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Disjunctivism again

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In Burge [Disjunctivism and perceptual psychology. *Philosophical Topics* 33: 1–78, 2005], I criticized several versions of disjunctivism. McDowell defends his version against my criticisms in McDowell [Tyler Burge on disjunctivism. *Philosophical Explorations* 13: 243–55, 2010]. He claims that my general characterization fails to apply to his view. I show that this claim fails because it overlooks two elements in my characterization. I elaborate and extend my criticisms of his disjunctivism. I criticize his positions on infallibility and indefeasibility, and reinforce my earlier charges that his views on perception and epistemology are hyper-intellectualized. The central point in my rejection of his disjunctivism concerns his claim that the science of perceptual psychology is irrelevant to his disjunctivist classification of perceptual states. I hold that this claim shows lack of familiarity with the science and serious misunderstanding of it. The basic deficiency in McDowell's disjunctivism is that it, like other versions, is incompatible with well-established scientific knowledge.

Keywords: McDowell; disjunctivism; epistemology; perceptual psychology

In 'Disjunctivism and perceptual psychology', I criticized all versions of disjunctivism that I know of (Burge 2005). All versions deny a 'common factor' to four types of perceptually indiscernible cases of perception by individuals. I label these cases (1) the starting-point veridical case; (2) perceptually indiscernible perception of a different object; (3) perceptually indiscernible ordinary illusion; and (4) perceptually indiscernible referential illusion, where nothing is perceived. In all four cases, an individual is in conscious perceptual states, ordinarily so-called – successful or unsuccessful perceivings. In denying a 'common factor' in the four cases, disjunctivists deny that the individual is in an explanatorily relevant fundamental kind of perceptual state that is instantiated by and specific to the four cases.

I showed this denial to be incompatible with scientific knowledge. The science of perceptual psychology explains individuals' perceivings in these cases as involving the same specific kind of perceptual state. Differences among the cases reside in occurrent aspects of these perceptual kinds. The science differentiates between the cases, and helps explain the differences. But the scientific principles that describe the laws into which individuals' perceptual states enter focus on a common factor, the ability-general kind. Disjunctivism denies such a common factor.¹

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The reason why the science's basic principles cite a common factor is that the kinds of perceptual states that are formed – including conscious state kinds that are the perceivings and misperceivings by individuals – depend purely on (a) the registration of proximal stimulation, (b) the antecedent psychological and physical states of the individuals, and (c) the quasi-deterministic laws of transition between registration of proximal stimulation and the perceptual states that are formed. This is a statement of what I call the science's 'Proximality Principle'.² Perceptual kinds are the same in cases (1)–(4), because these cases start from the same registration of proximal stimulation. Differences among the cases are individuated by reference to the occasion-specific "distal inputs" – the causal chains that lead from the environment to the same registration of proximal stimulation. The shared factor is separable from the unshared factors. It is separated by the science. Explanation of the formation of the perceptual states centers on that shared factor.

Of course, the four cases are idealized. There are always differences in proximal stimulation. But perceivers cannot register all such differences. We are to imagine that the same perceiver with the same antecedent psychological states, subject to the same laws of perception formation, is given indiscriminable proximal stimulation in the four cases. Between (1) and (2), the perceived objects are switched in a way that does not affect discriminable proximal stimulation. Similarly, with cases (3) and (4), the illusions are produced by proximal stimulation that is indiscriminable from the veridical cases, (1) and (2).³ The ability-general kind of perceptual state that is formed in the four cases is the same. The individual is in the same kind of conscious perceptual state. Science is committed to the common factor that disjunctivism denies.

Here, I reply to McDowell's (2010) defense of his version of disjunctivism against my criticisms.⁴ My reply is rather detailed. It may help to have a summary of what I take to be the most important point. McDowell denies that the science is about conscious perceiving or misperceiving by individuals (both of which he calls 'appearing to one'). He thinks that the science describes a completely different set of state kinds – ones that do not include, or at least do not center on, perceptions or misperceptions by individuals. He purports to accept the science. But he takes the states centered on by the science to be entirely sub-individual states, *not* states that are individuals' successful or unsuccessful perceptions.⁵

This view is his central mistake. He offers no serious defense of it. I discuss in detail what little he says in favor of it (Section V). The view shows lack of familiarity with the science and serious misunderstanding of it. The perceptual systems attributed in the science include conscious perceptual states of individuals, as both causes and effects. The science describes (among other things) the states of individual perceivers. It attributes the same kinds of perceptual states to perceivers in the four cases. The science provides a fundamental level of classification that must show up in, and cannot be fudged in, any other serious, correct, explanation-based classification of those states. Science is our best guide to determining the basic natures of kinds that it describes and explains. McDowell's denial of a common factor at the fundamental level of classification in relevant cases (251–2) is incompatible with the science.

Although much of my reply concerns other issues, the main issue is very simple. The main issue is McDowell's denial that the science describes, and gives laws for, perceptions and misperceptions by individuals. He writes that the science is 'irrelevant' (252) to how individuals' perceptual states should be classified. His disjunctivism hinges on that denial and fails because the denial is false.

Here is my plan. In Section I, I discuss McDowell's claim that my characterization of disjunctivism fails to apply to his version. I show that this claim depends on completely overlooking two primary elements in the characterization. In Section II, I criticize his

reply to my claim that disjunctivism is committed to the view that successful perceptions are infallible. In Section III, I criticize his view that warrants for successful perceptual beliefs are indefeasible. In Section IV, I reinforce my claim that his psychological and epistemic views are hyper-intellectualized.⁶ In Section V, I deal with the main issue. I reply to his claim that science is irrelevant to his disjunctivist classification. Since this mistake is elementary, my discussion of it is brief. Section VI reflects on disjunctivist methodology in philosophy.

Again, although I go into detail on the issues of Sections I–IV, rejecting McDowell’s disjunctivism does not depend on rejecting his views on those issues. I do reject those views. But one could bracket these matters and retain the main reason to reject his disjunctivism. The other issues are nonetheless worth discussing, especially for their bearing on relations between psychology and epistemology. To understand the issues in detail, the reader should read ‘Disjunctivism and perceptual psychology’.

I.

My criticism of disjunctivist views of perception and perceptual belief in ‘Disjunctivism and perceptual psychology’ brought together different versions of the syndrome under one heading. All versions used the term ‘disjunctivist’. But no version provided an adequate general characterization. I undertook to provide one that could frame the discussion. I wrote:

Disjunctivism ... claims that there is never an explanatorily relevant mental state type in common between (and specific to) a veridical perception and a referential perceptual illusion. And it claims that there is never a mental state type in common between (and specific to) perception of an object and perception of a would-be duplicate substitute for the object that would be, in the context, perceptually indiscernible to the perceiver. The same claims are made with respect to corresponding perceptual beliefs.⁷

I explicitly indicated that this characterization was ‘rough’. I sharpened and supplemented it later in my article. Before getting to this supplementation, let me elaborate the conditions of *explanatory relevance* and *specificity to the cases* in this initial characterization.

I took disjunctivists to share my interest in explanation that centers on natural mental or psychological kinds. I took them to deny that states, in the relevant cases, share an explanatorily relevant kind specific to the cases. Both I and disjunctivists hold the view that to be explanatorily relevant, a perceptual state kind cannot be specified as follows: *a kind that consists exactly in any one of the four mental state kinds designated in cases (1)–(4)*. Explicit disjunctions are paradigms of “kinds” that are not explanatorily relevant. Although the “kind” just designated in italics meets the other conditions in my initial characterization, it does not meet the condition of being explanatorily relevant. Furthermore, I took it that off-hand explanations are not at issue. The explanations must be serious, specific explanations. And they must be grounded in specific psychological kinds. My characterization indicates that disjunctivists claim that relevant kind-based explanation utilizes only the disjuncts, not a state kind common and specific to them.⁸

The requirement that a perceptual state kind be *specific* to the four cases is important. I will explicate it in some detail.

No disjunctivist that I am familiar with explained exactly what it means to deny a common factor to the relevant four cases. Some characterizations of disjunctivism by disjunctivists denied *any* common type of psychological state. I thought these self-characterizations

to be clearly mistaken. I knew that, on reflection, disjunctivists would not want to deny that certain genres of psychological state are common among the four sorts of cases. Obviously, the states in all four cases instantiate the kinds *sensory-perceptual psychological state*, *conscious visual psychological state*, and *visual perceptual state that represents the world as being some way or other*. These generic states are not specific to the four cases: many perceptual states besides those in (1)–(4) instantiate these kinds. The characterization of disjunctivism was meant to allow disjunctivism to acknowledge lots of kinds common to (1)–(4). These very generic kinds are just the most obvious examples.⁹

What is it to be *specific* to the four cases? For a given group of the four cases, the relevant state kind must be instantiated by each of the four instances in the group, and the kind must be instantiated by no possible psychological state instances that would not be members of the group (meet the conditions that define the group). For example, any perceptual kind with instances that are introspectively discernible from (1), or that have different representational form or function from (1), would not be a kind specific to the four cases. For such kinds are perceptually discernible from (1). The very generic kinds indicated in the previous paragraph are clearly not specific to the four cases. They are instantiated not only by instances in a given group of the four cases, but by instances of many other kinds of psychological states not instantiated by instances in the group.

The requirement that a perceptual state kind be specific to the four cases is more restrictive and powerful than one might first think. The representational form of the psychological states in the four cases is singular. States that lack this form are not specific to the four cases. The state kind *having a visual perception as of a [singularly indicated] red cube with a [singularly indicated] white background* is also not specific to the four cases. For one can have a visual perception as of a singularly indicated red cube with a singularly indicated white background in different ways that are perceptually discernible from instances in (1)–(4). For example, one could perceive the cube perceived in (1) as a red cube against a white background under a different illumination, or with more defocus. Perceptual constancies guarantee that one can perceive a red cube as red under different illuminations. The differences are perceptually, even introspectively, discernible. Differences in defocus are also perceptually discernible. Any perceptually discernible difference from any of the four cases prevents a state kind from being specific to the four cases. All such differences concern representational content.

For a neo-Fregean disjunctivist like McDowell, and also for me, the main kinds of perceptual states that are explanatorily relevant are individuated partly in terms of the states' representational content. To be an explanatorily relevant kind that is *specific* to cases (1)–(4), an instance of a psychological kind must instantiate kinds with representational content shared by all and only the representational contents of instances of (1)–(4).

No disjunctivist discussed the explanatory or classificatory level at which he denied a "common factor". As noted, some absurdly denied a common factor at any level. So I thought that I had to supply some precision that was missing in the disjunctivists' own work. I thought that they were committed by the "logic" of individuation of perceptual states at relevantly specific, explanatory levels to denying a common factor in the contents specific to the four cases.¹⁰ A perceptual state is kind-individuated for explanatory purposes by its representational content and its perceptual mode. I took it that neo-Fregean disjunctivists maintained that the component of representational content that is the singular mode of presentation of a successfully perceived entity (an entity that, in McDowell's terminology, is 'present to one') differs from – and shares no common factor with – a representational content that is the singular mode of presentation of any other entity.¹¹ And such a singular mode of presentation differs from – and shares no common factor

with – a representational content that is a singular mode of presentation that fails to refer to a perceived entity.

Any other element shared among the representational contents in the four cases would also be shared with perceptual states not among the four cases. Hence, it would not be specific to the four cases. So, for example, if the representational content were in subject–predicate form (as was allowed by McDowell in the papers that I criticized), and if the non-singular, predicative elements attributed generic *green* in all four cases, this aspect of the representational content (itself marking a kind) would be shared with perceptual states not among the four cases. So this kind or kind factor that is shared by the four cases would not be specific to the four cases.

I took it that, among the four cases, those aspects of representational contents that are specific to the singular specification of perceived entities, or to the singular specifications in referential illusions, are not only different, but also share no common factor – on the disjunctivist view. So, I took it that disjunctivists were committed to denying a common explanatory kind specific to the four cases.

I mentioned that perceptual state kind individuation depends on the representational content and perceptual mode. It is logically possible to hold that the four cases have exactly the same representational content, and that differences lie entirely in the perceptual mode. Then, visual ‘presence to one’ (or ‘absence to one’) would be the sole source of differentiation. This approach is, I think, hopeless. It would be uncharitable to attribute it to disjunctivists. In the first place, the view would not account for obvious differences in veridicality conditions among the four cases. For representational content comprises veridicality conditions. For example, differences in successful perception of different entities in cases (1) and (2) are clearly differences in representational content. The veridicality conditions that are made veridical differ. Second, the view would not plausibly express the denial of a common factor among the four cases. The common factor would be the representational content of the four perceptual states.

So, I took it that the denial of a common factor must apply to *representational* content, for neo-Fregean disjunctivists (see Note 10), though it might apply additionally, even fundamentally, to perceptual mode. By the reasoning of two paragraphs back, I took it to be most charitable to construe the denial as a denial of a common representational content, or element in the representational content, that is specific to the four cases.

But I did not rest my characterization of disjunctivism entirely on that reasoning. Given that disjunctivists never explained at what level they deny a common factor, I thought it prudent to supplement and sharpen my initial characterization – the one quoted above. I mentioned earlier that I termed my initial characterization ‘rough’. I supplemented and sharpened it by explicitly taking disjunctivists to deny a common kind or factor in the four cases at the *fundamental* level of explanatory classification of perceptual state kinds.

In itself being specific to a range of cases is not equivalent to being at the fundamental level of explanatory classification. But I think that *given* the nature of explanation of representational states in terms of mode and representational content – which takes these aspects of representational states to be fundamental types of classification – and given that being specific to the four cases involves sharing a common factor in the representational content, being specific to the four cases ultimately comes to the same thing as sharing a common factor at the fundamental level of classification and explanation. But for expositional reasons, I did not want to have to develop and argue the point. To allow for disjunctivists’ not recognizing or accepting the point (some do not accept the notion of representational content at all), I supplemented and sharpened the initial characterization

by citing the requirement of fundamentality. Disjunctivists deny a common factor at a fundamental level of explanatory kind classification.

I stated this supplementation of the initial characterization in two places. In the first, I explained why disjunctivists must allow common states at more generic levels of classification. I had in mind levels not specific to the four cases. I indicated that the level at which disjunctivists deny a common factor is the fundamental level of classification and explanation of individuals' perceivings and misperceivings in the four cases. I wrote that disjunctivists claim that common kinds 'are not "fundamental" kinds of perceptual states. I shall take disjunctivism in this sense'.¹²

I stated the point a second time: 'What I firmly reject is the disjunctivist denial that there are fundamental, explanatorily relevant perceptual state types that accord with the Proximality Principle'.¹³ The disjunctivist idea is that individuals' perceptions and misperceptions are not individuated at the fundamental level of classification (or the most basic level we currently have) in such a way that there is a kind (factor) in common, if proximal causes are indiscriminable and if antecedent states and formation principles are held constant. This is the denial of the Proximality Principle for the four cases of perception, ordinarily so-called. For if proximal causes are indiscriminable, and one holds antecedent states and formation principles constant, and if one varies distal causes, one gets the four cases.¹⁴

Contrary to disjunctivist views, I hold that the science of perceptual psychology produces fundamental explanatory classifications that attribute a common kind or factor in the four cases.

