CSM I 217; Principles II.4, AT VIII 42/CSM I 224; Principles IV.199, AT VIII 323/CSM I 285; and M6, AT VII 76/CSM II 52; and M6, AT 77/CSM II 53.
18 See also Search I.10.3, OCM I 125/LO 50; Search I.11.3, OCM I 133/LO 55; Search I.14.2, OCM I 158/LO 69; DM III.12, OCM XII 77/JS 43; DM IV.20, OCM XII 104/JS 67; and DM V.5, OCM XII 115/JS 76.

19 On this point, Malebranche’s is unequivocal, since he is clear that their bodily location is the result of natural judgments. Descartes’ texts are not, in part because he does not clearly distinguish between psychological and epistemic judgments, and in part because he does not even clearly say whether the apparent bodily location of sensations is the result of judgment (or either sort) or is rather built right into the pre-judgmental, second-grade sensations themselves. There is some suggestion that it is built right into second-grade sensations by Descartes’ discussion of the institution of Nature, which links types of motions in the brain with such sensations as pain-in-the-foot, not simply sensations of pain (which then need judgmentally to be projected onto a foot). See M6, AT VII 88/CSM II 60 and Principles IV.196, AT VIII 320/CSM I 283. What is more, we are said not simply to judge that pain is in the body, but feel (sentir) it as being in the foot (M6, AT VII 88/CSM II 60). If bodily location is a second-grade affair, then it is unquestionably hard-wired, and out of our control. If, however, the apparent bodily location of sensations is the result of third-grade judgments, then it is simply less clear whether Descartes thinks it is entirely out of our control. He sometimes intimates that in principle we could withhold the judgments we make in sensory experience, but that as a matter of fact these judgments are so habitually ingrained that it is “very difficult” for us to do so (Principles I.71-72, AT VIII 35-37/CSM I 219 and O/R, AT VII 438-40/CSM II 295-296). Descartes has to say that epistemic judgments are at least in principle in our control, since they are governed by a will that is absolutely free. Since he makes no explicit provision for distinguishing the underlying metaphysics of psychological judgments from that of epistemic judgments, it may seem to him that he cannot introduce judgments of any sort that are not at bottom freely made. Either way, though, he clearly thinks there is little we can do to stop colors and pains from appearing sensorily to have a bodily location.

20 In the exercises that follow in which I explore the resources of the intellect, it is the finite intellect I am interested in, in both its embodied (human) and disembodied (angelic) varieties. The problems that I charge the intellect with, however, are not for the most part problems that result from its simply from its being finite in the sense of having limited conceptual resources. The problems are with the sort of representation they operate with.

21 See, e.g., Search IV.10.2, OCM II 82-83/LO 310-311.

22 See, e.g., M6, AT VII 87-88/CSM II 60 and Search II-i.5.1, OCM I 69/LO 101-103.

23 Descartes and Malebranche explicitly recognize this phenomenon. See M6, AT VII 77/CSM II 53; Principles IV.196, AT VIII 320/CSM I 283; Search I.10.3, OCM I 125/LO 50; and DM V.7, OCM XII 118/JS 78.

24 In most cases, possession and partial identity are different relations: to say that a book is mine is not to say that it is a part of me, not in any literal sense anyway. In the present case, however, the phenomenological possession does amount to phenomenological partial identity: to say that in bodily awareness I experience this body to be mine is to say that I experience it to be part of me.
Another difference is that the pilot's observations are voluntary, whereas the embodied mind's bodily sensations are involuntary. The pilot chooses to inspect the damage to his ship or not, but I don't choose to feel pain or not. Still, Descartes suggests here that the sense of union with my body comes not from the involuntariness of bodily sensations, but something about their character or content.

