

On the Explanatory Limits of Concepts and Causes

Intentionality, Biology, and the Space of Reasons

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Abstract

In *Mind and World* John McDowell argues that our attempts to understand how it is that our thoughts are rationally answerable to the world are in vain. Whether one takes Cognitive Science, Evolutionary Psychology or Phenomenology to be capable of answering this question, such attempts are, he claims, merely a consequence of failing to see that they are already gripped by a picture of the world which precludes the possibility of such answers. In particular, he suggests that if we render *Nature* as that which is circumscribed by the intelligibility of the natural sciences, we leave no room for rationality conceived of in terms of the spontaneity and freedom that Kant associated with it. While McDowell claims to be a ‘quietist’ who is not putting forward his own theory of mind, he is, at the very least, suggesting a theory of nature, one which he dubs ‘liberal’ insofar as it suggests that we widen the scope of nature so that it can be hospitable to the normative features of thought.

This thesis will propose a theory of mind which attempts to show how the causal, normative, and phenomenological can be seen as continuous features of the natural world. It demonstrates that a careful appraisal of causal or scientific accounts of intentionality can be made compatible with McDowell’s commitment to the normativity of thought. By revealing that a biological account of the mind, suitably expanded to include an account of history as a *Dynamic Ecological Milieu*, generates biological interrogatives for the human organism, we can show that the normative manifests as an emergent property of the nomological. This allows second nature to retain its *sui generis* status while

being continuous with the causal descriptions of first nature. This thesis will also draw from the Phenomenological tradition, as a means of critiquing McDowell's account of "the Myth of the Given" and his rejection of pre-conceptual content. In particular, it will follow Charles Taylor and Hubert Dreyfus in affirming that we should view experience, not in terms of that which provides epistemic foundations, but as the domain of pre-reflective embodiment. This is essential to showing how the biological sciences can inform us about the causal background which makes embodied coping so unreflectively natural. Furthermore, phenomenology has provided a means of engaging with the biological sciences in a non-reductive way, as is evidenced by Maurice Merleau-Ponty's *The Structure of Behavior* and the more recent neurophenomenological tradition which is largely inspired by his work. Finally, by drawing on these resources, the desideratum of this thesis is a scientifically informed understanding of what McDowell calls "second nature" and "the space of reasons" in terms of what I have called "biological interrogatives" and the "phenomenology of epistemic agency".

Dedicated to John Horntvedt
13 March 1961 – 16 Dec 2018

If one morsel of your lived experience could act as evidence in this work, it would be more than enough to *save the appearances* which you fought to preserve.

Rest in peace my dear fellow

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Introduction: Biological Machines and the Space of Reasons

Any minimally scientifically informed individual knows today that we are made up of cells, which form structures called organs, and that DNA is involved in providing instructions on how to reliably manipulate matter and energy so that the structural form of the species as a whole comes to be preserved over time. Each member is indebted to its nature by what it shares with its kin: the same organizing principles which are the mark of its behavioral and functional distinctiveness. We are, in fact, biological ‘machines’ in the loose sense of the term. Frankly, “biological system” is a more accurate phrasing but the word ‘machine’ brings out some of the suspicions that lurk behind various rejections of scientific accounts of the human mind. Still, we are collections of matter, organized in overwhelmingly complex ways, which leads that analogy to fall short of its target. No machine can even come close to the complexity of the system in question: namely, the human organism. Hence my forthcoming rejection of a ‘computational’ theory of mind in favour of a more organic one, which understands organisms as constituted by information membranes. As such, it is no surprise to see individuals who totalize or eliminate the role of natural sciences in their investigations. Our starting point will concern a thinker who eliminates the role of the natural sciences: John McDowell.

This project is a consequence of many years of rumination on his seminal book, *Mind and World*. McDowell’s work is largely defined by his commitment to the truth of the

Kantian maxim, “[t]houghts without intuitions are empty, intuitions without concepts are blind”¹. He wishes to frame the question of how the relationship of *aboutness* can hold between subjective happenings and the empirical world which is presented by way of them. Furthermore, the transcendental characteristics of his investigations mean that McDowell is merely trying to bring into relief the conditions of possibility of *empirical content*. This is different from a purely epistemological stance on his work, which would allow us to answer the question of “How is empirical content possible?”... [with something like] ... ‘Good question; let me tell you how.’”² McDowell is neither trying to respond to sceptical anxieties surrounding the possibility of knowledge, nor is he suggesting that we must start with a secure foundation in which, “one could take the contentfulness of one’s empirical thinking for granted, and merely ... reassure oneself as to its credentials”³. Rather, McDowell is trying to shift our perspective in hopes of ensuring that we don’t attempt to answer this question but instead be liberated from “the apparent need to ask it”⁴. We shall see that McDowell is motivated to dissuade us from attempting to answer questions like these because he understands all potential responses to be exhaustively unsatisfying. In *Mind and World*, he describes the tension between possible solutions as follows:

... we are prone to fall into an intolerable oscillation: in one phase we are drawn to a coherentism that cannot make sense of the bearing of thought on objective reality, and in the other phase we recoil into an appeal to the Given, which turns out to be useless. I have urged that in order to escape the oscillation, we need a conception of experiences as states or occurrences that are passive but reflect conceptual capacities, capacities that belong to spontaneity, in operation⁵

¹Immanuel Kant, *Critique of Pure Reason*, trans. Wener S. Pluhar (Indianapolis, Hackett Publishing Company, 1996) A51 / B75.

²John McDowell, “Experiencing the World” in *The Engaged Intellect*, (Cambridge: Harvard University Press, 2009), 245.

³*Ibid*, 244.

⁴*Ibid*, 246.

⁵John McDowell, *Mind and World*, (Cambridge: Harvard University Press, 1996), 23.

In what follows, these positions will be elucidated. For now, what is relevant to our investigations is that he regards positions which recoil into an appeal to the Given as attempts to explain the contentfulness of thought and experience by way of ‘blind intuitions’. Those who are drawn towards coherentism, on the other hand, risk proposing a theory of intentionality in terms of ‘empty concepts’. Further, McDowell’s solution is purportedly quietest insofar as his project focuses on “explaining how it comes about that we seem to be confronted with philosophical obligations of a familiar sort” and wants his “explanation to unmask that appearance as illusion.”⁶

McDowell assumes he can achieve this end by appropriating concepts from Aristotle’s ethics to present a “model case of naturalism that would not stand in the way of a satisfactory conception of experience (and of action[...]). The position is a naturalism of second nature”⁷. This is what he calls “liberal naturalism” in his paper “Naturalism and the Philosophy of Mind”⁸. Our discussion will begin with a critical appraisal of McDowell’s quietism by reference to my strong agreement with Patrice Philie’s arguments against its legitimacy⁹. In view of these arguments, McDowell’s position will be considered as having theoretical consequences and commitments which generate metaphysical rather than epistemological dilemmas. Chapter two will argue for the importance of taking seriously the positions of thinkers opposed to McDowell – namely those he calls ‘bald’ or ‘restrictive’ naturalists. Chapter Three will investigate the relevance of the phenomenological tradition, as it has been appropriated by analytic philosophers, as a means of aiding us in seeing a continuity between restrictive and bald naturalists. Furthermore, the final chapter will present my own interpretation of McDowell’s Aristotelian commitments, based on resources I have derived from my readings of causal and phenomenological theories of intentionality alike. This will involve an elaboration of my own

⁶John McDowell, *Mind and World*, xi.

⁷John McDowell, *Mind and World*, 91.

⁸John McDowell, “Naturalism in the Philosophy of Mind” in *The Engaged Intellect*, (Cambridge: Harvard University Press, 2009), 257.

