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**Exclusion in Descartes’s *Rules for the Direction of the Mind*:**

**The Emergence of the Real Distinction**

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The distinction Descartes makes between the mental operations of abstraction and exclusion, in the replies to objections to the *Meditations*, and inletters from the early 1640s, has been recognized by scholars as important for understanding many of his major metaphysical arguments. Dugald Murdoch, in the important paper which brought the importance of exclusion to the attention of Descartes scholars, noted that “reference to the concept [of exclusion] can be traced right back to his earliest philosophical work”, the *Rules for the Direction of the Mind*.[[2]](#endnote-1) But neither in Murdoch’s paper, nor in the literature since then, has the nature and significance of Descartes’ use of the exclusion-abstraction distinction in the *Rules* been fully articulated. In this essay I focus on passages from the *Rules*, particularly from Rules 12 and 14. Descartes not only characterizes abstraction and exclusion, and distinguishes between them, but also makes exclusion the test that demarcates contingent from necessary connections between simple natures. Thus the exclusion test is involved in deduction and is hence a major part of the method proposed in the *Rules*.

 I also argue that Descartes has at least a rudimentary account of real distinction operating in Rule 14, and that the operation of exclusion (and its success or failure) is the criterion for real distinction.[[3]](#endnote-2) At least for the physical realm, this operation has to involve the imagination as well as the intellect. The fact that Descartes articulates a notion of real distinction in the context of the physical imagination or *phantasia* is potentially illuminating for the development of his thought on real distinction and separability. It suggests that the Cartesian real distinction was first thought of as a relation between different subjects of properties, rather than a distinction, e.g., between two things that can each exist while the other does not. Part of my aim is to show the continuities and contrasts between Descartes’s thought on distinction and exclusion in the *Rules* and his later elaboration and use of these concepts. To that end, I try to read the texts from the *Rules* on their own terms as much as possible.

 A brief note on the dating and composition of the *Rules* is necessary. Rules 12 and 14 have, of late, generally been placed in the late 1620s.[[4]](#endnote-3) The recent discovery of the Cambridge MS by Richard Serjeantson has potentially complicated the picture. Serjeantson and Michael Edwards believe that the Cambridge MS is an earlier version of the *Rules* than the other sources; on this view, the Rule 12 material I discuss below was written later than Rule 14.[[5]](#endnote-4) My working assumption is that at some point Descartes thought it reasonable to include both passages in the same work, and that it is thus legitimate to try to read them in conjunction. I propose that my reading supports Serjeantson and Edwards’ view, though it does not entail it. In any case, the theses I argue for in this paper should be considered as scholars investigate the significance and dating of the Cambridge MS.

**1. The Mature Theory of Distinction and the Role of Exclusion**

Descartes’s explicit theory of distinctions is proposed most fully in the *Principles of Philosophy*, though it plays a significant role in the *Meditations* and is a central theme in the First and Fourth sets of *Objections and Replies*.[[6]](#endnote-5) Here I will provide only a sketch sufficient to contextualize my discussion of the *Rules* and to raise questions that are particularly salient therein.In the *Principles*, Descartes sets out three kinds of distinction: real, modal, and conceptual. In each case he first identifies what sort of entities are related by the distinction in question, and then says how we perceive or identify the kind of distinction between two entities:

Strictly speaking, a *real* distinction exists only between two or more substances, and we can perceive that two substances are really distinct simply from the fact that we can clearly and distinctly understand one apart from the other.[[7]](#endnote-6)

The real distinction is marked by symmetry and separability: we can clearly and distinctly conceive A ‘apart from’ B, and vice versa. By contrast, we recognize one kind of modal distinction by an asymmetrical connection: we can clearly and distinctly understand the substance ‘apart from’ the mode, but not vice versa. There is a second kind of modal distinction; we recognize it by the fact that both items – two modes – cannot be clearly and distinctly understood apart from one substance.[[8]](#endnote-7) Finally, Descartes says that we recognize a conceptual distinction by the mutual inseparability between the two items. We cannot clearly and distinctly understand either apart from the other.

 Now clearly the notion of understanding something ‘apart from’ something else is doing a lot of the work in this taxonomy of distinctions. What Descartes has in mind here is the operation of exclusion.[[9]](#endnote-8) In the *Principles* Descartes does use the verb *excludere*:

from the mere fact that each of us understands himself to be a thinking thing and is capable, in thought, *of excluding from himself every other substance*, whether thinking or extended, it is certain that each of us, regarded in this way, is really distinct from every other thinking substance and from every corporeal substance.[[10]](#endnote-9)

Exclusion, and the difference between it and abstraction, is also much discussed in the First and Fourth *Objections and Replies*.Descartes writes to Arnauld, for example, that “it is of the nature of substances that they should mutually exclude one another.”[[11]](#endnote-10)

 The fullest and most direct account of this mental operation comes, however, in Descartes’s correspondence. He writes to Mesland that “there is a great difference between *abstraction* and *exclusion*.”[[12]](#endnote-11) The real distinction between mind and body is not argued by abstraction; that is, it is not argued on the weak basis that “the idea which I have of my soul does not represent it to me as being dependent on the body and identified with it”. It is rather that he has an idea of the mind as something which can be understood even when everything material is explicitly excluded.

 In an earlier letter to Gibieuf Descartes describes how one “excludes” something from an idea. Gibieuf asked how Descartes could know that his idea (e.g., of mind) had not been “made inadequate by an abstraction of [his] intellect.”[[13]](#endnote-12) Descartes answers that one checks against this possibility by not merely ignoring one idea (or part thereof) while considering another, but actually denying the former of the latter. For example, I can think of a shape without considering the extension which is shaped; this is abstraction. But if I try to conceive of the shape while denying that it is extended – if I try to exclude extension from my idea of a shape – I see that I cannot do so. By contrast, “the idea of a substance with extension and shape is a complete idea, because I can conceive it entirely on its own, and deny of it everything else of which I have an idea.”[[14]](#endnote-13)

 While the texts on exclusion help to elucidate the theory of distinctions, there is still ambiguity. It is not clear, for one, what is denied of what. Do we deny some thing of some other thing, or deny the nature of thing A of thing B and vice versa? Or do we rather affirm the existence of one thing while denying the existence of the other? This ambiguity plays a role in the scholarly debate about the kind of separability implied in Descartes’s real distinction: it is often proposed or assumed that A and B are really distinct just in case it is possible for A to exist while B does not *and* for B to exist while A does not.[[15]](#endnote-14) But Paul Hoffman and Marleen Rozemond have shown at least that this is not obvious from the texts in question. Hoffman identifies no fewer than five different sorts of separability that ought to be considered as interpretive options.[[16]](#endnote-15) Rozemond, more modestly, distinguishes the more standard reading, where A and B are really distinct if and only if each can exist while the other does not, from another reading, which she favours: A and B are really distinct just in case A can exist without a real union with B, and vice versa.[[17]](#endnote-16) My purpose here is not to survey all the options on this issue, much less to argue for one against others. I believe the *Rules* shows some of the same ambiguities on this point, but also that there is a specific sense of separability in the *Rules* that potentially sheds light on Descartes’s developing use of the idea. I discuss this in some detail in Sections 5 and 6 below.

