Additive Theories of Rationality: A Critique

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ABSTRACT: “Additive theories” of rationality, as I use the term, are views that hold that an account of our minds can begin with an account of what it is to perceive and desire, in terms which do not presuppose any connection to the capacity to reflect on reasons, and then can add an account of the capacity for rational thought as an independent capacity to “monitor” and “regulate” our believing-on-the-basis-of-perception and our acting-on-the-basis-of-desire. I show that a number of prominent recent discussions of rational perception and action are committed to an additive approach to rationality, and I argue that this approach faces two basic difficulties, each of which is structurally analogous to a classic problem for Cartesian dualism. The Interaction Problem concerns how capacities conceived as intrinsically independent of the power of reason can interact with this power in what is intuitively the right way. The Unity Problem concerns how an additive theorist can explain a rational subject’s entitlement to conceive of the animal whose perceptual and desiderative life he oversees as “I” rather than “it”. I argue that these difficulties give us reason to reject the additive approach, and I sketch an alternative, “transformative” framework in which to think about the cognitive and practical capacities of a rational animal.
Additive Theories of Rationality: A Critique

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If the human being had animal drives, he could not have that which we now call reason in him; for precisely these drives would naturally tear his forces so obscurely towards a single point that no free circle of reflection would arise for him... If the human being had animal senses, then he would have no reason; for precisely his senses’ strong susceptibility to stimulation, precisely the representations mightily pressing on him through them, would inevitably choke all cold reflectiveness.

J. G. Herder, Treatise on the Origin of Languages, Pt. I, §2

1. Two conceptions of rationality

1.1 My aim in this paper is first to characterize and then to criticize a certain widely-held view of the nature of rationality, a view that I believe is often accepted without much scrutiny. The view, to express it in a rough but evocative way, is that the capacity to “reflect on reasons” for belief and action is a sort of special module that rational minds possess, over and above the modules for accumulating information through perception and for desire-governed action, which are already present in the minds of nonrational animals. Our additional Rationality Module, it is held, gives us the capacity to monitor and regulate our believing-on-the-basis-of-perception and our acting-on-the-basis-of-desire in ways that nonrational animals cannot; but it does not make our perceiving and desiring themselves essentially different from the perceiving and desiring of any animal. We rational animals perceive and desire in the same sense in which any animal perceives and desires; the power that differentiates our minds is something separate and additional.

I will call views that take this shape additive theories of rationality. The point of this label is to mark a significant implication of such views: namely, that an account of our minds might begin with an account of what it is to perceive and desire, in terms which do not presuppose the capacity to reflect on reasons, and then add an account of the “monitoring” and “regulating” of belief-on-the-basis-of-perception and action-on-the-basis-of-desire that only rational creatures can perform. In this sense, such theories regard the power of
rationality as something that might be “tacked on” to a mind that already forms an intelligible system apart from this addition.

These characterizations of the explanatory commitments of additive theories need further clarification, and I shall shortly try to make them more precise. First, though, it will be helpful to introduce some quotations from recent authors that illustrate the sort of view I have in mind. Consider, then, the following pair of remarks, the first from Gareth Evans and the second from David Velleman:

[W]e arrive at conscious perceptual experience when sensory input is not only connected to behavioral dispositions...—perhaps in some phylogenetically more ancient part of the brain—but also serves as the input to a thinking, concept-applying, and reasoning system; so that the subject’s thoughts, plans, and deliberations are also systematically dependent on the informational properties of the input... Of course the thoughts are not epiphenomena; what a conscious subject does depends critically upon his thoughts, and so there must be links between the thinking and concept-applying system, on the one hand, and behavior, on the other... Further, the intelligibility of the system I have described depends on there being a harmony between the thoughts and the behavior to which a given sensory state gives rise. (Evans 1982, pp. 158-159)

Suppose that you were charged with the task of designing an autonomous agent, given the design for a mere subject of motivation... [You would not] start from scratch. Rather, you would add practical reason to the existing design for motivated creatures, and you would add it in the form of a mechanism modifying the motivational forces already at work... A creature endowed with such a mechanism would reflect on forces within him that were already capable of producing behavior by themselves, as they do in nonautonomous creatures or in his own nonautonomous behavior. His practical reasoning would be a process of assessing these springs of action
and intervening in their operations (Velleman 2000, pp. 11-12)\(^1\)

Both Evans and Velleman suggest that a central aspect of our ability to engage, as rational creatures, with the world around us (for Evans, our power to learn about the world through perception; for Velleman, our capacity to implement our aims in action) can be thought of as constituted from two components:

(1) a more primordial system which we share with nonrational creatures (in the one case, a perceptual system which adjusts our behavioral dispositions in response to changing sensory inputs; in the other, a motivational system which translates desires for things into behavior directed toward the pursuit of them); and

(2) a “reasoning system” which “monitors” the activities of the more primordial system, “assesses” the rational warrant for those activities, and “regulates” the activities in response to its assessments.

As both authors note, these two systems must not merely coexist; they must normally exhibit a certain harmony: states of the primordial system must in general make themselves known to the reasoning system, so that the thinking of the latter is informed by the condition of the former; and assessments of the reasoning system must in general produce predictable modifications in the primordial system, so that our reasoned judgments make a difference to how we react and what we pursue. This requirement of harmony implies that, at least when the two systems are functioning normally, we can think of them as constituting a single total system in a single total state, a state for which we can reserve a special term, as Evans reserves the term “conscious perceptual experience” for the kind of condition produced when sensory input is received in a way that seamlessly governs both our behavioral dispositions and our reflective thought. And having coined such a term, we can say that only rational creatures can be in such states. But we should not let this mislead us into thinking that such views recognize a fundamental difference between rational and merely animal perception, or between rational and merely animal desire. They recognize a

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\(^1\) Velleman introduces this proposal in a hypothetical mode, but he subsequently makes clear that it is not merely a suggestion about how practical reason might be added to a faculty of motivation, but as a proposal about how to understand the power of practical reason we actually possess.
difference, but not a fundamental difference: they hold that when a rational animal perceives something, this consists in its having a perception of a merely animal kind harmoniously integrated with the operations of a distinct “thinking, concept-applying, and reasoning system”; and that when a rational animal desires something, this consists of its having a merely animal desire harmoniously integrated with the operations of a distinct faculty of “practical reason,” conceived as “a mechanism modifying the motivational forces already at work.”

1.2 Evans and Velleman express their commitment to the additive approach with uncommon explicitness, but I believe this conception of rationality is widespread. Indeed, some philosophers take the additive approach to be inevitable once we admit that rational beings are animals and thus have something in common with nonrational animals. But the consensus is not universal. Dissent is voiced, for instance, by John McDowell:

If we share perception with mere animals, then of course we have something in common with them. Now there is a temptation to think it must be possible to isolate what we have in common with them by stripping off what is special about us, so as to arrive at a residue that we can recognize as what figures in the perceptual lives of mere animals... But it is not compulsory to attempt to accommodate the combination of something in common and a striking difference in this factorizing way: to suppose our perceptual lives include a core that we can recognize in the perceptual life of a mere animal, and an extra ingredient in addition... Instead we can say that we have what mere animals have, perceptual sensitivity to features of our environment, but we have it in a special form. (McDowell 1994, p. 64)

On the alternative McDowell proposes, our rationality does make a fundamental difference to the nature of our perceiving: it gives us a “special form” of perceptual sensitivity to our environment, one whose operations are themselves informed by our capacity to weigh reasons. If this is right, then our power to acquire perceptual knowledge cannot be accounted for in the additive style. For if what “perception” signifies in the case of rational
creatures cannot be explained without reference to the power of reason, then rational perceiving cannot be explained as: perceiving supplemented by the further power to monitor and regulate this activity in the light of reasoning. Rather, an account of our sort of perceiving must itself appeal to capacities connected with rational thought and judgment. This is at least part of the significance of McDowell’s well-known claim that the content of our perception is “conceptual”: it amounts to the claim that the kinds of perceptual episodes which we rational creatures undergo must themselves be characterized in terms that imply the power to reason about the import of such episodes. And if capacities differ in nature according as their actualizations differ in nature, it follows that a perceptual capacity of a rational subject differs in nature from a nonrational perceptual capacity.\(^2\) We can thus call the sort of view that McDowell recommends a \textit{transformative theory} of rationality. Such theories take the very nature of perceptual and desiderative capacities to be transformed by the presence of rationality, in a way that makes rational perceiving and rational desiring fundamentally different from their merely animal counterparts.

A principal aim of this paper is to bring out what is at stake in this McDowellian view of the relation between reason and perception. In his \textit{Mind and World} (1994), McDowell made a case for seeing the perceptual aspect of our animality as “permeated with rationality” in this way. He summed up his position in two slogans: on the one hand, that our perceptual experiences have “conceptual content”, and on the other hand, that our perceptual experiences themselves involve “actualizations of conceptual capacities”.\(^3\) Most of the discussion of his view has focused on the first slogan, and in particular on certain views McDowell then held about the shape conceptual contents must take: that they must be

\(^2\) The assumption I am making here about how to individuate capacities has a long philosophical history, extending back to Aristotle (cf. \textit{De Anima} II. 4, 415a18-20). It is grounded, presumably, in the intuitive idea that capacities should be identified by what they enable their subjects to do. A classic formulation of it is given by Thomas Aquinas:

A capacity as such is directed to an act. Wherefore we seek to know the nature of a capacity from the act to which it is directed, and consequently the nature of a capacity is diversified as the nature of the act is diversified. (\textit{Summa Theologica}, I\(^a\), q.77, a.3, corpus)

This principle about the individuation of capacities will be assumed throughout the present paper.