Descartes may not be consistent on this point, for he does suggest to Regius and Arnauld that the mind-body union is in some way "substantial" (AT III 493/CSMK 206; AT III 508/CSMK 209; and AT VII 223 & 228/CSM 157 & 160). There is a great deal of interpretive controversy over just what the mind-body union amounts to for Descartes. At one extreme, Paul Hoffman and Tad Schmaltz have argued that the union does, in fact, constitute a some sort of third kind of substance (Hoffman 1984 and Schmaltz 1992). At the other extreme, Daisie Radner and Vere Chappell have argued that the union amounts to no more than there being a causal exchange between the two substance, mind and body (Radner 1971 and Chappell 1994). Others offer intermediate readings, such as Geneviève Rodis-Lewis' suggestion that the union is a kind of functional unity (Rodis-Lewis 1990, 85-99), Marleen Rozemond's suggestion that the union results in each of the two substances being altered so that they attain new capacities (Rozemond 1998, chs. 5-6), and Lisa Shapiro's suggestion that the union is a sort of moral union directed by a good distinctive of the human being (Shapiro 2003a). By contrast with Descartes, Malebranche is clear about his position: the mind-body union amounts simply to God having established a set of psycho-physiological laws governing the relations between motions of animal spirits in the brain and sensations, passions, and volitions in the mind. It is beyond the scope of this essay to develop an account of the ontology of the mind-body union, though I will say some more about it below in Sections III.B.2-3.

Although Descartes does not state this out explicitly, one of his followers, Louis de la Forge does in his attempt to spell out the details of the Cartesian union of mind and body. He writes: "If our mind were to perceive clearly everything that injures or tickles its body in the same way that a pilot conceives what is beneficial or harmful to his vessel; if we were to sense dryness in our throat only as he does that of his sails; and if we were to feel the sharpness of the acidic liquid which causes hunger only as he sees the rot that corrodes his vessel, there is be no doubt, I maintain, that this mind would have much more reason to think of itself as something with entirely separate interests from the body...[T]he feelings of hunger, thirst, pain, tickling, and all the other passions force the mind to consider as its own all the good and evil that happens to the body to which it is joined" (La Forge 1666, ch. 14, p. 213).

There is a second concern lurking in this passage as well, viz., that intellectual perception of the destruction of our body would involve nothing unpleasant, so that it would not be represented as something to avoid. I'll return to this point below, in III.B.3. Louis de la Forge makes much the same point: "If [the mind's] thought were to represent clearly and distinctly everything that happens in its body, it would just as certainly understand that the body could do it neither good nor harm and that the body would give it no good reason to take an interest in it, no more than a very rich pilot would be very distressed by the loss of a vessel if he considered that, rather than causing him hard it would deliver him from captivity" (La Forge 1666, ch. 17, p. 280-81).
While the relationship appears to be entirely reciprocal as far as Malebranche is concerned, Descartes suggests that causal production of sensations in the mind requires a more intimate union between mind and body than the production of voluntary motions in the body, which can be accomplished by merely lodging a mind in a body like a pilot in a ship (AT VI 59/CSM I 141).

In Descartes, see Treatise on Man, AT XI 131-32/CSM I 101; Passions I.31-34, AT XI 351-55/CSM I 340-341; Passions I.41, AT XI 360/CSM I 343; letter for Arnauld, AT V 222/CSMK 357. In Malebranche, see Search II-i.5.1, OCM I 215/LO 102; Search II-i.5.4, OCM I 226/LO 107; Elucidation 15, OCM III 224-228/LO 669-671; and DM VII.13, OCM XII 165-166/JS 119-120. In these passages, Malebranche is chiefly occupied with denying that the mind’s volition has any genuine causal efficacy on the body (which he attributes instead to God), but in the course of these discussions he makes it clear that the occasional causal chain that follows a volition starts in the stirring of animal spirits in the brain and only medially winds up in motion of a limb.

Obviously even this means of determining my bodily boundaries has its limits if, e.g., my hair and fingernails count as part of my body. On the other hand, our relation to our hair and fingernails is really quite different from that to the rest of our body, in large part precisely because we have no bodily sensations associated with them.

Obviously Descartes does not mean to say that sensations are more clear and distinct than intellectual ideas in the sense that what they represent to the mind is more certain and epistemically reliable. He is describing here a phenomenal property that sensations have but that intellectual ideas lack.

Malebranche uses the word “idea” ambiguously, sometimes strictly, as I am here, to refer only to the representative ideas in God’s mind that are the immediate objects of our perceptual activity, and sometimes loosely to refer also to the perceptual modifications of our own mind themselves. The looser usage keeps Malebranche in terminological step with Descartes and most of the other Cartesian, but muddies his own theory of cognition.

This isn’t always the case. Sometimes intellectual inquiry can be so gripping that it blocks out sensations, such when, in the midst of writing a paper, one fails to notice the growing emptiness in one’s stomach. Descartes and Malebranche recognize this, though they seem to think that under these circumstances we are simply not subject to sensations because the bodily motions are not strong enough to produce a sensation in the mind (Dioptrics 4, AT VI 109/CSM I 164 and Search III-i.4.3, OCM I 408/LO 213).