 From the present section it should be evident that the operation of exclusion plays a systematic role in the theory of distinctions. Nolan shows that when the role of exclusion is made explicit, the three kinds of distinction are mutually exclusive.

For any two things, either we can mutually exclude them from each other (as in the case of a real distinction), or we can exclude one but not the other (as in the first type of a modal distinction), or we cannot exclude either (as in the first type of rational distinction).[[18]](#endnote-17)

Moreover, the role of exclusion is not merely a technical one in classifying distinctions. Dugald Murdoch has shown that exclusion is involved in, at least, the *cogito*, the piece of wax passage in the Second Meditation, the arguments for real distinction between mind and body, and the ontological argument for God’s existence.[[19]](#endnote-18)

**2. Exclusion and Distinction in Rule 12**

I turn now to the *Rules for the Directions of the Mind*, drawing out Descartes’s thought about distinction and the kinds thereof, as well as his articulation of exclusion and its place in his method. This section is intended to be independent of the previous one; I aim to follow these themes in the *Rules* without assuming continuity or discontinuity between his earlier and later thought on the issues in question.Descartes’s treatment of distinctions in the *Rules* occurs mainly in Rules 12 and 14. In Rule 12 he claims to sum up everything that has come in the preceding rules, and he divides his discussion of knowledge into two factors: we the knowers, and the things that are the objects of our knowledge. For the former, he proposes an account of our cognitive faculties. Descartes claims to hold back the full justification and exposition of his views, and instead offers a brief sketch, presented to the reader as a hypothesis. On this account, sense perception involves the literal shaping of the sense-organ by material contact with the sensible object, which in turn is simply shaped extension. These sensible images are transcribed into the common sense, which imprints them upon the corporeal imagination or *phantasia*. “The phantasy is a genuine part of the body, and is large enough to allow different parts of it to take on many different figures.”[[20]](#endnote-19) The power that is cognitive in the fullest sense, by contrast, is “purely spiritual, and is no less distinct from the whole body than blood is distinct from bone, or the hand from the eye.”[[21]](#endnote-20) (I read the contrasts between blood and bone, hand and eye, to indicate difference in kind and function. So the body is a different kind of thing than the *vis cognoscens*, and the function of the latter is not a bodily function.[[22]](#endnote-21)) Descartes says that this is one and the same cognitive power operating in sense-perception, imagination, memory, understanding, and *ingenium*, where the latter indicates the cognitive power’s formation of “new ideas in the corporeal imagination”, or the concentration on already formed ideas there.[[23]](#endnote-22) As an activity, then, imagination is an act of the *vis cognoscens* that essentially involves figures in the *phantasia*. It seems that imagination and *ingenium* must be closely related. This sketched-out treatment of the cognitive faculties will be important for what follows.

 Descartes’s discussion of the objects of knowledge in Rule 12 develops the notion of a simple nature, introduced in Rules 6 and 8, and makes several claims about its role in knowledge. As Jean-Luc Marion puts it, “A simple nature has two characteristic features: it is neither simple, nor a nature.”[[24]](#endnote-23) This is perhaps more witty than precise, but gets at two important points. First, simple natures are basic elements of our cognition, not necessarily of reality: Descartes says that “we are concerned here with things only in so far as they are perceived by the intellect.”[[25]](#endnote-24) This leaves the status of simple natures rather murky. For present purposes I simply note that Descartes introduces simple natures in terms of the intellect’s perception, not as ontological elements.

 Second, simplicity here is qualified: Descartes does *not* mean to pick out the most abstract ideas in terms of which we could define other ideas.[[26]](#endnote-25) To count as simple the idea must be so basic that any further abstraction would not result in a more distinct cognition. The example he provides is the relationship between shape and limit: we could try to define shape as a notion derived from the simpler ideas of extension and limit. But Descartes claims that “limit” is more general than shape only by being “compounded out of many quite different natures”. Simplicity here does not track the level of abstraction; an idea only counts as simple if its generality does not come at the expense of univocity.[[27]](#endnote-26) “Limit” achieves a sort of simulacrum of simplicity by being so abstract as to apply to many different ideas, but it does not really underlie those ideas cognitively, since it has no distinct meaning common to all of them.

 Descartes makes bold claims about the simple natures and their role in human cognition. Understanding extends only to the simple natures and to their composition or combination. Carrying out this combination properly, then, is a significant part of method. Deduction is “the sole means of compounding things in a way that enables us to be certain of their truth”. We avoid error in deduction “by never conjoining things unless we intuit that the conjunction of one with the other is wholly necessary.”[[28]](#endnote-27) Hence Descartes briefly articulates the difference between necessary and contingent connections between simple natures, and here we have the first key text for his theory of distinction in the *Rules*:

Fourthly, the conjunction between these simple things is either necessary or contingent. The conjunction is necessary when one of them is somehow implied (albeit confusedly) in the concept of the other so that we cannot conceive either of them distinctly if we judge them to be separate from each other. It is in this way that shape is conjoined with extension, motion with duration or time, etc., because we cannot conceive of a shape which is completely lacking in extension, or a motion wholly lacking in duration. […] The union between such things, however, is contingent when the relation conjoining them is not an inseparable one.[[29]](#endnote-28)

 It is part of the method proposed in the *Rules* to identify simple natures and to scrutinize the connections between them, to see whether they are necessary or contingent. Testing for necessary connections between simple natures is therefore a central activity in deduction, and this test is, as it turns out, an attempt at what Descartes later calls *exclusion*. A failed exclusion indicates necessary connection, while a successful one indicates contingent connection. This becomes fully apparent when Rule 12 is read alongside of Rule 14.

**3. Exclusion and Distinction in Rule 14**

Rule 14 treats of the interplay between imagination and intellect. As will be clear, there is significant uncertainty as to the scope of this rule and how it fits into the project of the *Rules*. It is helpful, then, to set out first the uncontroversial aspects of this rule’s place in the *Rules* as a whole. Descartes envisioned a tripartite structure for thework; Rule 14 falls in the section dealing with what he calls “perfectly understood problems.”

