Disjunctivism and Cartesian Idealisation

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“Our calculations would be easy if there were only two bodies colliding, and these were perfectly hard, and so isolated from all other bodies that no surrounding bodies impeded or augmented their motions. In this case they would obey the rules that follow.”

Descartes *Principles of Philosophy*, II §45 (1985, 244)

## Note to Reader

This draft is based on a much longer concluding chapter of my book *The Brain Abstracted* (under contract, MIT Press). For PAS the argument is reframed but I have not yet had time to do a complete re-write. Bullet points indicate where new angles need to be added, which will be incorporated in the final version.

# 1. Two Apparently Unrelated Questions

In this paper I give answers to two apparently unrelated questions and aim to convince you that these different concerns are, in fact, intertwined. The first question is, *why is dualism so tenacious?* The second is, *what is really at issue in the debate between Burge and McDowell?* Regarding the first question, various contemporary philosophers have cast Descartes as the originator of a pernicious idea about the radical difference between mind and body, an idea with weed-like tenacity, that many have attempted to dig out once and for all, but which always seems to grow back from fragments left in the soil. The problem with this diagnosis of dualistic thinking as the result of an individual philosopher’s influence is that it fails to consider that there may be broader and still active causes of its appeal. What is left unconsidered is the possibility that dualism is symptomatic of the wider tendencies of the scientific culture that Descartes, amongst others, represents, and that it persists not because of the long shadow of one philosopher, but because the essentials of this intellectual culture remain. In Sections 2 and 3 I will argue that this is indeed the case, and that the mode of thought at issue is to do with the dominance of scientific idealisations in our thinking about nature, including human beings and their minds.

In answer to the second question, Fish (2021) has examined the debate between Burge and McDowell over the alleged incompatibility of disjunctivism with the discoveries of perceptual science, and has compared it to a clash of Kuhnian paradigms. Miguens (2020) takes conflicting ideas about representations to be the main point of disagreement. I will argue instead that the point at issue is Burge’s acceptance, and McDowell’s rejection of the ‘Cartesian idealisation’ of mind as a self-contained system. Fish’s treatment of the controversy as a matter of competing research programmes, analogous to scientific ones, neglects the crucial particularity of the case, which is that McDowell’s philosophy of perception declines to define its explanatory objects in the way most conducive to scientific research. For this reason, there is more of a tension with science than McDowell admits; but as I will ultimately argue, this does not invalidate disjunctivism. [[1]](#footnote-2)

# 2. The Assumption of Near Decomposability and the Two Cartesian Idealisations

John Haugeland’s essay on “Mind Embodied and Embedded” makes a compelling case for there being a link between mind-body dualism and the conception of the mind as an isolatable sub-system, interacting with the body and environment only through limited, prespecified channels. His suggested remedy is recognition of the “*intimacy* of the mind’s embodiment and embeddedness in the world”, where the supposed opposite poles *co-mingle* and are *integral* to one another (Haugeland 1998, 208). I am sympathetic to this positive proposal, but this is not the occasion to develop it. Instead, I want to say more about this notion of the mind as an isolatable sub-system, and its role in scientific research on the mind.

Haugeland’s source is the famous paper by Herbert Simon on the “Architecture of Complexity”, in which he presents the idea of a *near decomposable system*. These are systems that are complex but scientifically intelligible because made up of components that can be investigated in relative independence from one another (Haugeland 1998:216). *Components* are defined by “intensity of interaction” (Simon 1969, 90). A component is a part of a system, such that the number of interactions within the part is an order of magnitude higher than the number of interactions that a part has with others in the system (Simon 1969, 99). This is why we are to think of components as semi-independent from one another.