⁹Patrice Philie, “Intentionality and Content in McDowell”, *Metaphilosophy* 47 (October 2016): 656-678.

positive account of intentionality, one which attempts to answer rather than escape McDowell's problematic, despite McDowell's insistence that such an answer is impossible. As such, the aim of this dissertation is to show that such an account is not only possible but necessary if we are to make any significant progress in understanding the relationship between mind and nature.

Chapter 1

McDowell as A Dialectical Starting Point

The purpose of this chapter is to provide a clear exposition of McDowell's way of understanding the problem of intentionality, allowing my criticisms to be based on a fair appraisal of his project. As such, we must focus on the way he understands the problem of intentional content for the sake of this end.

The notion of intentional content, simply understood, is one which suggests that subjective occurrences are those natural happenings in which the world is representationally contained. As such, intentionality is taken to be the minimal condition for regarding some natural phenomena as mental in a way that distinguishes it from other natural processes which do not themselves possess this character. While digestion is a natural process, we do not consider it a mental one, strictly speaking, even if it is in fact a consequence of neurological activity that is coordinated by the brain. It is not a natural event that could be regarded as *about* anything at all. This gives us a hint towards understanding McDowell's insistence that the mental cannot be understood by recourse to fields such as cognitive neuroscience and evolutionary psychology which will be discussed in more detail in the coming chapters. For McDowell, intentionality is necessarily a conceptual activity where concepts mediate the relationship between mind and world.¹ Here the meaning of the word "conceptual" requires clarification to prevent another misinterpre-

¹John McDowell, *Mind and World*, 3.

tation of his nuanced understanding of this notion. However, to do this, we must first gain an understanding of his employment of Wilfred Sellars' distinction between "the logical space of reasons" and "the realm of law".

1.1 The Space of Reasons and the Spectre of Rampant Platonism

The logical space of reasons is a description of the network of relations between events which are connected by the possibility of one being warranted or unwarranted in light of one another. This sort of relational property is thereby exemplified by the relationships of justification between beliefs or other propositional attitudes. This contrasts strongly with the sorts of nomological relationships expressed in the natural scientific understanding of the world which he refers to as 'the realm of law'. He describes the contrast between these spaces "in terms of a distinction between two ways of finding things intelligible: on the one hand, placing things in a context of rational considerations for and against them (the sort of thing we do when, for instance, we make sense of behaviour as rational agency), and, on the other hand, finding things intelligible in the ways in which the natural sciences do, for instance by subsuming them under lawlike generalizations."²

The emphasis on a distinction between these different types of relations is reminiscent of Gottlob Frege's anti-psychologism where the *sense*, meaning, or *thought* of an assertion, is to be distinguished from the psychological *idea* of that assertion. This is insofar as *thought's* truth is determined by rational relations rather than psychological ones. In order to make sense of Frege's meaning here, it will be useful to examine a few remarks from some of his seminal papers. Firstly, in his paper "The Thought: A Logical Inquiry" Frege states:

Even an unphilosophical person soon finds it necessary to recognize an inner world distinct from the outer world, a world of sense-impressions, of creations

²John McDowell, "Experiencing the World", 247.

of his imagination, of sensations, of feelings and moods, a world of inclinations, wishes and decisions. For brevity I want to collect all these, with the exception of decisions, under the word ‘idea’. Now do thoughts belong to this inner world? Are they ideas?³

Then later:

So the result seems to be: thoughts are neither things of the outer world nor ideas. A third realm must be recognized. What belongs to this corresponds with ideas, in that it cannot be perceived by the senses, but with things, in that it needs no bearer to the contents of whose consciousness to belong. Thus the thought, for example, which we expressed in the Pythagorean theorem is timelessly true, true independently of whether anyone takes it to be true. It needs no bearer. It is not true for the first time when it is discovered, but is like a planet which, already before anyone has seen it, has been in interaction with other planets⁴

And finally, in *The Foundations of Arithmetic* he states:

It not uncommonly happens that we first discover the content of a proposition, and only later give the rigorous proof of it, on other and more difficult lines; and often this same proof also reveals more precisely the conditions of restricting the validity of the original proposition. In general, therefore, *the question of how we arrive at the content of a judgement should be kept distinct from the other question, Whence do we derive the justification for its assertion?*⁵

Together, these remarks provide us with a schematic of Frege’s anti-psychologism. Firstly, the distinction between *ideas* and *thoughts* is employed to illustrate the difference between the psychological experience of mental events (ideas), and *thoughts* which are pseudo-platonic entities, subsisting in what he calls the ‘third realm’. We *apprehend* these platonic entities when we come to grasp some veridical assertion. As such, he

³Gottlob Frege, “The Thought: A Logical Inquiry”, *Mind. New Series*, Vol. 65. No.259 (July 1956):299.

⁴Gottlob Frege, “The Thought: A Logical Inquiry”, 302.

⁵Gottlob Frege, *The Foundations of Arithmetic*, trans. J. L. Austin (New York: Harper & Brothers, 1960) 3. Emphasis mine.

wishes to emphasize that the truth of the Pythagorean theorem, for example, cannot be *dependent* on the psychological happenings or *ideas* of persons, for these are contingent facts about thinkers that cannot capture the necessary truths of logic or mathematics. As such, how we come to acquire some sort of knowledge is a psychological fact which has nothing to do with the rational relations that warrant that knowledge. In McDowell's terms, we might say something like: ideas belong to the realm of law as they are merely descriptions of the material conditions under which someone comes to grasp conceptual content. Thoughts then belong to the space of reasons insofar as they are constituted by a network of rational relations of justification.

In any case, it is important to understand that the space of reasons is essentially normative in that it is the domain of rational prescription. This means that items occupying the space of reasons cannot be understood in the same terms as those which inhabit the realm of law. But speaking about items which inhabit two spaces is what raises concerns regarding the possibility of what McDowell calls "rampant platonism". Speaking in this way makes the space of reasons sound dangerously close to Frege's "third realm" or some other platonic space in which the property of one thought being warranted by another subsists. McDowell assumes that we want to avoid this sort of platonism if we are going to render the space of reasons as part of the natural world. His move is not to countenance the existence of some extra-natural domain but to reject the idea that the realm of law can exhaustively capture intimate aspects of human nature as we know and live it. Of course, there are many other familiar rejections of the notion that natural law cannot be exhaustively capable of reaping insights about the nature of mindedness. However, McDowell's eschewal of bald naturalism must be understood as something different from these familiar forms of anti-reductionism. In particular, it is motivated by Sellars' following description of the space of reasons:

"The essential point is that in characterizing an episode or a state as that of *knowing*, we are not giving an empirical description of that episode or state;

we are placing it in the logical space of reasons, of justifying and being able to justify what one says”⁶

Nonetheless, as we will come to see, I believe that his position can set the groundwork for a revised sort of theoretically articulated anti-reductionism that is closer to what he calls liberal naturalism.⁷ It remains closer to these more familiar anti-reductionist positions insofar as it draws a determinate boundary where scientific investigations fail to capture some relevant defining features of human nature. McDowell thinks that we can only accommodate these nomologically elusive aspects of our minds and lives if we turn our attention to certain “characteristic anxieties of modern philosophy,”⁸ which he frames in terms of an oscillation between two seemingly incommensurable epistemological positions. One of these is epistemological coherentism, an attempt to avoid being swayed into believing in what Sellars calls “The Myth of the Given”. The other is scheme/content dualism, which is the epistemological position that succumbs to the allure of the Myth of the Given. McDowell sees his own position as one which convinces us to reject the questions that lead us in either of these directions though I understand him to have failed in this end.⁹ His work has in fact encouraged me to produce better answers to these questions, and in that sense, I am at least one example of someone for whom the “therapeutic” aspect of his quietism fails. Nonetheless, before we take a deeper look at the attractive epistemological positions that McDowell thinks we should avoid, we must first look at the Kantian motivations that he deems responsible for the apparent incommensurability in question.

⁶Wilfred Sellars, *Empiricism and the Philosophy of Mind*, ed. Robert Brandom (Cambridge: Harvard University Press, 1997), 76.