We must note that a problem is to be counted as perfectly understood only if we have a distinct perception of the following three points: first, what the criteria are which enable us to recognize what we are looking for when we come upon it; second, what exactly is the basis from which we ought to deduce it; third, how it is to be proved that the two are so mutually dependent that the one cannot alter in any respect without there being a corresponding alteration in the other.[[30]](#endnote-29)

A second point that it is uncontroversial but somewhat mysterious: Descartes in Rule 14 explicitly leaves aside anything that cannot be imagined. It is not immediately clear why he does this. There is, though, some indication of a line of thought leading to this restriction. Rule 13 dictates that the problem should be stripped down to its essential elements, which involves abstracting it from features of its particular context that are not germane to the structure of the problem. He claims that this entails abstracting the problem’s terms “from every subject.” At the outset of Rule 14 Descartes argues, with rather breathtaking quickness, that all deductive reasoning, at least for perfectly understood problems, is essentially a matter of proportions and equalities between magnitudes. The argument goes something like this: reasoning always involves comparison, and perspicuous comparison (which is involved in perfectly understood problems) implies equality, which implies entities that can have the relation of equality. Hence, “when the terms of a problem have been abstracted from every subject in accordance with the preceding Rule, then we understand that all we have to deal with here are magnitudes in general.”[[31]](#endnote-30) This abstraction “from every subject” is the work of the pure intellect; the burden of Rule 14 is to show how the imagination is to be brought back into the picture.[[32]](#endnote-31)

 Descartes states, without pausing to explain why, that we must use the imagination at this point. The reason, I think, emerges from the discussion that follows in Rule 14. But supposing that we are to use the imagination, Descartes wants to use the species of magnitude that is the most perspicuous medium for the mind to investigate and manipulate proportions. This, he says, is “the real extension of a body considered in abstraction from everything else about it save its having a shape.”[[33]](#endnote-32) To be clear, the problem is still to be understood as applying to magnitudes in general, but extension is to stand in as a sort of paradigmatic case.[[34]](#endnote-33)

 We are now in a position to examine the central text on distinction in the *Rules*. Descartes wants to clarify what he does and does not mean by “extension,” and how the intellect and imagination are to relate to each other in thinking of extension. The issue has to do with the different distinctions made by these two faculties: the intellect can make subtler distinctions than the imagination can, and significant philosophical error occurs when these distinctions are understood as real.

 Descartes proposes three statements for consideration, each involving the notion of extension: “extension occupies a place,” “body has extension,” and “extension is not body.”[[35]](#endnote-34) In the first case extension (*extensio*)signifies the thing that is extended (*extensus*). The reason we use *extensio* rather than *extensus*, Descartes says,is to show the following: it does not just so happen that the object that is extended also occupies a place, it is because it is extended that it does so. The intellect, then, can intend the extended thing in different ways even when the concept of extension does not signify any entity distinct from the extended subject (I use the term “subject” to follow Descartes’s usage in the *Rules*, where he uses itto indicate the subject of properties).[[36]](#endnote-35)

 The second sentence, “body has extension” (*corpus habet extensionem*), is a case where we “understand the term ‘extension’ to denote (*significare*)something other than ‘body’; yet we do not form two distinct ideas in our imagination, one of extension, the other of body, but just the single idea of extended body.”[[37]](#endnote-36) The intellect distinguishes subject from predicate, regards body as sufficiently distinct from extension to “have” it. But this does not indicate any real separation or distinction at all: “So far as the fact of the matter is concerned (*a parte re*) I might just as well have said ‘Body is extended’, or better still ‘That which is extended is extended’ (*extensus est extensus*).”[[38]](#endnote-37) Descartes contrasts this sentence with another of the same form: “Peter has wealth (*Petrus habet divitias*)”, or “Paul is wealthy (*Paulus est dives*)”. In this case the predicate or property attributed to the subject signifies some thing (i.e., wealth or riches – *divitias*) really distinct from the subject. Note that the first sentence (i.e., the one about Peter) shows how to understand the second: Paul is rich, or is the subject of the property of being rich, insofar as he stands in a relationship of literal possession with another object or objects: his *divitias.* These riches can be really distinguished from him; they can be represented by a distinct figure or figures in the *phantasia*. As Descartes says of the first statement, “the idea of Peter is clearly distinct from that of wealth (*plane diversa est idea Petri ab illa divitiarum*).” Peter or Paul is over here; a pile of gold is over there. Peter is not the gold, and the gold is not Peter. Not so in the case of entities (*entia*),like *extensio*, which “can never be conceived apart from a subject”. As I read the passage, Descartes is saying that we can know that Peter and Paul are really distinct because we can conceive them through literally separate ideas in the *phantasia*. This reading depends on seeing the contrast with the third case, to which I now turn.

 The third case is the most interesting for the purposes of this paper, as it explicitly involves exclusion. “Extension is not body” and similar statements take terms in “so narrow a sense that they exclude something which is not really distinct from what they signify (*tam strictam habent significationem, ut aliquid excludant, a quo revera non sunt distinctae*).”[[39]](#endnote-38) The previous examples showed that the sense (*significatio*) of the term ‘extension’ is different from that of ‘body’: Descartes is saying here that we can use the term in a way that “excludes or denies” (*excludunt vel negunt*)everything other than that sense.[[40]](#endnote-39) In the case of extension and body this exclusion fails as far as reality is concerned. This is the occasion for erroneous views that posit an extension really distinct from body: a vacuum or empty space, for example. Those who make this error distinguish extension from body with the pure intellect, but then take the distinction to apply in the realm of the imagination – the physical realm. Hence their concept is both body and not body and is thus incoherent.

 Indeed, Descartes goes on to critique the common understanding of mathematical objects, both geometrical and arithmetical, as an instance of this kind of error. “A number is not the thing numbered”; “a surface is the limit of a body”; “A line is the limit of a surface”; these are, Descartes says, just like the third case discussed above. His concern is to address the view, common even among mathematicians, that these objects are distinct from bodies. On his view a number can be considered in abstraction from the particular set of material objects that is numbered, but it cannot really be conceived while excluding all such objects. Similarly, a surface, or a line or point, cannot really be conceived while excluding all bodies. (I take it he thinks that defining these geometrical entities as limits entails that they are distinct from bodies, though this is not entirely clear.)

 It is true, however, that Descartes thinks a sentence like “extension is not body” or “number is not the thing numbered” can be true (*vera*); he says that they must be entirely removed from the imagination if they are to be true.[[41]](#endnote-40) At the outset of this passage, however, Descartes states that he does not admit “philosophical entities” that are not really imaginable.[[42]](#endnote-41) I take it he means entities such as this narrow notion of extension. They are “philosophical” insofar as they are the abstract products of the pure intellect, which “alone has the ability to distinguish between abstract entities of this sort (*qui solus habet facultatem ejusmodi entia abstracta separandi*)”.[[43]](#endnote-42) I conclude that sentences of the kind in question can only be true if they are understood *not* to imply a real distinction; there may (or may not) be a *basis* in reality for the distinction, but Descartes does not here discuss this, so attempts at further precision would be speculative.[[44]](#endnote-43)

 It is worth noting that Descartes is not inventing this notion of exclusion *ex nihilo*. Aquinas makes the same point about ‘humanity’ as opposed to ‘man’ or ‘human’. It is true that Socrates is a human, but not true that Socrates is humanity, even though ‘humanity’ and ‘human’ both signify the species to which he belongs.

Since, therefore, humanity includes in its concept only those things by which man is man, it is clear that designated matter is excluded from or is cut out (*excluditur vel praeciditur*)of its signification. And because a part is not predicated of its whole, humanity is not predicated of man, nor is it predicated of Socrates.[[45]](#endnote-44)

According to Aquinas, the term ‘man’ signifies, “though indistinctly, everything which is essentially in the individual”. Humanity, though, is taken in such a narrow sense that it excludes the principle of individuation, which for Aquinas is “designated matter”. For Descartes the matter making up the corporeal imagination serves the same role as designated matter does here for Aquinas.