One way to think about Simon’s notion of a component is to say that from the perspective of the wider system, each component is a *black box*. As such, its place in the system is clearly defined in terms of its *function,* the inputs it can receive and the outputs it will generate, but its inner workings – the procedure by which this input-output relationship is maintained -- do not matter. This affords the investigator of the system a handy simplification. In order to understand the operating principles of the system, she need only characterise the function of each component, deferring the specification of their inner mechanisms. Moreover, there is a layered picture of “boxes-within-boxes”, such that components have sub-components, but likewise the details of those sub-mechanisms can be black-boxed, allowing the same abstraction to occur at the various levels of the system (Chirimuuta in preparation). We should note the connection to the computer, which conforms more closely than anything to the ideal of a system in which only function, and not mechanistic or implementational details, are relevant to its behaviour (Simon 1969, 18).

Descartes was one of the early scientists (natural philosophers) whose explanatory programme presupposed the denial of any fundamental difference between natural and artefactual objects.[[2]](#footnote-3) This is a simplifying assumption, because machines and other technological entities are less complex than organisms, but they afford a model, a simplifying lens through which to view the works of nature (Chirimuuta 2021). We can call this a ‘Cartesian idealisation’, and recognise that Simon is employing it in his promotion of the computer as the model for the mind. The other Cartesian idealisation is the positing of isolated systems (see epigraph to this paper). I do not mean to suggest that Descartes holds the copyright on these idealisations. Rather, they are characteristic of a tradition of physical science which has in turn shaped the course of cognitive science and neuroscience more recently.[[3]](#footnote-4) Simon’s positing of almost-independent components is a species of this other sort of Cartesian idealisation.

*More on the centrality of the second of these “Cartesian idealisation” in physical science, past and present:*

* “What the theory [in physics] actually describes is typically an idealized ‘closed system.’ The theory of this ‘closed system’ can be as precise as you want. And it is within this idealization that one gets the familiar examples of the ‘scientific method.’ But the application of physics depends on the fact that we can produce in the laboratory, or find in the world, open systems which approximate to the idealized system sufficiently well to yield very accurate predictions. The decision that conditions have been approximated well in a given case—that it is even worthwhile to apply the idealized model to this case—typically depends on unformalized practical knowledge.” (Putnam 1978, 72, quoted in de Regt 2017, 35)
* “We look at little bits of nature, and we look under a very limited range of circumstances. This is especially true of the exact sciences. We can get very precise outcomes, but to do so we need very tight control over our inputs…… We tend to think that shielding does not matter to the laws we use. The same laws apply both inside and outside the shields; the difference is that inside the shield we know how to calculate what the laws will produce, but outside it is too complicated.” (Cartwright 1999, 29)

It is worth here pausing to note the underlying interconnection between our two Cartesian idealisations. The assertion that an artefact could be a ‘perfect’ model for an organ or organism, that is to say, one not suffering from glaring and misleading disanalogies, is a commitment to the idea that an organ like the brain could operate, in its essentials, in the same way as a machine such as a computer. Descartes is well known for arguing in his *Treatise on Man* that a living body could operate, in its essentials, in the same way as a machine, because bodies are mechanisms. Independently of the question of whether Descartes was historically the most important propagator of this idea, it is true to say that this is now a prevalent, if not dominant conception of the body and its systems. But what does it mean to say that the body is a suite of mechanisms? Amongst the many characterisations of mechanism on offer in the literature, one feature is particularly significant to our study. It is that mechanisms are assemblages of parts that are in principle separable from one another. The components of mechanisms are *partes extra partes* – things all sitting externally to one another, with no inherent connection amongst them.[[4]](#footnote-5) They interact in limited, clearly specifiable ways, being components in Simon’s sense. Indeed, the parts of man-made mechanisms must be that way or else they could not be assembled. Thus, the notion of this isolated form of existence – of entities that are not inherently dependent on or constituted by what is beyond their outer boundaries, even if as a matter of empirical fact they always occur within particular contexts -- can be found at the root of the idea of mechanism and of decomposable systems. The assumption of isolated existences is prerequisite for the kind of conceptual clarity demanded in scientific thought. If the assumption is not employed, the boundaries around objects of study remain vague and indeterminate, and we are beginning to deal with a worldview in which resonance and mutual influence replace workable relationships of demarcated cause and effect, and where relationality has precedence over entities related. What I now want to suggest is that the mindset of dualism, which is the mindset of the so-called mechanistic worldview, is the rejection of that.[[5]](#footnote-6)