\(^3\) For the “conceptual content” slogan, McDowell 1994, Lecture I, §4. For the “conceptual capacities” slogan, see Lecture I, §5.
propositional structures, that everything a perceptual experience puts a subject in a position to know noninferentially must be somehow written into the conceptual content of that experience, that the specificity of perceptual content can be captured by appeal to the notion of a “demonstrative concept,” etc.\textsuperscript{4} McDowell has subsequently changed his mind about certain of these points,\textsuperscript{5} but in any case, there were always two parts to his position: on the one hand, a more abstract claim about the order of explanation that an account of human perceptual experience must follow (namely, that it must not take an add-on shape), and on the other hand, a set of more specific views about the nature of conceptual contents. The former claim was always the more fundamental commitment of his view, but most critical responses have not directly confronted it. Part of the reason for this, presumably, is that it has not seemed clear what could be at stake in this claim taken by itself: without further theses about the nature of conceptual contents to flesh it out, what can it mean to say that our perception “actualizes conceptual capacities”? I want to suggest that McDowell’s point is significant even in this abstract form, since, if correct, it would rule out a widely held and tempting view of the structure an account of rational mentality must exhibit.

The crucial difference between additive and transformative theories of rationality is not that additive theorists admit, whereas transformative theorists deny, that the minds of rational and nonrational creatures have something in common. As McDowell observes, the real dispute is about how to understand the idea of “something in common.” Additive theorists advocate a certain way of understanding what we have in common with nonrational animals: they hold that there must be a distinguishable factor in rational powers of perception and action which is of the very same kind as the factor that wholly constitutes merely animal powers of perception and action. Transformative theorists, by contrast, locate the similarity between rational and nonrational mentality in a different sort of explanatory structure. They hold that rational mentality and nonrational mentality are different species of the genus of animal mentality. What the two “have in common,” on this view, is not a separable factor that is present in both, but a generic structure that is realized


\textsuperscript{5} See McDowell 2008.
in fundamentally different ways in the two cases. Rational and nonrational animals do not share in the sensory and conative powers of nonrational animals; they share in the sensory and conative powers of animals, where this is a generic category of power which admits of two fundamentally different sorts of realization. So the difference between the explanatory commitments of the two approaches can be diagrammed as follows:

\[ \text{Additive theory} \quad \text{Transformative theory} \]

(Nonrational) Animal  
\[ \rightarrow \text{(further powers added to an existing stock)} \]

Rational Animal  
Nonrational Animal  
Rational Animal

It is important to emphasize that the additive/transformative distinction is a distinction between views about what the perceptual and desiderative capacities of rational animals consist in, not a distinction between views about how they develop. Human beings are rational animals, but it seems unlikely that they are born with the capacity to perceive in a way that “actualizes conceptual capacities.” This sort of perceptual capacity presumably emerges only with the development of rational capacities for reflection and judgment. Young children can surely perceive things well before they have developed these latter capacities. It might seem to follow that our human capacity for perception is not “intrinsically” related to our capacity for rational reflection and judgment, but becomes related to it only with the development of certain further capacities. Would this vindicate the position of the additive theorist?

This would not be a vindication of the additive approach as I am understanding it. It may be true that the perceptual capacities of young children do not actualize conceptual capacities, and that the perceptual capacities of cognitively mature rational subjects develop from more primitive capacities of this sort. It does not follow that the perceptual capacity of a cognitively mature rational subject, one who can reflect and judge, can be accounted for in an additive way: as consisting of a capacity for merely animal perception harmoniously integrated with the operations of a distinct “thinking, concept-applying, and reasoning
system.” If, as McDowell maintains, the perceptual capacity of a mature rational subject is actualized, in the basic case, in a kind of state whose presence itself involves the actualization of conceptual capacities, then we cannot explain what it is for a mature rational subject to perceive without making reference to her rational capacities. And if capacities differ in nature inasmuch as their actualizations differ in nature, we cannot explain the nature of the perceptual capacity of a mature rational subject without reference to these latter capacities. In that case, the additive approach cannot succeed, for the additive theorist’s project is to say, not merely what lies in the developmental background of a mature rational subject’s perceptual capacity, but what this capacity consists in.

1.3 It is an old idea to locate the difference between two kinds of mindedness in the sort of framework depicted in the right-hand figure above. Aristotle famously thinks of “rational” as a predicate that differentiates the genus “animal,” and when characterizing the relation of genera to the species that fall under them, he remarks that

by genus I mean that one identical thing which is predicated of both and is differentiated in no merely accidental way... For not only must the common nature attach to the different things, e.g. not only must both be animals, but this very animality must also be different for each... For I give the name of ‘difference in the genus’ to an otherness which makes the genus itself other. Commenting on this passage, Thomas Aquinas remarks that what the Philosopher says here rules out ... the opinion of those who say that whatever pertains to the nature of the genus does not differ specifically in different species, for example, the opinion that the sensory soul of a man does

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6 I think this captures how McDowell and his most direct opponents see the issue in dispute. Thus McDowell takes the view he opposes to hold, not merely that our capacity for perception develops from a pre-rational perceptual capacity, but that actualizations of our mature perceptual capacity do not themselves “actualize conceptual capacities.” And thus Peacocke (1998, 2001) and Heck (2000), two of McDowell’s most direct opponents, undertake to argue that the sort of actualization of our mature perceptual capacities that gives us a reason for judgment need not itself have a kind of content whose availability depends on our conceptual capacities.

7 Aristotle, Metaphysics X.8 (1057b39-1058a7).
not differ specifically from that in a horse.\footnote{Aquinas, \textit{Commentary on Aristotle's Metaphysics}, Vol. 2, Bk. X, Ch. 10, §2119, p. 760. Elsewhere, speaking for himself rather than for Aristotle, Aquinas considers the following objection:}

But although this way of looking at the difference between rational and nonrational mentality has a long history, it is presently in a fairly profound eclipse. It is not so much that the transformative view is understood and rejected – though a battery of standard objections are brought against philosophers who profess this sort of view.\footnote{Standard objections include: that the view is in tension with the fact that we “rational animals” have evolved from animals that are not rational; that it forces us to deny the fact that nonrational animals genuinely perceive, desire, know things, and exhibit intelligent activity in pursuit of goals; that it must deny the fact that human beings often believe, judge, desire, and intend irrationality; that it faces difficulties in explaining the perceiving and desiring of human infants, or in accounting for their cognitive development into mature rational creatures; that it is in some vaguer way “unscientific” or not sufficiently “naturalistic” in its whole approach. I believe that all of these objections rest either on misrepresentations of the transformative theorist's position or on disputable assumptions about the shape that all sound understanding of the natural world must take. Since my aim here is simply to raise difficulties for additive theories, I will not discuss objections to transformative theories in this paper. For discussion of some of them, see my “Essentially Rational Animals”, a companion to the present paper, which seeks to give a positive account of the framework in which a transformative theory of rationality could be developed.} But these objections are, it seems to me, generally put forward without great appreciation of how the transformative view works, and what resources it has for defending itself. The primary difficulty facing this approach is not so much that it is subject to certain definite objections as that the entire framework of concepts to which it belongs has fallen out of general use.

A first step toward seeing the point of this framework is to see grounds for skepticism about the additive approach. The main aim of the present paper will be to develop such grounds. I will present two difficulties for additive theories, difficulties I will
call the **Interaction Problem** and the **Unity Problem**. Versions of these difficulties have been raised for additive approaches in particular domains, but I think their generality has not been appreciated. I will argue that these problems do not merely affect this or that particular account, but a whole class of views, and that versions of it can be raised wherever the powers of a rational animal are treated in the additive way.

The problem will turn out, interestingly enough, to be similar to a classic problem for Cartesian dualism. I think this is not an accident: although the views about mind and explanation that motivate additive theories are quite different from those that motivate mind-body dualism, the two positions bear a structural similarity to one another. Both views have a sort of horse-and-rider structure, in which one power is set over another (the mind over the body in the Cartesian case, the rational system over the animal systems in the case of additive theories). The additive theorist’s position is certainly not metaphysically extravagant in the way the Cartesian position is: it does not regard our rational powers as inhering in an immaterial substance. I will argue, however, that the two positions face similar difficulties, difficulties which reflect a formal similarity between them.

2. The Interaction Problem

2.1 The first difficulty I want to raise for additive theories concerns the nature of the interaction they posit between our perceiving and desiring, on the one hand, and our judging and choosing, on the other. To bring out this difficulty, it will help to reconsider the problem McDowell originally raised for the idea that the content of our perception is nonconceptual.

When McDowell first argued against the idea that a nonconceptual “given” might play a role in an account of human perceptual knowledge, his basic objection was simply that we cannot make sense of the role this nonconceptual factor is required to play:

> [W]e cannot really understand the relations in virtue of which a judgment is warranted except as relations within the space of concepts: relations such as implication or probabilification, which hold between potential exercises of conceptual capacities. The attempt to extend the scope of justificatory
relations outside the conceptual sphere cannot do what it is supposed to do.

(McDowell 1994, p. 7)

Any satisfactory account of perception must, McDowell held, explain how our perception can exercise an intelligible “constraint” on what we judge, so that our enterprise of forming a reasonable view about the world does not appear to be an activity in which we proceed without input, a “frictionless spinning in a void” (McDowell 1994, p. 11). But, he claimed, if we try to introduce this constraint by supposing that perception supplies a nonconceptual content with which our application of concepts in judgment must agree, we impose a limitation on this content that makes it unintelligible how it could supply the needed constraint. For what is needed is not just any sort of constraint on the subject's judging; what is needed is something intelligible as a constraint from the subject's own point of view – something she could see as a reason for judging the world to be thus-and-so, if she were to reflect on the question “Why should I believe that?” But to suppose that the content of perceptual experience is nonconceptual is to conceive of it in a way that rules out its playing such a role.