In summary, in order to supplement and sharpen the initial characterization of disjunctivism as denying a common, explanatorily relevant kind that is specific to the four cases, I stated that disjunctivism denies an explanatorily relevant kind of perceptual state common to the four cases at the fundamental level of classification. It is understood that the four cases concern individuals' perceptual states, ordinarily so-called – states of perceivings and misperceivings by individuals. So the denial of a common fundamental kind specific to the four cases is a denial that concerns individuals' perceptual states, ordinarily so-called.

In what follows, I will invoke both the requirement of specificity to the four cases and the requirement of fundamentality. But the denials of a common factor that are clearest in McDowell's current piece center on fundamentality.

I should have explained my conceptions of explanatory relevance, specificity, and fundamentality at greater length. I took it as so obvious that disjunctivism must allow common kinds at non-basic levels that I did not always repeat the qualification of specificity, or fundamentality. But the qualification that the denied common kind must be specific to the four cases is in both statements of the initial characterization. And the supplemental sharpening that requires that the denied common kind be at the fundamental level of kind classification is stated twice. I think that my characterization of disjunctivism, certainly with the sharpening, is correct. I will show, using McDowell's own words, that it applies to his version of disjunctivism.

I criticized McDowell's disjunctivist views, among others. He protests that my characterization of disjunctivism does not apply to his work. When an author protests that his view has been mischaracterized, one must accord some weight to the protest. Authors usually know their own views. But to be correct, a protest must be based on understanding not only the author's own views, but also the protested characterization. McDowell's protest rests on failure to understand the characterization. In fact, it rests on failure even to consider either the requirement of being specific to the four cases or the sharpening in terms of fundamentality.

I shall give an overview of what is wrong with the protest before going into detail. McDowell repeatedly insists that he acknowledges common states among the relevant cases (1)–(4). He acknowledges two sorts of commonalities. He acknowledges *common kinds attributed by the science* of perceptual psychology. And he acknowledges *common kinds of ‘appearings’ to individuals*, which I take to comprise conscious perceivings and misperceivings by individuals. Not one of the acknowledgments in these two categories is to the point. All are mere window dressing.

The acknowledgment of common kinds attributed in the science is not to the point, even *apart* from McDowell’s failure to consider the requirements of specificity and fundamentality. In McDowell’s view, the state kinds *attributed by the science* that he allows to be in common are not types of individuals’ perceptions or misperceptions at all (252). They are, in his view, sub-individual psychological states (see Note 5 above). He thinks that the state kinds attributed by the science are a different sort of thing altogether. They are, he thinks, only metaphorically perceptions, only metaphorically have representational content; in fact, he thinks that state kinds attributed by the science are ‘irrelevant’ to classifications of perceptions and misperceptions, or ‘experiences’, by individuals (249–252). In his view, the instances in cases (1)–(4) – appearings to individuals, or conscious perceivings and misperceivings by individuals – do not instantiate the state kinds attributed by the science. The kinds attributed by the science are, in his view, not genuinely perceptual. They are not the states instantiated by perceivings or misperceivings by individuals – not experiences or awarenesses of the world by individuals (250). So, they are not relevant to the claim that disjunctivists deny common kinds instantiated by the four cases of perceivings and misperceivings by individuals.¹⁵ So, acknowledging common states attributed by the science is irrelevant to the correctness of my characterization of disjunctivism. The kinds – or factors – that are relevant to disjunctivism’s denial of commonality are perceivings and misperceivings by individuals, perceptual states ordinarily so-called.

The *appearings* – the genuine, conscious perceptual state kinds – that he acknowledges to be common among the relevant cases are also not specific to the four cases. They are too generic. They are not shared by all and only possible instances of those cases. Moreover, McDowell nowhere considers the requirement of fundamentality. The state kinds that he acknowledges as common to the relevant cases are not fundamental, as I will show.

So much for overview. Let us now consider the two types of acknowledgments more closely. McDowell protests that he acknowledges that there are common state kinds attributed in perceptual psychology. He claims that I claimed that disjunctivism denies the existence of common state kinds in the psychology (249). His claim is mistaken. I wrote that disjunctivists hold views that are incompatible with perceptual psychology. Like most people, I distinguish incompatibility from denial. I criticized McDowell’s denial of the relevance of the science to understanding the nature of perceptual states. I wrote that he misunderstood the science, not that he directly denied its claims.¹⁶ McDowell’s view is incompatible with perceptual psychology not by directly denying its claims, but by denying the fact that the science attributes perceptual states to perceivers. He fails to recognize the incompatibility of his disjunctivism with the science.

McDowell writes, ‘... it seems obvious to me that there must be state types of perceptual systems in common between occasions on which perception enables perceivers to get something right and occasions on which their experience misleads them ... Why should I deny any of that?’ (249). This passage is a piece misdirection. No one claimed that he denied any of that. Commonalities in state kinds within perceptual systems are, in his

view, not common state kinds instantiated by successful and misleading experiences, or appearances to individuals, or conscious perceivings or misperceivings by individuals (249–51). The relevant disjunctivist denial concerns these latter.

The four cases are cases of conscious perceivings and misperceivings by individuals – perception ordinarily so-called. McDowell holds that states attributed in perceptual psychology are not cases of perception ordinarily so-called. He even claims that states attributed in perceptual psychology do not literally have representational content.¹⁷ He thinks that the states attributed in the science are not relevant to his disjunctivism (252). I think that these views are clearly mistaken. I shall discuss them in Section V. But the key point here is that, on his view, the state kinds attributed in perceptual psychology are not instances of ordinary perception. In McDowell's view, they are not kinds that ordinary conscious perceptual states of individuals instantiate at all. So, his acceptance of commonalities among states attributed by perceptual psychology is completely irrelevant to supporting his protest that my characterization does not apply to his form of disjunctivism.

I turn to a more detailed discussion of McDowell's acknowledgment of common state kinds of appearances to individuals – of conscious perception and misperception, ordinarily so-called. In much of his reply, the protest rests on resistance to 'the allegation that I recognize no state in common between veridical perceptions and perceptual illusions' (244). As noted, I explicitly indicated that disjunctivists allow state kinds common to such cases. (See Note 9.) My initial characterization of disjunctivism and the sharpening of that characterization qualify very severely the kind of common state that disjunctivists deny. McDowell's reply here, and in most of his paper, bypasses the requirements of explanatory relevance, being specific to the four cases, and being fundamental.

In Section 7, McDowell gets around to explanatory relevance. What explanatory work does he give to a state kind that is common to the four cases of perception ordinarily so-called? He offers one sentence on the topic. He asserts, 'states of having it appear to one that things are thus and so' are relevant to 'understanding how we can accommodate fallibility in an epistemology according to which experience at its best reveals aspects of objective reality to subjects' (249). He does not say how the explanation goes. But more importantly, he does not show the state kind (*appearing to one that things are thus and so*) to be specific to the four cases, or at the fundamental level of kind classification. (See Notes 7, 12, and 13 above.) He never considers the requirements of specificity or fundamentality at all.

The state that he cites is described schematically, in a way that is uninformative on the point at issue. For each quartet of cases, the state is claimed to be that 'of having it appear to one that things are thus and so' (249, cf. 244, 251). What representational content is schematized by 'things are thus and so'? Exactly what kind is cited? Unless these questions are answered, there is no designation of a state kind that is specific to the four cases, or that is at the fundamental level of classification. The failure to be concrete about the common state kinds shows a failure to recognize what the characterization of disjunctivism requires.

The phrase 'things are thus and so' could mean that the appearance represents things in some way or other. Then, the common state would be very generic. The phrase could mean something like things are such that there is a red cube against a white background. Such a meaning still does not designate a state kind that is specific to the four cases, for two reasons.

First, the specific singular way of appearing to be a cube, appearing to be red, appearing to be a white background must be shared in all four cases, and not shared by any other possible cases. As noted earlier, the state kind indicated by the underlined meaning would be shared by instances that do not fit among the four cases. Red cubes can be presented in

perception in numerous ways. The relevant way must be so specific that it is not shared by any possible cases that do not meet the indiscernibility criteria that are met by the four cases. A definite (*de re*) singular way of representing what is perceived must be shared by exactly the four cases. And that singular way of representing what is perceived must be fundamental.

Second, the way of appearing involves capacities that function to single out particulars. No perceptual state has anything in its representational content that corresponds to the generalized term ‘things’. Conscious perceptual states of individuals, or appearances to individuals, do not instantiate quantificational kinds. The phrase ‘things are thus and so’ is an off-hand grouping of perceptual states. It is not a specification of an explanatory kind of perceptual state at all. To be specific to the four cases, the perceptual kind must be singular, and the representational content must be in singular form. All perceivings and misperceivings by individuals have singular representational elements. Referential successes (cases (1) and (2)) are successes in singular (or plural) representation of particulars. Referential failures ((3) and (4)) in perception are failures in singular (or plural) reference, not of quantification.¹⁸ For an acknowledgment of a common kind to be relevant to protesting my characterization, the kind would have to be specific to the four cases and at the fundamental level of classification for serious explanation. In particular, the singular presentations of the different perceived entities ((1) and (2)) would have to share a common kind at the fundamental level. And the singular presentations that do not succeed in referring to entities perceived in the environment ((3) and (4)) would have to share a common kind with cases (1) and (2) at the fundamental level. McDowell’s acknowledgment of a common kind *having it appear to one that things are thus and so* is not a definite kind of perceptual state at all, much less a kind specific to the four cases at a fundamental level of classification.

I believe that McDowell’s disjunctivism is committed to denying a common kind specific to the four cases. For I believe that he is committed to denying a common representational content for the four cases, and to holding that kind individuation in terms of representational content is a key element in any fundamental classification of representational states. Whether or not my belief on this matter is correct, it is quite clear that McDowell’s disjunctivism is committed to denying a common kind or factor at the fundamental level of kind classification. For his disjunctivism is explicit in denying a fundamental common kind. Here is what McDowell writes about his position:

...it is part of the point of my disjunctive conception of experience that having an aspect of objective reality perceptually present to one entails having it appear to one that things are a certain way. But that is not to say that having an aspect of objective reality perceptually present to one can be factored into some non-mental conditions and an appearance conceived as being the mental state it is independently of the non-mental conditions.¹⁹ The factoring fails; the state is the appearance it is only because it is a state of having something perceptually present to one. (251)²⁰

McDowell twice explicitly indicates that he thinks that his disjunctivist view of perception (as well as singular perception-based thought), with its denial of a common factor, applies to ‘fundamental’ levels of classification (252). In fact, in explaining his disjunctivism, he explicitly denies (252–3) the common factor that I argue is basic to scientific understanding of perception.

It is important to separate some things in the blocked quotation. The key point is the denial of factoring. I agree with the claim that the whole appearance (the whole successful perception by an individual) is the appearance that it is, only because it is a successful perception of the particular that is successfully perceived. That whole perceptual state kind has

different representational content than any perceptual state kind that is not a perception of that object. This point is a consequence of the perception's being made veridical by the entity that is perceived. There is a different singular, context-dependent veridicality condition, a different representational content, for the perception of that entity than for the perception of any other entity – or for a referential illusion. It does not follow that 'factoring fails'. It is the denial of factoring that marks disjunctivism. If there is a factor in the representational content – an aspect of the state, at the fundamental level of classification – that is 'an appearance conceived as being the [kind of]²¹ state it is independently of the non-mental conditions', then factoring succeeds.

I believe that there is a fundamental state kind or kind factor specific to (1)–(4) at the fundamental level of kind classification. It is the ability-general element in the kind and in the representational content. Such a kind factor is indeed neutral as to whether an object is perceived, since in (1) an object is perceived and in (4) no object is perceived. The relevant state kind, or kind factor, is also neutral ('independent') as to whether a given object or a duplicate is perceived, for similar reasons. For example, the particular cube and its background (in (1) or in (2)) are among the non-mental conditions that help individuate the states – and that, in McDowell's view, are 'perceptually present to one'.

McDowell explicitly denies this very type of factoring (251–3). He twice indicates that his denial of such factoring occurs at the level of classification that he regards as most 'fundamental' (252). These claims by McDowell squarely match my characterization of disjunctivism. (See Notes 7, 12, 13.) His protest of the characterization fails, because it completely overlooks the requirements of specificity and fundamentality.²²

Laying aside the technical terminology, one can see the issue more intuitively. Denying that conscious perceptual states in (1)–(4) share a common nature at a basic level of characterization is what makes disjunctivism both striking and implausible.

In my view, ability-general kinds are common factors specific to the four kinds at the most fundamental level of kind classification and explanation. The kinds are marked in ability-general attributional elements in the representational contents of the four cases. The cases differ in occurrence-based ways (kinds, factors). Like the attributional, ability-general kinds, these ways are marked in the representational contents – by the singular, occurrence-based, demonstrative-like applications of the attributional elements. The two kinds (ability-general and occurrence-based) are separable factors, as are the two types of elements in the representational contents. The science itself separates them.

The specific, fundamental kind of conscious perceptual state, or appearance, is the same, although there are occurrence-based, representational differences. This common kind is individuated in a pattern-based way. The occurrence-based aspects of the kind of conscious perception, or appearance, differ among the four cases. These aspects (or kinds) are individuated in occasion-dependent ways. Their individuation must depend on what particulars, if any, are perceived. Compatibly with rejecting disjunctivism, one might even individuate such occurrence-based kinds – or aspects of kinds – in cross-world object-dependent ways.²³ Acknowledging occurrence-based psychological *differences* in the four cases – as differing factors – is necessary to distinguish different veridicality conditions involved in perceptual state instances that refer to different particulars, and in order to distinguish different veridicality conditions involved in successful and illusory perceptual instances.²⁴ Acknowledging an ability-general kind as a *common* factor, specific to the representational kinds of the four cases of individuals' perceivings and misperceivings – and present at the most fundamental level of classification that we have – is necessary to an account's being compatible with the science of perceptual psychology. Denying such common factors is basic to disjunctivism.

Of course, what is important is not how a view is classified, but whether it is true. I turn to more straightforwardly substantive issues.

II

McDowell holds that issues about fallibility are among the principal substantive issues. He claims that I mishandled these issues by falling into confusion about what is and what is not intelligible. I claimed that ‘perceptual representations apply fallibly to their referents, in any given instance’.²⁵ McDowell writes, ‘Fallibility is a property that attaches to *capacities*. It is a confusion to think that the idea of fallibility can intelligibly carry over to *exercises* of fallible capacities’ (245). He claims that it is ‘a confused idea that it makes sense to attribute fallibility to . . . exercises [of a fallible capacity]’ (245). He provides no support for these remarkable claims. He simply makes them, and bases much of his paper on them.