⁷McDowell uses this phrase to describe his expanded sense of naturalism in the essay “Naturalism and the Philosophy of Mind”.

⁸John McDowell, *Mind and World*, xi.

⁹For a clear account of how McDowell fails to be a quietist and why he can be easily read as advancing a particular *theory of mind* see “Intentionality and Content in McDowell” by Patrice Philie, in *Metaphilosophy* 47, Nos. 4-5, (October 2016): ISSN: 0026-1068, 656-678.

1.2 Kant, the Linguistic Turn and the Development of Modern Science

The Kantian picture of experience, which underlies McDowell's work, leads him to characterize experience as something which is transcendently dependent on conceptual activity as much as sensory receptivity. Hence, the aforementioned slogan: "Thoughts without intuitions are empty, intuitions without concepts are blind"¹⁰. We must, however, take into consideration a few things about the historical context upon which this Kantian notion is now coming to bear.

1.2.1 Spontaneity After the Linguistic Turn

The first of these is the linguistic turn. The influence of the linguistic turn, particularly due to Sellars's influence on McDowell's thinking, ensures that his employment of the term "concept" is quite different from that of Kant. What he retains from Kantian thought is the structural relationship between things like concepts and intuitions as well the corresponding transcendental role of receptivity and spontaneity in grounding the possibility of empirical thought and experience. Consequently, the word "concept" no longer holds its *a priori* status as a set of inbuilt categories standing as conditions of empirical intelligibility. Rather, it comes to mean the conditions of *articulability* regarding such concepts as the categories, modes of presentation, and intentional vehicles which are expressed in linguistic reports. He expresses this clearly at the start of his book *Having the World in View*:

"Sellars describes the logical space of reasons as the space 'of justifying and being able to justify what one says'. We can see this as a distinctively twentieth-century elaboration of a Kantian conception, the conception of the capacity to exercise, paradigmatically in judgement, a freedom that is essentially a matter of responsiveness to reasons. The twentieth-century element

¹⁰Immanuel Kant, *Critique of Pure Reason*, B75.

is the idea that this capacity comes with being initiated into language.”¹¹

Here we see that language has taken the place of the “categories of the understanding” in Kant. It is language that allows the data of sensory experience to intelligibly tell us something about the world. Analytic philosophers since the linguistic turn have commonly understood intentional relationships to the world as linguistically stratified, though as we shall see later, the rise of scientific naturalism in later analytic philosophy has led some thinkers to contest this claim. For now, what is important is that we see that McDowell has subscribed to this point of view, albeit in a highly nuanced way, one that I hope to elucidate in the following sections. Linguistic reports are important paradigmatic examples of conceptual activity insofar as, “[i]t is essential to conceptual capacities, in the demanding sense, that they can be exploited in active thinking, thinking that is open to reflection about its own rational credentials.”¹² This makes explicit two things.

The first is the idea that, as in Kant’s original formulation, expressions of *judgement* are to be understood as “making up one’s mind about how things are [in the same way that] forming an intention is making up one’s mind about what to do. Judging is like formulating an intention in being an exercise of responsible freedom.”¹³ Judging is then seen as the paradigmatic example of conceptual exercises as it is something “we freely do, as opposed to something that merely happens in our lives.”¹⁴ Nonetheless, McDowell’s emphasis that this is *paradigmatic* is important.

It leads to the second point to be made explicit: conceptual activity is not *always* an exercise of freedom or spontaneity – though it is exemplified in behaviour which evidences epistemic or moral agency. It would be wrong to say that the conceptual activity is somehow reducible to deliberate verbal reasoning. Rather, concepts are just

¹¹John McDowell, *Having the World in View: Sellars, Kant, and Intentionality* (Cambridge, Harvard University Press, 2009), 6.

¹²John McDowell, *Mind and World*, 47.

¹³John McDowell, “Experiencing the World”, 250.

¹⁴John McDowell, *Having the World in View*, 6.

most obviously actualized in such linguistic practices.¹⁵ Linguistic reports are themselves subject to rational credentials insofar as they have the intrinsic capacity to be veridical or non-veridical. As such, they are the currency by which we can understand someone as having correctly or incorrectly thought *about* some state of affairs. Our linguistic practices then give us behaviourally explicit standards of rationality which are intersubjectively realized examples of normative principles by which intentional contents come to be determinately apprehended. The difficult consequence of this linguistic account of conceptual activity emerges from McDowell’s claim that “perceptual experience is already conceptual.”¹⁶ If perceptual experience is to be understood as passively determined by the objects in our perceptual milieu, without the intervention of our will, then how can we understand them to be saturated with the rational freedom associated with the faculty of spontaneity? In particular, if we are to understand the part of the Kantian maxim which tells us that, ‘intuitions without concepts are blind,’ we must then provide an account of how a linguistically articulable domain of concepts gives sight to the deliverances of sensory receptivity (intuitions). Deliverances which are made available to experience by the activity of the sensory equipment endowed to us by our biology.

1.2.2 Receptivity and Scientific Progress

McDowell then must also show how the linguistically realized conceptual activity associated with the freedom of spontaneity is necessarily operative in the passive determination of sensory contents by extra-agential causes. How can we understand that “a [verbal]

¹⁵This sort of formulation has led Hubert Dreyfus to accuse McDowell of what he calls “the Myth of the Mental” in his Presidential Address to the American Philosophical Association in 2005. Dreyfus’s worry is that McDowell’s insistence that experience is always conceptually saturated, due to his commitment to the Kantian notion that experience must both involve concepts and intuitions, exaggerates the role of language in his understanding of intentionality. Dreyfus points to examples, such as in cases of embodied coping, in which language seems to play no explicit role in the relationship between the agent and the intentional objects to which their thought and behaviour is directed. This accusation led to an illuminating exchange between McDowell and Dreyfus in 2007, published in *Inquiry*, one which challenges us to understand the role of Kantian and Phenomenological traditions within contemporary discourse about intentionality. This will be discussed in more detail in chapter 3.

¹⁶John McDowell, *Mind and World*, 48.

judgement of experience does not introduce a new kind of content, but simply endorses the conceptual content, or some of it, that is already possessed by the experience”?¹⁷ This is a dense statement that needs unpacking. First, however, we must briefly address the traditional Kantian distinction between the passivity of receptivity and activity of spontaneity. In service of this aim, it is worthwhile to cite the following rather lengthy albeit germane passage from the *Critique of Pure Reason*:

“Only two kinds of causality can be conceived in regard to what occurs, viz., either a causality according to *nature* or one from *freedom*. The causality according to nature is the connection, in the world of sense, of one state with a previous state upon which the state follows according to a rule. Now the *causality* of appearances rests on conditions of time; and the previous state, if it has always been there, would not have produced an effect that first arises in time. Therefore, the causality of the cause of what occurs or comes about has likewise *come about*, and – according to the principle of understanding – itself requires a cause in turn.

By freedom, on the other hand, In the cosmological sense of the term, I mean the power to be a state *on one’s own*. Thus the causality of freedom is not in turn subject, according to the law of nature, to another cause that determines it as it regards time. Freedom, in this meaning of the term, is a pure transcendental idea. The idea, first, contains nothing borrowed from experience. Moreover, second, the object of this idea cannot be given determinately in any experience, because there is a universal law of the very possibility of all experience whereby whatever occurs must have a cause, and whereby, therefore, also the cause’s causality which *itself has occurred* or come about must in turn have a cause. And thus the entire realm of experience, however far it may extend, is transformed into a sum of what is mere nature. But since in this way no absolute totality of conditions in their causal relation can be obtained, reason creates for itself the idea of a spontaneity that can, on its own, start to act – without, i.e., needing to be preceded by another cause by means of which it is determined to action in turn, according to the law of causal connection”¹⁸

¹⁷*Ibid.*

¹⁸Immanuel Kant, *Critique of Pure Reason*, A533, B561.