McDowell's ground for claiming that states with nonconceptual contents could not provide reasons for a reflecting subject turned on a thought about the nature of the capacity to reflect on reasons, on the one hand, and a thought about the nature of conceptual content, on the other. The capacity to reflect on reasons, he held, is a capacity for “spontaneity” – for knowing self-determination in the light of a reason recognized as such. But a perceptual state has conceptual content only if it

has its content by virtue of the drawing into operation ... of capacities that are genuinely elements in a faculty of spontaneity. The very same capacities must also be able to be exercised in judgments, and that requires them to be rationally linked into a whole system of concepts and conceptions within which their possessor engages in a continuing activity of adjusting her thinking to experience. (McDowell 1994, pp. 46-47)\(^\text{10}\)

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\(^\text{10}\) It is worth remarking on an important difference between McDowell’s understanding of the notion of conceptual content and other influential ways of understanding the notion. In Bill Brewer’s well-known defense of the claim that our perceptual states must have conceptual content, for instance, he defines a
A perceptual state whose content was nonconceptual, by contrast, would be one whose obtaining did not engage capacities for such reflection. Hence, McDowell argued, such a state would be one whose impact on judgment stood outside the scope of such self-determination:

[T]he putatively rational relations between experiences, which this position does not conceive as operations of spontaneity, and judgments, which it does conceive as operations of spontaneity, cannot themselves be within the scope of spontaneity—liable to revision, if that were to be what the self-scrutiny of active thinking recommends. And that means that we cannot genuinely recognize the relations as potentially reason-constituting. (McDowell 1994, p. 52).

A subject’s judgment might certainly in some sense “match” such a nonconceptual perceptual content, but her having a perceptual experience with such a content could not itself be her reason for so judging. At best, a subject’s having a nonconceptual perceptual experience with content P might figure in some other sort of explanation of how it came about that she judged J. McDowell summed this up by saying that nonconceptual contents could at best supply “exculpations,” not “justifications,” for a subject’s judgments: they could at best make it explicable, and thus excusable, that the subject judged as she did; they could

mental state as having conceptual content just if

it has a representational content that is characterizable only in terms of concepts which the subject himself must possess and which is of a form which enables it to serve as a premise or the conclusion of a deductive argument, or of an inference of some other kind (e.g. inductive or abductive). (Brewer 1999, p. 149).

This way of framing the issue is less committal than McDowell’s in some respects, more committal in others. It is less committal – at least apparently – inasmuch as this characterization of what it is for a mental state to have conceptual content does not obviously require that the existence of the state itself actualizes conceptual capacities. After all, it is not obvious that a state the characterization of whose content appeals only to concepts the subject possesses must be one whose obtaining itself actualizes the relevant conceptual capacities, and neither is this obviously implied by the requirement that the state should have a content that could serve as a premise or conclusion of inference (at least not if this simply means, as it does for Brewer, that the relevant content must be propositional in form). There is no direct equivalent in Brewer’s characterization of the McDowellian idea that our perceiving must itself actualize our conceptual capacities. By the same token, Brewer’s position is more committal than McDowell’s inasmuch as his basic characterization of the issue builds in more determinate commitments about how perceptual contents must be characterized. McDowell did, of course, make specific commitments about this, but if I am right, his basic formulation of the issue does not depend on them.
McDowell presented his case for this conclusion in an evocative but somewhat metaphorical idiom, and it is not easy to see how his argument is supposed to work. A natural objection, raised by a number of authors, is that the argument trades on a non-sequitur. Even if we grant that a genuine reason for judgment must be “within the scope of spontaneity” in the sense that the subject must be able to evaluate the probative force of this reason, and grant that such evaluation must draw on conceptual capacities, it does not obviously follow that the mere ability to have the perception whose rational significance is evaluated must draw on such capacities. Why couldn’t my capacity to perceive present me with representations whose content was not intrinsically conceptual, but which my possession of a further capacity for conceptual thought and judgment enabled me to articulate and to weigh?

We will be in a better position to assess this objection once we have a clearer understanding of the difficulty McDowell aims to raise for nonconceptualism about perception. I will return to McDowell’s argument and the objections to it below (§2.4), after drawing two comparisons that should help to clarify the general form of the difficulty that McDowell’s argument raises. For the moment, let me simply make two observations about the sketch of the argument just given.

First, the argument does not appear to depend on specific commitments about the nature of conceptual contents. “Conceptual content” simply figures as a term for content the attribution of which implies the engagement of certain capacities – the capacities, whatever they may be, that enable us to reflect on our reasons for believing things to be thus-and-so and form a considered judgment about the matter. McDowell’s ambition is to raise a

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11 See McDowell 1994, Lecture I, §3, and for further discussion, see Lecture III and Afterword, Part II.
13 This capacity-oriented way of thinking about the nature of representational contents is certainly not universal (for a rejection this way of framing issues about conceptual content, see for instance Stalnaker 1998 and Byrne 2005). It is, however, common ground among the authors with whom McDowell is primarily engaged: compare Evans’s “Generality Constraint” on conceptual representation (Evans 1982, pp. 100-105) and Peacocke’s “Principle of Dependence” (Peacocke 1992, p. 5, and cf. pp. 42-51).

None of these authors is entirely explicit about which claims about capacities an attribution of conceptual content commits us to, but the idea seems to be this. Suppose a subject has a representation whose content is …F… (i.e., a representation whose content includes the predicate F, whatever else it may
difficulty for any view that does not recognize the operation of such capacities in our perception itself, but still maintains that perception give us reasons for judgment. In other words, his ambition is to raise a difficulty for any account that treats the cognitive powers of a rational perceiver in an additive way: as consisting of a not-intrinsically-rationality-involving power to perceive, whose acts of perception are inputs to a further and independent power to make reflective judgments.14

Secondly, the strategy of the argument is to raise a problem about how, if our perceiving does not itself draw on conceptual capacities, our perceptions can explain our judgments in the right way. Some of McDowell’s phrasing does not foreground this question of explanation, as when he asks how “relations in virtue of which a judgment is warranted” such as “implication and probabilification” can hold between perception and judgment. But a careful reader of the surrounding text will know that McDowell’s concern is not merely that perception should supply reasons for judgment in the sense in which R might be a reason for me to judge J although I am quite unaware of R, and hence in no position to take it into account in judging. His demand is that an account of perception should make it intelligible how a subject’s perceiving something can be her reason for making a certain

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14 In fact, I believe the case against the additive approach could be made without presupposing that the role of perception in cognition is to present us with contents at all. Both McDowell and most of his principal nonconceptualist opponents take for granted that perception should be conceived as supplying us with contents, but in the past decade there have been important challenges to this idea (see, e.g., Travis 2004, Brewer 2006). For simplicity, I have adhered here to McDowell’s way of framing the issue, but I believe the question how to conceive of the contribution that actualizations of our perceptual capacities make to our reasons for judgment can be raised without making this assumption. Briefly: it may be that the role of perception is simply to present us with worldly things, not to supply us with representational contents concerning those things. Even if the notion of presentation applies to perception only in the former way – as a verb characterizing our mode of relation to something that gives us a reason, not a noun characterizing the reason presented (a certain representational content) – still there is room for a contrast between additive and transformative conceptions of such presentation. In work now in progress, I offer a fuller account of how a transformative theory of the relation between reason and perception can take on board the insights of critics of the idea of perceptual content.
judgment – can explain her so judging precisely in virtue of being recognized to rationalize it.\textsuperscript{15} His strategy is to argue that a view on which perceiving does not itself “actualize conceptual capacities” cannot give an adequate account of this explanatory dependence – that the closest it can come is to represent the power of perception and the power of judgment as interacting in a way that – if it is even intelligible – would involve a dependence of the wrong kind.

2.2 To clarify the general structure of the problem McDowell raises for perceptual nonconceptualism, it will be useful to compare it with a venerable objection to Cartesian dualism, one that has been discussed ever since Princess Elisabeth of Bohemia wrote to Descartes to ask how the mind can move the body, given that

it seems that all determination of movement takes place by the propulsion of the thing moved, by the manner in which it is propelled by that which moves it, and by the quality and shape of the surface of this latter... [Yet] you yourself entirely exclude extension from the notion you have of mind, and touching seems to me incompatible with an immaterial thing.\textsuperscript{16}

The difficulty here can be stated without appeal to the specifically mechanistic view of physical causation presupposed in Elisabeth's remark. The general problem is simply that the Cartesian view posits an explanatory relation between relata whose natures seem to exclude their standing in any such relation. A mind, for Descartes, is a thinking thing, whose only determinations are thoughts. A body is an extended thing, to which determinations of thought can never pertain, and which is moved only by the impulsion of other bodies.\textsuperscript{17}

Every change in the movement of a body must have a sufficient explanation in some interaction with another body; any thought can depend only on other thoughts. Indeed, Descartes holds that things might proceed just as they do with the mind even if there were no bodies, and things might proceed with bodies just as they do even if there no were minds.