 Similar distinctions are articulated by Eustachius and Goclenius, to take authors closer to Descartes. Goclenius divides intellectual abstraction into two kinds: *abstractio praecisionis* and *abstractio negationis*. The first occurs “when, of two things conjoined, apprehending one, we leave out (*relinquimus*) the other.” The second kind occurs “when we deny one thing of another.”[[46]](#endnote-45) Likewise, Eustachius notes that we can view a “generic nature” in two ways:

1. insofar as it signifies some level of a nature cut out (*praecisam*) from any other inferior level – in this way it can be expressed by an abstract name; 2. insofar as it signifies a general level of a nature in such a way that it does not exclude (*excludat*), but rather implies, a special level – in this way it must be expressed by a concrete name.[[47]](#endnote-46)

Eustachius’s example of abstract and concrete names for a genus is the pair “animal-animality.” As in the Aquinas passage, the discrimination between these two senses of a generic term is based on whether the term can be predicated of the species or individuals ‘inferior’ to it. *Equus* or *homo* is *animal*, but not *animalitas*.[[48]](#endnote-47)

**4. Distinction, Exclusion, and Necessary Connection**

Let us draw out the implications of this very rich passage from Rule 14 when it is read in conjunction with the Rule 12 treatment of necessary connection. I will discuss below some of the tensions between these passages; here I assume that it is worthwhile to see what follows from reading them together. I aim to show in this section that Descartes had, in the *Rules*, an understanding of the abstraction/exclusion operations, and of their use in discerning necessary connections and real distinctions, that is in substantial continuity with his later views. When read in conjunction with Rule 14, the test for necessary connection described in Rule 12 must be understood as an attempt at exclusion: a failed exclusion indicates necessary connection; a successful exclusion indicates real distinction. This continuity, in turn, sets his philosophical development in relief, in two ways: first, in Rule 14, Descartes claims emphatically that the imagination is necessary for detecting necessary connections, which is certainly not something he holds in his published works, nor even in Rule 12; second, the notion of real distinction in the *Rules* shows some continuity and some divergence from the later texts on real distinction. I will discuss the implications for the development of Descartes’ thought at the end of this section, and in the following sections.

 An objection might be raised at the outset, for if the *Rules* brackets metaphysical questions (as some commentators argue), then it seems wrongheaded to try to unearth a theory of real distinction from it.[[49]](#endnote-48) To this I respond that Descartes does make claims about reality in the *Rules*, conspicuously in Rules 12 and 14. Even though he proposes his austere matter theory as part of a hypothesis in Rule 12, he also notes that he could show it to be true, but simply lacks the space to do so in a way what would deal with the predictable objections. His examples of necessary connections in Rule 12 include several bold metaphysical claims: “I am, therefore God exists”; “I understand, therefore I have a mind distinct from my body.”[[50]](#endnote-49) He notes, in passages sprinkled through the work, that the belief in a vacuum is erroneous, and he provides an analysis of the underlying error in Rule 14. Also in Rule 14, he makes the striking claim that “in general, [he does] not recognize philosophical entities of the sort that are not genuinely (*revera*) imaginable”.[[51]](#endnote-50) Descartes does set aside ontology in certain contexts in the *Rules*. But his discussion of necessary connections between simple natures clearly has ontological consequences, even if he is not systematizing his view of reality in the *Rules*. Thus in what follows I assume that there is no such principled reason why a theory of distinction cannot be found in or reconstructed from the *Rules*.

 One might object more specifically from a passage in Rule 12, where Descartes seems to concede a certain degree of skepticism about the imagination’s representation of the senses and “external things”.[[52]](#endnote-51) I do not think this obviates the points I will argue. I do claim that the imagination, for the Descartes of Rule 14, serves as a sort of reality check on the distinctions made by the intellect. But, as will become clear later, it does not have to faithfully replicate sensible objects or external reality in every way in order to play this role. Rather, it just has to involve a real body, such that when we form two ideas in it, they are literally separate figures in an extended body. And Descartes, this passage notwithstanding, does claim that the *phantasia*, with the ideas figured in it, is a real body. (I emphasize again the distinction between a) imagination as an activity or faculty, which involves the *vis cognoscens*, and b) the corporeal imagination or *phantasia*, which is a body.)So there is nothing here that impedes my project, which is, in part, to tease out the notion of real distinction at work in the *Rules*.

 Descartes’s primary focus, in the texts in question, is on necessary connections between natures, which connections are recognized by *ingenium*:the intellectual scrutiny of the contents of the imagination. Natures are really distinguishable if they are not necessarily connected. We can see this by following the shape-extension example across Rules 12 and 14, since Descartes brings it up in both contexts. In Rule 12 he points out that we cannot conceive of a shape lacking all extension, and concludes that they are necessarily connected. In Rule 14 “shape is not body” is one of his examples of a statement where the nature is not really distinguishable from its subject. By contraposition (and by the copious evidence in Rule 14), natures are not really distinct if they are necessarily connected.

 In testing for necessary connections between simple natures, Rule 14 makes it very clear that the imagination is necessary. The pure intellect purports to distinguish abstract entities that are not really distinguishable, and for this reason it will miss necessary connections between natures like shape and extension. [[53]](#endnote-52) Even in Rule 12 Descartes’s description of the shape-extension relationship strongly suggests that we have to examine our real ideas in the imagination to test for necessary connection: “It is in this way [necessarily] that shape is conjoined with extension […] because we cannot conceive of a shape which is completely lacking in extension (*hoc pacto figura extensioni conjuncta est* […] *quia nec figuram omni extensione carentem*).”[[54]](#endnote-53) Now of course Descartes’s Latin text has no articles, so it is not so clear that he means *a shape* rather than just *shape* in the final clause of this sentence. But that is nonetheless the natural reading, since it is not really clear what it means to conceive of shape (in general) lacking (*carentem*) extension. The next example Descartes gives provides better evidence: he says that the statement “4 and 3 make 7” involves a necessary connection because, in the *Philosophical Writings* translation, “we do not have a distinct conception of the number 7 unless in a confused sort of way we include 3 and 4 in it. (*Ita etiam si dico, 4 & 3 sunt 7, haec composition necessaria est; neque enim septenarium distincte concipimus, nisi in illo ternarium & quaternarium confuse quadam ratione includamus.*)” The translation misleads in an important respect.[[55]](#endnote-54) In the setting out of the arithmetical statement Descartes uses numerals, but in the latter part of the sentence he uses instead the terms *septenarium*, *ternarium*,and *quaternarium*. What he means, then, is that we cannot conceive of something *sevenfold* without implicitly conceiving of it threefold and fourfold – that is, our conception of any set of seven *objects* must implicitly include three such objects, and four such objects. This point connects nicely with his claims about number and the numbered in Rule 14.

 Failure to use the imagination in checking for necessary connection is serious, Descartes maintains: it leads to deep ontological error. For example, he says that those who endorse the possibility of vacuum have missed the necessary connection between body and extension because they mistook a purely intellectual sense of the term for something with ontological significance, i.e., something imaginable. So we have to use the imagination to identify necessary connections.