* Also, systems are intelligible as causal mechanisms only when proximal causes screen off distal ones. They are subject to a very general *proximality principle*.
* Burge’s proximality principle for perceptual psychology plays an important role in the disjunctivism controversy.

# 3. Dualism

Cartesian dualism is the notorious view that mental substance (*res cogitans)* is radically different from physical substance (*res extensa*).[[6]](#footnote-7) If we bracket the ontological commitments of Descartes’ substance dualism, we see that the more tenacious dualist idea stems from the idealisation of isolation, as Haugeland (1998b:207) rightly puts it, of cognitions as, “as self-standing and determinate on their own, without essential regard to other entities.” To treat mind in this way as conceptually separate from brain, and brain as separate from body, is to treat a person as a near decomposable system. The key assumption is that there is r*elatively* little interaction between these components – the interface between them is “narrow-bandwidth” (Haugeland 1998b, 220) – such that the mind can be characterised in terms of its rich internal organisation (within component interactions), plus the small number of interactions it has with the components outside it, via its input and output channels. The coupling between soul and pineal gland is the most slight of narrow bandwidth interfaces; but even the contemporary image of the brain in a vat runs on the assumption that the brain (now taking the place of the soul) is hooked up to the rest of the world via a relatively small number of nerve fibres, so that the input and output communications typical of an embodied brain could be recreated artificially. Thus, we see that the treatment of a human being as a near decomposable system grounds the conception of the mind/brain as a separable component, which is one way to express the dualist commitment to the self-containment of the mind.

Whereas Haugeland (1998b, 228-9) treats it as a straightforward matter of empirical discovery, that a picture of the integralness of brain and body will be favoured once the weight of neuroanatomical evidence in support of the view that the interface between them is extremely “high-bandwidth” is acknowledged, my view is that even given these well known facts, the pressure remains for scientists to idealise away from them, retaining the picture of cleanly separable systems and subsystems. The richness and breadth of the interconnections between the nervous system and all the other bodily systems – immune, endocrine, digestive, muscular skeletal, etc. – is more than can be encompassed from any one modelling perspective that aims at a minimum of clarity and precision. Thus, the tendency towards some form of dualism will remain. The demand of science to make complex systems intelligible by imposing simplifying assumptions will create a pressure towards treating human beings, and other creatures, as if near decomposable systems, with self-contained minds, even though that is not what they are. [[7]](#footnote-8)

*Relevant acknowledgements of this constraint:*

* “However, the full sensorimotor loop is so complex that understanding it all is a daunting task. This is partly why the coding metaphor is so pervasive – it offers a tempting method to delineate subsystems within the loop, each with defined inputs and outputs, which can then be studied experimentally. But if splitting the loop into sensory, motor, and cognitive processes leads to artificial borders and flawed notions of coding, then how else can we subdivide the large question of behavior into smaller and more manageable questions?” (Cisek 2019, 21)

*Burge describes how this ‘boxing’ is done when scientists break down perception as a whole into subsystems:*

* “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.”