\textsuperscript{15} On this point, see especially McDowell's response to Peacocke in McDowell 1994, Afterword, Part II.
\textsuperscript{16} Elisabeth to Descartes, La Haye, 16 May 1643.
\textsuperscript{17} Cf. Meditations on First Philosophy, AT VII, 26-27; 78.
Each realm, in short, forms a closed explanatory system, one whose phenomena are characterized in such a way that their occurrence is intrinsically independent of phenomena belonging to the other realm. Yet the idea that a change in the one realm should effect a change in the other seems to require that a determination of the one should necessitate a determination of the other. If we are to acknowledge the reality of voluntary action, we must make room for an explanatory relationship between determinations of the mind and determinations of the body. And equally – though Elisabeth does not mention this point – if we are to acknowledge the reality of sense-perception, we must make room for an explanatory relationship between determinations of the bodily sense-organs and thoughts occurring to the mind. In each case, it is necessary to leave room for a form of interaction whose possibility looks problematic within the Cartesian framework. For if the two realms are essentially independent of one another, how can a condition obtaining in the one explain a condition obtaining in the other? A philosopher who continues to accept this framework is then left with a familiar array of unattractive options: occasionalism, preestablished harmony, perhaps some sort of idealism?¹⁸

I think McDowell’s objection to perceptual nonconceptualism is in important ways similar to this objection. The similarity is partly obscured by McDowell’s concessive move of allowing that experiences with nonconceptual contents might supply “exculpations” for our judgments: this makes it sound as if his question is not how states with nonconceptual contents could influence judgments, but merely how they could warrant the judgments they influence. But although McDowell concedes the possibility of such “exculpatory constraint” for the sake of argument, his ultimate aim is to argue that the very idea of judgment implies that the canonical kind of explanation of an act of judgment must be of another sort. For, he holds, a subject possesses the capacity for judgment only if she possesses the capacity for a kind of spontaneous self-determination: to be capable of judging, she must be capable of accepting P precisely because, on considering whether P, she reflectively takes some

¹⁸ My interest here is not primarily in the position of the historical Descartes, but in the structure of a generically Cartesian view and a kind of difficulty to which it naturally gives rise. For illuminating recent discussion of Descartes’s actual reply to Elisabeth, and what resources he has for answering her question in his own terms, see Garber 2001.
consideration to provide adequate reason to take P to be true.\textsuperscript{19} The difficulty McDowell aims to raise concerns how a state with a nonconceptual content could constrain judgment in a manner consistent with this self-determined character.

A resemblance to Elisabeth’s objection should now be apparent. In each case, the difficulty concerns how to make sense of a sort of influence that plainly occurs (the shaping of bodily movement by will in the one case, the constraining of judgment by perception in the other) without compromising the constitutive principles of the realm that is influenced. Moreover, the difficulty has an analogous source in each case: it arises, we might say, from the fact that the power which must exercise the influence (will in the one case, perception in the other) is conceived as one whose efficacy does not operate according to the canonical, constitutive principles of the system being influenced. Given this set-up, it is difficult to see how such an influence is even possible. And granting for the sake of argument that it is possible, it is difficult to see how the relevant influence can be anything but a disruptive one: a source of movements in bodies which do not accord with the general laws of nature, or an “exculpation” for judgments that are not self-determined on the basis of recognized grounds. But this is not the sort of influence we had wanted to describe: our aim was to explain how the factor in question could belong internally to the system at issue.

When I speak of an Interaction Problem for additive theories, this is the sort of difficulty I have in mind. Such a problem will arise for any view that posits a situation with the following structure:

\begin{itemize}
  \item [( Canonical Explanation)] For any fact F of type T\textsubscript{1}, a canonical explanation of F must appeal to a fact that relates to F in way W.
  \item [( Non-disruptive Influence)] Facts of type T\textsubscript{2} can canonically explain facts of type T\textsubscript{1}.
  \item [( System Externality)] Facts of type T\textsubscript{2} do not relate to facts of type T\textsubscript{1} in way W.
\end{itemize}

A view that is committed to versions of these three theses is committed to an incoherent...

\textsuperscript{19} I take it that McDowell need not deny that judgment can be subject to other sorts of influence: factors that bias judgment without being taken to rationalize the relevant judgment, or even factors that influence judgment without our being aware of them at all. What McDowell must hold is simply that (1) a subject can have the capacity for judgment only if, in the basic, capacity-defining case, his judging P is explained by his recognizing what he takes to be an adequate reason to judge P, and (2) if perception is to supply him with reasons for judgment, it must be capable of explaining our judgments in this canonical way.
position. But this, I will argue, is exactly the sort of situation that additive theories of rationality characteristically produce: one in which a certain system is supposed to be non-disruptively influenced by a power whose operations are conceived in such a way that they could only influence the system by disrupting it. For additive theories aim to explain how there can be a nondisruptive interaction between our animal powers of perception and desire and our rational powers of judgment and choice, and yet – I will argue – they represent the operations of the one power in such a way that they cannot satisfy the conditions required in a canonical explanation of operations of the other power.

To bring this out, I will first consider some difficulties faced by additive accounts of the relation between desire and choice (§2.3), and then return to the case on which McDowell focused: the relation between perception and judgment (§2.4).

2.3 Having noted some significant similarities between the Cartesian conception of mind-body interaction and the additive conception of the relation between perception and judgment, it is also important to register certain important differences. Whereas Descartes held that mind and body are distinct substances, each of which could exist in independence from the other; the nonconceptualist about perception posits not distinct substances but distinct capacities, and he is mainly concerned to assert an independence in one direction: he claims that it is possible to explain what is involved in our having the capacity to perceive without already building into our account of this capacity that its operations are such as to engage with our capacity for judgment. Before returning to McDowell’s argument against perceptual nonconceptualism, it will be useful to consider another philosophical position that bears a still closer resemblance to the one McDowell criticizes. For this purpose, we can turn to the relation between our animal faculty of desire and our capacity for reasoned choice. I will argue that here too, accounts with an additive structure give rise to versions of the Interaction Problem.

To clarify how an additive theory of the relation between desire and choice might

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20 An additive theorist might well admit a dependence in the converse direction: he might admit that explaining what the power reason is requires describing how it is related to the powers of perception and desire. I say more about this contrast between dualistic theories and additive theories below in §3.2.
work, it will help to consider the idea, endorsed by a number of recent authors, that the special and distinctive power of a rational agent is the capacity to “step back” from her desires-to-act. This idea has been given an especially vivid expression by Christine Korsgaard:

A lower animal’s attention is fixed on the world. Its perceptions are its beliefs and its desires are its will. It is engaged in conscious activities, but it is not conscious of them... But we human animals turn our attention on to our perceptions and desires themselves, on to our own mental activities, and we are conscious of them. That is why we can think about them... I desire and I find myself with a powerful impulse to act. But I back up and bring that impulse into view and then I have a certain distance. Now the impulse doesn’t dominate me and now I have a problem. Shall I act? Is this desire really a reason to act? (Korsgaard 1996, pp. 92-3)

The metaphor of “backing up” from one’s own desires obviously admits of various interpretations; but on one natural reading, it suggests a view with an additive structure: one on which the power to reflect on one’s own desires is added, in a rational creature, to a merely animal power to be impelled by desire, in such a way that this addition does not alter the nature of our desiring itself, but merely allows us to make certain sorts of assessments of and interventions in the animal desiderative system, encouraging some “impulses” and thwarting others.

I should immediately say that I do not take Korsgaard herself to conceive of the relation between reason and desire in this way (though I think she does not take sufficient pains to distinguish her view from this one). For my purposes here, however, it is not necessary to accuse any particular author of holding such a view: the step from Korsgaard’s metaphor to an additive theory is, at any rate, an intelligible and tempting one. The idea that we are subject in the first instance to “brute impulses,” but that reason gives us the power to

21 An author who does seem to accept a version of the view I discuss is Tamar Schapiro (2009), who advocates a position she calls “inclination as animal action”: i.e., that our “inclinations” are to be conceived as having essentially the same nature as the sorts of impulses that directly govern the activity of a nonrational animal.
scrutinize and govern these impulses, embodies a venerable and appealing picture of human motivation. But appealing though this may be as a picture, I want to suggest that it is unacceptable as a literal theory of the relation between reason and desire. For taken literally, it makes it mysterious how desire can present a rational agent with even a *prima facie* reason to act.

As Korsgaard’s remark brings out, the same kinds of considerations that make it attractive to conceive of rational judgment as a self-determined act make it attractive to conceive of choice in a similar way. Just as a subject has the capacity to judge only if she has the capacity to accept propositions for reasons whose adequacy she can scrutinize and freely accept or reject, so a subject has the capacity to choose only if she has the capacity to adopt aims for reasons whose sufficiency she can likewise freely scrutinize and assess. This gives us a version of

(CsEx) For any choice $C$ of a rational subject $S$, a canonical explanation of $C$ must appeal to a reason grasped by $S$ and regarded as sufficient for $C$.

It is also natural to assume that our desires can at least sometimes present us with such reasons. Korsgaard’s own phrasing reflects this assumption: in speaking of my reflectively asking myself whether a certain desire “is really a *reason* to act,” she implicitly presupposes that my desiring $X$ can present me with a reason in the way that canonically explains choice, even if not all desires actually presents me with such reasons. If we assume this, we are committed to

(CnsInf) The fact that a rational subject $S$ desires $X$ can canonically explain $S$’s choosing to pursue $X$.

Now, additive theorists must hold that a rational subject’s faculty of desire is not intrinsically different from the faculty of desire of a nonrational animal, one lacking the power to assess whether there is reason to pursue $X$. Hence they must hold that a rational subject’s desiring $X$ does not itself engage her capacity to represent $X$ as an aim there is reason to pursue. To put the point in quasi-McDowellian language: additive theorists must hold that a rational subject’s desiring $X$ does not itself actualize capacities to assess whether
there is reason to pursue X. For if the subject’s desiring X did involve her representing X as an aim there is reason to pursue, then her faculty of desire would be a kind of faculty that an animal lacking the capacity to frame thoughts about whether there is reason to pursue X could not possess. But that would rule out an additive approach, for then we could not explain the capacity for practical reason as consisting of a capacity for merely animal desire supplemented by a further distinct capacity to monitor and regulate such desires.