This is not to say that we cannot actively direct our attention to one thing rather than another, but it does seem undeniable that some sensorily represented things grab our attention despite the best intentions to keep our attention focused on something else.
As we saw above, affectiveness for Malebranche is also coordinated with whether the sensation is represented as being on our own body or on some other body, so that the more affective sensations are represented as being on our own bodies and the less affective are represented as being on other bodies. Malebranche thus tends to link three things: a sensation’s (a) being strong and lively, (b) directing the mind’s attention to something urgent for self-preservation, and (c) being represented as a property of one’s own body. On the flip side, he links a sensation’s (a’) being weak and languid, (b’) directing the mind’s attention to something rather less urgent vis-à-vis self-preservation, and (c’) being represented as a property of an “external” body, i.e., a body outside the limits of one’s own body. There are many cases in which these things are going to be linked, but there would appear to be many counter-examples to this rather simple theory: weak and languid bodily sensations, such as the sensation of light pressure on my skin, and startling color sensations.

That this attention must be not drawn but applied is particularly important to Malebranche for the theological reason that we must turn our attention freely to the chief object of intellectual perception, God: “God is not content to be loved with a blind and instinctive love; He wishes to be loved with an enlightened love, with a love through choice” (Search I.5.1, OCM I 73/LO 21).

Descartes and Malebranche do not deny that there are differences of degree among sensations: headaches can be more or less intense, something can be more or less red, and pink can said to be lighter than red.

Malebranche rehearses this reasoning at Search I.16.2, OCM I 166-167/LO 74.

For an especially detailed illustration of this point, see Descartes’ treatment of gustatory perception in the Treatise (AT XI 146-47).
Sensations alone cannot account for action. A complete account of Cartesian action theory would have to include a discussion of the passions and the will, which is far beyond the scope of this essay. I simply want to claim that sensations get the ball rolling, carrying with them motivational force. For some work that explores the roles of the passions and will, see Sean Greenberg, “The Nature and Function of the Passions in Descartes,” unpublished manuscript, and Shapiro 2003b.

Both Descartes and Malebranche are explicit about the relativity of sensory representation. See *Treatise on Man*, AT XI 147; *Search* I.13.5, OCM I 149/LO 64; and *DM* IV.15, OCM XII 99/JS 62.

Malebranche is not as averse as Descartes is to appealing to natural ends, but insofar as he too is committed to a Cartesian conception of body, then he too should be resistant to attributing such biological properties to it. And committed to a Cartesian conception of body he is: “The body is only extension in height, breadth, and depth, and all its properties consist only in (a) motion and rest, and (b) an infinite of different figures” (*Search* I.10.1, OCM I 122/LO 49; see also *DM* I.2, OCM XII 33/JS 6-7).

Also relevant here is Descartes’ discussion of the identity of the body in his correspondence with Mesland. He distinguishes here the body considered simply as a hunk of res extensa, which becomes numerically a different body when any one of its parts is lost or changed, from the body considered as part of a mind-body union, which, so considered, remains numerically the same in virtue of its functional integrity despite parts being lost or changed (AT IV 166/CSMK 242-243).

For more detailed discussions of the teleology that arises in the context of the mind-body union, see Gueroult 1985, vol. 2, ch. 17; Rodis-Lewis 2001, chs. 1-2; and Simmons 2001.

See above, fn. xxx

See also *O/R* 4, AT VII 229/CSM II 160.

Unless, perhaps, it is provided a primitive intellectual notion of the union. Descartes, however, gives no indication that there might be an intellectual as well as a sensory primitive notion of the union. To the contrary, in the passage quoted above he maintains that it absurd for the intellect to conceive both the union and distinction between mind and body.

His argument for this claim is part of larger argument against Descartes’ claim that the nature of the mind is better known than body (see especially *Elucidation* 11, OCM 163-171/LO 633-638. For a discussion of this argument, see Schmaltz 1996, ch. 2.

See also *DM* IV.14, OCM XII 98/JS 61.

See also *Search* V.4, OCM II 161/LO 359.

See also *Search*, Preface, OCM I 19/LO xxv; *DM* IV.15, OCM 100/JS 62; and *DM* XII.2, OCM XII 280-281/JS 219.
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