Again, the spectre of rampant platonism surfaces on the initial reading of this passage. Kant is making a distinction between events which are causally determined by the temporal order of the natural world and those which are caused by agential freedom which is not itself determined by antecedent causes in that order. This passage, read in the context of McDowell's investigations, does not suggest that, for instance, the famous *Libet* experiments, can be refuted by reference to this Kantian power "to be a state *on one's own*". Kant's supposition of rational freedom is not, for my purposes or McDowell's, a metaphysical claim about some elusive power called "free will". There is ample literature regarding the impossibility of having causal powers that are somehow completely undetermined by natural forces. Most obviously, having something outside of the causal order of nature effect change within that causal order, would violate the law of the conservation of energy. Instead, what is being captured here, is to my mind, best understood as phenomenologically evidenced. If I ask you to think of a two-headed beast with guitars for arms and McDowell and Kant's heads, steering a musically driven motorcycle on a road made of kaleidoscopic glass, you may question my sanity. Nonetheless, you will also have been given a clear, though absurd example, of the power to spontaneously determine mental content by the free exercise of conceptual powers. As a reader, you have been passively subject to this ludicrous mental content by the causal influence of the text displayed on your retina and the subsequent neurological processes giving rise to this mental image. Even so, as the writer, there is a significant difference between the mental representation that I just *spontaneously produced* and the one that is produced by the behaviour of my cat trying to get my attention or by the colour of my keyboard. I have no freedom with regards to the experiential content which my keyboard and cat passively determines in me, though I do have a sort of freedom in bringing up the antecedent image alongside the content of rest of this manuscript. That is, the distinction between the passivity of sensory receptivity and the activity of rational spontaneity is a distinction which captures different ways in which mental content comes

to be actualized *in experience*. Hence, my emphasis on the merits of a phenomenological reading of this Kantian distinction. The experience of writing such a manuscript makes evident what McDowell must mean when he says rationality is paradigmatically exercised in judgement and is thereby an exercise of spontaneity. The composition of the previous sentence was a different sort of phenomenal event than reading it or seeing it. In both cases (reading and writing) my conceptual powers are exercised. However, in the case of reading the concepts are imposed upon me by text produced by some other author or by records of my own past utterances. In the case of speaking or writing, I am actively deploying those concepts in expressing a certain propositional content.

What is important are the lived experiences wherein we encounter this difference between mental presentations which are brought about by one's own will and those which are imposed upon us by extra-agential causes. Of course, cognitive scientists, along with phenomenological thinkers, wish to suggest that in some sense receptivity is active rather than passive. For the cognitive neuroscientist and evolutionary psychologist, this is because the machinery of the brain and its related sensory faculties do actively process the deliverances of sensation by way of functions sometimes known as “subpersonal routines,’ which by nature are completely inaccessible to personal awareness under any conditions”¹⁹. For phenomenological thinkers, our embodied activities and interests actively direct our sensory equipment towards objects that are relevant to those activities and thereby the notion that perception and sensation are entirely passive is brought into question. I will return to these counterarguments to the passivity of sensation when elaborating on my notion of *differential availability of the environment to the organism*. For the time being, the phenomenological contrast between mental contents which are imposed by extra-agential causes (that is, causes which are not directly generated by the agent themselves), and the ones which are actively or spontaneously generated by the agent, is necessary for us to understand McDowell's Kantian motivations. This reading

¹⁹Evan Thomson, *Mind in Life*, (Cambridge: Harvard University Press, 2007), 6.

of McDowell is an example of my interpretation of his work in terms of the phenomenology of epistemically relevant mental episodes. By way of review, let us return to some themes. Spontaneity is the *sui generis* natural capacity that is given to us by our Second Nature. This second nature is “second” insofar as it is not merely given to us by our untutored biological apparatus; rather, it depends on the manner by which normative inculcation initiates us into responsiveness to reasons by way of endowing us with the appropriate conceptual capacities that are required to occupy a place in the space of reasons. Receptivity, is then often associated with the first natural capacities that are given to us by our biological apparatus: the sensory motor system alongside the complex aggregate of neurological faculties involved in the processing of sensory information and the behavioural regularities that proceed from them²⁰. These capacities, like those involving the ability for a child to identify a “visual cliff”²¹ or “object permanence”²² in the natural course of their biological maturation, are then those which, unlike the capacity to play an instrument or speak a language, do not necessarily require normative inculcation to be achieved even if they do take experience to be realized.

McDowell’s reliance on the distinction between first and second nature is drawn from Aristotle, and in particular, a distinction he makes at the start of Book Two in the *Nicomachean Ethics*:

“[f]urther, in the case of those things present in us by nature, we are first provided with the capacities associated with them, then later on display the activities, something that is in fact clear in the case of sense perceptions. For it is not as a result of seeing many times or hearing many times that we came to have those sense perceptions; rather, it is, conversely, because we have them that we use them, and not because we use them that we have them. But the virtues we come to have by engaging in the activities first, as is the case with the arts as well. For as regards those things we must learn how to

²⁰Though as we shall see, McDowell thinks this cannot be the whole story insofar as receptivity and intuition is always saturated with conceptual content.

²¹Ross Vasta et al., *Child Psychology: Canadian Edition* (Mississauga: John Wiley and Sons, 2006), 204.

²²*Ibid*, 228.

do, we learn by doing them – for example, by building houses, people become house builders, and by playing the cithara, they become cithara players. So too, then, by doing just things we become just; moderate things, moderate; and courageous things, courageous”²³

This passage then captures the relevant distinction between capacities which precede an activity, as those now investigated by the biological sciences that characterize our first nature, and those activities which precede the capacity, as those which characterize our second nature. This distinction is central to McDowell’s proposed resolution to the epistemological oscillation that his work seeks to dissuade us from taking seriously. He then relies on his appropriation of these Aristotelian notions to emphasize that, unlike Kant, the distinction should not be between ‘nature’ and ‘freedom’ as expressed in the passage I quote at the start of this section. McDowell’s project aims to show how our rational freedom can be *sui generis* without thereby leading us to the conclusion that it is somehow unnatural.

Now that we have a better understanding of the historical context to which McDowell’s Kantian commitments are situated, we can begin to look at the epistemological poles of the oscillation which he understands as insidiously bewitching discourse within contemporary philosophy of mind.

1.3 McDowell’s Interminable Oscillation (Blind Intuitions and Empty Concepts)

The above considerations regarding the nature of the passivity of receptivity involved in sensory experience, and the active spontaneity involved in reflective thought, provide the investigative background that we need to better understand the dialectical tension that McDowell’s work seeks to resolve. Without wishing to be redundant, we must be reminded of the Kantian maxim that motivates these investigations: “Thoughts without

²³Aristotle, *Nicomachean Ethics*, (Chicago: The University of Chicago Press, 2011), 1103a27-1103b3.

intuitions are empty, intuitions without concepts are blind.”²⁴ Further, we must keep in mind our investigative goal: to provide a satisfying account of the issue of intentionality which, at the very least, requires the resolution of the following two questions:

1. how it is that one thing can be *about* another
2. how (if at all) does this relationship of *aboutness* constitute what we call mindedness, rationality and meaning?

McDowell’s appraisal of the failure of the following positions to provide us with a satisfactory theory of intentionality will help us understand the importance of his question and his desire to rid contemporary discourse of the aporia he takes it to produce. Understanding this aporia is why his work is so important, nuanced, and counterintuitive. The relevant positions are those which have fallen into the allure of the Myth of the Given and those which have recoiled too far from the anxieties produced by it.

He identifies what he considers as two instructive examples of theorists who gravitate towards or away from the Myth of the Given: scheme/content dualists and coherentists. However, before going into the details of these two frameworks, we must get a clearer idea of how McDowell understands Sellars’ Myth of the Given.