Additive theorists are therefore prohibited by the structure of their project from conceiving of the desiderative capacity of a rational subject as itself a capacity for prima facie rational assessment of aims and objects, a capacity actualized in presentations of certain objects as rationally choiceworthy or worth pursuing. The representation of objects of desire as objects we have a reason to pursue must be introduced in the first instance by the actualization of a further faculty of practical reason, conceived – as Velleman puts it – as “a mechanism modifying the motivational forces already at work.” The idea that the relevant forces are “already at work” expresses the basic commitment of the additive theorist: that the “forces” monitored and regulated by practical reason, namely desires, can be conceived as a distinguishable factor in the motivation of a rational subject, a factor of such a nature that it might be “already at work” in the absence of any capacity for rational assessment of aims. But now the difficulty – which I will develop in a moment – is to see how the presence of a desire for X that did not itself represent X as an aim there is reason to pursue could present me with a prima facie reason to pursue X. If it could not, then the additive approach implies:

22 What it would be for a desire to represent its object as rationally choiceworthy or worth pursuing is a question about how a transformative theory should represent the form of presentation of an object that characterizes rational desiring. This question would need to be addressed in the elaboration of a worked-out transformative theory of the relation between reason and desire, but I will not take it up here. Just as the question whether a rational subject’s capacity for perception must “actualize conceptual capacities” can be separated from the question how specifically to conceive of perceptual content, so too, I want to suggest, the question whether a rational subject’s capacity for desire must actualize her practically rational capacities can be separated from the question how specifically to conceive of the structure of this actualization. When I speak of desires “representing their objects as rationally choiceworthy,” I use this phrase simply as a placeholder to mark an explanatory commitment of transformative theories, leaving it open exactly how this demand should be met.
A rational subject S’s desiring X does not present S with a reason that S can grasp and regard as sufficient for choosing to pursue X.

And then we have a version of the Interaction Problem.

To see how the additive approach leads to (System ExternalityD), suppose for the sake of argument that my desiring X does not itself involve my representing X as an aim there is reason to pursue. The question to consider, now, is how my desiring X can be for me, as a reflecting subject, a presentation of an apparent reason for pursuing X, rather than a fact about the situation with which I have to cope in choosing what to do. To see the contrast here, consider how an ordinary desire for X differs from, e.g., my experiencing a feeling of nausea which disposes me to vomit. A feeling of nausea does not present an ostensible reason for vomiting: it presents this result, not as prima facie reasonable to pursue, but as tending to become unavoidable. One indication of the difference between nausea and ordinary desire is this: if I can relieve my nausea not by vomiting but by taking a pill that alleviates the nausea, then – absent some independent reason to believe that it is important for me to vomit – I take myself to have just as much if not more reason to take the pill.23 Not so for ordinary, choice-relevant desire: perhaps I might eliminate my desire for X by taking a pill, but unless I subscribe to some stoical philosophy that rejects the claims of desire on general grounds, I do not take this outcome to be one I have just as much presumptive reason to pursue as the outcome in which I obtain X. An ordinary desire presents its object as prima facie to-be-pursued in a way that nausea does not present vomiting: this is what makes it natural to speak, as Korsgaard does, of my asking myself whether my desiring X “is really a reason” to pursue X (as it at least appears to be). But it is not clear how an additive theory of the relation between reason and desire can account for this presumptive reasonableness of ordinary desire. For on the additive view, as we have seen, my desiring X must not per se involve its seeming to me that there is reason to pursue X.

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23 Nothing turns on whether this conception of nausea is correct. I introduce it simply as a conceivable view of nausea, in order to bring out, by contrast, a significant feature of ordinary desire.
There is a well-known hypothetical example, originally due to Warren Quinn, that helps to highlight the difficulty here. Quinn asks us to imagine a person with a brute impulse to turn on radios whenever he sees them: not in order to hear the broadcast, or for any other purpose, but unaccountably (perhaps as the result of hypnotic suggestion, or of some scientist’s having established odd connections among his brain synapses). Imagining himself to be such a person, Quinn remarks:

I cannot see how this bizarre functional state in itself gives me even a *prima facie* reason to turn on radios... It may help explain, causally, why I turn on a particular radio, but it does not make the act sensible, except in so far as resisting the attendant disposition is painful and giving in pleasant. But in that case it is not the present state that is the reason but the future prospect of relief. (Quinn 1994, p. 237)

Quinn constructs this example with a view to arguing against the Humean claim that my having a brute desire for X by itself constitutes my having a reason to pursue X. Considered in the present context, however, I think the example suggests that a certain sort of “impulse” would not even be a *desire* in the ordinary sense. A desire in the ordinary sense – ordinary, that is, to us rational creatures – presents its object as *prima facie* to-be-pursued, where this means something like: *prima facie* meriting the endorsement of reflective reason. Reflection may of course overrule immediate desire, but if our account of desire does not make intelligible how it can, so to speak, present a verdict that reason must recognize as at least presumptively valid, then we lose the intuitive distinction between ordinary desires and Quinn-ish impulses to turn on radios. But a view on which my desiring X does not normally involve its appearing to me that there is reason to pursue X could, it seems, only represent desire in this way: as a disposition to pursue X which did itself not engage my sense of what there is reason to do. It thus appears that the additive theorist is committed to (System ExternalityD). And then, unless he is willing to reject either (Canonical ExplanationD) or (Non-disruptive InfluenceD), he has a problem. For a philosopher who

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24 A similar conclusion about Quinn’s case is drawn at Scanlon 1998, p. 38. For related discussion of the “intelligibility” of ordinary desire, see Stampe 1987.
finds (Canonical Explanation) and (Non-disruptive Influence) attractive, on the other hand, the best way out may well be to reject the additive approach.

An additive theorist might reply that, although his approach must hold that a rational subject S’s desiring X does not itself involve its appearing to S that there is reason to pursue X, the approach can still allow for an extrinsic relationship between desiring and being presented with a reason. Might there not be some linking disposition, not belonging to S’s capacity for desire itself, but nevertheless normally present in rational subjects, which ensures that normally, when S desires X, it appears to S that there is reason to pursue X?

Well, if the relevant disposition is to operate in a way consistent with the thought that a rational subject must be able to “back up” from her dispositions to be moved and scrutinize their rational basis – if, to put matters in McDowellian terms, it is to explain her prima facie reason-assessments not merely in an “exculpatory” but in a “justifying” way – then the relevant disposition had better be one she canrationally consider and whose continued operation depends on her acceptance of it as sound. We can capture this requirement by insisting that the relevant disposition is grounded in a rationally-reviewable belief of the subject, a belief to the effect that

(D) My desires normally direct me toward kinds of objects I have reason to pursue.

If a person believed something like (D), then even if her desiring X did not itself involve its seeming to her that there is reason to pursue X, still she might intelligibly regard her desire for X as making it prima facie reasonable for her to pursue X. The connection between her desiring and her sense of what there was reason to do would be established, not intrinsically through the nature of her desiring itself, but extrinsically through a belief about the normal connection between her desires and her reasons for choice.

This is indeed a possible way in which the fact that I desire X might come to bear on my reasoning about whether to pursue X. We should, however, note two points about this sort of connection between reason and desire. First, this proposal seems intuitively wrong

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25 I am indebted to an anonymous reader for pressing me to address this point.
as a characterization of the primary relation between our actual ordinary desires and our sense of what there is reason to do. It is true that I might come to suppose I have reason to pursue X in virtue of feeling a desire for X and holding a further belief like (D). Perhaps in cases where I am already in doubt about whether my present desire for X presents me with a genuine reason to pursue X, I might reinforce my conviction that there is reason to pursue X by recalling such a conviction. But the claim of my desire for X on my rational attention does not normally seem to be mediated in this way. In the normal case, there seems intuitively to be no logical or inferential gap to bridge between my desiring X and its seeming to me that there is reason to pursue X: normally, to desire X just is to find the prospect of obtaining X presenting itself as choiceworthy in some respect. A desire for X of which this was not true would be akin to nausea: it would be an impulse toward X about which I might perhaps believe, as a further, independent conviction, that it should not be resisted, but which did not itself present X in a prima facie favorable light. But, as we have already noted, our actual ordinary desires are not like that.

Secondly, it seems open to question, not merely whether this proposal rightly characterizes the primary actual relationship between reason and desire, but whether it could characterize the primary relationship between actualizations of these two powers. Taken as an account of the primary relationship between desiring X and supposing there to be a reason to pursue X, this proposal bears a structural resemblance to a familiar sort of “foundationalist” view about the relationship between perceptual appearances and reasons for belief. On such a view, the primary rational bearing of perception on belief must be established through my having a non-question-begging reason to believe that

(F) Having a perceptual appearance as of X’s being F normally presents me with a reason to believe that X is F.

where a reason for (F) is non-question-begging only if it does not itself presuppose that my perceptions normally give me reasons for corresponding beliefs. This is not the place to consider whether this sort of foundationalist project can succeed, but the well-known objections to standard attempts to give an account of perceptual epistemology that would
meet these conditions surely give us some grounds for skepticism on this point. Likewise, I would suggest, we should be skeptical about whether we could “bootstrap” ourselves into a conviction in the rational bearing of desire on choice if, in the basic case, our desiring X did not itself already involve our representing X as an aim there is reason to pursue. If the rational bearing of desire on choice needed to have its source in an independent conviction that the objects of desire are normally choiceworthy, a conviction that had to rest on non-question-begging reasons, then we would be faced with the threat of a kind of volitional skepticism that would jeopardize the very intelligibility of rationalizing relations between desire and choice. If the additive approach requires us to give an account of the relation between reason and desire that would face these difficulties, we have reason to be skeptical of this approach.

My aim in the foregoing has been to raise doubts about whether, if we conceive of our capacity for desire as additive theorists are committed to conceiving of it, we can account for the intuitive thought that our desires normally present us with prima facie reasons for choice. The considerations I have presented clearly amount to a challenge rather than to a conclusive refutation: I can hardly claim to have considered every proposal that an additive theorist might make in this area. But my aim here is not to settle this issue once and for all, but to bring out a general strategy for raising difficulties for additive theories, one with a structure that can be applied in many areas. Having seen this strategy, we are in a position to see what sorts of questions to raise whatever proposals additive theorists go on to make: we must focus on how, on the proposal in question, desire and choice are supposed to interact, and whether the capacities that ground the relata of this interaction are conceived in such a way that the actualization of the one can non-disruptively affect the actualization of the other. To the extent that additive theories face systematic difficulties on this point, we have a general ground for skepticism about such theories, and a motivation for exploring the transformative approach.