*And is optimistic that a more integrated understanding of the system as a whole can be achieved:*

* “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.” (Burge 2011 p.69)

We end this section with a deeper understanding of the ways in which contemporary, philosophies of mind are dualistic. Searle rightly finds fault with materialist theories, such as functionalism, for their accepting the Cartesian categories of the mental versus the physical:

The weird feature about this entire discussion is that materialism inherits the worst assumption of dualism. In denying the dualist’s claim that there are two kinds of substances in the world or in denying the property dualist's claim that there are two kinds of properties in the world, materialism inadvertently accepts the categories and the vocabulary of dualism. It accepts the terms in which Descartes set the debate. It accepts, in short, the idea that the vocabulary of the mental and the physical, of material and immaterial, of mind and body, is perfectly adequate as it stands. (Searle 1992, 54)

However, this does not account for why the terms of the debate remain so intuitive and appealing, other than hinting that Descartes arranged things that way, and no-one has bothered in the meantime to shift things. The more plausible explanation is that dualism has something else to offer, and for this reason has been reinvented many times. And if the division of substances and properties into two schedules under a mental and physical heading is itself a convenient way to clarify terms and simplify the subject matter of science, perhaps it is not so dispensable after all. Perhaps we cannot be anti-dualist without being in some way unscientific. We will now turn to the McDowell’s disjunctivism, to examine how it reacts against an additional feature in the post-Cartesian landscape, radical scepticism, and why it faces a charge of incompatibility with current science.

# 4. Scepticism

The habit of thought underlying dualism takes the world to be made up of items not inherently related to one other, that are more or less, in principle, isolatable. These separate entities are linked to one another by cause and effect, but not by the deeper bond of constitution. The mind as separate from the body, and body as separate from the world are just two instances of a more generalised picture. However, the separateness of mind from everything else is marked out from other cases in its generating a unique set of philosophical concerns. We have already examined dualism, which creates the puzzle of how mind and body could be so tightly co-ordinated with one another, if so radically different. Scepticism shows even more clearly how a problem arises with the assumption of isolatability, and how it can be resolved by removing that assumption. The Cartesian sceptical predicament is of a mind absolutely isolated, but deceived into thinking that it perceives an external world by the manipulations of an evil demon, or – in the updated version of the thought experiment – a mad neuroscientist tweaking the nerve impulses sent into a brain in a vat. Once the mind is in principle cut off from the rest of existence, it can in principle only have certain knowledge of its own contents – that it is experiencing a sensation, but not that there is anything in the world beyond the confines of the mind, that the experience is a perception of.

That the Cartesian predicament is more general than an epistemological puzzle has been appreciated elsewhere. At the start of *Mind and World,* JohnMcDowell writes of,

an inchoately felt threat that a way of thinking we find ourselves falling into leaves minds simply out of touch with the rest of reality, not just questionably capable of getting to know about it. A problem about crediting ourselves with knowledge is one shape, and not the most fundamental, in which that anxiety can make itself felt. (1996, xiii-xiv)

We will see in Section 4.1 how *disjunctivism*, one strand of McDowell’s response to the worry about the failure of the mind to make contact with the world, is in essence a denial of the assumption of isolatability, for disjunctivism asserts that in the good cases, where perception affords knowledge of things in the world around me, those things do not merely cause but also constitute my mental state. However, disjunctivism has faced condemnation from Tyler Burge for alleged incompatibility with perceptual science. In 4.2 I argue that the incompatibility is not the one that Burge takes it to be, and that there are indeed good reasons for philosophy to pursue enquiries detached from the conceptual frameworks of the sciences.

## 4.1 Disjunctivism

Disjunctivism is a theory in the philosophy of perception, which states that in the case of a veridical perceptual state (e.g. of seeing a purple balloon drift past your window) which has an illusory or hallucinatory counterpart indistinguishable to the subject, even though the veridical and non-veridical states are subjectively indiscriminable, it is *not* the case that they have the same epistemic significance (McDowell 2013, 259-260; 263). Disjunctivism is most often presented as a solution to the problem posed by illusions and hallucinations to the naïve realist theory whereby veridical perceptual states involve a relation of acquaintance with the external object of perception (Soteriou 2020, Crane and French 2021). For this reason, it is not always obvious that disjunctivism, at least on McDowell’s account, is in essence a response to Cartesian scepticism, and there has therefore been a tendency to miss the point that it is deliberately a move away from the Cartesian self-containment of the mind.