Is it unintelligible to attribute fallibility to instances or exercises of a capacity? If ‘fallibility’ were *defined* as actual vulnerability to be mistaken, then since each actual event instance might be thought not to have such a vulnerability (it is either mistaken or not; vulnerabilities might be thought to apply only to types), it might be thought that one should not count event instances as either fallible or infallible. But I did not define ‘fallibility’ that way, and that is not its only meaning. What I had in mind, and stated, is clearly intelligible. My attribution of fallibility to instances of event instances, or exercises of a capacity, means that it is metaphysically possible for those exercises to be, or to have been, mistaken. It is an attribution of a modal property to a particular – here, a perceptual event. Such attributions are well understood from work on modality. They have familiar *de dicto* and *de re* forms. Here, I intend the *de re* form. A particular veridical instance of perception, a particular seeing of a red cube against a white background, is infallible if and only if there is no possible world in which that very instance could have been inaccurate.

I thought it plausible that particular successful instances of perceiving a particular could have failed to be successful. I think that the inference from the fallibility of perceptual capacities to the fallibility of their exercises is a natural one. But I do not think that the inference rests on an entailment.²⁶ Rather, I reflect on the contingencies in causal connections to objects that successful instances of perception depend on, and connect those contingencies to the contingencies that make the perceptual capacities fallible. I judge it possible for a successful perception to have been unsuccessful if those contingencies had not been in place.²⁷

McDowell presents an analogy as a *reductio* of the view that exercises of perceptual capacities are fallible. The analogy is muffed in a way that, contrary to its intended use, suggests the intuitive fallibility of exercises of perceptual capacities. McDowell writes,

Fallibility is an imperfection in cognitive capacities. But the mistake I am pointing out is easier to recognize if we consider its analogue in application to other sorts of imperfection in capacities. Some people have a capacity to throw a basketball through the hoop from the free-throw line. Any instantiation of such a capacity is imperfect; even the best players do not make all their free throws. Burge thinks that there cannot be a fallible capacity in whose non-defective exercises one gets to have indefeasible warrant for certain beliefs. One might as well think that there cannot be a capacity – of course, not guaranteed success on all occasions – in whose non-defective exercises one actually makes free throws. (245–6)²⁸

McDowell’s presentation of the example is defective. The defect lies in his drawing an analogy between (a) a fallible capacity (perception) and an exercise of the capacity that has a modal property (in the case as stated, indefeasibility of warrant – see Note 28, just above)

and (b) a fallible capacity (free-throw shooting) and an exercise of the capacity that has an actual property (actually making free throws).

The correct use of the analogy is to compare exercises of the capacity with respect to a modal property. The relevant property is fallibility. To realize the function of the capacity to shoot free throws is to actually make them. But any given successful shot could have been unsuccessful if circumstances had been different. The very same shooting that, in fact, was successful could have failed to be successful – for example, if immediately after the individual shot the ball, a sudden wind had blown it off course. That is a metaphysical possibility. If instances of perception are analogous to shootings of free throws, they are fallible, not infallible.

I think that intuitive considerations suggest that a given perceptual event that is referentially successful could have failed to be so. Successful perceptual events are not referentially infallible. If conditions immediately surrounding the occasion of one's having the perception had been different, the perception could have been off target, indeed referentially unsuccessful. I do not rest much on the analogy to free throws, even correctly used. I do not rest heavy weight even on the plausibility of the intuitions. I think that individuation of mental states must be considered on its own merits. And, of course, I hold that individuating mental states, kinds and instances – including perceptual events – hinges in complex ways on relations to the environment.²⁹ What is at issue is getting those ways right.

The intuitive point that I made about the referential fallibility of individual perceptions seems to me to have some weight, however. Disjunctivist views entail that referentially successful instances of perception of the physical environment are referentially infallible. McDowell's view implies, for successful instances of perception, not only infallibility as regards reference, but also infallibility as regards veridicality.³⁰ I think that the way particular successful perceptions depend on particular contingent non-psychological conditions for their referential success suggests that instances of perception are as fallible as the perceptual capacities that produce them, and for similar reasons.

Perceptual capacities and perceptual state kinds are the capacities and kinds that they are because of patterns of interaction between environment and individuals with the relevant perceptual systems. Among these patterns, there are cases in which perceptual states are veridical. The general conditions present in these cases constitutively determine the natures of the capacities and the ability-based natures of the states – basic kinds by which they are individuated. The patterns determine capacities and natures that in certain exercises or instances turn out non-veridical. The fallibility of those perceptual capacities and kinds hinges on the fact that on particular occasions it is possible that there be a mismatch between the actual causal interactions between the environment and perceptual state instance, on one hand, and the *type* of interaction that makes for veridical perception, on the other.

The possibility holds not just in general. The very kinds of conditions that actually undermine the veridicality of some state instances are the same kinds of conditions that could have been in play in any given actual case, including actual cases of veridicality. Particular perceptions seem to be subject to the same *possible* mismatches that make the general capacity fallible. Nothing about the perceptual ability or its exercise on the particular occasion guarantees veridicality. The *exercise* of the perceptual ability depends purely on the registration of proximal stimulation that initiates it, the antecedent internal states, and the relevant laws of formation for perceptual states. (This is the Proximity Principle again.) A given kind of registration of proximal stimulation is compatible with a variety of environmental conditions that (metaphysically) could have initiated it. Referential success depends on the causal connections between the environmental conditions and the

registration of proximal stimulation being normal – of the sort that helps explain the abilities in the first place. But normality in any given case is contingent. So it is plausible, and I think correct, to regard particular successful exercises of these fallible perceptual competencies to be fallible. Perceptual beliefs are similarly fallible.

Of course, disjunctivists so individuate representational contents that if in any possible world there *were* a different perceived environmental particular, or no perceived particular at all, the perceptual state instance would have been different. On this view, it is impossible for an exercise of a perceptual capacity that does refer to have failed to refer to what it refers to. Such a view makes relevant successful exercises of the perceptual capacity referentially infallible.³¹

Such a view is intelligible. One could claim that the relevant successful exercises of perceptual capacities are, in this respect, just different from successful exercises of free-throw shooting. One could insist that the identity of a veridical perceptual state instance depends on its causal origin in a perceptual referent. Perceptual experiences, when successful, could not have failed to refer to what they refer to: they are necessarily, and infallibly, perceptions of the perceived entities.

This is McDowell's view. In fact, he holds the stronger view that successful perceptual experiences are not only referentially infallible, but also infallible as regards veridicality. They could not have been mistaken. In the paragraph immediately before the one in which he claims that it is unintelligible to attribute infallibility to exercises of perceptual capacities, he contradicts his own claim by holding that it is impossible for successful exercises to be mistaken. He writes, 'It is a confusion to think that the idea of fallibility can intelligibly carry over to *exercises* of fallible capacities. . .' (245). In the previous paragraph, he writes, 'If an aspect of objective reality is perceptually present to someone, there is no possibility, compatibly with her experience's being as it is, that she might be wrong in believing that things are the way her experience is revealing them to be. . .' (245).

The dialectical context of my point about infallibility (in Section VI of my 2005 paper) was this. Disjunctivist views are committed to an antecedently implausible conclusion. The grounds given for the conclusion stem from views distinctive of disjunctivism. Unless there are good reasons to accept the infallibility view, its implausibility counts against it, and against disjunctivism. The appendix considered and refuted arguments for disjunctivism. I showed the one argument that McDowell gave for his version of disjunctivism, in the papers that I considered, to be unsound, indeed invalid. McDowell does not defend the argument against the criticism.

The implausibility of the view that successful exercises of perceptual capacities are infallible is not the basic problem for disjunctivism. I noted that one could *accept* such infallibility (including cross-world object dependence) and reject disjunctivism. (See Note 23 above and Note 41 below.) I think that the cross-world individuation issues that underlie referential infallibility are not very important. Disjunctivism's main defect is its incompatibility with science.

The disjunctivists' commitment to infallibility is, however, part of a tradition in philosophy of perception that has a bad track record. Some traditional commitments to infallibility have rested on maintaining an infallibility of perceptual capacities. But some have rested on claims about perceptual content, as both direct-realist and neo-Fregean forms of disjunctivism also do. Claims of infallibility have been driven by philosophical ideologies that present the claims as the only way to avoid some drastic, unacceptable consequence.

McDowell follows in this tradition. He urges disjunctivism as the way to avoid 'darkness within', 'the Cartesian fear of losing the world' – the 'disaster' that intentionality with respect to the physical world would be 'unintelligible' without disjunctivism's aid. He also

claims that responding to scepticism requires disjunctivism.³² The implausibility of the view's commitment to infallibility – not to say the view's incompatibility with science – should motivate scrutiny of arguments that the view is needed to avoid disaster. The arguments have not withstood scrutiny. No new arguments appear in the present paper. In Section III, I discuss two arguments given elsewhere.

III

I turn to the proposed disjunction. What is the psychological difference between the state instances that are referentially successful and those that are not? McDowell uses various locutions. Things being thus and so are 'manifest' to the subject, as opposed to 'merely seeming that that is how things are' (244, 245, 252). The state of affairs that conforms to the first of the disjuncts is 'an element in the subject's inner world' (244). Some aspect of objective reality is '*there* for the subject, perceptually *present* to her' (245–7, 249–51, 253). Experience 'is revealing an aspect of reality' and 'revelatory of the world' (246, 253).

Laying aside the faintly mystical associations of manifestation and revelation, these locutions, some of them metaphorical, have unobjectionable ordinary uses. They describe veridical conscious perceptual experience. Such experience is immediate, in the sense of non-inferential and in the sense of not referring to physical entities by referring to anything else. Such experience has the phenomenology of directly and concretely presenting to the perceiver entities in the objective, physical environment, rather than merely describing them in an abstracted conceptual way. McDowell intends the locutions in a stronger, philosophically loaded sense.

McDowell often uses the locutions, often amplified with italics, as if they conveyed the intended, philosophically special sense. They do not convey it. Part of what is intended is that a state of the relevant kind 'consists in the obtaining of a relation' to the particular object that is perceived (252). But being veridical consists in the obtaining of a relation to the particulars that are perceived. According to McDowell, however, this kind of state is not to be glossed 'a veridical perceptual state'. Such a gloss would be insufficient to get the intended classifications right. Such a gloss would be compatible with taking factors in such states to be individuated independently of the state's being veridical and of its being 'revelatory'. The idea is that of 'directedness of a [state] at an object that is, at the most fundamental level of classification, a relation between the thinker and the object' (252). McDowell also intends that in no counterfactual situation could the same perceptual state (kind or instance) be unsuccessful. This view, as we have seen, entails that the state instance is infallible. Further, he intends that such perceptual states yield indefeasible warrant for perceptual beliefs (246). These ideas are highly theoretical, not ordinary common sense. I believe the theory of classification to be mistaken.

A central theoretical motivation for this classification is epistemic. McDowell writes,

To have an experience [that makes objective reality present to us] is to have an *indefeasible* warrant for believing that things are as the experience is revealing them to be. (245)

In a nondefective exercise of a perceptual capacity of the relevant sort [meaning, I think in a rational animal capable of beliefs and propositional knowledge], an aspect of objective reality is perceptually *there* for one. For that to be so is for one to be in a position that constitutes having an indefeasible warrant for believing that things are a certain way. (246)

The force and exact meaning of 'is to have' and 'is for one to be' are not clarified. Are they meant to indicate an explanation of the classification of the psychological state kind

itself – a classification in epistemic terms? Or are they meant to indicate only some sort of necessary or apriori implication of an independent, non-epistemic classification? Some of what McDowell writes suggests that he intends the former position. He writes that a perceptual belief that rests on experiences present to one ‘is the mental state it is only because it is a state of knowledge’ (251). The force of ‘only because’ is, however, itself not made clear. But the locution can be read as citing the constitutive explanation of the nature of the mental state.

If the kinds of psychological states are just epistemological states, the question ‘what is it about the psychological state that makes it warranted, or indefeasibly warranted?’ is precluded. There would be no independently specifiable kind of state that could be evaluated as warranted because of some feature of the state, or some way the state was formed. I believe that such a position is clearly unattractive, and certainly mistaken. I believe that it would seriously misconstrue the relation between epistemology and psychology. I will return to this matter.

An alternative, ostensibly less committal understanding is that the psychological state is classified only in the relational, object-dependent way cited above. Its providing an indefeasible warrant is a further, necessarily implicated matter. This interpretation is perhaps suggested, though not clearly stated, in the remark, ‘...when the capacity does not stumble and one is not being fooled ... one’s experience ... [provides] one with an indefeasible warrant’ (246). Then, epistemic attributions, like that of having indefeasible warrant, can, at least in principle, be grounded in, and explained by reference to, something about the psychological states (for example, their natures or how they were formed). The position would be that the epistemic status of the relevant states is a necessary or apriori implication from an independent specification of the nature of the psychological state, together perhaps with other non-epistemic facts about the state.

The nature of the relevant perceptual-state and belief-state instances is in dispute. I will describe the instances as *successful perceptions of*, and *successful perceptual beliefs about*, a given object, understanding that McDowell classifies them according to his theory.

I will discuss whether successful perceptual beliefs that rest on successful perceptions are *indefeasibly* warranted. McDowell does not explain in this paper what he means by ‘indefeasible warrant’. Preparatory to discussing indefeasibility claims, I will have to break the flow a bit by differentiating some notions. The definitions are tedious, but they serve clarity.

A perceptual or belief state instance is *referentially successful* if and only if all singular (or plural) referential elements in its representational content refer to entities.

A perceptual or belief state instance is *referentially infallible* if and only if all singular (or plural) referential elements in its representational content refer to entities and metaphysically could not have failed to refer to those very entities (while being the same elements). Any given referential element in the representational content of a perceptual or belief state instance is referentially infallible if and only if it refers to an entity (or entities) and metaphysically could not have failed to refer to that entity (or those entities). Referentially infallible referential elements are what are popularly understood to be *object dependent*.

There is a status intermediate between referential success and referential infallibility. A referential element (an occurrence-based application) is *referentially differentiated* if and only if it is successful in referring to an entity (or entities) and is necessarily distinct from any other actual referential element that does not refer to that entity (or entities). Differentiating that referential element from others in the actual world hinges on what it refers to. The element’s individuation across possible worlds does not require the element to be referentially infallible.³³

Representationally successful psychological states are *in-fact-factive*: they are veridical. A successful perceptual state instance is veridical (accurate), and is *in-fact-factive*. It has a *correct factive specification* – a specification that implies that it is veridical. For example, a successful instance of a visual perception is veridical; it is a seeing. Specifying it as a seeing implies that it is veridical. A representationally successful belief is true; it can be correctly specified as a *de facto* true belief. A knowledgeable belief is similarly representationally successful, and a specification of it as knowledge implies that the belief is true. Knowledgeable beliefs, like true beliefs, are *in-fact-factive*.