2.4 Let us now return to McDowell’s argument and consider how the structure we have

26 For a survey of standard attempts and objections to them, see Brewer 1999, ch. 4, §2.
been considering is exemplified in it.

McDowell’s reason for claiming that our perception must actualize conceptual capacities, we saw, was that otherwise episodes of perception could place no constraint, or only the wrong kind of constraint, on our acts of judgment. Adopting the shorthand talk of “representations with conceptual content” for “representations that actualize conceptual capacities,” we can schematize his argument as follows:

1. Perception supplies rational subjects with reasons for judgment. (Judgment is “rationally constrained” by perception.)
2. A rational subject’s reason for judgment must be a reason available to the reflection of the subject.
3. A representation with nonconceptual content would not present a reason available to the reflection of the judging subject.

So 4. Perception cannot have nonconceptual content (not insofar as it is to supply us with reasons for judgment, at any rate).

(1) formulates a version of (Non-disruptive Influence) for the present case. This premise is granted by most writers (though Epistemological Coherentists deny it). I will assume it is not in dispute. (2), which amounts to a version of (Canonical Explanation), articulates an attractive conception of what distinguishes the capacity for reflective judgment from the capacity for merely “instinctive” belief: a subject who can judge must be one who can scrutinize her own reasons for belief and reflect on their cogency. A certain sort of resolute “naturalist” about cognition might deny that human beings are really capable of judging in this sense, or might attempt to give a deflationary account of this capacity in terms of operations of a kind attributable to merely instinctive believers. This would really amount to skepticism about whether the rational/nonrational contrasts marks a philosophically-significant distinction at all, and writers who are skeptical about this are not my target here. additive theorists, as I have characterized them, are philosophers who grant that the capacity to reflect on reasons is a significant and distinctive sort of capacity, but who hold
that this is a further capacity distinct from our capacity for perception, and hence that we can explain the nature of our perceiving itself without making reference to distinctively rational capacities.

What additive theorists are committed to rejecting is (3): that a representation with nonconceptual content cannot supply a reason available to the reflection of a rational subject. For given that a representation with conceptual content is just a representation that actualizes conceptual capacities, where “conceptual capacities” are stipulatively defined as those capacities that enable us to reflect on reasons, (3) amounts to the denial that a representation that did not itself draw on our capacity to reflect on reasons could present us with a reason for judgment. But additive theorists about the relation between reason and perception must maintain exactly this: that we can explain what it is to perceive, in the way that supplies us with reasons for judgment, without building into the characterization of perceiving itself that it draws on the kinds of capacities that enable us to reflect on reasons. If the additive theorist grants (3), he has granted a version of (System Externality). And then he faces the Interaction Problem.

The idea that an account of the relation between reason and perception must take an additive shape is only one of several motivations for perceptual nonconceptualism, but it plays an explicit role in some prominent defenses of this view, and much of the opposition to McDowell’s argument has focused on (3). A common objection, mentioned earlier, is that McDowell fails to distinguish between the content of the perceptual state itself and the content of the thoughts by which a subject reflects on this state. Critics who make this objection grant that the thoughts a subject thinks when she reflects on her perception – e.g., “I see such-and-such,” “It looks to have this shade of color” – actualize her conceptual capacities, but they deny that these thoughts are about representations with conceptual content. And then there appears to be space to admit both that perception supplies us with reasons on which we can reflect, and that reflection calls on conceptual capacities, without granting (3). Perception supplies me with a reason on which I reflect using concepts, but the

presentation of the reason itself need not actualize conceptual capacities.

This, I think, is the point at which an additive theorist must resist McDowell’s argument.29 But this response leaves us with a sort of problem that should by now feel familiar. The reason with which my perceptual state supplies me is supposed to be nonconceptual: i.e., it is supposed to be a reason whose perceptual availability to me does not itself involve an actualization of the capacities I exercise in assessing reasons for judgment. When I reflect on this reason, this is supposed to consist in my conceptualizing what is intrinsically nonconceptual. But now consider this supposed act or event of “conceptualizing.” To say that a certain reflective thought conceptualizes a certain perceptual content involves positing some sort of dependence of the thought on the perception; but what sort of dependence can this be? Can I, who conceptualize my perception in a certain way, reflect on this act and see a reason for so conceptualizing, or can I not?

It does not seem that I can see a reason for conceptualizing as I do, for what could

29 An anonymous reader has raised the question whether the additive theorist might not reject (3) in a simpler way. Could he simply maintain that perception supplies me with a reason available to my reflection only against the background of my possession of conceptual capacities, but that this condition on the availability of the relevant reason to reflection is not a condition on my perceiving itself?

The question I would ask about this proposal is exactly how my conceptual capacities are supposed to contribute to making the relevant reason available. If they do so by being drawn into operation in my perceiving, in such a way that the actualization of my capacity for perception is inextricably a presentation of what I understand to be a prima facie reason for judgment, then the resulting view is not an additive theory in the sense I have sought to criticize, for it identifies the capacity for perception of a mature rational subject as one whose actualization itself involves the actualization of rational, conceptual capacities. As noted earlier (§1.2), such a position is consistent with the thought that our mature capacity for perception develops out of a capacity that does not engage rational capacities in this way: in that sense, the latter capacities need not belong to our capacity for perception “intrinsically,” but might constitute a necessary background for my perception’s presenting me with reasons on which I can reflect. But this outcome would not vindicate the additive theorist: he is committed to maintaining that even in a mature rational subject, the actualization of the capacity for perception which presents a reason for judgment can itself be characterized without implying any actualization of the capacities that enable the subject to reflect on such reasons. And indeed, this is what the sort of reply to McDowell described in the text seeks to establish.

If, on the other hand, the relevant capacities are actualized, not in my perceiving itself, but in a further, distinct act of apprehending the relevant reason (recognizing what perception presents as a reason, conceptualizing what perception presents, etc.), then I would want to ask how this act of apprehending (recognizing, conceptualizing) relates to the actualization of my power of perception itself. Does the former supply a reason for the latter or not? I believe that a series of difficulties will arise for each of the two options here, difficulties that closely parallel the difficulties I raise for the proposal considered in the text.
this reason be? It cannot be the very reason the perceptual state itself was supposed to supply, for my ability to reflect on that reason was supposed to be the upshot of my act of conceptualizing, and so cannot be available to me as something I can see as my ground for this very act. And surely there is no other candidate reason in the picture: to try to insert one would initiate a regress. But if my act of conceptualizing is one for which I cannot see a reason, then how can I regard the reflective thought that is the upshot of this supposed act as a potential justifier of judgments at all? This reflective thought will make a claim about what I am perceiving, or how things perceptually appear to me, and this claim will itself be something I take to be true. On the proposal under consideration, I am correct to take this to be true just in case I am in a perceptual state with a certain nonconceptual content. But my being in this state cannot be my ground for thinking what I do, for, by hypothesis, it only becomes available to my reflection via this very thought. Then what can my reason be for thinking myself to be in a certain perceptual state? If my thought needs a ground, but I cannot see any ground for it, then it is not clear how I can regard it as giving me a reason for any further judgment. But if it does not need a ground, then the supposed nonconceptual content of my perceptual state drops out of the picture as rationally irrelevant. In either case, the supposed nonconceptual perceptual state cannot supply me with a reason for judgment. And the difficulty here has a familiar source: it derives from the fact that our capacity for perception has been conceived in such a way that its actualizations cannot present us with reasons of the sort that canonically explain judgment. It derives, in short, from a version of the Interaction Problem.

A defender of perceptual nonconceptualism who has explicitly responded to this sort of challenge is Richard Heck (2000). According to Heck, this objection to nonconceptualism unfairly saddles the nonconceptualist with an unreasonable view of perceptual epistemology, one on which perceptually-based judgments about how the world is must rest on judgments about how things perceptually appear to me. Heck replies that we need no epistemic intermediary between our perceptions and our beliefs, and it would not help if we had one: if there is a problem about how I can form justified beliefs about the world on the basis of my perceptions—one
allegedly solved by letting me form them on the basis of judgments about how things appear to me—why is there not a similar problem about how I can form justified beliefs about how things appear. If judgments about how things appear can justifiably be made without any intermediary, why can't judgments about how things are justifiably be made without one too. (Heck 2000, pp. 517-518)

I think this is an attractive position in its own right; the question is whether it is available to the nonconceptualist, given his other commitments. In granting the first two premises of McDowell’s argument, the nonconceptualist grants that a rational subject must be able to advert to what her perception presents when she reflects on her reasons for judging that things in her environment are thus-and-so. When she reflects in this way, she will be making another judgment, one about what her perception presents. But on the nonconceptualist’s view, the subject has a reason for making such a judgment just if she is in a certain nonconceptual perceptual state. Now, a rational subject will be able to ask herself what reason she has for making the judgment in question, as she can ask this about any judgment she makes. But if her perceptual state is nonconceptual, then, I have argued, the relevant reason is not available to her. No doubt it would be better to hold that her judgment does not stand in need of such a ground, but I cannot see how the nonconceptualist’s position permits him to say this.