However, the connection between self-containment and scepticism, and the rejection of these afforded by disjunctivism, is quite clear in McDowell’s presentation. The idea at fault, according to McDowell (1998, 242) is of a “self-contained subjective realm, in which things are as they are independently of external real­ity”. On such a view, the mind just seems to make no contact with the external world. McDowell uses various locutions to describe the problematic account: it is of, “the inner realm au­tonomous” in which “we deny interpenetration between inner and outer” (p.245); it is, “a conception of a realm whose layout is independent of external reality” (p.257). With this isolation of the mind, the idea that perception could give it access to things around it becomes doubtful, and hence radical sceptical scenarios rise up as coherent possibilities.[[8]](#footnote-9)

McDowell concurs with the view defended in this paper that what is most fundamentally problematic about the Cartesian frame in philosophy of mind is in its positing of the self-containment of mind, not the ontology of mental substance, and McDowell also sees this as a fault within functionalism even though it is a materialist theory (1998:246). Moreover, he pinpoints the demands of scientific causal explanation as giving the initial impetus for the Cartesian separation of the mental as a self-standing explanandum:

It seems scarcely more than common sense that a science of the way organisms relate to their environment should look for states of the organisms whose intrinsic nature can be described independently of the environment; this would allow explanations of the presence of such states in terms of the environment’s impact, and explanations of interventions in the environment in terms of the causal influence of such states, to fit into a kind of explanation whose enormous power to make the world in­telligible was becoming clear with the rise of modern science, and is even clearer to us than it would have been to Descartes. (McDowell 1998, 243-4)

McDowell’s point of arrival also bears similarities with the view defended by Haugeland, of mind embodied and embedded, whose capacities, are inherently due to its belonging to a living body. There is also acceptance of Searle’s biological approach, but rejection of the identification of mind with brain:

It is an in­sight on Searle’s part that intentionality is a biological phenomenon. But intentionality needs to be understood in the context of an organism’s life in the world. We cannot understand it, or even keep it in view, if we try to think of it in the context of the brain’s “life” inside the head. (McDowell 1998, 258 fn 57)

Like Haugeland, McDowell rejects the usual ways of placing boundaries on the cognitive, and sees this as a direct implication of disjunctivism:

Allowing intrinsic object­ dependence, we have to set whatever literally spatial boundaries are in question outside the subject’s skin or skull. Cognitive space incorporates the relevant portions of the ‘external’ world. (McDowell 1998, 258)

The striking difference between Haugeland’s and McDowell’s presentation of the view is that the former but not the latter makes ample reference to ideas and results from neuroscience and cognitive science. Indeed, McDowell (2013) asserts that his project is tangential to those activities. This claim for the autonomy of philosophical enquiries into perception is what most seems to have exercised Burge (2005), and his attack on disjunctivism boils down to the charge that it has been refuted by empirical findings, since the science requires, but disjunctivism denies, an explanatorily relevant, “specific perceptual-state kind in common” between subjectively indistinguishable veridical and non-veridical perceptual states (p.2).

## 4.2 Inner States

Burge’s work displays an ample familiarity with the details of experimental and theoretical research on perception, especially vision. I do not have the space here to review the many facets of the theory of perception that he has developed out of consideration of these results. My focus here is on the way that he follows the science, tacitly, in its idealisations. Burge unquestioningly inherits the idealisation discussed at length in this paper, of mind and environment being separate systems, interacting with each other in relatively minimal ways, so that particular perceptual states of an animal get an adequate characterisation by citing factors within the organism (internal to the system), bracketing what is distal (external to it). This leads Burge to enforce the separation between mind and world, disallowing the interpenetration of “inner” and “outer”, which is exactly the position that disjunctivism is set up against.

To see how this Cartesian idealisation follows directly from Burge’s incorporation of the mainstream computational theory in perceptual science, it is worth quoting him at length.