A successful perceptual state instance or successful perceptual belief is *constitutively, or infallibly, factive* if and only if it is, in fact, veridical, and it metaphysically could not have failed to have been veridical. An instance of actual knowledge is constitutively knowledgeable if and only if it is metaphysically impossible not to have been knowledge.

A belief is *warrant-factive* if and only if being warranted in having the belief in a given possible world implies by apriority or necessity that the belief is true in that world. A belief's being warrant-factive does not preclude that in the world in which an individual holds the belief, there are truths that could undermine the warrant for the belief, if they were relevantly accessible to the individual – as long as the belief is true in that world. Warrant factivity is not a type of indefeasibility of warrant. It is a type of indefeasibility of the truth of a warranted belief.

A belief is *indefeasibly warranted in the traditional sense* if and only if it is warranted and there is no metaphysically possible situation in which a counter-warrant could undermine the warrant.³⁴ For an individual's warranted perceptual belief to be indefeasibly warranted in this sense, it must be metaphysically impossible for the individual to be in a position of having the warrant for the belief overturned by further considerations.

A belief is *indefeasibly warranted in the world-limited sense* if and only if, in a given possible world, holding the belief and being warranted in holding it jointly imply by apriority or necessity that there are no truths in that world that would undermine the warrant if they were relevantly accessible to the believer. A consequence of a warrant's being indefeasibly warranted in the world-limited sense is that a belief with such a warrant cannot change from being warranted to being unwarranted in a given world. World-limited indefeasibility for a perceptual warrant is clearly compatible with the warrant's not being indefeasible in the traditional sense. An instance of *knowledge* is *world-limited indefeasible* if and only if, in a given possible world, having the knowledge implies by apriority or necessity that there are no truths in that world that would undermine the knowledge if they were relevantly accessible to the knower.³⁵

I will explain my attitudes toward the application of these various notions before discussing McDowell's claims about indefeasibility.

Clearly, there are referentially successful perceptual and belief states. I believe that all occurrence-based referential elements (applications) in the representational contents of perceptual and belief states are referentially differentiated.³⁶ As indicated in Section II, I do not believe that there are referentially infallible perceptions or perceptual beliefs that refer to the physical environment.

There are certainly *in-fact-factive* perceptual state instances and belief state instances. I believe that successful perceptual beliefs are not constitutively, or infallibly, factive. My disbelief in referential infallibility for perceptual state instances and perceptual beliefs also commits me to disbelief in their being constitutively, or infallibly, factive. I think that knowledgeable perceptual beliefs are also not constitutively, or infallibly, knowledgeable. I think that this view follows from my belief, stated below, that perceptual warrants for perceptual knowledge are not indefeasible in the traditional sense.

I believe that perceptual beliefs are not warrant-factive. I think that perceptual beliefs can be warranted but false. One can be not merely “blameless” but warranted in – epistemically entitled to – mistaken perceptual beliefs, if one’s relevantly reliable perceptual system and reliable belief-forming capacities operate well and if one has no reason to doubt.³⁷

I believe that no successful perceptual belief about the physical environment is indefeasibly warranted in the traditional sense. There are many well-known counter-examples. The individual could have had the same successful perceptual belief, resting on the same successful perception. But the individual could have been given overwhelming reason – from induction or from expert testimony – to think (mistakenly), immediately after forming the belief, that his or her perception or belief-formation process was inaccurate or unreliable in the circumstances. It is also metaphysically possible for an individual’s actually warranted perceptual belief to have been, at first unbeknownst to the individual, in a landscape of illusory look-alikes or in the context of a psychological experiment in which illusions are regularly presented.³⁸ Counterfactually, if the individual had obtained such metaphysically possible information, the warrant that the individual actually has for the successful perceptual belief would have been undermined.

Defining the relevant belief state instance as the same only if it is knowledge does not help here. For it seems that if one is not actually in one of these metaphysically possible situations, one has knowledge. Attempting to define belief state instances, and their associated perceptual states, as relevantly successful ones only if such metaphysical possibilities do not obtain would leave one without any successful perceptual states or perceptual beliefs.

I think that basic warrants for perceptual beliefs are not world-limited indefeasible. Presence, in the believer’s world, of truths that, if known, would lead the believer rationally but mistakenly to doubt perceptual beliefs does not prevent the individual that has no access to such truths from being epistemically entitled to the beliefs. I think that default warrant (entitlement) for perceptual beliefs depends on the quality of the individual’s perceptual and belief-forming capacities, and on how well they are exercised in a given case. It does not depend on circumstances that do not affect the formation of the beliefs and are not accessible to the individual.³⁹

Although I do not think that in-fact-factive perceptual states are the only perceptual states that yield an entitlement to a perceptual belief, and although I reject the idea that perceptual beliefs are warrant-factive, I think that even true beliefs based on seeings are not world-limited indefeasible. One can see something and be entitled to the associated perceptual belief, but still be subject to counter-considerations (present in the actual world) that would make it unreasonable to believe one’s eyes *if* one had the counter-considerations. I believe that one can be warranted despite the unrecognized (and relevantly inaccessible) existence of such misleading but rational counter-considerations. Such warrant is open to possible defeat.

Since I think that perceptual beliefs, including knowledgeable ones, do not have world-limited indefeasible warrant, I think that knowledgeable perceptual beliefs are not world-limited indefeasible. I am not impressed by arguments from the alleged “accidental-ity” of individuals’ not having access to misleading but would-be rationally persuasive evidence to the conclusion that those individuals cannot have warrant or ordinary knowledge (as distinguished from *scientia*). (See Note 39.) Such arguments are, to my mind, not much stronger than a claim that since it is accidental that we are in the actual world, not having a possible counter-consideration would be accidental. I know that some think that rejecting these views is necessary to respond to scepticism or to retain an acceptable notion of knowledge. I discuss an instance of such thinking later in this section.

I have taken positions opposed to McDowell's on the epistemic status of perceptual belief. But I emphasize again that rejection of disjunctivism does not depend on these positions. I see no way to explain indefeasibility of warrant in terms of the formation or nature of perceptual belief. I believe that there is no other good way to motivate indefeasibility of warrant for perceptual belief.⁴⁰ But rejection of disjunctivism does not hinge on rejection of any form of indefeasibility.

Nor does rejection of disjunctivism hinge on rejection of referential infallibility (object dependence) or constitutive, infallible factivity.⁴¹ Rejecting disjunctivism is compatible with individuating *one* factor (occurrence-based applications) in kinds of perceptual state instances in any number of ways. I believe that there is no good reason to individuate them in the ways that I have rejected. Nor is there good reason to accept warrant factivity or indefeasibility of warrant for perceptual belief. But the root error of disjunctivism is its denial of a common factor (ability-general kinds) specific to perceptual state kinds, or the representational contents, in the four cases at the fundamental level of kind classification. This error is incompatible with science. I return to this matter in Section V.

As noted above, McDowell holds that for an aspect of objective reality to be 'perceptually *there* for one . . . is for one to be in a position that constitutes having an indefeasible warrant for believing that things are a certain way' (246, his italics). In his view, successful perceptual states in reasoners either are constitutively explained in terms of being indefeasibly warranted, or at least ground such warrant for perceptual beliefs, by necessary implication.

McDowell is committed to holding that warrants for perceptual beliefs are indefeasible in one or both of the ways I specified.⁴² A philosopher who believes that basic warrant for perceptual belief is defeasible holds the following position. Despite the possibility (all-out or limited-world) that the warrant could be defeated, one can be warranted in holding the belief if the warrant is not actually defeated. A further position that such a philosopher might take is that knowledgeable perceptual belief can be supported by undefeated defeasible warrant.⁴³

McDowell takes a contrary position. As the two passages (245, 246) cited above indicate, he holds that successful perceptual states and perceptual beliefs are individuated so as to imply by necessity that they are indefeasibly warranted, either in the traditional sense or in the limited-world sense. Before discussing what he says in favor of his position, I raise a difficulty, congenial to the well-known counter-examples, to these claims of indefeasibility.

The difficulty concerns explanation of why the warrant is indefeasible. Suppose that we grant, for the sake of argument, that particular seeings are infallible and that warrant for successful perceptual beliefs grounded in them is warrant-factive. Why is the warrant indefeasible – in either the traditional sense or the world-limited sense? McDowell states, 'one's experience [reveals] things to be a certain way, thereby providing one with an indefeasible warrant to believe that things are that way' (246); 'the authority of a report [of a perceptual belief] consists in the fact that things are manifestly so'.⁴⁴ Suppose that on a given occasion, an individual has an experience that is present to the individual. Suppose that the individual forms, in a good way, a true perceptual belief from the seeing. The idea is that the thought *I see such and such* is supposed to have an authority that derives from one's successful perception. But, as noted above, there can be true inductive or testimonial considerations that seem to make it reasonable for the individual – – having seen something, and having formed a true perceptual belief about it – – to doubt that he or she did see, and that call the perceptual belief into question. In such cases, the thought *I see such and such* (though true) cannot just be reiterated as a reason for resisting the doubt. Such reiteration would beg the question. Insisting that it is 'manifest' does not alter the situation. So it appears that the usual warrant is not only called into question, but shown to be insufficient for rational belief. The usual warrant is defeated and needs reinforcement.

How might one hold to the indefeasibility claim? There are two possible lines.

First, one could hold that the seeing was not, after all, a case of things being ‘manifestly so’; things were not ‘present to one’, even though one did see things veridically; experience did not ‘reveal things to be a certain way’. Then, one would not have had the warrant in the first place. Then, the psychological state *being present to one* is explained constitutively not merely in terms of seeing – indeed, not even in terms of infallible, warrant-factive seeing – but in further terms. For a seeing’s being infallibly factive does not in itself ground explanation of why a warrant for belief that one is seeing is indefeasible. The further explanation of *being present to one* would have to entail, probably directly invoke, indefeasible warrant.

I believe that such an explanation of the nature of a psychological state is unacceptable. It closes a natural question: ‘what is it about the psychological state that makes it indefeasibly warranted?’ On such an account, any answer to such a question would be circular. Psychological states should be constitutively specifiable independently of their being warranted in some way. The warrant should be (perhaps apriori) explicable (but not reducible) in terms of the nature or formation of the state and its relation to veridicality. No acceptable non-epistemic explanation of the psychological states seems able to show why warrants for perceptual beliefs are indefeasible. Further, trying to explain *being present to one* in terms of indefeasible warrant, or in terms of some unspecified psychological state, beyond seeing, that insures indefeasible warrant, encourages doubt that individuals are ever in states of things being present to them in the philosophically loaded sense.⁴⁵

Second, one can maintain that any ordinary seeing (perhaps construed as constitutively, or infallibly, factive) is a case of things being present to one; one insists that apparent counter-considerations have no rational force. In all successful perceptual beliefs formed from seeings, the individual’s belief is indefeasibly warranted. Apparent counter-considerations do not threaten the reason that one already has: I see such and such.

This second position is incompatible with how we reason, and what counts as reasonable. Reiterating I see such and such (even if true) begs questions raised when strong inductive ground, or seemingly authoritative, true testimonial evidence, is presented for doubting the belief. Maintaining one’s position in the face of such counter-considerations is not being reasonable. There is nothing in the fact that one *sees* that shows why it provides an indefeasible warrant for true beliefs about such seeings or about what is seen.⁴⁶

I think that any notion of indefeasible warrant weaker than world-limited indefeasible warrant would not be a notion of indefeasibility of warrant. In any case, the view that perceptual beliefs have an indefeasible warrant is antecedently very implausible.

In the present paper, McDowell does not say why he thinks that being in the state of an object’s being ‘present to one’ in perception ‘is for one to be in a position that constitutes having an indefeasible warrant’ (246, quoted above; see also 245). He does claim,

If it did not seem that there is no alternative, no one would take seriously the idea that one can know something about one’s environment on the basis of an experience such that it is possible, compatibly with the experience’s being as it is, that things are not as one supposedly knows them to be. (253)

I think that this passage is bluster and bravado. What alternative is alluded to? What alternative is so powerful and liberating that mere awareness of it would lead anyone to drop any seriousness about defeasibility? It is the alternative that I have been discussing – the view that basic warrant for perceptual belief is warrant-factive and indefeasible. Elsewhere, McDowell offers two short arguments for the view. Perhaps by attending to them, we can recognize its ineluctable truth, and the error of our ways.

Both arguments hinge on use of the terms ‘accidental’ and ‘luck’. One runs as follows. If someone had a warrant sufficient for a belief, and falsity of the belief were not incompatible with the warrant, then any putative knowledge that rests on such a warrant would be accidental, or lucky, in relation to the warrant. But knowledge cannot rest on accident in this way. So, any warrant that supports knowledge must be incompatible with the warranted belief’s being false. The warrant must imply, by necessity knowable on mere reflection, that the belief is true.

The other argument is similar: If someone had a defeasible warrant [reason] for knowledge that was defeasible, he or she would have a true belief ‘by accident’ and ‘by luck’. It would be an accident, or a piece of luck, that it is not defeated. True belief by accident or luck is neither warranted nor knowledgeable. So knowledge and its warrant must be indefeasible.⁴⁷

The first argument purports to establish warrant factivity for perceptual belief, which is not a kind of indefeasibility of warrant. The second argument is meant to support some unspecified type of indefeasible warrant for perceptual beliefs about the physical environment.

Having given the arguments, McDowell immediately qualifies his use of ‘accidental’ and ‘luck’. He writes that it is not luck in the sense of ‘complete accident’ or ‘sheer chance’. He notes that on defeasibility views, warranted and knowledgeable beliefs are ‘likely to be true’. But he stands by the application of these terms in other senses. What are these other senses?

With respect to the first argument, he writes ‘it is accidental . . . that the case [in which the warranted belief is true] is not one of the cases in which the supposedly open possibility of falsehood is actual’. The supposed knowledge is based on a ‘good but not conclusive reason to suppose things are thus and so, in a situation in which, *as it happens*, things *are* thus and so’.⁴⁸

With respect to the second argument, he thinks that warranted and knowledgeable beliefs will, on any defeasibility view, be accidental and a matter of luck ‘in the sense that they depend for being warranted and knowledgeable on factors that reason cannot control, or control for’.⁴⁹

That is all that the arguments come to. I think that any disinterested person aware of discussions of warrant factivity and defeasibility must find them impotent. They assume the negation of what the opponent on these two matters asserts. The arguments cover the question-begging assumption with non-standard, misleading uses of ‘accidental’ and ‘luck’.