For, even if the intellect attends solely and precisely to what the word denotes, the imagination nonetheless ought to form a real idea of the thing, so that the intellect, when required, can be directed towards the other features of the thing which are not conveyed by the term in question, and so that it may never injudiciously take these features to be excluded.[[56]](#endnote-55)

This test for necessary connection is, at least for the physical realm, an act of *ingenium*: we try to form ideas in the imagination in a way dictated by the intellect.

 It is clear that the test for necessary connections described in Rule 12, taken in conjunction with the discussion in Rule 14, closely matches the later (post-*Discourse*) texts defining the operation of exclusion. It is true that he does not frame it explicitly under the terms “abstraction” and “exclusion,” as he does in the Mesland letter. But the same could be said for the Gibieuf letter (which is broadly accepted as thefullest explication of the abstraction-exclusion distinction) and the passages in the Fourth Replies.[[57]](#endnote-56) On the surface, the Rule 14 passage seems to warn the reader against using exclusion, but the point is really that we will fall into error if we unwittingly apply a term in the narrow, exclusive sense to imaginable objects – i.e., to the real, physical world. Nonetheless we cannot identify necessary connections by mere abstraction; the intellect is capable of turning its attention to one aspect or part of a thing while ignoring others, as the passage quoted in the previous paragraph indicates. This is why Descartes specifies a necessary connection as one in which we cannot distinctlyconceive either nature if we *judge them to be separate* from each other. Judging the natures to be separate is a more stringent operation than mere abstraction: it is the attempt to carry out the operation of exclusion. An attempted exclusion that fails indicates necessary connection.

 To see this, it is important to note that we can have an *indistinct* conception of two natures that are necessarily connected even if we judge them to be separate. Thus geometers who think figure is wholly separable from body still conceive of figure and body, but they do not do so distinctly. Hence the test for necessary connection involves attempting to judge the two natures to be separate, and seeing whether we can still conceive of them distinctly; this is very close to the description in the letter to Gibieuf. And in Rule 14 Descartes very clearly marks the logical difference that he uses to distinguish between abstraction and exclusion in the Gibieuf letter. From Rule 14:

We must carefully note the following point with respect to all propositions in which these terms retain the same meaning and are used in *abstraction* from subjects, yet do not *exclude* or deny anything which is not really distinct from what they denote: in these cases we can and should employ the terms with the help of imagination.[[58]](#endnote-57)

That is, he distinguishes A) taking a term to signify some general entity *X*, which is in some epistemic sense something other than the particular subject in which it inheres, from B) *denying* of *X* everything other than the precise sense which has been abstracted.

 I conclude, then, that the exclusion-abstraction distinction is indeed clearly applied and characterized in the *Rules*, although it is not articulated so explicitly, or in exactly the same terms, as it is in some of the later correspondence. Second, Descartes takes exclusion to be an essential part of his method in the *Rules*, since according to Rule 12 the attempt to carry out exclusion is involved in discerning necessary connections, which in turn is (or is an essential part of) deduction. Third, Descartes has at least a rudimentary account of real distinction that is integrated with his treatment of the cognitive faculties and the operations of abstraction and exclusion.

 It must be admitted that the taxonomy of distinctions in these texts *is* rudimentary when compared to that presented in, e.g., the *Principles of Philosophy*. Some things are really distinct, while others aren’t. The latter category covers both the relationship between shape and extension *and* that between body and extension, where the Descartes of the *Principles* categorizes these as modal and conceptual distinctions, respectively. In the *Rules* Descartes does not really indicate how he would differentiate kinds of non-real distinctions, though there are hints of such differentiation—compare the first and second example statements in the Rule 14 passage, for example. The *Rules*’articulation of the exclusion-abstraction operations, though, is developed enough to map onto Descartes’ account of the cognitive faculties, developed enough to fit into a theory of distinction described in terms of the account of those faculties, and developed enough to fit into his account of deduction, and hence into the methodology of the *Rules*.

5. SEPARABILITY IN AND AFTER THE *RULES*

In the *Rules*, as in later works and correspondence, Descartes links distinction to separability. Thus Rule 12 identifies necessary connections between natures by the fact that “we cannot conceive either of them distinctly if we judge them to be *separate* from each other”. As noted above, however, the notion of separability is ambiguous, and its sense disputed, in the later texts. To simplify the issue a bit, there is at least the question whether separability means that A and B can each exist while the other does not, or rather that A and B can each exist (or be clearly and distinctly perceived) without some sort of union with the other.

 The evidence in the *Rules* is, I think, one-sided on this question. Separability is not explicated or defined in terms of the supposed non-existence of one entity. Instead Descartes speaks (in Rule 12) of the subject which has one nature as “lacking” the other nature. Thus we know that motion is necessarily connected with duration because we cannot conceive of a motion lacking all duration. Again, this test involved exclusion or denial, so that we are trying (and noticing our failure) to conceive of a motion while explicitly denying that it has any duration. Further, the Rule 14 passage is cast even more explicitly in terms of subjects and natures and the relationship between them, which Descartes describes in terms of inherence and participation.[[59]](#endnote-58) Descartes is concerned with whether or not natures are really distinct from their subjects. The “real ideas” figured in the *phantasia*, which is a genuine body, are subjects (or somehow correspond to subjects) of inherence: hence Descartes treats something that is defined in exclusion from every subject as *ipso facto* not imaginable. So we have to frame the notion of real distinction here in terms of subjects and natures, not just in terms of pairs of objects. Thus the test for whether two natures are really distinguishable amounts to seeing whether they can be conceived as inhering in distinct subjects, so that subject *x* is *A* and subject *y* is *B*, while *x* is not *B* and *y* is not *A*.

 That there are separate subjects of inherence in the *phantasia* is simply taken for granted in this context. Indeed, one might object on this ground that Rule 14 does not propose an account of real distinction in general. I cannot dismiss the objection; here Descartes is indeed concerned with whether natures related as subject and predicate are “really distinguishable,” i.e., conceivable by separate ideas in the *phantasia*. Note that separation in this context is thus quite literal: the *phantasia* is a real body, and the “real ideas” are figures in it or on its surface.[[60]](#endnote-59) The example that Descartes gives is that of Peter and his wealth: we can form a real idea of Peter that is not wealth, and a real idea of wealth that is not Peter. This is an example where a nature (wealth) can be really distinguished in the imagination from the subject (Peter) which participates in it: as noted above, Peter is here, the pile of gold is there. This fits the most immediate context of Descartes’s discussion – he aims to show where intellectual distinctions do and do not track distinct images in the *phantasia*.

 His point has metaphysical implications. As noted above, Descartes takes his (partially) physical characterization of imagination to be *true*.Indeed, the imagination provides a sort of reality test for the intellect’s combination and division of its concepts (or “abstract entities”), at least as far as the physical realm is concerned. Descartes’s point about the third statement (“extension is not body”) is that although we are denying one nature of another, in fact we cannot carry out the exclusion when we try to conceive of extension that is not body. And if we mistakenly think that we can, we will endorse a falsehood about the real world, by imposing a merely intellectual, abstract distinction onto the real ideas in the corporeal imagination. Thus even if Descartes is not setting out an explicit and general theory of real distinction in Rule 14, he is revealing commitments with ontological weight.