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’…. Differences among the [subjectively indistinguishable veridical and non-veridical] 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*. (Burge 2011, 44 emphasis added)

The “proximal stimulation” is the first reception of a stimulus at a sensory organ. It is the product of the “transduction” of the stimulus into a pattern of activity in the nervous system. The proximal stimulus, e.g. the pattern of light falling on the retina, contrasts with the distal stimulus, the object in the world that one would ordinarily think of as the target of perception, such as the surface that the light was originally reflected from. When comparing the veridical and non-veridical cases Burge assumes a clean division between factors that occur before and after this moment of transduction. The proximal stimulation serves as the absolute divide between factors essential (inside the perceiver, from the point of sensory transduction onwards) and inessential (the distal ones) to the (causal) explanation of how a particular perceptual state comes into being. Since the veridical and non-veridical cases differ only in their distal conditions, they are not different for the purposes of causal explanation, since these distal differences are screened off by the sameness of the proximal causes of the state of the perceptual system, from transduction onwards. The mistake of disjunctivism, as Burge sees it, is to neglect the importance of this identity with respect to proximal factors. Indeed, the fact that disjunctivism seems to break with this norm of causal explanation is what invites accusation of it being a basically unscientific idea.[[9]](#footnote-10)

However, Haugeland’s (1998) essay contains an extended criticism of the assumption that sensory transduction marks the point of interface, the boundary between mind and world, or that transduction in the opposite direction, from symbolic motor command in the brain to muscle movement, is the point of interface between mind and body. The view that he urges us to take up is one in which the signals, codes or symbols, which are the hallmark of the cognitive domain, and are supposed only to reside on the inside of the transduction boundary, only make sense, are only decodable, in the context of bodily and worldly states. In other words, he rejects the supposition of ‘inner symbols’ housed in the mind, that have their intentionality, their meanings, independently of anything going on beyond the mind. This is how Haugeland makes the case for the radical dependency of the putative symbolic realm on bodily context, denying in principle the clean division, at the point of transduction, between distal and proximal factors:

that some particular pulse pattern, on some occasion, should result in my typing an ‘A’ depends on many contingencies, over and above just which pattern of pulses it happens to be. In the first place, it depends on the lengths of my fingers, the strengths and quicknesses of my muscles, the shapes of my joints, and the like. Of course, whatever else I might do with my hands, from typing the rest of the alphabet to tying my shoes, would likewise depend simultaneously on particular pulse patterns and these other concrete contingencies. But there need be no way to “factor out” the respective contributions of these different dependencies, such that contents could consistently be assigned to pulse patterns independent of which fingers they’re destined for. That is to say, there need be no way—even in principle, and with God’s own microsurgery—to reconnect my neurons to anyone else’s fingers, such that I could reliably type or tie my shoes with them. (1998: 225)

In a striking metaphor that conveys the way that the theory of embodied mind rejects the division between what is cognitive (i.e. symbolic) and what is material (i.e. corporeal), Haugeland (1998: 226) speaks of the body as a large and ever changing encryption key for neural motor commands.

The default tendency of theoretical neuroscience has been to treat sensory and motor neurons as being fixed representations, whose activations always *mean* the same particular stimulus feature, or a certain muscle movement, whatever is going on with the body or distal environment. Similarly, the commitment of perceptual psychology that Burge presses on is that both sub-individual and individual-level states of perceptual systems have genuine representational content,[[10]](#footnote-11) and this content is fixed regardless of whether the state is veridical or not. The point relevant to our discussion is how Cartesian the assumption of fixed representations is. The assumption is that whatever goes on more widely beyond the brain is irrelevant to the content of a perceptual state or the significance of neural activity -- so long as a neuron is made to fire, however the firing is caused, it will always *mean* the same thing. The result is that all the malevolent neuroscientist needs to do is to cause the same set of neural activations that would occur in ordinary life, and the disembodied mind/brain will be perfectly deluded by its sensory array. In short, the idealisation of fixed representations implies that neural activations have meanings autonomously of anything beyond the brain, and this Cartesian idealisation lends itself to Cartesian scepticism. This is also the view encapsulated in the proximality principle, and that Haugeland rejects, precisely by doubting that transduction provides a hard borderline between the brain and its surroundings.