Take the sense of ‘accidental’ in the first argument. The sense is that the warrant for the knowledge is compatible with the belief’s falsehood: the warrant does not imply by necessity that the belief is true. I think that perceptual beliefs do not have warrant-factive warrants. I think that perceptual beliefs are subject to brute error – error compatible with perceptual belief’s being formed non-pathologically and being warranted. I think that perceptual warrants depend on there being normal, reliable, law-like, psychological, perceptual belief-forming patterns that were formed through being routinely caused by lawful natural processes that connect environmental entities with the initiation of the psychological belief-forming processes. In normal circumstances, the initiations of the psychological processes by natural law combine with the normal workings of the perceptual system and belief-forming system to yield true perceptual beliefs. This is not a matter of mere statistical probability, much less accident or luck. It is a matter of being in the normal situation in which psychological laws and the non-psychological natural laws of nature that engendered those law-like patterns of belief formation are aligned. Cases in which one is warranted but mistaken are paradigm cases of accidental, unlucky situations. In such cases, the psychological processes are initiated by sensory registrations that do not derive from the normal, physically reliable processes that helped constitute the nature of the perceptual states, the perceptual beliefs, and the belief formation.⁵⁰

McDowell's rhetoric takes the product of a well-functioning psychological process that normally and reliably connects veridically to the environment to be a matter of accident or luck, if, in a metaphysically possible but actually unusual type of case, the process is initiated by a type of cause other than the reliable type of cause that is so fundamental that it helped constitute the nature of the product, the psychological state. The argument's opponent claims that such normal, law-like patterns ground perceptual warrant. The view allows warranted but false beliefs in unlucky cases. The opponent denies that the warrant guarantees truth by metaphysical necessity. Arguing that not being metaphysically necessitated by a warrant would leave the truth of beliefs to be an accident or a matter of luck is a paradigmatic philosophical misuse of language.⁵¹ When the rhetoric is stripped away, the argument is seen nakedly to beg the very question at issue. Yes, perceptual warrants do not necessitate the truth of warranted perceptual beliefs. Warranted, true beliefs are not thereby true by luck relative to the warrant.

The same sort of point applies to McDowell's use of "conclusive reason". He holds that empirical warrants are not "conclusive reasons" in the sense that they do not necessitate the truth of perceptual beliefs. But it is the considered view of McDowell's opponents that basic perceptual warrants do not necessitate the truth of what they are warrants for.⁵² It does not follow from *this* sense in which empirical warrants are not conclusive that they do not yield practical certainty, that they yield only lucky true belief, or that they are not sufficient for knowledge, when undefeated. No inductive empirical warrants necessitate the truth of the beliefs that they warrant. One does not count beliefs supported by inductive warrants as matters of luck. Applying 'matter of luck' to non-inductive perceptual beliefs with non-warrant-factive warrants is equally wrong.

The sense given to 'accidental' and 'matter of luck' in the second argument is no better. The idea is that warranted and knowledgeable beliefs are, on defeasibility views, accidental and a matter of luck 'in the sense that they depend for being warranted and knowledgeable on factors that reason cannot control, or control for'. But that is simply what defeasibility views maintain. In the sense of non-control required by his view, one can have sufficient reason, or a warrant sufficient for belief, even though the reason, or other warrant, does not necessitate the impossibility of defeat. Again, that is the situation with inductive reason. The philosophers whom McDowell opposes think that that is the situation with basic warrants for non-inferential perceptual beliefs. McDowell's argument, stripped of its misleading rhetoric, straightforwardly begs the question.

McDowell has a strongly felt intuition that defeasibility views provide an unsatisfactory account of knowledge and warrant. Philosophers whom he argues against do not share his intuition. So far, he has given no genuine argument against those who do not intuit things his way. It is not enough to claim that mere acquaintance with his alternative will lead opponents to give up their views, and realize that those views should not have been taken seriously. It is not enough to spin out abstract "pictures", and warn of vaguely characterized disasters allegedly implicit in the opposing "picture". It is not enough to claim that an opponent is blind, deaf, lacking in imagination, and saddled with inability to comprehend or contemplate his alternative.⁵³ Progress requires non-question-begging argument. Progress does not issue from bluster or bravado.

IV

In 'Perceptual entitlement', I argued that McDowell's views, among others, hyper-intellectualize perception and the epistemology of perceptual belief. I argued, against Sellarsian views, that perceptual beliefs do not require propositional reasons to be warranted.

As one point against McDowell's Sellarsian views, I claimed that a transition from a perception to a perceptual belief 'is not a piece of reasoning – a transition from a reason to what it is a reason for'.⁵⁴ The work of McDowell that I cited and targeted in the criticism certainly does treat perceptions as conceptually structured, propositional reasons for perceptual beliefs. It certainly does countenance transitions (termed 'moves' and 'steps') between perceptions and beliefs, in 'the space of reasons'. His view was committed to there being reasoning in that sense.⁵⁵ I denied that transitions from perceptions to perceptual beliefs are reasoning in that sense.

McDowell responds by writing that I was 'distracted' (254n3) by his attributing propositional content to experiences. He claims that that view – and presumably the associated commitment to a step or move from a perception as a reason to an empirical judgment that it is a reason for – is 'inessential for the fundamental point'. But I did not claim that it was essential to the fundamental point. I claimed that it was a mistake in the view that he actually held. McDowell's response is another example of misdirection. McDowell has now changed his view on the point that I criticized – the point that counted perceptions propositional, and reasons for perceptual beliefs. Perhaps, the 'fundamentals' of his view can survive this particular error of his. Other criticisms remain germane.

McDowell writes, 'it would be a gross falsification of perceptual knowledge... if one took it to be based on reasoning' (247). I did not see my point in such florid terms. I termed the view 'strange' and 'implausible'. But I do not think it false on its face. I think it empirically false.

McDowell explains why he agrees that coming to a perceptual belief when one has a perception is not a piece of reasoning by saying 'It happens without any need for rational activity' (254n3). But my characterization of reasoning does not mention activity. I described such 'comings' to perceptual beliefs as transitions, precisely because I did not assume that pieces of reasoning in my sense must be rational activities. I think that some pieces of reasoning are passive, unconscious, and possibly even modular. In such cases, the transitions are not activities by reasoners. I was allowing for this point in my description of his view, since it really is pretty obvious that such transitions are not activities by reasoners. I wanted to describe the view in a way that was as non-tendentious as possible. My point was that even taken in a way that does not require the transition to be an activity, much less a conscious or self-conscious activity, it is not a piece of reasoning in the sense that I specified. I explicitly took the basic ground for the criticism to be empirical: there is no evidence that perceptions are structured propositionally. Like McDowell, I believe that reasons are propositional. So, I concluded that perceptual contents and perceptions are not reasons, contrary to McDowell's earlier view. I thought, and think, that McDowell allowed his epistemological views to dictate on empirical psychological matters that are prior to epistemic evaluation. Empirical evidence counts against his former view.

In addition to the claim that taking perceptual contents to be propositional hyper-intellectualizes perception, I made three claims about hyper-intellectualization in epistemology.

I claimed, first, that individuals that lack meta-representational capacities can nonetheless be entitled to their perceptual beliefs – and have perceptual knowledge. I think that to have reasons for perceptual beliefs (as distinguished from using perceptual beliefs as reasons for other beliefs), one must be able to think about one's perceptions as such, or have other such meta-representational beliefs. Hence, I think that individuals can be entitled to, hence warranted in, their perceptual beliefs without having reasons for them. Such individuals can also lack the concept of reason and lack self-consciousness. Young children, who have beliefs and reasons before they give clear evidence of having meta-representational beliefs about their psychological states, are the clearest examples.

They are warranted in their perceptual beliefs, but lack meta-representational thoughts like I saw such and such, or any other reasons for the beliefs. Higher animals are probably further examples. Requiring an individual to have a reason for a perceptual belief in order to be epistemically entitled to it (or even in order to have knowledge, as distinguished from *scientia*) hyper-intellectualizes the epistemology of perceptual belief.

Second, I claimed that not all human adults have a minimum capacity, associated with having reasons for their perceptual beliefs – a capacity that minimally respects defeasibility conditions on reasons for the beliefs. Yet, I think that all human adults with normal perception and normal perceptual belief formation are entitled to their perceptual beliefs.

Third, I claimed that sophisticated people, who do have capacities to provide reasons for their perceptual beliefs, need not rely on those capacities to be entitled to the beliefs. They need not be self-conscious or rely on self-consciousness, and they need not employ the meta-representational capacities involved in thoughts like I saw such and such as reasons. I wrote that the first and third points are the fundamental ones.⁵⁶

To the second point, McDowell responds that, on his indefeasibility view of warrant, one need not have any minimal conception of defeasibility conditions. This reply is part of a serious misrepresentation of what I wrote on this point. He writes, '[Burge] thinks that to justify describing the state as a seeing, with the factive character that imports, would require working with sophisticated concepts like that of defeating conditions' (247). I nowhere made any such claim. I believe that using I see such and such as a reason for a belief does not require having the concept defeating condition. I wrote instead that using I see such and such as a reason requires a 'know how' ability to respond to potential defeaters by accepting or defending against them *in particular cases*. The point of my writing about a 'know how' mastery was precisely to avoid requiring that individuals that reasoned in this way have general epistemological concepts.⁵⁷

I doubted that every human adult who is entitled to perceptual beliefs has even this low-level 'know how' ability to support perceptual beliefs by propositional reasons. Perhaps, it does not require 'much sophistication' (247) to use the thought I see such and such as a reason. But I did not write that it does require much sophistication. I wrote that I doubted that all human adults have even that sophistication. And I think that such adults, like young children and higher animals, can nonetheless be entitled to their perceptual beliefs. Warrant for perceptual beliefs does not require having reasons for them, even the reasons McDowell cites. McDowell's reply fails to engage. There remains the disagreement over defeasibility conditions. I showed in Section III that McDowell has given no reason to believe that basic warrant for perceptual belief is indefeasible.

What of the first and third points? McDowell's resistance to the charge of hyper-intellectualization exhibits the very quality that it disclaims. He holds that the space of reasons includes 'ordinary mature', 'minimally articulate' (247) human adults who do not have 'much sophistication' (247). He takes a belief to 'owe its status as knowledge to a self-consciously possessed warrant' (247). He takes warrant to require self-consciousness (247, 252, 253). He takes individuals with perceptual warrants to use factive concepts, like see and know, about their psychological states (247, 252). He takes perceptual beliefs to be justified by such reasons as that they derive from seeings (247). Focus on self-conscious, meta-representational mobilizations of reasons, even by such minimally mature adults, hyper-intellectualizes epistemology. Individuals can have perceptual warrant and perceptual knowledge while lacking self-consciousness and meta-representational concepts, like the factive concepts that McDowell invokes. I argued these points in supporting the first and third claims. Reasoning with perceptual beliefs starts sooner. Even individuals that have meta-representational concepts and are self-conscious about

their warrants do not need reasons for their perceptual beliefs in order to be epistemically entitled to them.⁵⁸

McDowell has seemingly given up his earlier view that perceptions are propositional reasons for perceptual beliefs. I think that McDowell's new descriptions of the role of reason in perceptual belief, even in their vague form, are unacceptable. He writes that perceptual capacities 'belong to' their possessor's rationality (247), that perceptual capacities of rational animals are 'among the rational powers of their possessors' (247), that the rationality of rational self-conscious animals 'informs their perceptual capacities' (248), and that 'exercising rational perceptual capacities is the form taken by perceiving' (248). His takes the form and nature of mature human perception to be shaped by reasoning capacities – in fact, by the epistemic conditions that he espouses.

Of course, perception is a resource for reason. When a reasoner perceives, the individual's rational capacities utilize perceptions. But how perception and propositional reason are related is a psychological matter, determinable on empirical grounds. Empirical grounds count against McDowell's descriptions. There is powerful empirical evidence that the formation of perception in human beings occurs in almost complete independence of higher conceptual and rational powers. The form, nature, and basic laws governing basic human perception owe nothing to reason. Reason affects what individuals perceptually attend to and remember. Reason is involved in forming perceptual beliefs from perceptual states. But the basic formation of ground-level perception in mature humans is fundamentally the same as it is in all mammals.⁵⁹ In many respects, the principles, operation, and form of visual perception are the same among mammals, birds, and even insects.⁶⁰

V

McDowell believes that he can make claims about the form and nature of human perception from the armchair because he thinks that perceptual psychology does not specify the form or nature of perceptions by human beings. This remarkable view is quite clearly mistaken. The view exhibits ignorance of the most elementary aims, claims, and methodology of the science of perceptual psychology. I think that it is the key mistake underlying his disjunctivism.

McDowell purports to accept perceptual psychology. He thinks that the psychological states that it attributes 'are explanatorily relevant . . . for explaining the fact that animals with the relevant kind of visual systems can perceive entities in the environment' (248). But, he thinks, 'the states of perceptual systems that do that explanatory work are not the states of perceivers that they explain' (250). He holds that states attributed in perceptual psychology are 'irrelevant to the question how states of perceivers should be classified' (252). He postulates a whole new range of perceptual states. The classification is governed by a different 'conceptual apparatus' (249), and occurs within a different 'conceptual framework' (250).

I criticized this view. I showed that he had failed to cordon off human perception from perceptual psychology.⁶¹ The mistake lies in failing to understand the claims of the science and in denying their relevance to the classification of human perceptual states. Since the science explicitly concerns states of human and other animal perception (not merely sub-individual systems of states in the psychology of individuals), McDowell's view is incompatible with the science, while it purports to agree with it. Since the denial of relevance is mistaken, human perceptual states are to be classified as the science classifies them. Such a classification is incompatible with disjunctivist classification. There is a common factor specific to the four cases at the most fundamental level of psychological classification and explanation.

McDowell repeatedly reports that I assume that the states in perceptual systems that are attributed in perceptual psychology are the same as the states of perceivers (249–52). In fact, I argued the point, although elementary knowledge of perceptual psychology makes it so obvious that it should not need argument. As I explained, the basic methodology and laws of the science are directed toward attributing the states of human and other animals' veridical and non-veridical perception. The most basic, best established principles of perceptual formation cite, as causes as well as effects, representational perceptual states of individual perceivers, including many conscious ones available to introspection. For example, the principles explain the formation of states that constitute our seeing a rock as the same size from both 10 feet and 30 feet away, or states that constitute our seeing a surface as white under white, blue, or red illumination. These states are introspectible as our perceptual experiences. The science draws on this introspectibility, although it also uses much more sophisticated methods for getting at what the states are like. In fact, the science itself differentiates between conscious and unconscious perceptions, and explains different patterns governing each. Conceptions of test and evidence depend on attributing the perceptions that individuals have in perceiving the world.