1.3.1 The Myth of the Given and the Naturalistic Fallacy

Sellars’ attack on epistemological givens is a highly original application of the so-called “naturalistic fallacy” to questions about the possibility of empirical knowledge. In the original formulation of this fallacy, G.E. Moore claimed that one could not infer that, “X is good from any proposition about X’s natural properties.”²⁵ Sellars then makes a similar move that suggests that we are gravely mistaken when we surmise that, “epistemic facts can be analysed without remainder – even ‘in principle’ – into non-epistemic facts,

²⁴Immanuel Kant, *Critique of Pure Reason*, B75.

²⁵Michael Ridge, “Moral Non-Naturalism”, *The Stanford Encyclopedia of Philosophy*, Spring 2018, <https://plato.stanford.edu/entries/moral-non-naturalism/#NatFal>

whether phenomenal or behavioural, public or private.”²⁶ Sellars raises this concern largely as a response to the early attempts by analytic philosophers to do just this. In particular, Bertrand Russell, along with the logical positivists, attempted to regard sensory givens as the foundation on which all our knowledge rests and regarded the truth and content of propositions to be determined by the absence or presence of these sensory givens.

For example, Russell’s theory of definite descriptions sought to show how all propositions with epistemic import can be evaluated by reference to the immediately given sense data.²⁷ Sense data are non-epistemic in the following sense; they do not require that the person apprehending them is exercising any sort of epistemic agency or engaging in any sort of thinking in which propositional reasoning features. For Russell, the idea is that the world impresses upon us by way of sensory givens which are inalienable and qualitatively irreducible to further explanation. He states, “I say that I am acquainted with an object when I have a direct cognitive relation to that object, i.e. when I am directly aware of the object itself. When I speak of a cognitive relation here, I do not mean the sort of relation which constitutes judgment, but the sort which constitutes presentation.”²⁸

What is important here is Russell’s emphasis that *judgement* does not stand as the paradigmatic foundation of empirical content, but instead, acts as the external constraint that we would ideally wish our thinking to enjoy. That is, the hope is that empirical con-

²⁶Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, (Cambridge, Massachusetts, 1997), 19.

²⁷It’s interesting to note that in *Naming and Necessity* Kripke makes explicit arguments against the theory of definite descriptions and then later he makes famous arguments regarding the normativity of meaning on the basis of his reading of Wittgenstein. It’s not surprising, then, to see McDowell as suspicious of the same epistemological theory, due to his commitment to the normativity of meaning. What is interesting is that prior to writing *Wittgenstein on Rules and Private Language* which arguably set the stage for the normative reading of epistemology in the 80s and 90s, we can see Kripke attacking the same sort of empiricism that McDowell and Sellars are suspicious of. Of course, Kripke and McDowell’s projects are significantly different but this connection is worth mentioning.

²⁸Bertrand Russell, “Knowledge by Acquaintance and Knowledge by Description,” *Proceedings of the Aristotelian Society*, 11: 108–128; repr. in Bertrand Russell, *Mysticism and Logic and Other Essays*, New York, London: Longmans, Green & Co., 1918, 209–232; also appearing in *Collected Papers*, Vol. 6. 209.

tent is constrained by the very objects of empirical awareness in a way that is indifferent to the judgement of the creature which it influences. Furthermore, his distinction between “*judgement and presentation*”, in the above passage, is significant insofar as it alludes to suppositions which later become central to debates regarding pre-conceptual content. In particular, debates regarding the ‘content’ by which the world comes to be presented to creatures which do not strictly-speaking possess the capacity for judgement.²⁹

This theory of definite descriptions then provides us with a powerful example of the sway of regarding empiricism as a means of epistemological foundationalism. It is the sort of epistemology which seeks to ground knowledge in the sensory objects to which its truth is indebted by purporting that this foundation results from the apprehension of non-epistemic facts. This is an example of what Sellars means when he renders the naturalistic fallacy in epistemological terms: it is erroneous to assume that the *is* of a given sensory deliverance determines an *ought* about a rational inference. As such, the Given attempts to satiate our “craving for rational constraint from outside the realm of thought and judgement”³⁰ in a way that cannot function as a *rational constraint* at all.

While McDowell does not cite Russell as an example of an author who succumbs to the Myth of the Given, I do take his work to be an obvious example of McDowell’s understanding of this Sellarsian notion. Instead, McDowell uses Quine for his example of someone who is compelled by it. My reason for mentioning Russell is twofold: first his form of Givenness is simpler than Quine’s. Second, Quine’s central methodology, known as the theory of *regimentation*³¹, is a “naturalistic” version of Russell’s theory of definite

²⁹I will later, in Chapter Four, suggest that the relevant distinction should be *judgement and discrimination* insofar as I will define the latter as a form of sensory receptivity that is not conceptually saturated in the Kantian sense but which, nonetheless, possesses a form of proto-intentionality that is both explicable in terms of the language of the realm of law while avoiding the concerns that emerge from the myth of the given. It will consider discrimination in a way that is congenial to Sellars’s treatment of intuitions: to be understood in terms of scientific hypothesis regarding the character of the deliverances of sensation even before they have been delivered to one’s awareness. This inability to have direct knowledge of the systems responsible for what is presented to us in sensation means that the phenomenal content *always* precedes the explanation for it at least in the order of epistemological discovery.

³⁰John McDowell, *Mind and World*, 18.

³¹Regimentation requires that we paraphrase one sentence into another which is clearer; we regard a

descriptions.

1.3.2 The Myth of the Given in Quine's Scheme/Content Dualism

While Russell's version of givenness is the most classical – a phenomenal view of the given which takes it to consist in the irreducible of sense impressions that are reminiscent of a Humean mosaic of experience – Quine's scheme/content dualism is more relevant to McDowell's concerns. There are two obvious reasons for this: Firstly, Quine revolutionized epistemology by way of his uniquely behaviouristic and naturalistic theory of meaning.³² As such, he is a central figure in the development of what we now often call “naturalistic philosophy,” though the precise meaning of this phrase is one of the major issues of contention between the authors being discussed in this work. Nonetheless, the phrase often refers to thinkers who take the boundaries between philosophy and science to be minimal or non-existent. Such philosophers believe that scientific understanding

sentence as clearer if it retains its truth value, while revealing the things that the sentence can be true of. For example, if we take Ux to mean x is human, and Hx to mean x has a heart, then $((\forall x) UxHx)$, recapitulates the sentence 'all human beings have a heart'. Regardless of whether I take Ux to mean “ x is human”, “ x is a person” or “ x is a rational animal” the truth value of the sentence does not change. An entity, which produces nerve stimulations, verifying the truth of the proposition, is what we regard as a human being; this means that any entity, which is substituted for x , is a human being if it makes the sentence true. Thus, regimentation reveals what is demanded in terms of ontological commitment. Behind regimentation is Quine's commitment to the theory of definite descriptions. When we regiment we provide the truth conditions, for a sentence by specifying the extensions of the terms in the sentence. We specify the extensions of terms by reducing them to definite descriptions. For example, we might reduce the term “human being” to ‘the x , such that, x is bipedal and x is a mammal and x is a rational animal and x has the capacity to speak’. We thereby present the truth conditions for Ux . We could also do this for Hx , by replacing it with the definite description, ‘the x such that, x circulates blood and x is a muscle and x is vital for the functioning of the human organism’. This provides the set of predicates and relations that are true of that thing; the evidential conditions, whose fulfillment entails the existence of that thing. This is why Quine asserts, “To be is to be the value of a variable”; the existence of an entity lies in its fulfillment of a definite description in the form of a propositional function. It is important to note that without this reduction to definite descriptions the compound sentence $((\forall x) UxHx)$ could not be determined as true or false. This is why determining the truth conditions of the atomic sentences, such as Ux and Hx allows us to determine the truth conditions of the entire compound sentence. This of course, is getting ahead of ourselves insofar as I have not yet elucidated the relevant features of Quine's position which might assist the reader in understanding the foregoing remarks.