 The scope of those commitments, however, is less clear—hence the force of the objection just mentioned. In particular, it is not clear what the implications are for the purely intellectual simple natures discussed in Rule 12, “which the intellect recognizes by means of a sort of innate light, without the aid of any corporeal image”: natures such as knowledge, doubt, volition, etc.[[61]](#endnote-60) The bold argument in Rule 14 that assimilates all reasoning to comparison and therefore to proportions, equality, and magnitude, is not couched within a qualification that excepts intellectual natures.[[62]](#endnote-61) It would seem, then, that Rule 14 can be reasonably read as containing a general account of real distinction. On the other hand, Descartes claims in Rule 12 that there are necessary connections between intellectual simple natures, but there presumably the imagination cannot be brought in when testing for the connection. This would suggest that Rule 14, and what it has to say about real distinction, is restricted to the material realm. There are some tensions here, and I do not think there is sufficient textual basis to say exactly what Descartes had in mind for testing for necessary connections when intellectual simple natures are involved. According to Serjeantson and Edwards’ thesis, the material on simple natures in Rule 12 was written later than Rule 14; thus Descartes would apparently have changed his mind as to whether the imagination is needed to identify necessary connections. Rule 14 could be read as implicitly restricted in scope, but there is no direct evidence for this, so I propose that my reading supports Serjeantson and Edwards’ thesis.

**6. Conclusion and Implications**

I have shown that Descartes does employ and characterize the exclusion-abstraction distinction in the *Rules*, and considers exclusion, or rather, the attempt and *failure* to carry out exclusion, to be the crucial tool for identifying necessary connections. Since this, in turn, is essential for carrying out all deduction, the exclusion test is an important part of the proposed method of the *Rules*.Moreover, I have argued that necessary connection or its absence indicates whether natures are really distinct or not. At least for material simple natures, the exclusion test must be applied by the intellect aided by the imagination. Real distinction, as far as the explicit statements of the *Rules* reveal, is determined by conceivability by literally separate images in the *phantasia*.

 It seems very likely that Descartes’s later thought on real distinction and separability has a developmental connection with the ideas on distinction and separability in Rules 12 and 14. If that is right, then we might expect two results. The first is a tendency on Descartes’s part to define real distinction in terms of predicability of distinct subjects, since that is how real distinction is articulated in the *Rules*: the imagination provides the obviously distinct subjects of predication so that the intellect’s separation and combination of natures can be checked against reality. And indeed, as Hoffman in particular has emphasized, there are texts in the *Meditations* and *Objections and Replies* that treat the real distinction and separability of mind and body in terms of attributes existing in separate subjects. Hoffman picks out two closely related strands that he thinks are at the core of Descartes’s dualism. First, “that mind can exist without the essential attribute of body existing in it (and hence without any of its modes) and that body can exist without the essential attribute of mind existing in it (and hence without any of its modes)”.[[63]](#endnote-62) And second, mind can exist without existing in body as in a subject, and *vice versa*.[[64]](#endnote-63) While the treatment of real distinction in the *Rules* is certainly not as developed as that found in these later texts, there is a discernible continuity here, and the later texts are intelligible as a development and outgrowth of the treatment in the *Rules*.

 The second thing we might expect is that this early conception of real distinction, built around shaped extensions as subjects of predication, would fit uneasily into a schema built around the notion of existential independence – i.e., one in which substances are precisely those things that could exist while no other created things exist. Indeed, it is arguably the case of individual finite bodies that fits least well into the latter (and later) ontological scheme;[[65]](#endnote-64) the shaped extension of the *phantasia* presented in the *Rules* is maximally perspicuous as a manifold of subjects, not as a multitude of existentially autonomous substances. Whether and to what extent Descartes succeeded in somehow integrating these two ideas of substance in his metaphysics is a matter of ongoing debate, with implications for understanding the real distinction and the character of his dualism.

 The *Rules* cannot decide those debates – not least because of the tension between Rule 14, which presents the imagination as necessary to apply the exclusion test, and Rule 12, which asserts necessary connections between purely incorporeal natures. If that Rule 12 material is indeed of a later date, as Serjeantson and Edwards would have it, then perhaps the imagination’s role in applying the exclusion test is being filled by a purely intellectual act. Instead of needing a “real idea” of the *phantasia*, a genuine concrete body against whichto check the intellect’s distinctions, perhaps the intellect alone can now intuit a sufficiently concrete subject. The connection is admittedly speculative. Nonetheless, the context of the treatment of real distinction in Rule 14, where the physical imagination is the *sine qua non* for avoiding erroneous theses about abstracted notions, brings out the stark tension between this passage, on the one hand, and Rule 12’s confident assertions of necessary connections between purely intellectual natures, on the other. This supports, though of course it does not establish, Serjeantson and Edward’s timeline of the text’s composition. In any case, the *Rules* shows Descartes already equipped with a developed faculty-based account of distinction and separability, and shows him deploying the test of exclusion to identify real distinctions based upon distinct subjects of predication. This ought to inform our view of his philosophical development.