The methodology of the science is, where possible, to match, clarify, sharpen, and make sense of (often by roughly confirming and sometimes by seriously correcting) the introspective conscious reports of human individuals. It attributes such states to non-human animals on the basis of discriminative behavior. It integrates ordinary, conscious perceivings and misperceivings by individuals into a system including non-perceptual states and processes; and it explains, in systematic, mathematicized ways, how these perceptual states are formed and affect other states. Individuals' perceivings and misperceivings are the central topic of the science.

How does McDowell support his construal of the science?

In his present paper and in the one that I criticized, he claims that key aspects of the science, including its attribution of representational states, are 'metaphorical' (249–50).⁶² None of McDowell's writing about the science shows even moderately detailed familiarity with it. The claims about the metaphors involve no detailed analysis.

McDowell claims that I acknowledge that such descriptions of perceptual systems as those in terms of states that 'extract information about features of the environment' and states that move 'from arrays of sensory stimulation to states with representational content pertaining to ... environmental features' are 'shot through with metaphor' (249).

This claim is mistaken, as regards both what I acknowledged and how the science works. I acknowledged that in (popular) presentations of the psychology, metaphor is used. I specified metaphors of the perceptual system's 'solving problems', 'making assumptions', and engaging in 'reasoning'. Contrary to what McDowell writes (quoted above), I did not acknowledge that there is any metaphor in the attribution of extraction of information (which is a statistical, not representational, notion), or in the attribution of states with representational content about the environment.⁶³ I emphasized that even the metaphors that I did cite are inessential to the scientific theory. The metaphors are easily separated from expositions of the theory, as my expositions show.⁶⁴ Metaphor does not occur in the law-like principles invoked by the science. The science invokes none of the higher level rational activity described in the metaphors. The science explains, in mathematicized, law-like terms, patterns of transitions by which sensory registrations cause perceptual states that represent specific environmental particulars and attributes. The perceptual states are those of individual, including human, perceivers. Explanations in scientific journals commonly do not rely on metaphor at all.

McDowell holds that, though the language of the theory is metaphorical, it has the ‘power to illuminate’. He protests that he does not ‘debunk’ or ‘deprecate’ the explanatory power of the theory (250–1). None of these protestations of friendship to the science are to the point. I criticized his view for misunderstanding the science, not for deprecating it. Metaphorical explanations can be illuminating. But these explanations are not metaphorical. Core scientific explanation is not metaphorical in this case, or in others.

A second line that McDowell employs – for holding that the science does not attribute the perceptual states that constitute human perception – appeals to a difference in ‘conceptual apparatus’ between his epistemological project and the science (249, 250). The idea is that this difference makes the classification of perceptual states in the science ‘irrelevant to the question of how states of perceivers should be classified’ (252).

Of course, there are differences in cognitive projects that involve different vocabularies and concepts. Notions of warrant do not appear in psychology. Notions of filters and opponent processes do not normally appear in epistemology. But there appear to be notions – seeing, believing, and conscious sensory awareness – that occur in both. McDowell’s conception of a difference in ‘conceptual apparatus’ or ‘conceptual framework’ is a special one. He invokes it to try to show that if certain concepts that he thinks have their home in one of the frameworks were used in the other framework, the use would ‘make no sense’ (250). In particular, he thinks that it ‘makes no sense’ to use ordinary notions of individuals’ perceptions – which he thinks have their home in epistemology and in ordinary thought about perceivers – to apply to psychological states in perceptual systems of states theorized about in perceptual psychology (250). He also thinks that it ‘makes no sense’ to apply epistemic terms like ‘provides an indefeasible warrant for belief’ to the psychological states that occur in the perceptual systems theorized about in perceptual psychology (250).

I shall consider all that he says to support his invocation of different conceptual frameworks that have these consequences.

First, he indicates that taking the science to classify states of perceivers indicates insensitivity to the issue of ‘who or what is in a state’ (250). He writes,

Experiences are states of perceivers; the states that perceptual systems get into when they as it were solve the problem of moving from sensory input to representations of the environment (which is not something perceivers do even in a metaphorical sense) are states of perceptual systems. (250)

He writes, ‘The conceptual framework in which talk of perceivers operates is in many ways very different from the conceptual framework in which talk of perceptual systems operates’ (250).

No one thinks that perceivers do anything when perceptual states are formed within them. McDowell writes as if perceptual states in perceptual systems are, for the science, like subjects that ‘as it were’ solve problems, or at least entities that have the states in something like the way perceivers have experiences. This way of thinking is mistaken. Once the metaphor is dropped, the alleged categorial differences that McDowell is invoking turn out to be illusory.

What is a perceptual system? The science takes perceptual systems to be systems of states, including perceptual states, of perceivers – states that are fruitfully studied as members of a unit. For example, the system of perceptual states that are initiated through registration of light stimulations in the retinas of the eyes is fruitfully studied as a unit. Similarly, for the auditory system of perceptual states. These systems interact; there are cross-modal influences that are also fruitfully studied. Moreover, there are amodal systems that take input from the various systems associated with the different perceptual modalities – vision, hearing, touch, and so on – that are fruitfully studied as units.

Commonly, the units or systems are taken to be groups of states of a single perceptual modality. However, it is obvious that none of these systems or groups of perceptual states can ultimately be understood in complete isolation from the others. In fact, cross-modal relations and amodal representational states are among the most intensely studied topics in current perceptual psychology. One might take vision, touch, and hearing to participate in a multi-modal perceptual system. That is, when a perceiver sees something as to the left and also hears it as to the left, the perceptual states interact in a way that might be fruitfully studied as members of a unit. Empirical theory has found it useful to conceive certain groups of perceptual states as units, and to call them systems. This way of conceiving groups or systems of psychological states presupposes taking the perceptual states in these various systems to be states of individuals' perceivings and misperceivings. These are two ways characterizing the same states, not different conceptual schemes isolated by categorial barriers.

Perceptual systems are not subjects 'of' states, as perceivers are, as McDowell's rhetoric implies. They are simply groups of inter-related states – including, most prominently and centrally, perceptual states of perceivers.⁶⁵ The perceptual states in perceptual systems are, one and all, perceptual states that are individual perceivings and misperceivings. There is no difference in conceptual framework of the sort that McDowell invokes. The uses of 'in' and 'of' in his claim obscure the way the science theorizes about perceivers' perceptual states. Perceptual states are "in" perceptual systems in the sense that they are among the states in the system of states. (Similarly, for "of".) Perceptual states in the system are "in" perceivers in the sense that they are states of perceivers, as subjects of the states – subjects having the states. The whole system at any given time is a state of the perceiver.

Many of the perceptual states – as opposed to most registrations and all transitions – are conscious states of the individual. A conscious perceptual state that represents a pattern of edges within a natural scene and that is theorized about in the science can be found introspectively by considering one's own perceptual experience of the patterns of edges. A conscious state that represents a complex arrangement of bodies at different distances and directions, some partly occluding others, and that is theorized about in the science can be discerned introspectively by considering one's perceptual experience of, and as of, the system of bodies. Far from exhibiting a difference in conceptual framework, the science's conception of perceptual systems intentionally meshes with ordinary thought about individual perception. It sharpens, systematizes, and explains insights present in common sense. So much for the first consideration McDowell offers for holding that perceptual psychology is irrelevant to the classification of perceptions and misperceptions by individuals.

Second, McDowell claims, 'It does not make sense to conceive an animal's perceptual systems as being aware of features in the animal's environment. Here too, a state of a perceptual system cannot have the cognitive significance of an animal's exercise of a perceptual capacity' (250). It is hard to take this point seriously. The claim in the first sentence is perhaps correct. But it is irrelevant to supporting the claim of different conceptual frameworks. The science's attributing conscious perceptual states to individual perceivers does not involve claiming that perceptual systems are aware of the environment. Perceptual systems are just groups of states of the perceiver. The perceiver is the only one that is aware of or conscious of anything. Perceivers are aware of the environment through having conscious perceptual states (experiences) that represent the environment. An individual is consciously aware of a red surface lit with a blue light at such and such a slant from head-on; this awareness is by way of the conscious perceptual state just alluded to. The science explains the formation of these sorts of perceptual states (including conscious ones). No one claims that perceptual systems – groups of perceptual states – are aware of anything. Individuals are perceptually aware of particulars and features in the environment. Their having this

awareness consists in their being in the conscious perceptual states that occur in perceptual systems – the groups of states described and theorized about in perceptual psychology.⁶⁶

Third, McDowell holds, ‘It makes no sense to suppose a perceptual system might be in a state with respect to which there is no possibility that things might not be as it represents them as being’ (250). This claim of unintelligibility resembles the one that I showed to be mistaken in Section II. It is perfectly intelligible to claim that a state instance in a perceptual system could not have been mistaken. I do not accept that claim. I see no good reason to individuate perceptual occurrences in that way. But the claim is intelligible.⁶⁷ Like the others, this line for claiming a categorial distinction between thought about individual perceivings and misperceivings, on one hand, and thought about states in perceptual systems, on the other, fails.

These three considerations are all that McDowell provides to support his view that the science of perceptual psychology is not what it claims to be – the science of perception by individuals. These considerations are shallow and based on misunderstanding. They are far from what would be required to support such a large, implausible claim.⁶⁸

McDowell makes a remark that shows that the armchair thinking that led to these mistakes about the science derives from a different conception of appropriate methodology for thinking about science. He writes, ‘I raise a *conceptual* question about how we should understand the language used in such theories [theories such as those in perceptual psychology]. Burge responds, bizarrely, as if to a case of *empirical* ignorance’ (251, italics his).⁶⁹

I think it clear that answering conceptual questions about a science’s language depends on empirical knowledge – knowledge of what the science says. To distinguish metaphor in popular expositions from literal theory, one must have empirical knowledge of how the science works; one must know the theory. Empirical ignorance of the science does prevent conceptual claims about the science from being correct. Conceptual questions are not, in general, independent of empirical knowledge. To do philosophy of a science, one has to understand the science.

Conceptual questions about whether the concept of physical space is necessarily Euclidean cannot be seriously discussed without understanding relativity theory. Conceptual questions about what it means for something to be both a particle and a wave (or both particle-like and wave-like) – and about whether language in the science on this topic is metaphorical – cannot be reasonably discussed without understanding and knowing some quantum mechanics. Conceptual questions about uses of the concept of species, or about language that refers to species in biology, cannot be reasonably discussed without knowing evolutionary biology. The “conceptual” questions about perceptual psychology’s use of language about accuracy and illusion, about perception, perceptual systems, perceptual states, and so on, are not nearly as complex as the ones just mentioned. But the case of perceptual psychology is parallel. Conceptual pronouncements about the nature of an empirical science’s language that are not based on understanding and knowing the empirical science are vulnerable to empirical error.

The idea that philosophy can pursue conceptual inquiries that are insulated from empirical knowledge, even where science appears to have something to say about a given topic, has had an undistinguished career in philosophy. It played little role in philosophy, except perhaps in late German idealism, until early twentieth century, gaining momentum briefly in ordinary-language philosophy.⁷⁰ In trying to protect philosophy from empirical incursion, and to give it a subject matter of its own, the tradition succeeds in isolating philosophy from knowledge. The approach has made a lot of philosophy irrelevant to advancing the knowledge of humankind, and to illuminating conceptual questions that philosophy rightly confronts. Few areas of philosophy have been more enervated by this approach than philosophy of perception.

VI

McDowell's mistake in claiming that the science of perception does not attribute perceptual states to individual perceivers undermines his disjunctivist classification scheme. It is not compatible with the science to deny a common factor specific to and fundamental to individual perceivings and misperceivings in the four cases. If there were reason to maintain the infallibility of successful perceivings, or the indefeasibility of successful perceptual beliefs based on such perceivings, one could maintain those positions, compatibly with the letter of the science. Such positions are possible inasmuch as one relies on an independently motivated distinction between ability-general perceptual kinds, which are common factors specific to the four cases at a fundamental level of kind classification, and occurrence-based perceptual kinds, which differ at the same level of kind classification among the four cases. But I believe that although such positions are compatible with the letter of the science, there are good reasons not to hold them. They do not accord well with what we know about what perceptual success depends on, or with what we know about reason and warrant for perceptual belief.

The failure of the disjunctivist classification scheme undermines the view that the form and nature of human perception depend on human capacities for reason. It also undermines other such hyper-intellectualized views of perception and the epistemology of perceptual belief. One can no longer pronounce from the armchair on the form and nature of human perception. Such issues are to be determined by empirical investigation, not by armchair pronouncements uninformed by understanding the relevant science. Human perception is the subject matter of a science. Philosophy of perception must incorporate informed philosophy of science.⁷¹

The failure of the disjunctivist classification scheme also helps undermine the view that the epistemology of perceptual belief can be pursued independently of the psychology of the states being epistemically evaluated. Epistemic status hinges on how well individuals and their psychologies fulfill their representational functions. Representational functions are grounded in representational competencies. Representational competencies are specified by our best psychological understanding. In the case of perception, such an understanding derives from very well-grounded, mature science.

No particular scientific theory is sacrosanct. But well-grounded, rigorous science, with massive empirical support, raises the bar for philosophical views that do not accord with it. Disjunctivist views languish well below the bar. The positions criticized here are marked not only by failing to understand relevant science, but by a striking series of errors – in analysis, reporting, dialectic, and argument. The view that positions need only be understood to be accepted encourages the attitude that argument and analysis are not necessary: pronouncement suffices. Such an attitude is also encouraged by a methodology that takes philosophical pronouncements in this area to be immune to empirical check. Disjunctivism ignores science in specifying ordinary psychological kinds and in doing epistemology. It is a doctrinal and methodological aberration. Philosophical progress will continue to pass it by.

Acknowledgment

I thank Ned Block for comments.