³²Strictly speaking, because Quine is a behaviourist, he rejects the category of meaning altogether. Instead he believes all that is needed to explain the fact that words have significance is to understand that under certain conditions people are likely or unlikely to exhibit certain types of verbal behaviour.

of philosophically significant phenomena cannot be ignored and, in fact, take it to be an essential feature of any viable philosophical project. Consequently, Quine is certainly at least a candidate for bald naturalism, if not an obvious example of someone who fits McDowell's description of it.³³ Secondly, McDowell uses Donald Davidson's coherentist epistemology (which I will discuss in the next section) as a counterpoint to Quine's version of the Myth of the Given. Since the works of Quine and Davidson are closely related, with the latter being a student of the former, my exposition of McDowell's position through the contrast between them is methodologically significant for the purposes of this project. Furthermore, McDowell calls on Davidson's criticism of Quine in order to explain the latter's particular way of having succumbed to the Myth of the Given. He uses Davidson's famous polemic against Quine, articulated in "On the Very Idea of a Conceptual Scheme", to elucidate this myth and its relationship to current attempts to ground epistemology based on a scientific account of receptivity. There Davidson states:

I want to urge that this second dualism of scheme and content, of organizing system and something waiting to be organized, cannot be made intelligible and defensible. It is itself a dogma of empiricism, the third dogma. The third and perhaps the last, for if we give it up it is not clear that there is anything distinctive left to call empiricism.³⁴

It is important that Davidson thinks this suggests that the problem with scheme/content dualism puts empiricism itself in jeopardy. Davidson is then challenging Quine's notion of the "tribunal of experience", by which the epistemic import of our verbal utterances come to be judged. He is responding, of course, to Quine's famous paper "Two Dogmas

³³In fact, there are many good reasons to think that Quine isn't a straightforward bald naturalist in the way that Patricia and Paul Churchland might be considered to be. This is due to Quine's famous commitment to Ontological Relativism which suggests that our theoretical posits regarding the natural world are nothing other than predictive tools to help ensure that our future sensory irradiations fit our expectations. Strictly-speaking, he cannot be seen as a full-fledged reductionist in the sense that I take bald naturalists to be. Arguably, however, his unwavering faith in the scientific enterprise as the only legitimate tool that humans have to gain knowledge might render him one. I only mention this because Quine doesn't make explicit ontological claims about what constitutes the natural world even if he does create strong epistemological criteria for regarding something to be a reliable form of scientific knowledge, which to him is the only type of knowledge.

³⁴Donald Davidson, "On the Very Idea of a Conceptual Scheme", 189.

of Empiricism”, which is too rich to fully discuss here.³⁵ Still, it is worth mentioning that Quine’s infamous elimination of the first dogma of empiricism, namely the analytic/synthetic distinction, suggests that there can be no such thing as true analytic statements; that is, statements whose truth depends on meaning alone. Here we see that Quine is rejecting the notion of conceptual content insofar as it most often relies on an intensional theory of meaning which he rejects on the grounds that meaning should be eliminated from our theoretical frameworks entirely. Further, this leads to the second dogma of empiricism, which he calls *radical reductionism* in which “[e]very meaningful statement is held to be translatable into a statement (true or false) about immediate experience.”³⁶ This is what Quine rejects when he says “[t]he unit of empirical significance is the whole of science”³⁷. Such a view implies that propositions cannot be evaluated independently of one another. Contrast this with, for example, what Patrice Philie calls the “object-dependence” of content in McDowell.³⁸ This is the thesis that meanings or contents are indebted to objects in a non-trivial way. He states:

“Let us first note that the relational aspect of intentionality has to be understood in a robust sense: it is not merely the tautological, commonsensical idea that intentionality pertains to the relation between mind and world—what McDowell means is that for a conceptual episode such as an experience to be contentful, it must entertain a relation with something outside it (otherwise the conceptual episode has no content).”³⁹

Nonetheless, as McDowell discusses in the afterword of *Mind and World*, Quine’s commitment to grounding conceptual schemes in sensory irradiations, “makes it look as

³⁵W.V.O. Quine, “Two Dogmas of Empiricism”, 41.

³⁶W.V.O. Quine, “Two Dogmas of Empiricism”, 13.

³⁷W.V.O. Quine, “Two Dogmas of Empiricism”, 42.

³⁸Patrice Philie, “Intentionality and Content in McDowell”, 4.

³⁹*Ibid.* As Philie states, just after the quoted passage, McDowell is indebted to Frege and Russell for this view. Furthermore, the aforementioned platonism that features in the theories of both thinkers can also be seen as a consequence of this view. Early in Russell’s work, in his book *The Principles of Mathematics* and his paper *Denoting* we find an insistence that every word *must* refer to an object which leads him to suggest that they denote pseudo-platonic entities that subsist outside of the material realm as a form of “logical existence”. Frege’s so-called “third realm” is another obvious consequence of such thinking.

if Quine's conception of 'empirical significance' corresponds to the Kantian conception of empirical content, or bearing on the empirical world, that I defend".⁴⁰ But of course, Quine's conception of "empirical significance" does not correspond to this Kantian notion. This is because, for Quine, empirical significance and the so-called 'tribunal of experience' are rendered as extra-conceptual foundations which, like Russell, attempt to ground epistemic facts in non-epistemic ones. But for Kant, as well as for McDowell, the divide between concepts and intuitions does not indicate that they are somehow separable but merely helps us provide a theoretical account of two faculties that are always working in tandem. We can conceptually distinguish them for purposes of analysis but cannot make claims about one as if it existed independently of the other. There is "[n]o doubt," according to McDowell, that "exercises of concepts as we ordinarily conceive them, are not empty, since they already incorporate content as well as scheme"⁴¹. But this is precisely what Quine does. Quine's position supposes that our sensory apparatus provides the material content, that is, the Given understood as 'inputs' or 'information',⁴² while our linguistically articulated conceptual schemes provide the interpretative and evaluative scaffold on which veridical judgments can rest.⁴³ In Kantian terms, content is provided by intuition whereas scheme is the rational organization of such contents by the concepts of the understanding. This 'scheme-content' distinction, which McDowell following Davidson takes to be a myth, presupposes that we primarily encounter the world as 'pre-conceptual' content to which we apply linguistically acquired concepts. A conceptual scheme organizes this information by the application of a system of categories that are said to structure and differentiate the content of experience. By way

⁴⁰John McDowell, *Mind and World*, 130.

⁴¹John McDowell, "Issues in Davidson," in *The Engaged Intellect* (Cambridge: Harvard University Press, 2009), 116.

⁴²McDowell would be hesitant to use this word to describe the Given, since information presupposes some sort of intrinsic capacity to *inform* us about things. The whole point of problematizing the Given is to show that, under this picture, it cannot do this. His criticisms of Gareth Evans in Lecture III of *Mind and World* serve to undermine an informational or view of 'non-conceptual content'.