I conclude that an additive approach to the relation between reason and perception implies

30 This need not be a judgment about how things perceptually appear to her. It might be a (factive) judgment about how she perceives things to be. The role of the relevant judgment is not to ground a proposition about how things are in the subject’s environment on an epistemologically less problematic proposition about how things appear to her, but to formulate a reflective understanding of how the relevant fact about her environment is known to her — viz., in virtue of an actualization of her perceptual capacities. I share Heck’s skepticism about accounts of perceptual epistemology that place intermediaries between perception and belief, but the role of an appeal to perception in the reflection of a rational subject need not be to supply such an intermediary, but to recognize the visual availability of an object with certain properties. To know that an object with certain properties is visually available to me is not to know something less contentious from which I can infer that my environment contains an object with certain properties; it is to understand something about how I am presented with the relevant environmental fact, and thus to understand what kind of reason I have for holding it true.
A rational subject’s perception does not present her with reasons available to her reflective judgment. Hence, unless the additive theorist is willing to reject either the perceptual version of (Canonical Explanation) or the perceptual version of (Non-disruptive Influence), he has a problem. But again, for a philosopher who finds the relevant versions of (Canonical Explanation) and (Non-disruptive Influence) attractive, the best way out may well be to reject the additive approach.

In several respects, this result is quite modest. It does not speak to the question how exactly we should conceive of the perceptual presentation of reasons for judgment. The claim that a rational subject’s perception must have “conceptual content” has figured in my discussion only as an abbreviation for the claim that her perceiving must, inasmuch as it presents her with reasons, “actualize her conceptual capacities,” where the latter phrase means simply that her perceiving somehow draws on the capacities that enable her to reflect on reasons for judgment. How exactly to characterize the role of these capacities in rational perception is a further topic beyond the scope of my discussion here; I have only been defending an abstract thesis about the order of explanation that an account of the relation between reason and perception must follow.

The conclusion I have reached is also modest in another respect. It does not rule out – and it is no part of my agenda to deny – that it might be valuable in understanding our capacities for perception to describe forms of perceptual content whose presence bears no connection to the actualization of the subject’s conceptual capacities. There is, indeed, a rich body of work in the cognitive science of vision that does just this. The value of positing such forms of perceptual content as “2½-D Sketches,” “3D Models,” etc., is, I take it, to be assessed by reference to the explanatory success of the theory that posits them: no a priori argument rules out such theorizing. But ruling it out is no part of my project here.31 My question concerns the grounds for judgment that perception makes available to us in a specific sense: the ones that we can reflectively consider and take as our reasons for judging as we do.

It seems clear that perception can supply us with such reasons, as comes out in our

31 Nor was it part of McDowell’s project: compare McDowell 1994, p. 55.
readiness to point to our having perceived something when asked why we accept a certain proposition. This notion of what perception makes available belongs, not to a theory of perception to be judged by its explanatory success, but to the internal standpoint of the judge herself. The question I have sought to address is whether explaining how perception can play this role requires relating the capacity to perceive to capacities that enable us to reflect on reasons. This is the question at issue in the dispute between additive and transformative theorists of the relation between reason and perception. The undeniable value of the sort of theorizing about perception mentioned above has, I think, been one factor that has led philosophers to suppose that our account of the relation between perception and judgment can and should take an additive shape. My aim has been to raise doubts about this by bringing out a structural difficulty for the additive approach: a difficulty about how, if the capacity for perception is conceived in the additive way, actualizations of this capacity can interact with our judging in the right way.

3. The Unity Problem

3.1 The preceding section sought to raise a difficulty about the additive theorist’s account of the interaction between our rational capacities and the perceptual and desiderative capacities we share with nonrational animals. I have illustrated the difficulty in a few cases, but I believe it can be raised for any additive theory. Any such theory will be forced to posit a relation of explanatory dependence, whether in the “input” or the “output” direction, that is subject to versions of the difficulties I have been raising. The names for such relations are manifold: “monitoring,” “accepting,” “basing upon,” “conceptualizing,” “intervening,” “blocking,” “reinforcing,” “redirecting,” etc. But the structure of the problem will be the same.

Before closing, I want to give a brief sketch of a second difficulty for additive theories, one I will call the Unity Problem. My presentation of this difficulty will be much more schematic than my discussion of the Interaction Problem. My aim in presenting it is not primarily to strengthen the case against additive theories, but to clarify the source of the difficulties we have already seen, while developing further the comparison between additive
theories of rationality and dualistic accounts of the relation between mind and body.

3.2 Again it will help to start by recalling a classic objection to Cartesian dualism: the objection that, since Cartesians hold that mind (or soul) and body are “really distinct” (i.e., are distinct substances, each of which can exist in its own right), they cannot account for the unity of mind and body that we all know a living human being to be. This objection maintains that a living human being cannot, on Cartesian principles, count as one thing at all, and so, given Descartes’s claim that I am a thinking thing, it seems that he is not in a position to make sense of the commonsense thought that I am a living human being. Rather, I must be a mind making use of a body, which body I am not. Arnauld raised this difficulty for Descartes in the “Fourth Objections” to the Meditations:

It seems to me, moreover, that the argument [for the conclusion that I am a thinking thing] proves too much, and takes us back to the Platonic view (which M. Descartes nonetheless rejects) that nothing corporeal belongs to our essence, so that man is merely a rational soul and the body merely a vehicle for the soul – a view which gives rise to the definition of man as ‘a soul which makes use of a body’.\(^{32}\)

The (reputedly) Platonic position that I am a soul using a body was much discussed in Scholastic philosophy, and the slogan “I am in my body as a sailor in a ship” was taken to epitomize the position.\(^{33}\) Descartes repudiates this position in the Sixth Meditation, where he insists that I am not in my body as a sailor in a ship.\(^{34}\) Arnauld’s question, however, is whether Descartes is entitled to say this, given his other claims about mind and body. To

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\(^{32}\) Fourth Set of Objections, in Philosophical Writings of Descartes, vol. 2, AT 203, p. 143. My discussion is indebted to the illuminating account of this objection and its Scholastic background in Rozemond 1998, Chapters 5.

\(^{33}\) For the attribution, see for instance Aquinas, Quaestiones de Anima, q. 11 (1984, p. 148). Whether this attribution is justified depends partly on whether the “First Alcibiades” is a genuine work of Plato: there the doctrine that I am a soul which makes use of a body is explicitly maintained by Socrates (129e-130c; but cf. also Republic, 580d-581c and Timaeus, 69e-70a). The use of the sailor-in-a-ship metaphor to characterize the relation of soul to body does not appear in the existing Platonic corpus, but it is mentioned by Aristotle (in the vicinity of a discussion of Plato’s views, though not explicitly as a characterization of them) at De Anima II. 1.

\(^{34}\) See Philosophical Writings of Descartes, vol. 2, AT 81, p. 56.
say that mind and body are distinct substances is to say that each can exist in its own right, without the other. But if they are intrinsically two, it is not clear how the composite they supposedly form can be genuinely one; and if I am identical to one of the two (since I am a thinking thing), and the two are distinct, it seems that I cannot also be identical to the other.

Descartes replies to Arnauld that

[It is... possible to call a substance incomplete in the sense that, although it has nothing incomplete about it qua substance, it is incomplete in so far as it is referred to some other substance in conjunction with which it forms something which is a unity in its own right.]

That is, although neither mind nor body is incomplete in itself, still we can say that each is incomplete inasmuch as each by nature belongs to a third substance, a man, which is a unity “in its own right” consisting of a mind and a body. The difficulty, however, is to see what can entitle Descartes to hold that a man is a unity in his own right. Something that is a unity in its own right (or per se) is standardly contrasted in Scholastic philosophy with something that is a unity per accidens, i.e., a unity of things which do not essentially belong together. A heap of stones is a unity per accidens, for it is composed of distinct existences, and nothing in the nature of these several existences implies that there must be such a heap. A man who is white is also, in another way, a unity per accidens, for being white is accidental to him qua man, since it is not in the nature of man as man to be this color as opposed to another. By contrast, a man who is an animal is a per se unity, since it belongs to the essence of man to be an animal. And the organs of a living body form to a per se unity, since (according to Aristotle and the Scholastics who follow him) they cannot genuinely exist apart from the whole they form: a hand severed from a living body is a hand “in name only,” as is shown by the fact that it can no longer perform the characteristic functions of a hand, and by the fact that, soon enough, it decomposes. Now, if a man is a composite of mind and body, and these are each substances in their own right, then it is hard to see how a man can be a unity in his own right: his existence as a whole is not prior but posterior to the existence of the parts that compose him. And the difficulty facing this view comes out when we ask “What am I?”:

35 Replies to Fourth Set of Objections, Ibid., AT 222, p. 156.
for if mind and body do not form a per se unity, and if I am the thing that thinks, then it seems that I cannot also be another, distinct thing, my body. I must rather stand to my body as a sailor to his ship.

I think additive theorists face an interesting analogue of this problem. The problem is not exactly the same as the one facing Descartes, since additive theorists do not take our animal powers and our rational powers to constitute two independent entities, each of which is capable of existing in its own right. Rather, they suppose that our animal powers can exist independently of our rational powers, but not conversely: rational powers are taken to be essentially powers to “step back” from, “monitor” and “intervene in” the operations of our animal powers. So the right comparison in this case is not a heap of stones, whose constituents are all independent existences, but rather a man who is white: just as whiteness cannot exist apart from a substance in which it inheres, but it does not belong essentially to man to be white, so rationality cannot exist apart from an animal whose life it oversees, but it does not belong essentially to any animal qua animal to be rational. Nevertheless, I want to suggest, this is still a kind of unity per accidens, and difficulties not unlike those facing the Cartesian position can be raised for a view that conceives of our animality and our rationality as united only in this way.

3.3 As in the Cartesian case, the way to bring out the problem is to ask: What am I? At first this may seem to present no difficulties: I am a certain rational animal. But matters become more complicated when we ask how the term “rational animal” decomposes.