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**Notes**

1. \* email: jrz2@stmarys-ca.edu [↑](#footnote-ref-1)
2. Murdoch, “Abstraction and Exclusion,” building on Wilson, “Epistemological Argument.” But recent attention to the development of Descartes’s thought has in some cases associated exclusion wholly or mainly with Descartes’s later works. See especially Machamer and McGuire, *Descartes’s Changing Mind*, who argue that the *Rules* follows “the method of abstraction”, while the post-*Meditations* metaphysics increasingly follows “the method of exclusion”. Murdoch claims, more plausibly, that exclusion is not emphasized in the *Rules* insofar as it is not concerned with proposing “substantive metaphysical propositions”. [↑](#endnote-ref-1)
3. Roger Ariew (Ariew, *Descartes among the Scholastics*, 50-55) makes a historically careful case that Descartes’ mature theory of distinctions emerges from Descartes’ reengagement, after long neglect, with scholastic texts, and thus that the mature theory cannot be read into pre-1640s texts. Daniel Garber (Garber, “Descartes against the Materialists”), likewise, argues that Descartes fundamentally revises his understanding of real distinction, as it applies to substances and their attributes, in response to Hobbes’ objections to the *Meditations*. While I do not here dispute these developmental theses directly, this paper offers a counter-consideration, in favor of a relatively robust continuity in Descartes’ thought on real distinction. [↑](#endnote-ref-2)
4. The literature on the dating and composition of the *Rules* either follows or reacts to Weber, *Constitution du texte ‘Regulae’*. See the discussions and references in Doyle, “How Not to Read,” and Oliveira, “La genèse méthode cartésienne.” [↑](#endnote-ref-3)
5. Serjeantson and Edwards, “New Light on Descartes.” [↑](#endnote-ref-4)
6. The central relevant texts from the *Objections and Replies* are as follows. Caterus’s objection: Descartes, *Oeuvres,* vol. 7, 100; Descartes, *Philosophical Writings*, vol. 2, 72-73. Descartes’s reply to Caterus: Descartes, *Oeuvres*, vol. 7, 120-121; *Philosophical Writings*, vol. 2, 85-86. Arnauld’s objections: Descartes, *Oeuvres*, vol. 7, 198-204; *Philosophical Writings*, vol. 2, 139-143. Descartes’s replies to Arnauld: Descartes, *Oeuvres*, vol. 7, 219-229; *Philosophical Writings*, vol. 2, 154-161. References to the works of Descartes are given to the Adam and Tannery edition. For the *Rules*, however, I have used Giovanni Crapulli’s 1966 edition of the text. [↑](#endnote-ref-5)
7. Descartes, *Oeuvres*, vol. 8A, 28; *Philosophical Writings*, vol. 1, 213). [↑](#endnote-ref-6)
8. Descartes, *Oeuvres*, vol. 8A, 28-29; *Philosophical Writings*, vol. 1, 213-214. [↑](#endnote-ref-7)
9. This is noted by many commentators, and explored in detail in Nolan, “Reduction and Nominalism.” [↑](#endnote-ref-8)
10. Descartes, *Oeuvres*, vol. 8A, 29; *Philosophical Writings*, vol. 1, 213. [↑](#endnote-ref-9)
11. Descartes, *Oeuvres*, vol. 7, 227; *Philosophical Writings*, vol. 2, 159. [↑](#endnote-ref-10)
12. Descartes, *Oeuvres*, vol. 4, 120; *Philosophical Writings*, vol. 3, 236. [↑](#endnote-ref-11)
13. Descartes, *Oeuvres*, vol. 3, 474; *Philosophical Writings*, vol. 3, 201 [↑](#endnote-ref-12)
14. Descartes, *Oeuvres*, vol. 3, 475; *Philosophical Writings*, vol. 3, 202. [↑](#endnote-ref-13)
15. See, for example, Murdoch, “Abstraction and Exclusion,” 39. For other commentators who read separability this way see Hoffman, “Descartes’ Theory of Distinction,” 67, fn 10. [↑](#endnote-ref-14)
16. Hoffman, “Descartes’ Theory of Distinction,” 56-78. [↑](#endnote-ref-15)
17. Rozemond, “Real Distinction, Separability, Substance.” Much of the discussion around this issue addresses a different but related point: how separability relates to real distinction for Descartes. Is separability a sign of real distinction, or its very essence? If it is a sign, is it present in all cases of real distinction, or only most of the time? [↑](#endnote-ref-16)
18. Nolan, “Reduction and Nominalism,” 135. Nolan also claims that they are jointly exhaustive, though this is disputed by Hoffman. [↑](#endnote-ref-17)
19. Murdoch, “Abstraction and Exclusion.” See also, for example, Machamer and McGuire, *Descartes’s Changing Mind*,and Cunning, *Argument and Persuasion*, 78-80, 85-87. [↑](#endnote-ref-18)
20. Descartes, *Oeuvres*, vol. 10, 414; *Philosophical Writings*, vol. 1, 41-42. [↑](#endnote-ref-19)
21. Descartes, *Oeuvres*, vol. 10, 415; *Philosophical Writings*, vol. 1, 42. [↑](#endnote-ref-20)
22. From his later works, we would expect Descartes to relegate blood, bone, etc. to the same “kind”, i.e., *res extensa*. I think, for my purposes here, we can remain agnostic about whether he held this when he wrote this passage. If he did, then I take it he was speaking with the vulgar and thinking with the learned. It is very clear that he holds back some of his metaphysical views in Rule 12. [↑](#endnote-ref-21)
23. Note that the title of the work is *Regulae ad directionem ingenii*, so Descartes is particularly interested in this manifestation of the *vis cognoscens.* On the other hand, due to the textual situation and unpublished status of this work, we cannot put too heavy an emphasis on the title. See Sepper, *Descartes’s Imagination*, 83 fn-84 fn. [↑](#endnote-ref-22)
24. Marion, “Cartesian Metaphysics,” 115. [↑](#endnote-ref-23)
25. Descartes, *Oeuvres*, vol. 10, 418; *Philosophical Writings*, vol. 1, 44. [↑](#endnote-ref-24)
26. Marion (“Cartesian Metaphysics,” 116) makes a different point in trying to show that simple natures are not simple, but it seems to me simply to repeat his reasoning for their not being natures. [↑](#endnote-ref-25)
27. For a precise articulation of the simplicity criterion here, see Smith, *Matter Matters*, 96. [↑](#endnote-ref-26)
28. Descartes, *Oeuvres*, vol. 10, 425; *Philosophical Writings*, vol. 1, 48. [↑](#endnote-ref-27)
29. Descartes, *Oeuvres*, vol. 10, 421; *Philosophical Writings*, vol. 1, 45-6. Smith discusses this text in detail (Smith, *Matter Matters*, 103-104); he interprets it in the light of his reading of enumeration and Descartes’s aim to make deduction “intuition-like”. Smith thus construes necessary and contingent connection as indicating relations between classes of things. [↑](#endnote-ref-28)
30. Descartes, *Oeuvres*, vol. 10, 429; *Philosophical Writings*, vol. 1, 51. [↑](#endnote-ref-29)
31. Descartes, *Oeuvres*, vol. 10, 440; *Philosophical Writings*, vol. 1, 58. [↑](#endnote-ref-30)
32. Descartes, *Oeuvres*, vol. 10, 444; *Philosophical Writings*, vol. 1, 60. [↑](#endnote-ref-31)
33. Descartes, *Oeuvres*, vol. 10, 441; *Philosophical Writings*, vol. 1, 58. Descartes cites his earlier introduction of this stripped-down concept of matter in Rule 12. [↑](#endnote-ref-32)
34. Jacob Klein (Klein, *Greek Geometrical Thought*, 208-211) describes this move as a “symbol-generating abstraction” and sees here a crucial turning point in the conceptualization of nature. At this point the concept of number operative in algebra is implanted into the conception of the natural world; Klein sees this as the condition for the emergence of modern mathematical physics. [↑](#endnote-ref-33)