⁴³On p. 4 of *Mind and World* McDowell notes an important point of clarification "In fact 'dualism of scheme and Given' is a better label than 'dualism of scheme and content', because it does not resonate confusingly with the idea of representational content".

of his reading of Sellars, McDowell argues that the notion of pre-conceptual content is itself unintelligible. The issue is as follows: how can sensory episodes, conceived of as “nonverbal episodes of awareness”, have the authoritative basis of warranting a verbal judgement?⁴⁴ If the giving-and-taking of reasons depends on relations between beliefs (and the agents to which epistemic agency and doxastic dispositions are possible), it becomes difficult to understand how, direct, non-inferential, deliverances of sensation can play the inferentially dependent role of justifying knowledge claims. If the space of reasons is “a logical space whose structure consists in some of its occupants being, for instance, warranted or correct in light of others”, then how could sensory episodes possess the normative properties needed to take part in this logical space? ⁴⁵

This is why Sellars regards the idea of having ‘given’ bits of sensory data to be mythical; they seem to be incommensurable with the notion of warranted judgment. Importantly, Robert Brandom states that, “Sellars’ principle [is] that *grasping a concept is mastering the use of a word*.”⁴⁶ If we take the mastery of a word as something dependent on correct or incorrect applications which are determined by some evaluative standard, it appears that the space of reasons is normatively governed – possibly by socio-historical rules, norms, and practices.⁴⁷ Brute, causally given, “bits of experiential intake”, which, in Quine’s view, are the sensory irradiations of our nervous system, could not generate the rules necessarily involved in making judgments about the world. How are we supposed to understand a non-propositional happening *x* as a solicitation to it is ‘correct to judge that *x* is the case’ or ‘some *x*’ is true? As a result of this difficulty, a description of the causal antecedents of a particular judgment cannot yield an understanding of the evaluative standards of rationality by which it can be assessed. Quine’s picture does not give us any basis for having a normative *ought* by which it is

⁴⁴Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, 73.

⁴⁵John McDowell, *Mind and World*, xvi.

⁴⁶Robert Brandom, *Articulating Reasons*, Harvard University Press, 2000, 6 (Italics in original).

⁴⁷It is clear that the role of socialization is a significant feature of conceptual acquisition and normative determination.

correct or incorrect to make a claim, rather it can only *describe* the, “brutely causal linkage that subjects are conditioned into when they learn a language. [For Quine] [i]t is not that it is right to revise one’s belief system thus and so in the light of such-and-such an experience, but just that that revision is what would probably happen if one’s experience took that course. Quine conceives experiences so that they can only be outside of the space of reasons, the order of justification.”⁴⁸ For Quine, epistemology is about describing successful behavioural regularities responsible for predictively adequate linguistic activities. Nonetheless, nowhere do we find anything like an evaluative standard which might provide us with some criteria for determining why such behaviour *should* be successful or adequate in a given context.

For this reason, McDowell takes Sellars’s picture to preclude the possibility that any scientifically descriptive account of intentionality, meaning, or cognition could ever account for the explanandum in view. He takes these descriptive accounts to reside in what he calls “the realm of law” rather than “the space of reasons” and does not believe that the latter can be explained by way of resources derived from the former. To do so would be to commit the naturalistic fallacy. Quine takes descriptions of sensory irradiations and the behavioural regularities solicited by them, as the *is*, by which we can derive the *ought*, which is proper to the rational prescription of epistemic justification. As we have seen, Davidson finds this to be problematic, in particular, because he holds that “[n]othing can count as a reason for holding a belief except another belief.”⁴⁹ In stating this, Davidson agrees with Quine’s confirmation holism, that is, the idea that propositions or words cannot be meaningful piecemeal. Unlike Russell, for whom each word has a direct sensory basis that need not make reference to other words for its meaning, both these thinkers suppose language and knowledge to depend on an interrelated network of beliefs which Quine calls “the web of belief”. As we have seen, Quine still takes this

⁴⁸John McDowell, *Mind and World*. 137

⁴⁹Donald Davidson, “A Coherence Theory of Truth and Knowledge,” in *The Essential Davidson*, (New York: Oxford University press, 2006), 266.

web of belief to find its ultimate justification in something outside of it, namely, sensory irradiations. Nonetheless, it is important that no particular fact or piece of content is then said to make our sentences true; instead, their truth is said to come as a holistic property of the totality of propositions, and their relationship to the totality of possible sensory experiences.

In *Word and Object*, Quine uses the following metaphor taken from Otto Neurath:

“Neurath has likened science to a boat which, if we are to rebuild it, we must rebuild plank by plank while staying afloat in it. The philosopher and the scientist are in the same boat. If we improve our understanding of ordinary talk of physical things, it will not be by reducing that talk to a more familiar idiom; there is none. It will be by clarifying the connections, causal or otherwise, between ordinary talk of physical things and various further matters which in turn we grasp with help of ordinary talk of physical things.”⁵⁰

The planks of this boat, then, are the propositions of our language. We cannot escape the set of beliefs by which we come to intelligibly understand the world in order to evaluate those beliefs from the outside. This may sound uncongenial to Quine’s emphasis on sensory irradiations as things which appear to stand outside of our language. However, this issue is both too rich to discuss here (for example, his idea of what is ‘given’ in experience depends on a sophisticated account which depends on the totality of his philosophy of science to be vindicated) and is not relevant for the sake of our current investigations. What is important is that Davidson inherited this notion in a way that implies that our understanding of the world is somehow inescapably dependent on beliefs which cannot refer to anything outside of themselves. For McDowell, this threatens to leave us in a position in which thoughts can never be rationally connected to a reality external to themselves.

⁵⁰W.V.O. Quine, *Word and Object*. 3

1.3.3 Coherentism, Donald Davidson, and the Danger of Epistemological Frictionlessness

We have seen the problems with the Myth of the Given.⁵¹ It describes positions that emphasize the role of extra-agential causes, ones which anchor our thoughts to the items in the world to which we direct them, but are said to lack the justificatory relations required for them to do so. As such, they try to capture the passivity of Kantian receptivity and the extra-personal items responsible for phenomenal presentations of sensation. Such positions hope to find intentional grounding in the deliverances of sensations. These then are positions which erroneously take transactions in the realm of law to be capable of possessing the relational properties of items in the space of reasons. They suppose blind intuitions to be capable of endowing us with epistemic awareness.

The other end of the oscillation is one which, due to the failure of the sort of empiricism discussed in the foregoing section, reduces intentionality to a property of thoughts and beliefs. Such positions emphasize the role of normativity, spontaneity, and agency. These then provide us with the evaluative conditions and rational freedom required for us to be able to experience the world in such a way that it is subject to rational scrutiny by way of collectively realized standards of evaluation. As such, coherentist positions then focus on the agent's propositional attitudes and beliefs in order to fulfil the requirement that knowledge involves rational warrant rather than mere causal impetus. According to McDowell, such a view leaves us with the sense that our rational evaluations of the world depend more on the conceptual commitments of a community of thinkers rather than the ontological demands of the world to which these thinkers are rationally responsive (by way of experience). What is important here is the notion that the tribunal by which our experience of the world can be meaningfully contentful⁵² consists in the insular network of beliefs which play the role in justifying what we say or think about things.

⁵¹It is worth noting that when I refer to the Myth of the Given, I am primarily concerned with McDowell's rather than Sellars's critique.

⁵²Here contentful indicates that experiences that carry or contain or tell us something *about* what we are experiencing as it exists independently of that experience (in nature).

McDowell warns us that “[w]hat we wanted to conceive as exercises of concepts threaten to degenerate into moves in a self-contained game.”⁵³ As such, this construal of the conceptual character of our relation to the world comes to leave us rationally disconnected from the events and items to which our concepts are supposed to apply. This is because, as counterintuitive as it may seem, for Davidson, experience has *no role* in justifying our beliefs. As McDowell states, “I think we should be suspicious of his [Davidson’s] bland confidence that empirical content can be intelligibly in our picture even though we carefully stipulate that the world’s impacts on our senses have nothing to do with justification.”⁵⁴

So, in view of McDowell’s Kantian commitments, coherentist epistemology emphasizes the rational freedom associated with spontaneity and eliminates the passive role of receptivity in ensuring that our intentional relationship to the world can be meaningfully contentful. The previous view, which we associated with Quine, takes the realm of law to be exhaustively capable of providing us with an account of intentionality. This one takes the space of reasons to be sufficient for providing such an account. Thus, the former view founds intentionality on blind intuitions and the latter threatens to render intentionality as explicable in terms of potentially empty concepts. It is the threat of emptiness that McDowell is concerned about. He agrees that we must be suspicious of empirical foundationalism, in the same sense that Davidson is, but nonetheless takes Davidson’s position as threatening to render “spontaneity as frictionless, the very thing that makes the idea of the Given attractive.”⁵⁵ By this, McDowell intends to emphasize that when we recoil from the Given, from the idea that something outside of thought can provide it with rational constraint, then we lose our assurance that our experiences can intelligibly inform us about the world. The freedom of our thoughts seems in that way absolute.