*Points to be added:*

* In contrast with Haugeland, McDowell’s stance towards the proximality principle is not one of flat out denial, but avoidance. He says that for his purposes – the project is epistemology, to explain how perceptual states of an individual permit that individual to have indefeasible knowledge (in the good cases) of the world around them -- the proximality principle is not applicable.
* “The science of perception explains perceptual states only as upshots of differential responsivenesses. It does not explain them as what they also are, acts of capacities for knowledge. Classifying them in that further way is additional to what the science does, not inconsistent with it.” (McDowell 2013:274)

How does McDowell try to avoid the proximality principle? By saying that the classification into fundamental explanatory kinds that the scientists need to do, for their explanatory purposes, will be different from his explanatory purposes in epistemology. Burge’s proximality principle just flags up that for the scientist, explaining perceptual states in terms of differential responsiveness of the system, “perceptions and misperceptions with corresponding content are grouped together” (McDowell 2013:262), whereas in McDowell’s epistemological project, perceptual states are acts of a capacity for knowing the environment, and the state-types fundamental here are non-defective vs. defective acts of this capacity.

*In addition*

* Burge’s *anti-individualism* aims to show that perceptual states and beliefs are not only caused, but also constitutively related to aspects of the physical environment (Burge 2005:1, Burge 2010:61ff).
* “The representational content of an animal’s perceptual states is individuated partly in terms of what causes those states and how those states enable the animal to cope with specific types of entities in its environment.” (Burge 2005:5)
* Don’t Burge and McDowell (and Haugeland) all want the same thing, namely, to erode the Cartesian, internalist account of the contents of mental states?
* Yes, but I will argue that adherence to the proximality principle – which is to say, the norms of causal-mechanical explanation of interacting entities – creates an unacknowledged problem for Burge’s externalist ambition. Precisely the problem that McDowell is reacting to.

The upshot is that the clash between Burge and McDowell is generated by Burge’s incorporation of a scientific framework which is itself in the business of making the Cartesian idealisation of the separability of “inner” and “outer” factors. Burge is correct to recognise a tension between the scientific framework and a disjunctivism that rejects its core assumption. But he is wrong to uphold the authority of that framework over independent philosophical enquiries. A philosophical position is not refuted because inconsistent with a thesis that is not a discovery, but a working assumption, of the empirical science – which is what these idealisations are. Burge (2011:44) writes that, “[s]cience is our best guide to determining the basic natures of kinds that it describes and explains.” Accordingly, for him, any philosophical methodology not closely attending to scientific results, and deferential to its conceptual schemes, is invalid. What Burge fails to appreciate is the way that the abstractions and idealisations of science – and of course he is aware that models depend on them – invalidate the authority of science within such inquiries into “natures” and “kinds”. For these simplifications are introduced for pragmatic reasons, and as many examples show, they involve departures, in the scientific representation, from how things actually are. A philosophical inquiry concerned, for example, with “human nature” should not satisfy itself with the caricature given in a scientific model which must necessarily abstract away from the variety, complications, and subjectivity that make human existence what it is. The same simplifying assumption may offer an innocuous convenience within a scientific context, but cause an endless, exhausting headache once embedded philosophical enquiry – as is the case with the idealisation of the self-contained mind.