Notes

1. Representational contents help type-individuate perceptual kinds. The four cases have different representational contents, but share a common factor in their representational contents that is

- specific to and fundamental to the four cases. Differences among the representational contents in the four cases are again occurrence-based. The common factor is ability-general and pattern-individuated. One can count the differences as occurrence-based *kinds*. One can even allow the occurrence-based kinds to be cross-world object-dependent. But to remain compatible with the science, one must acknowledge a common factor in the representational content, and in the perceptual kind that it marks. I explain these points in detail in Section I and in Burge 2005. For explication of ‘ability-general’ and ‘occurrence-based’, see Burge (2005, esp. sec. VII; 2009, sec. II; 2010, 379–396).
2. Burge 2005, 22–3.
 3. I engage in schematization even here. One could imagine the referential illusion in (4) as affecting all purported particulars, or some but not others. There are many combinations here. Similarly, one can imagine indefinitely many different indiscernible particulars that fit the cases (1) and (2). In successful perception, one always perceives numerous particulars. The switches could occur among any combination of particulars perceived. I write of four cases here, although for any given original case (1), there are indefinitely many companion cases (2)–(4). I did not discuss case (3) in ‘Disjunctivism and perceptual psychology’. There I wrote of three cases. I write here as if I wrote of four cases in the original article, just for expositional simplicity. Nothing in the present discussion hinges on the difference between three and four.
 4. Citations in parentheses in the text refer to page numbers in this article.
 5. I write of individuals’ perceptual states rather than of perceptual states ‘at the personal level’, because my points apply to perceivings and misperceivings by non-human animals as well as human animals and persons. I think that writing of ‘person-level’ perceptual states is misleading, inasmuch as it suggests that the perceptions at issue are confined to persons. This suggestion is congenial to a very influential line of thought according to which genuine perceptual reference is available only to persons. Criticizing this line is a main theme in my *Origins of objectivity* (2010, esp. chap. 1, 5–7). The distinction that I am discussing, and which I think McDowell is partly relying upon, is analogous to the corruptly termed distinction between person-level perceptions (really, perceptions or misperceptions by individual perceivers) and sub-personal states (really, states imputable to an individual’s psychology but not to the individual). Roughly, the individual level is a level at which conscious, or at least potentially conscious, states occur. For further discussion of this issue, see Burge (2010, 369–76).
 6. Not all forms of disjunctivism engage in hyper-intellectualization. The primary objection to all forms is that they are incompatible with scientific classifications of perceptual states.
 7. This is the characterization quoted by McDowell (see Burge 2005, 25). I first state the characterization (Burge 2005, 2) where the parentheses on the key term ‘specific to’ do not occur. I describe the characterization as ‘rough’ (see next paragraph) (Burge 2005, 2). I connect being specific to the cases with being a fundamental level of explanatory kind (Burge 2005, 26, 28).
 8. I noted the point (Burge 2005, 26).
 9. I noted that disjunctivism allows state kinds in common among the relevant cases (Burge 2005, 26).
 10. I use ‘content’ here to include both the content attributed by naive realist views of perception and the representational content attributed by neo-Fregean views. Content according to direct realist views consists of the entities in the environment that are perceived, at least in successful cases. The denial of a common factor in the content falls out rather straightforwardly for direct realist disjunctivist views. Since McDowell is a neo-Fregean, his notion of content is representational content. In this respect, it is like mine. In this article, I will be almost exclusively concerned with the representational content of perceptual states. I believe that representational content is a primary aspect of perceptual state kinds.
 11. The expression ‘present to one’ is a technical term for McDowell. I discuss it in Section III.
 12. Burge (2005, 26).
 13. Burge (2005, 28). For me, fundamental kinds are natures, constitutive to their instances. I take fundamental kinds to be the most fine-grained kinds that ground systematic explanation.
 14. To maintain this position, the disjunctivist must hold that science does not produce the most fundamental level of classification for individuals’ perceptions and misperceptions. McDowell denies the relevance of the science to classifying these cases – perceptual states ordinarily so-called. Disjunctivism was initially formulated, perhaps in all its versions, without any serious consideration of the science.

15. It follows, trivially, that in his view, those states are not specific to the four cases. To be specific to the four cases, a kind must be instantiated by the four cases. However, the irrelevance of his acknowledgment of common kinds attributed in the science need not be explained by reference to the notion of being specific to the four cases. It is irrelevant on its face.
16. Burge (2005, 45–50, 9).
17. This is a primary point in McDowell (1994a). In Section 8 of his present paper, he implicates that he still accepts it. I return to his views on perceptual psychology in Section V.
18. McDowell indicates that each of the relevant cases entails having it appear to one that things are a certain way (251). Entailment commonly holds between designations of species and genus. If the entailed state designation applies to any other possible states besides instances of the four cases, the genus would not be specific to the four cases. Moreover, such entailments commonly hold between fundamental and more generic classifications. So McDowell's point about entailment does not show that his schematic phrase cites a common state that is specific to the cases and at a fundamental level. In fact, it tends to suggest that the states he has in mind that are common are not at the fundamental level of classification.

The disjunctivist might think that in cases of referential illusion, there is no singular element in the representational content of the perceptual state. (McDowell may be intimating such a view (252).) I regard such a view as mistaken. But a disjunctivist that held it would certainly be committed to holding that there is no common state specific to referential aspects of the four cases. For the singular form of the successful cases ((1) and (2)) is not in dispute.

19. McDowell means that no factorization can yield an element neutral with respect to the particulars (such as a given cube and a given white background) that are perceived in the successful cases, an element that is a kind of appearance of those particulars. I think that all attributive elements in the perceptual states are neutral common factors. Only the demonstrative-like singular applications differ.
20. The positive point, after the semi-colon, does not explain the negative point 'The factoring fails'. The positive point implies only that being in relation to a certain perceived particular is constitutive to instance (1). Similarly, for instance (2). It implies nothing about there being no further common factor, at the fundamental level of classification, that is also constitutive. It requires the representational contents of (1)–(4) to be different, but does not explain failure of factoring. A common factor specific to the four cases – and a common representational content specific to the four cases – is compatible with the required differences in representational content among (1)–(4).

The passage just before this quotation indicates that a knowledgeable belief is the kind of belief that it is only because it is knowledge. This point is intended in the sense that a knowledgeable belief must be a different kind of belief from any non-knowledgeable belief, at the fundamental level of classification. Thus, my belief that adult monk seals weigh more than adult cheetahs cannot be the same kind of belief as your belief that adult monk seals weigh more than adult cheetahs, if my belief is knowledge and your belief is not. He also denies that there is any common factor between the two cases. By analogy, a successful perception is supposed not to share any common factor with an unsuccessful one. In his view, they certainly share no kind specific to the four cases at the fundamental level of kind classification.

With respect to the belief that is the kind of belief it is because it is knowledge, we have the threat – which I discuss in Section III – of closing the question 'what is it about the belief that makes it warranted or knowledgeable?'. If being knowledgeable is part of the identity of the belief, there are no non-circular answers to the question. The view that McDowell accepts here rests on a mistaken conception of the relation between psychology and epistemology. This issue is a theme of Sections III–V.

21. In the quoted passage, as in many other places, McDowell's writing blurs the distinction between a state instance and a state kind. Here, it is clear that it is the kind of state that is at issue. Moreover, McDowell explicitly denies the kind of factoring (251, 253) that I am proposing here and that I claimed is necessary for remaining compatible with science (cf. Burge 2005, Section VII).
22. I believe that the perceptual (or 'appearing') state kind that is common to (1)–(4) that I am proposing as a common factor is not only fundamental but also specific to the four cases. It is an ability-general kind, marked by an ability-general representational content that is not shared by any other cases not among (1)–(4). So I believe that McDowell's explicit denial of this common factor (251, 253) is a denial of a common kind that is, in fact, specific to the four cases.

23. McDowell makes glancing reference to this view (251, see Burge 2005, 27). He claims his disjunctivism to be among the views allowed for by it, if occurrence-based aspects of representational contents (occurrence-based “kinds”) are individuated in a cross-world object-dependent way. I see no good reason to individuate occurrence-based applications in cross-world object-dependent ways (see Burge 2005, 30–1, 36–40, and Section II below). But I indicated that such individuation is not the key issue. I indicated that allowing cross-world object-dependent individuation is compatible with rejecting disjunctivism (Burge 2005, 38–9, 41).

McDowell’s claim that by allowing finer-grained, object-dependent individuation, I allow his disjunctivism – and thus fail to center on what his disjunctivism holds – is mistaken. It is mistaken because it misses the fact that my way of allowing for object dependence presupposes accepting a common factor among the four cases that is specific to them at the most fundamental level of classification for explanatory purposes. I explained and motivated, in some detail, the fundamental factor, specific to the four cases, that must be recognized in order to be compatible with the science (esp. Burge 2005, 36–40). As I emphasized, denial of such a common factor, not acceptance of object-dependent elements, distinguishes disjunctivism. McDowell denies such a common factor.

McDowell’s failure to consider the roles of specificity and fundamentality in my characterization of disjunctivism is probably partly a result of his failure to think through my account of the common factor – which he dismisses without discussion as an example of factoring (252). The carelessness involved in these failures is not the most basic defect in the reply, however. The basic error is the claim that science is irrelevant to the nature of human perception. I believe, however, that the carelessness and the basic error are related (see Section VI).

I do not accept cross-world object-dependent individuation. I discuss this matter in Section II. But my point here is that accepting such individuation is not incompatible with at least the letter of the science of perceptual psychology (see Note 41).

24. These points are explained in Burge (2005, Section VII).
25. Burge (2005, 30).
26. McDowell attributes a mistake about what ‘follows from’ the fallibility of the capacity (246), and assumes that there is a simple fallacy about entailment. He offers no evidence that I believe in such an entailment, and I do not. Other non-equivalent descriptions of the inference (246) are mistaken. In fact, the reader is well advised to check all his attributions of assumptions, ‘implicit’ principles, and inferences against what I actually wrote. They are nearly all presented without textual evidence.
27. This judgment is supplemented by a judgment about the most plausible type of individuation of perceptual occurrences, given what we know from the science (though the science does not require this judgment). Perceptual events are plausibly individuated in terms of their most specific perceptual kind, instantiated in the individual perceiver at a given time, and anchored, roughly, by a causal chain going back to proximal stimulation. I have so far seen no good reason why, in individuating the event across possible worlds, one should appeal to anything beyond there being such a causal chain. That much is needed to insure that the event is a perceptual event. (Chains beginning in the central brain do not yield perceptual events, because they are not formed by the perceptual system.) Sameness of proximal stimulations, sameness of psychological laws governing transitions from them to a perceptual event, and sameness of intervening psychological events are compatible with different distal causes. Therein, on this type of individuation, lies fallibility of particular exercises of the perceptual capacity.
28. There are some irrelevancies in this passage that need to be eliminated to evaluate it. I lay aside the discussion of indefeasible warrants until we have discussed fallibility. The relevant modal property is fallibility not defeasibility. Moreover, the attribution to me (‘Burge thinks...’) has no basis. I made no general claim about what kind of capacities there can be. I discussed perceptual capacities. I claimed that it is an ‘unnatural’ implication of disjunctivism that the state type instantiated by any occurrent successful perception – and equally each such occurrent perception – is infallible (Burge 2005, 31). McDowell’s presentation of the example is defective independently of these misleading aspects of his discussion.

It is hard to see why McDowell would think it ‘intelligible’ to assert, as he does, that particular exercises of a capacity are indefeasible, whereas he denies that it is ‘intelligible’ to assert that particular exercises of a capacity are infallible. Each is a modal property asserted of

particular events. I think it obvious that both assertions are intelligible – although I think that neither McDowell’s assertion of indefeasibility nor an assertion of infallibility is true.

Since McDowell thinks that it is unintelligible to say that the exercise of a capacity is either fallible or infallible, he does not claim that any given free-throw shot is infallible. I will, however, reflect on the analogy in light of the fact that such claims are intelligible.

29. Even shootings of free throws are what they are only because of patterns of relations to a social environment. Individual shootings seem not to be the particulars that they are because they are actually successful or not.
30. The point applies to McDowell’s view, despite his belief that the commitment is unintelligible. His view implies the proposition, which is a genuine (hence intelligible) one.
31. I believe that when one considers in detail the nature of perceptual reference, so as to include reference to instances of properties and relations, it emerges that on any disjunctivist view, not just McDowell’s, each successful, veridical exercise of the perceptual capacity is infallibly veridical. Individuation that yields infallibility is made more complex by the fact that some aspects of some non-veridical perceptual states are referentially successful and some are not.
32. Alarms regarding this disaster (so termed in the work of his cited last below) are sounded in McDowell (1986, 152, 157, 160, 164–8); the present paper (253–4); and McDowell (1998b, 404–10). McDowell’s statement, ‘A state of an animal cannot be genuinely recognizable as awareness of a feature of the environment if the state would be just as it is even if the feature of the environment was not there’ (253) rests on the conflation of ability-general and occurrence-based state kinds that I criticize in Burge (2005, 43–5). As I show there, once the distinction is clearly made, the argument that he gives in ‘Singular thoughts and inner space’ is seen to be unsound – indeed invalid. One can accept an interpretation of the just-quoted unspecific statement while firmly rejecting disjunctivism. McDowell reiterates (253) his view that disjunctivism is needed to make sense of intentionality and to avoid “darkness within”. But as noted, he fails to address the detailed refutation of this claim in Burge (2005).

McDowell also urges his version of disjunctivism in the last cited passage as the way to avoid what he conceives as the dreary history of moves in epistemology that respond to scepticism (e.g. McDowell 1998b, 404 ff.). The discussion of scepticism is conducted at the level of urging one picture against another, without analysis or argumentation. His approach is another example of the most familiar move in response to scepticism – claiming infallibility and indefeasibility for successful perceptual beliefs. McDowell thinks his move is importantly different. I think that it is superficial, and vastly underestimates the complexity of the scepticism issue.

At the end of his paper, he states that it was ‘wildly off target’ for me to have speculated that he, along with others, was motivated by concern to avoid veil-of-ideas approaches (253). The treatment of ‘Cartesian fear’ in ‘Singular thoughts and inner space’ is, I think, a clear example of this concern. In McDowell (1998a), he explicitly takes a prominent motivation for disjunctivism’s rejection of a ‘highest common factor’ to be a response to the ‘temptation’ of “‘veil of ideas” scepticism’ (386). The reader can judge whether the attribution is wildly off target.

33. As I explain in Burge (2005, 37–8, esp 38n36), this conception and the denial of referential infallibility are compatible with an actually successful referential element’s being rigid – with its referring to the same particular when evaluated with respect to any possible world. Rigidity does not require referential infallibility. I accept the rigidity of perceptual reference. I think that successful occurrence-based referential perceptual applications must be referentially differentiated. But because cross-world object dependence implies referential infallibility of referentially successful perceptions, I reject cross-world object dependence (see Notes 23 and 41).
34. This notion derives from Descartes: ‘Now if this conviction is so firm that it is impossible for us ever to have any reason for doubting what we are convinced of, then there are no further questions for us to ask: we have everything that we could reasonably want’ (Descartes 1964–1976b, 144–5); ‘...knowledge [*scientia*] is conviction based on a reason so strong that it can never be shaken by any stronger reason’ (Descartes 1964–1976b, 64–5).
35. A piece of knowledge defeasible in the world-limited sense would be vulnerable to there being truths that, if they were made available to the knower, would provide would-be authoritative reasons to give up the belief, even though the belief is, in fact, true (otherwise, it would not be knowledge). If an instance of knowledge is world-limited indefeasible, there are no such truths.
36. I motivate these points, Burge (2005, 37–8).