On the additive view, it seems that “rational animal” must be read as “animal that is in fact rational” – i.e., as designating an animal that in fact possesses a certain further power that does not belong to its essential nature as animal. If that is right, then it seems that what

36 Note that, on the Thomistic Aristotelian view presented above (§1.3), the animality that we rational animals possess is an animality to which rationality is essential. The existence of a wider genus to which this species of animality belongs, and the fact that this genus does not imply rationality, does not conflict with this. On the Thomistic Aristotelian view, the genus is an abstraction, which can be exemplified in actual cases only by one of its species: either essentially rational animality or essentially nonrational animality. When we say that a human being is an animal, we predicate, not the abstract genus, but a definite species of animality. Compare Aquinas, De Ente et Essentia, II, esp. para. 10.
I am is an animal, and “rational” really designates something about the way I am, as a matter of fact. So it seems that the answer to the question “What am I?” must be: I am a certain animal (one that, as a matter of fact, is rational).

But another line of thought points in a different direction. Consider a case in which I reflectively deliberate about what to believe or what to do. Suppose I think to myself, e.g., “I wonder whether P?” or “I really should do A.” These occurrences of “I” surely refer to the thinker of these very thoughts. That is the function of the first person: to refer to the subject who thinks a given thought or utters a given sentence. Moreover, a thinker who understands the significance of the first person must understand this: his deployment of the representation I expresses genuine self-consciousness only if he understands that, when he thinks a thought involving this representation, he thereby refers to the subject who thinks this very thought. So if, in the course of reflection, he asks “What am I?” – and how else could he ask it? – it seems his answer must be: I am the subject who thinks.

What I am calling the Unity Problem is a difficulty about how to account for the intuitive idea that the same subject is both a certain animal and the subject who thinks. The animal is supposed to be the subject of various perceptions and desires. The thinker is supposed to be the subject of various reflective thoughts. Is the very same subject the locus of all these activities? That of course is what everyone wants to say. No additive theorist would want to claim that the “I” that thinks stands over an “it” that perceives and desires. But given how the additive theorist conceives of our powers of perception and desire, it is not clear how the unity of this subject is secured.

To see the difficulty, imagine a subject reflectively considering whether to pursue something for which she has a desire. Suppose she feels an immediate desire for X, but she reflectively weighs her reasons and chooses not to pursue X. She might express her conclusion (a little stiltedly) by thinking to herself: “I choose not to pursue X.” We have seen that the “I” that figures in this thought must refer to the thinking subject: the thought articulates this subject’s conclusion about what the balance of reasons supports. In concluding “I choose not to pursue X,” the thinking subject has reached a conclusion that expresses what she is disposed to do, and that reflects her judgment about what view of
things ought rationally to govern the activity of the animal that desires X. But has she thereby expressed what this animal is disposed to do? Is the subject of which the thought is predicated the very same subject of which the animal operations of perception and desire are predicated?

Well, on the additive view, her animal capacities for perception and desire are not themselves capacities whose actualization involves the actualization of her rational capacities. They are capacities of a kind that might be present in a nonrational animal, one whose “perceptions are its beliefs and [whose] desires are its will” (to borrow a phrase from the passage of Korsgaard quoted earlier).37 Such an animal would not, by hypothesis, have the capacity to reflect on reasons, but it would certainly have a point of view on the world: we could ascribe to the animal itself, not merely to its several subsystems, representations of what is the case and what to pursue. The question to consider is how the additive theorist can account for the fact that, in our own case, though the very same kinds of animal capacities are present, they constitute no nonrational standpoint distinct from the rational one. What in the structure of the additive theory ensures that the thinking subject is the only subject in the picture?

A transformative theorist has a simple answer to this question. The transformative conception of the relation between our animal capacities and our rational capacities implies that the former capacities can only be realized together with the latter, in a single subject. This follows from the basic assumption of the transformative approach: that the specific kind of perceptual and desiderative capacities a rational animal possesses are one that themselves draw on that subject’s capacity for rational reflection. The additive theorist, by contrast, is committed to holding that a rational animal’s perceptual and desiderative capacities can operate independently of any actualization of its rational powers. Moreover, it is a familiar fact that “the animal in us” can resist the dictates of choice, that we can suffer

37 The phrase is of course an oversimplification. The relations between a nonrational animal’s perceptions and its beliefs, and between its desires and its voluntary pursuits, might be quite complex. They would not, however, be under the governance of a capacity to reflect on reasons. That, I take it, is the real point of Korsgaard’s phrase: that a nonrational animal’s point of view contains no distinction between the factors that function as prima facie solicitations to reason and the subject’s rational assessment of those solicitations.
from “weak will” or be “overpowered by” a desire to pursue object whose pursuit we do not endorse as thinking subjects. For a transformativetheorist, these facts present no deep threat to the unity of the relevant subject, for though they show that the actualizations of our desiderative capacities can in particular cases fail to be governed by the actualizations of our capacity for reflective choice, they do not show that the capacities thus actualized are of such a nature as to be in general independent of the actualization of the latter capacities.

But for the additive theorist, such facts present at least a prima facie problem. If the relation between our rational and our perceptual and desiderative capacities is conceived in the additive way – as a relation in which reason monitors, assesses, and intervenes in the operation of “forces already at work” – then what differentiates this situation from the operation of one subject on another, as a sailor acts on a ship to change its course?

To reply that these two systems belong to a single body is not to the point, any more than it would be to the point for Descartes to reply in this way to Arnauld’s objection. The question is whether the view under consideration gives us the resources to understand what makes this body the locus of a single subjectivity, rather than the scene of a relatively harmonious accord between two subjectivities. Nor does it suffice to emphasize that the accord is harmonious (and no doubt intelligibly so, given the evolutionary history of the relevant kind of animal and the life history of the individual in question). A harmonious accord is plainly consistent with the presence of two subjectivities adapted to one another.

Nor again does it suffice to appeal to the fact that these two systems of capacities, the animal and the rational ones, must, like all capacities, have a bearer. It is true that capacities must have a bearer, but the point in question is whether there is a single bearer of capacities present here. To avoid tortured syntax, I have been speaking as if there is something to which these two capacities both belong, “the rational animal.” But the question is whether this putative entity is like the entity Descartes refers to when he speaks of “a man”: not fundamentally one thing, but two things standing in a relation.

The question at issue here is not simply one that the eye can judge; it is a question about whether how to conceive of a rational animal, whether to regard it a single subjectivity of which both choices and desires are predicated, or two subjectivities standing
in a relation. The difficulty is to see how, if the operations of a person’s animal powers do not actualize her rational capacities, and if the reference of “I” in her thought is to the aspect of herself that in operative in the actualization of the latter capacities, there can be warrant for the application of one of these conceptions in preference to the other. To the extent that such warrant is lacking, the additive approach faces difficulties in explaining what it is for me to be a certain sort of animal, in something like the way that Cartesianism faces difficulties in explaining what it is for me to be an embodied living thing.

3.4 Are the Unity Problem and the Interaction Problem two entirely independent difficulties? Why do additive theories give rise to both? Let me conclude this section by making a brief and speculative remark about this.

The Interaction Problem was a difficulty about making sense of the influence of our perceptions on our judgments and of our desires on our choices. The problem was that additive theories appeared to characterize these forms of influence in ways that are intuitively wrong, at best “exculpatory” rather than “justifying.” I think the Unity Problem sheds further light on what would be the right kind of influence of the actualization of our animal capacities on the actualizations our rational capacities, the one with which we are all intuitively familiar but which we struggle to characterize. It suggests that the right kind of influence would not be a form of interaction at all, but a form of intra-action, as we might put it: not one capacity influencing the operation of another, distinct capacity, but a single capacity being actualized, first in an immediate way, and then in a fuller, reflective way. These characterizations of how we might think about the relation between the actualizations of our rational and our animal powers are merely gestures toward a topic in need of further investigation, but to the extent that they capture something, they suggest the reason why additive theories fail to give a satisfactory account of the interdependence of our rationality and our animality is precisely because they cannot represent them as belonging, in the right way, to a unified cognitive capacity. If this is right, then the Interaction Problem and the Unity Problem are not simply two distinct difficulties. On the contrary, the latter underlies the former.
4. Conclusion: The transformative alternative

I have been arguing for an abstract but nevertheless real constraint on the form of an account of our powers of perception and desire: namely, that it must understand these powers as inextricable from the capacities that allow us to reflect on reasons, in such a way that the latter capacities are actualized in our perceiving and desiring itself. My aim has been, so far as possible, to argue for this constraint without making specific commitments about how we should think of rational perception and desire – or indeed, of the power of rational reflection itself. One thing I hope to have shown is that there is a dispute to be conducted at this level, one that does not turn on how specifically to conceive of our perceiving and desiring and their role in judgment and choice. The upshot of our discussion is that, however these matters are to be understood, our perceiving and desiring must at least be actualizations of powers of an essentially rational form. If this is right, then “rationality” is not merely a particular cognitive capacity we have, the capacity to step back and reflect. Our capacity for rationality does not merely complement our animal capacities for perception and desire; it informs them, in a way that makes these capacities different in nature from the counterpart capacities that might exist in a nonrational animal. If this is right, our theory of the relation between our rational and our animal powers must be transformative.

In its classic, Aristotelian version, the transformative view of the relation between our rationality and our animality followed from two fundamental ideas: first, that the soul is the form of a living thing, that in virtue of which the living thing exists at all; and secondly, that “rational” names the specific difference of our kind of soul. That rationality is our specific difference implies, as we have seen (§1.3), that animality, which is our genus, must take a distinctive form in our case. And general Aristotelian principles about the relation of form to what bears it dictate that what receives this form must in its own nature be of the right sort to receive it. In a slogan: our generic matter (our sort of animality) must be such as to receive our specific form (rationality). A way of putting the upshot of this paper is to

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38 For the suggestion that genus is to difference as matter to form, see Aristotle, *Metaphysics*, VIII. 2
say that, if I have succeeded, we should be able to see something sound in this fundamental Aristotelian thought.


Cambridge: Harvard University Press.