# 5. Conclusion

The clash between Burge and McDowell involved disagreement over whether philosophy could claim to have a subject matter of its own. McDowell carves out for himself the notion of the state of a perceiver, as opposed to states of perceptual systems, whereas Burge finds all of these terms incorporated into the field of investigation of perceptual science. And it is true that explanations in that science occur as much at the “individual level” as “sub-individual” one. However, if we appreciate that the divergent agendas of the two disciplines make available or unavailable different kinds of abstractions (given that all theoretical enquiries, including philosophical ones, involve abstractions), we see that their notions and subject matters can indeed be different, even if they seem to be referring to the same things.

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1. I only consider McDowell’s version of disjunctivism. See Byrne and Logue (2009) and Haddock and MacPherson (2011) for comprehensive surveys of the topic. [↑](#footnote-ref-2)
2. Descartes *Principles of Philosophy*, II §203 (1985, 288-9). See Canguilhem (1965/2008) for a provocative discussion of this denial. [↑](#footnote-ref-3)
3. My deployment of the term “Cartesian” is self consciously polemical, and as with all such polemics it risks caricature of the historical figure (Roux 2013). I emphasise that in talking of “Cartesian idealisation” I am making no claim for Descartes’ being the inventor or propagator of these idealisations. [↑](#footnote-ref-4)
4. See Guttinger (2018, 306), reporting on the ideas of biologists Birch and Cobb:

“In a mechanical system…. the nature of an entity is not affected by the relations it has with other things or processes. The cogwheel or the steel rod are not affected in their nature by their (external) relations or by the change (turning, expanding, contracting) they undergo. The way they react to changes in their context is set by their material constitution”. [↑](#footnote-ref-5)
5. The contrast between these two worldviews is the theme that runs through Mary Hesse’s *Forces and Fields.* Action at a distance was associated with obscure modes of influence, whereas the restriction to action-by-contact came with a conception of material bodies as impassive, bounded entities only able to be affected by immediate impulse.

“The preference for action-by-contact theories in physics was historically connected with the objectification and depersonalisation of nature and the desire to eliminate from explanations of it the ‘psychological’ analogies of organism, command, and attraction in favour of the analogy of mechanism, and it was a fact that most familiar mechanical devices acted by contact.” (Hesse 1962, 291) [↑](#footnote-ref-6)
6. Descartes’ own views on the mind-body relationship more complicated than the standard reading, focussed on the *Meditations,* allows. From other texts such as *Traité de l’homme* it is possible to recover an “embodied Descartes”, in which the body by itself is endowed with flexibility and intelligence. But this does not disrupt the core point at issue in this chapter, which is that, “Descartes does take the mind and the body to be radically distinct—and to be fully separable, at least in principle” (Hutchins, Eriksen, and Wolfe 2016, 301). [↑](#footnote-ref-7)
7. A precursor to the diagnosis of dualism offered here is William James in his attack on the doctrine of *concomitance*, a dualistic theory popular amongst 19th century neurologists (1890/1950, 136). [↑](#footnote-ref-8)
8. The anti-Cartesian agenda behind disjunctivism is recapitulated in McDowell’s first response to Burge’s attack on disjunctivism:

“We can express the idea with a disjunction: an appearance is either a case of things being thus and so in a way that is manifest to the subject or a case of its merely seeming to the subject that that is how things are. If we go on regarding appearances as elements in a subject’s inner world, this disjunctive conception embodies a recognizably non-Cartesian conception of that world. When a state of affairs that conforms to the first of those two disjuncts is an element in a subject’s inner world, how things are in that world cannot be fully specified without a commitment as to how things are in the subject’s environment. On this conception, a subject’s inner world does not have the characteristic Cartesian independence from the outer world.” (McDowell 2010, 244) [↑](#footnote-ref-9)
9. Denial of the proximality principle, “would not only deny the actual science. It would also deny that any normal causal psychological explanation is possible.” (Burge 2005:24) [↑](#footnote-ref-10)
10. McDowell (1994, 199) argues that sub-individual states only have representational content metaphorically speaking, a position that Burge (2011:67) disputes. [↑](#footnote-ref-11)