37. See my Burge (2003, 503–48). Blameless failures of warrant occur through malfunction of cognitive equipment. I think that blame has little to do with epistemic warrant.
38. The second type of example is from Goldman (1976, 771–91). McDowell considers cases like this in a different context (McDowell 1998a, 390n). There he takes them to undermine actual knowledge, and does not consider easy transformations on them as threats to the view that successful perceptual beliefs have indefeasible warrant. His discussion there does not focus on indefeasibility of warrant, or even indefeasibility of knowledge.
39. I think the same about perceptual knowledge, understood as ordinary knowledge, not *scientia*. (Incidentally, I do not agree with Descartes's very strong claims about *scientia*; see Note 34.) The relevant types of accessibility differ for knowledge and warrant. I will not elaborate the distinction between ordinary knowledge and *scientia* here.
40. Other philosophers have engaged in epistemology without considering psychology. The so-called *generality problem* depends on assuming that the kinds relevant to determining the reliability of a belief-forming process are open to endless armchair speculation. In fact, the relevant kinds are the most specific, or fundamental, natural psychological kinds of perceptual state and perceptual belief. The kinds are constrained by empirical knowledge of the natures of those states. We know a lot about such natures.
41. I noted that allowing cross-world object-dependent individuation of singular applications is compatible with rejecting disjunctivism (Burge 2005, 38–9, 41). Even allowing constitutive, or infallibly, factive and warrant-factive perceptual states is compatible with rejecting disjunctivism.
42. In McDowell (1998a, 369), he explains defeasibility in a way that seems to entail that indefeasible warrant is either indefeasible in the traditional sense or world-limited indefeasible: 'the support that a "criterion" yields for a claim is defeasible: that is, a state of information in which one is in possession of a "criterial" warrant for a claim can always be expanded into a state of information in which the claim would not be warranted at all.' The explanation is not specific enough to make clear which notion of (in)defeasibility is intended. What is striking about all his discussions of indefeasibility is that there is no attempt to confront the threat that the well-known counter-examples seem to pose to claims of indefeasibility for perceptual warrants. (See also Note 38.) Most of his discussions of indefeasibility focus entirely on warrant factivity, which is not a notion of indefeasibility of warrant at all. For example, he writes, as if in explanation of '*indefeasible* warrant' (his italics), 'To have an experience describable in those terms is to have an *indefeasible* warrant . . . If an aspect of objective reality is perceptually present to someone, there is no possibility, compatibly with her experience's being as it is, that she might be wrong in believing that things are the way her experience is revealing them to be. . . .' (245). Impossibility of being wrong is not a notion of indefeasibility of warrant – of its being impossible to defeat the warrant. See also McDowell (1998a, 372, 386); McDowell (1998b, 402n, 410n); and McDowell (2009, 285), for the persistent tendency to focus on warrant factivity when warrant indefeasibility is the announced topic. The failure to discuss possible counter-examples to indefeasibility may derive from his conflating indefeasible warrant with warrant factivity. My discussion does not depend on whether this is so. I take the first passage cited in this note to commit McDowell to indefeasibility of warrant.
43. Any further conditions on knowledge, beyond being warranted true belief, must also be met.
44. McDowell (1998b, 410n).
45. Any view that holds that warrants for perceptual beliefs are indefeasible in the world-limited sense, and that also holds, as McDowell's does, that a successful perceptual belief state 'is the belief it is only because it is the knowledge it is' (251) is faced with such implausibilities. On such a view, individuation of belief and perception is much more complex than the simple idea of individuating them relationally – object-dependently, in terms of the objects of perception – suggested. Citing the fact that *one sees* (even if seeing is interpreted as constitutively, or infallibly, factive, and even if the claim that one sees is, when warranted, warrant-factive) does not provide a defense against world-limited defeaters that provide ground for thinking that one might not have seen such and such. So to retain world-limited indefeasibility, one must individuate the underlying perceptual states in a way that requires it to be world-limited indefeasible. For example, the state could be directly classified as one that entails world-limited indefeasible warrant. If there are no truths in the relevant world that would, if accessible to the believer, raise reasonable questions about a given perceptual belief, then, constitutively, the perceptual state is of the relevant kind. Not all ordinary seeings could be so classified.

So, whether a perceptual state or perceptual belief is of the relevant “revelatory” kind would depend on whether there are contingent facts in the believer’s world that bear no causal relation to the beliefs or perceptual states (either in a given instance or in the history of formations of the state kind). Whether a psychological state is a successful one would depend not only on whether it is in a successful referential relation to an object of perception, but also on whether there are truths in that world that, if they were relevantly accessible to the individual, would undermine warrant.

It is unclear how or why such facts would affect the representational content that helps individuate the representational state instance. Any hope that one might produce a scientific account of such psychological states would be dimmed. Less theoretically: we do not individuate beliefs and perceptions in a way that hinges on world-limited indefeasibility, much less on indefeasibility in the traditional sense. These considerations count against individuating psychological states in a way that depends on indefeasible warrants in the world-limited sense. See also Note 20.

46. As I have suggested, one cannot get from the view that warrants for perceptual belief are warrant-factive to the warrants’ being indefeasible, without further premises. Here is a route from one to the other. Suppose a warrant is warrant-factive. Assume that anyone with the warrant knows with indefeasible warrant that he or she has the warrant. Assume that anyone with the warrant-factive warrant knows with an indefeasible warrant that the warrant is warrant-factive. Then, an individual has an indefeasible warrant for perceptual belief. The assumptions are just as incompatible with what counts as reasonable as the position discussed in the text.
47. Both arguments occur in McDowell (1998b, 403–5). The first is repeated in McDowell (2009, 285–6). Here is the first of the two statements of the first argument:

One way to appreciate what I am driving at here is to consider the familiar point that true belief need not amount to knowledge. Why not? A good simple answer is that mere truth in a belief leaves it open that the believer has hold of the truth by accident, and knowledge excludes that. Now in the hybrid conception of knowledge [one that entails that not all warrants – in particular, not those involved in empirical knowledge – are warrant-factive], it is admittedly not a complete accident, relative to someone’s standing in the space of reasons, if things are as she takes them to be; the position of her belief in the space of reasons makes it likely to be true. But the reason why the extra stipulation that the belief *is* true – what is distinctive of the hybrid approach – is needed is that likelihood of truth is the best that the space of reasons yields, on the interiorized conception of it: the closest we can come to factiveness. The extra that we need for knowledge – the fact that the case in question is not one of those in which a largely reliable habit or policy of belief formation leads the subject astray – is, relative to the knower’s moves in the space of reasons, a stroke of good fortune, a favour the world does her. So if we try to picture epistemic status as constituted in the way the hybrid conception has it, we are vulnerable to a version of the familiar point that distinguishes knowledge from mere true belief.

McDowell equips his opponent with the view that reason is in total control within a certain domain other than the domain of empirical belief. I dissociate myself from any commitment about reason’s control in non-perceptual domains. That is a separable issue. The arguments are given in a framework that takes epistemology to be purely concerned with a space of reasons, a framework that I do not accept. In my view, ground-level warrants (entitlements) for perceptual beliefs are not warrants by reason or reasons at all (see Burge 2003). I think that such warrants are not warrant-factive.

48. McDowell (2009, 285).
49. McDowell (1998b, 405). To characterize my view, the point must be understood to mean that reason, *insofar as reason is available to the individual knower*, cannot insure warrant, knowledge, or truth. I think knowledge does not need these types of insurance. Reasons can, however, supplement entitlements in sufficiently reflective reasoners.
50. Burge (2003, *passim*). The notion of brute error is introduced (2003, 507).
51. In fact, I highlighted the non-accidental character of perceptual warrants (which, in my view, are neither warrant-factive nor warrant-indefeasible) as a point in favor of the view of default entitlement that I develop (see Burge 2003, 532–7).
52. I do not regard perceptual warrants as reasons at all. They are entitlements – certain types of default warrants. They are entitlements that allow brute error. But they can be sufficient for knowledge, as distinguished from *scientia*.

53. These and other such *ad hominem* epithets are repeated throughout his article. McDowell's *ad hominem* writing is not always under control. Within one paragraph (245), he holds both that the very possibility of having a type of experience that 'is to have an indefeasible warrant for believing that things are as the experiences reveals them to be' is 'absent' from 'my thinking' (in the sense that I 'cannot even contemplate' the idea), and that I think 'that experience cannot provide indefeasible warrant about the environment'. Rejection belies absence and inability to contemplate. In fact, I do reject the view that experience can provide indefeasible warrant about the environment (cf. Burge 2003, 533–6).
54. Burge (2003, 527).
55. McDowell (1994b, 6–10).
56. Burge (2003, 529).
57. Burge (2003, 529).
58. I think that McDowell's appeal to factives as fundamental reasons for perceptual beliefs stems not only from hyper-intellectualization of the epistemology of perceptual belief, but also from several other mistakes about reason. Although I do not think it fruitful to engage his conception of reason further, I expect to elaborate a conception of reason and reasoning that provides a better account of their role in knowledge and practice.
59. Ground-level perception is to be distinguished from the hybrid high-level perception, which combines perceptual contents, strictly so-called, with concepts –including concepts (like *piano* or *X-ray machine*) that have no counterparts among perceptual attributives. The perceptual attributives in the repertoire of individuals' perceptions include attributives for shape, body, color, spatial and temporal relations, and other attributes, possibly including functional attributes such as danger, food, or fear. They do not include attributives for cultural attributes like being a piano. I know of no apriori principle here. The point is empirical. But it is well established. For discussion of high-level perception, see Ullman (1996).
60. A general critique of the widespread tendency in twentieth-century philosophy to hyper-intellectualize perception is one of the main themes of Burge (2010). This book gives a more detailed account of what is known about the shape of perceptual competencies. For an elementary explanation of the relative independence of human perceptual systems from higher level cognitive capacities, see Pylyshyn (1999). Pylyshyn's general line is among the best supported general facts in perceptual psychology about perception. Although there have been numerous experiments, for example, in social psychology, that attempt to show that background beliefs affect perception, these experiments have never controlled well for the psychological source of familiarity effects; and they do not directly challenge the results in perceptual psychology. Familiarity effects deriving from knowing what sort of thing is perceived have not been shown to derive from perception as opposed to prior beliefs. Familiarity effects have not been shown to affect formation of perceptions themselves (as opposed to beliefs). The most sophisticated experimental work in perceptual psychology indicates that formation of perception *per se* does not depend on propositional belief or knowledge. For two sophisticated, and pointed, studies that show that when the sources of familiarity effects are controlled for, the judgment independence of perception – including human perception – remains intact (see Naor-Raz, Tarr, and Kersten 2003; Olkkonen, Hansen, and Gegenfurtner 2008). Basic formation laws for ground-level perception do not involve reason or concepts.
61. Burge (2005, 45 ff.).
62. McDowell (1994a).
63. Burge (2005, 9, 21–3, 46, 74n50). For example, I wrote, 'In presentations of the psychology, a good bit of metaphor is used for convenience. The visual system is often spoken of as "solving" the underdetermination problem, or as using the principles as "assumptions", or as engaging in "reasoning". Explanation does not require these terms. They are metaphorical, and known to be so by most methodologically aware psychologists' (Burge 2005, 13); and 'The psychology is also committed to some of the information's being representational – genuinely perceptual in the sense that it represents objective matters and can be mistaken as well as veridical' (Burge 2005, 13). Comparison of McDowell's report of what I acknowledge with what I actually wrote shows serious misreporting on a fundamental point. I further explain and argue the point that the hyper-intellectualized metaphors are not present in the scientific theory in Burge (2010, esp. chaps 8 (the last section) and 9).
64. Burge (2005, Section III). In Burge (2010), I also go to some length to explain the theory in ways that do not involve metaphor. I separate the terminology in which the theoretical

explanations are given from loose glosses that occur in popular expositions. McDowell's claims about the metaphors are supported by no detailed analysis.

65. All perceptual systems include psychological states, like registrations of stimulations, that are not perceptual states. Many of these non-perceptual psychological states are sub-individual, and are irretrievably unconscious. Virtually all of the processes and transitions that occur in the system are both irretrievably unconscious and not imputable to individuals. The computational determination of differences in registration of light intensity in the earliest filtering processes – for example, determination of zero crossings – is irretrievably unconscious and not imputable to individuals. Computational responses to defocus are similar. All transitions – including transitions from one perceptual state to another – occur at a level that is not imputable to the individual. These points should not be allowed to obscure the fact that many of the states – including conscious perceptual states – that enter into these transitions, as causes as well as effects, are normal perceptions and misperceptions by individuals – open to introspection. One can determine approximately by introspection some aspects of defocus, and representations of size, color, distance, direction, movement, occlusion, edges, contours, and surfaces that are postulated in states described in the science. The psychological states in perceptual systems that make perceptual systems worth studying as units are perceptual states – perceivings and misperceivings – of perceivers.
66. See Burge (2010, 369–76), for exposition of the point that perception and awareness are by individuals, and the role of this point in science and ordinary thought. See also Note 5 above.
67. Indeed, as I have emphasized, the claim is logically compatible with the letter of perceptual psychology; accepting the claim is compatible with rejecting disjunctivism. See again Notes 23, 27 and 41.
68. Of course, the science is not about constitutive conditions for perception. That is a philosophical project, though one that must make use of the science. The science is about the formation of perceptual states that, when accurate, are individuals' perceivings of the world. The science is also about the formation of inaccurate states. In conjunction with the natural sciences, the science gives precise explanations of state occurrences that constitute both the accurate and the inaccurate perceivings by individuals. Such state occurrences are cited as causes as well as effects in its law-like explanations. For a sketch of what I believe to be the first fully scientific explanation of accurate (and inaccurate) reference or intentionality by individuals, see Burge (2010, 383–4).
69. In the attached footnote (254n6), he appears to assume that conceptual inquiries into whether the science literally counts perceptual states as having representational content do not require being informed about how the science works and what it claims – knowing the empirical science.
70. Kant's transcendental arguments are sometimes claimed to be antecedents of approaches that isolate philosophy from science. I believe that these claims are very much mistaken. Kant's (1968) transcendental arguments work off of truths in science (Bx-xx).
71. There are many ways in which understanding the shape of epistemic warrant for a psychological state depends on specifics about the nature of the psychology. For example, if perception were heavily penetrated by background knowledge or background belief, then the perception's contribution to warrant for perceptual belief would be different than if (as is the case) perception is not freely cognitively penetrable. Whether perception has propositional structure bears on its relation to reason, and whether it has propositional structure is an empirical issue. What natural psychological kinds figure in the formation of perceptual belief is relevant to addressing the so-called 'generality problem'. (See Note 40). And so on. To understand the nature of warranted perceptual belief, one must understand the nature of perception and belief. Science is our best guide for perception. Maybe one day it will be a comparable guide for belief. For many epistemic purposes, of course, detailed psychological knowledge is not only not available, but not necessary. But I think that the deepest understanding follows the order set out in the text.

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