35. The introduction and discussion of these three statements runs through Descartes, *Oeuvres de Descartes*, vol. 10, 443-6; *Philosophical Writings,* vol. 1, 59-61. [↑](#endnote-ref-34)
36. Here I agree with Murdoch, who translated the *Rules* for *Philosophical Writings*, and who makes this point in a footnote: *Philosophical Writings*, vol. 1, 57. [↑](#endnote-ref-35)
37. Descartes, *Oeuvres*, vol. 10, 444; *Philosophical Writings*, vol. 1, 60. [↑](#endnote-ref-36)
38. Ibid. [↑](#endnote-ref-37)
39. Descartes, *Oeuvres*, vol. 10, 445; *Philosophical Writings*, vol. 1, 60. [↑](#endnote-ref-38)
40. Descartes, *Oeuvres*, vol. 10, 445; *Philosophical Writings*, vol. 1, 61. [↑](#endnote-ref-39)
41. Ibid. [↑](#endnote-ref-40)
42. Descartes, *Oeuvres*, vol. 10, 442; *Philosophical Writings*, vol. 1, 59. [↑](#endnote-ref-41)
43. Descartes, *Oeuvres*, vol. 10, 444; *Philosophical Writings*, vol. 1, 60. [↑](#endnote-ref-42)
44. See Sepper, *Descartes’s Imagination*, 203, fn. 34. [↑](#endnote-ref-43)
45. Aquinas, *On Being and Essence*, 106. For the Latin I have used the Marietti edition: Aquinas, *De Ente et Essentia*,13. [↑](#endnote-ref-44)
46. See the article on “Abstractio”, in Goclenius, *Lexicon philosophicum*, 14. [↑](#endnote-ref-45)
47. Eustachius a Santo Paulo, *Summa philosophiae quadripartita*, 32. Note that Goclenius and Eustachius both use the term *praecidere* to indicate abstraction, not exclusion, whereas Aquinas uses it as a synonym for *excludere*. Descartes follows the later Scholastics’ use of *praecidere* and *praecise* in the Second Meditation (Descartes, *Oeuvres de Descartes*, vol. 7, 27; *Philosophical Writings*, vol. 2, 18, and see also *Oeuvres de Descartes*, vol. 9A, 215; *Philosophical Writings*, vol. 2, 276). See Carriero, *Between Two Worlds*, 94-6 and Cunning, *Argument and Persuasion*, 78. [↑](#endnote-ref-46)
48. These examples show that Murdoch (“Abstraction and Exclusion,” 56) is probably too quick to claim that Descartes’s notion of exclusion is original. He may make original use of it or an original classification of it with respect to abstraction, but the specification of the operation was part of the Scholastic toolkit. [↑](#endnote-ref-47)
49. See, for example, Sepper, *Descartes’s Imagination*, 101 fn and Ch. 5 *in toto*; Alquié, *Decouverte metaphysique chez Descartes*, 78. See Marion’s reference to the latter (Marion, “Cartesian Metaphysics,” 118). Ariew (*Descartes among the Scholastics*, 3)makes the bold claim that “there is no formal theory of distinction, Suarezian or otherwise, that Descartes was operating with before 1640.” Ariew is here discussing the *Meditations*, which is not my focus here. Nevertheless it will become apparent that I think the claim is overstated. [↑](#endnote-ref-48)
50. Descartes, *Oeuvres*, vol. 10, 422; *Philosophical Writings*, vol. 1, 46. [↑](#endnote-ref-49)
51. Descartes, *Oeuvres*, vol. 10, 442; *Philosophical Writings*, vol. 1, 59. [↑](#endnote-ref-50)
52. Descartes, *Oeuvres*, vol. 10, 423; *Philosophical Writings*, vol. 1, 47. [↑](#endnote-ref-51)
53. Though Descartes attributes to the intellect the ability or faculty of separating these “abstract entities”, he also says that he does not admit (*agnoscere*) such entities. So I think these must be understood as not implying any distinction at all outside the mind. My point is similar to one made by Nolan, who argues that the later *distinctio rationis* is not a distinction at all; distinction is here simply a way of speaking. See Nolan, “Reduction and Nominalism,” 137. [↑](#endnote-ref-52)
54. Descartes, *Oeuvres*, vol. 10, 421; *Philosophical Writings*, vol. 1, 46. [↑](#endnote-ref-53)
55. The mistranslation has led to some unproductive interpretive worrying, in my view. See, e.g., Beck, *The Method of Descartes*, 94-9. [↑](#endnote-ref-54)
56. Descartes, *Oeuvres*, vol. 10, 445; *Philosophical Writings*, vol. 1, 61. Descartes does not address in the *Rules* how we are to avoid similar error when dealing with purely intellectual simple natures. [↑](#endnote-ref-55)
57. See Murdoch, “Abstraction and Exclusion,” 38; Nolan, “Reduction and Nominalism,” 133; Smith and Nelson, “Divisibility and Cartesian Extension,” 16-17; Skirry, “Descartes’s Conceptual Distinction,” 123. [↑](#endnote-ref-56)
58. Descartes, *Oeuvres*, vol. 10, 445; *Philosophical Writings*, vol. 1, 61. My italics. [↑](#endnote-ref-57)
59. In Rule 14 he speaks of entities (*entia*) that exist in another (*in alio sunt*), and of subjects “having” or “participating in” natures. [↑](#endnote-ref-58)
60. Descartes, *Oeuvres*, vol. 10, 414; *Philosophical Writings*, vol. 1, 41-2, and *Oeuvres*, vol. 10, 441; *Philosophical Writings*, vol. 1, 58. See Smith, *Matter Matters*, 84-5. He argues (soundly, in my view) that distinctness, as a characteristic of ideas, is to be taken literally and physically in the *Rules*. As Sepper points out, however, it is not at all clear that Descartes equated the corporeal imagination with the surface of the pineal gland in mind at the time he wrote Rules 12 and 14. See Sepper, “Eclipse of Imagination,” 379-403. [↑](#endnote-ref-59)
61. Descartes, *Oeuvres*, vol. 10, 419; *Philosophical Writings*, vol. 1, 44. [↑](#endnote-ref-60)
62. Marion and Sepper have noted the tension here, though their appraisals of its significance are quite different. See Marion, “Cartesian Metaphysics,” 117; Sepper, *Descartes’s Imagination*,203-6. [↑](#endnote-ref-61)
63. Hoffman, “Descartes’ Theory of Distinction,” 69. He cites six passages in support of this concept of separability: from the *Synopsis* (Descartes, *Oeuvres*, vol. 7, 12; *Philosophical Writings* vol. 2, 9); from the Fourth Replies, (Descartes, *Oeuvres*, vol. 7, 223; *Philosophical Writings*, vol. 2 157); from the Fifth Replies (Descartes, *Oeuvres*, vol. 7, 354-5; *Philosophical Writings*, vol. 2, 245); from the Sixth Meditation (Descartes, *Oeuvres*, vol. 7, 78; *Philosophical Writings*, vol. 2, 54); from the Sixth Replies (Descartes, *Oeuvres*, vol. 7, 444; *Philosophical Writings*, vol. 2, 299); and from the First Replies (Descartes, *Oeuvres*, vol. 7, 121; *Philosophical Writings*, vol. 2, 86). See also Schmaltz, “Descartes on Extensions,” 113-147. [↑](#endnote-ref-62)
64. Hoffman, “Descartes’ Theory of Distinction,” 73. Here he cites a text from the Sixth Replies (Descartes, *Oeuvres*, vol. 7, 434; *Philosophical Writings*, vol. 2, 293). [↑](#endnote-ref-63)
65. The literature on this broad topic is vast; for some representative analyses of some of Descartes’s problems, real or apparent, with the metaphysics of singular extended things, see Spinoza, *Collected Works*, 423; Robinson, “Spinoza on the Vacuum,” Normore, “Metaphysics of Extension”; Smith and Nelson, “Divisibility and Cartesian Extension”; and Rozemond, “Real Distinction, Separability, Substance.” For a related line of criticism and responses thereto, see Leibniz’s *De Ipsa Natura* (Leibniz, *Philosophical Papers and Letters*, 498-508); Garber, *Descartes’ Metaphysical Physics*, 180-181; Lennon, “The Eleatic Descartes.”

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