This comes to be most evidently problematic once we acknowledge the association

⁵³John McDowell, *Mind and World*, 5.

⁵⁴John McDowell, *Mind and World*, 15.

⁵⁵John McDowell, *Mind and World*, 14.

of spontaneity with *freedom* or epistemic agency. Since we are free to think what we want and to hold beliefs based on our appraisal of other beliefs, the lack of a rational external constraint on thought suggests the possibility that we might not ever, in fact, have beliefs *about* the world. In a certain sense, this is a contemporary version of the threat of idealism. Just as George Berkeley wondered whether it was possible to have ideas corresponding to anything but other ideas, McDowell sees Davidson's position as producing a similar anxiety about whether we can ever really get outside of our beliefs.⁵⁶ As McDowell remarks, "[o]f course Davidson's thinking does not obliterate all forms of the idea that empirical thinking is rationally vulnerable to the course of experience," but that it is impossible for Davidson to suppose "that sensory impressions, impacts of the world on our senses, impose[s] rational demands on our empirical thinking."⁵⁷ McDowell takes Davidson to regard "appearings", that is "the succession of circumstances that consist in its appearing to one that things are thus and so",⁵⁸ as a sort of belief.⁵⁹ That is, he takes Davidson to say that the world always causes beliefs in us, beliefs of the sort used in giving reasons for the world being a certain way. But this means that the appearance of the world in experience is a belief itself and McDowell, in my mind rightly, takes issue with this (if this is, after all, Davidson's position): "Its appearing to me that things are thus and so is not obviously to be equated with my believing something"⁶⁰.

⁵⁶It is obvious that Davidson would not agree that his position puts our ability to think about the extra-conceptual items in the world into question. In fact, he is trying to avoid the sort of conceptual relativism that leads Quine to suppose that two languages could be connected to the world in the same way while remaining untranslatable (the famous thesis of "the indeterminacy of translation"). The consequence of this means that we can never be sure that any given language *truly represents the* world but, in line with Quine's pragmatist thinking, that it is merely useful for anticipating future sensory irradiations. In fact, Davidson closes "On the Very Idea of a Conceptual Scheme" with the following remark "In giving up the dualism of scheme and world, we do not give up the world but re-establish unmediated touch with the familiar objects whose antics make our sentences and opinions true or false." (p. 198). It is important to emphasize that I do not necessarily agree with McDowell's appraisal of Davidson, though an exposition of *McDowell's Davidson* is instructive for the purposes of this investigation. Once we get to my evaluation of McDowell's own position, my disagreements about his appraisal of various thinkers will be elucidated.

⁵⁷John McDowell, *Mind and World*, 139.

⁵⁸*Ibid.*

⁵⁹John McDowell, *Mind and World*, 140.

⁶⁰*Ibid.*

Again, the main problem for McDowell is that this picture appears to render experience as inert and incapable of issuing a verdict on the adequacy or correctness of our conceptual applications. This adequacy is internal to the conceptual scheme and therefore leaves the deliverances of sensation as mere prompts which produce ‘appearings as beliefs’. However, this leaves us with the counterintuitive conclusion that the rational truth of these beliefs is then not dependent on the experiences or causal happenings which give rise to them.

McDowell expresses this in his Kantian jargon as follows:

“But this idea of external constraint is genuinely available only if we can contrive to accept a rational engagement with spontaneity on the part of receptivity itself, and Davidson thinks that is impossible. [...] Davidson’s formulation reflects something deeper: he cannot countenance external rational requirements on exercises of spontaneity, so his coherentism is genuinely unconstrained. Even if we do not take the word “belief” very seriously, the restriction to beliefs conveys something on these lines: only subjective things belong together with evolving world-views in the space of reasons. My claim is that this is disastrous: it ensures that we cannot refuse to find a mystery in the bearing of belief, or anything else, for instance appearing, on the empirical world.”⁶¹

So, by way of summary, McDowell’s oscillation is between the following positions:

- 1) Positions that gravitate towards what Sellars and McDowell call, “the Myth of the Given”, which are exemplified by Quine’s scheme/content dualism.
 - These positions emphasize the role of extra-agential causes which anchor our thoughts to the items in the world to which we direct them but are said to lack the justificatory relations required for them to do so. As such, they try to capture the passivity of Kantian receptivity and the extra-personal items responsible for phenomenal presentations of sensation. Such positions hope

⁶¹John McDowell, *Mind and World*, 144.

to find intentional grounding in the deliverances of sensations. These then are positions which erroneously take transactions in the realm of law to be capable of possessing the relational properties of items in the space of reasons.

2) Positions that gravitate towards coherentist epistemology as exemplified by Donald Davidson's slogan "[n]othing can count as a reason for holding a belief except another belief"⁶²

- These positions emphasize the role of normativity, spontaneity, and agency. These provide us with the evaluative conditions and rational freedom required for us to be able to experience the world in such a way that it is subject to rational scrutiny by way of collectively realized standards of evaluation. As such, these positions then focus on the agent's propositional attitudes and beliefs in order to fulfill the requirement that knowledge involves rational warrant rather than mere causal impetus. Nonetheless, they fail insofar as they cannot provide us with a means of understanding how this freedom can be constrained by the extra-agential world, viz. the natural order understood as the realm of law.

It is worth noting that these positions can be understood as contemporary equivalents of enlightenment empiricism and rationalism. The first of which attempts to regard the sensory event to be the basis by which we evaluate knowledge though it does not, on its own, say anything about the fidelity of this knowledge. This is evidenced by the differences between, for example, Locke, Hume, and Berkeley's distinct stances on whether sensory experience is capable of reaping actual knowledge of the world. Understood, from McDowellian starting point, we can regard these individuals as asking the question whether sensory episodes can act as justifiers for knowledge claims. On the other hand, traditional rationalism, requires that knowledge must be based on the sort

⁶²Donald Davidson, "A Coherence Theory of Truth and Knowledge" 310

of inferential justifications which are proper to logic and mathematics. These then seek a standard of evaluation which is divorced from the of sensory experience. Descartes' famous worry about the reliability of sensory experience evidences this. Furthermore, it is uncontroversial to see Kant as reconciling the dialectical tension between these two ways of understanding our knowledge of the world. It is clear that McDowell is striving for a similar contemporary reconciliation – albeit with the Wittgensteinian proviso of quietism. This is what enabling to avoid important questions that Kantian epistemic commitments tend to create; namely, metaphysical questions about the noumena, self, and the distinction between the “natural order” and the transcendental conditions for them.

1.4 McDowell's Solution

McDowell is trying to resolve the tension between the normative dimensions, which prescribe the rational rules of human thought, and the causal background under which these thoughts occur. He believes we get trapped between the positions outlined in the previous sections and expresses this impasse as follows:

“... we are prone to fall into an intolerable oscillation: in one phase we are drawn to a coherentism that cannot make sense of the bearing of thought on objective reality, and in the other phase we recoil into an appeal to the Given, which turns out to be useless. I have urged that in order to escape the oscillation, we need a conception of experiences as states or occurrences that are passive but reflect conceptual capacities, capacities that belong to spontaneity, in operation”⁶³

McDowell's solution to this “intolerable oscillation” is predominantly Kantian. He does not wish to see our conceptual capacities as something ‘extra’ that we apply onto the brute givens of sensory experience but as something inextricably involved in our recep-

⁶³John McDowell, *Mind and World*, 23

tivity or “drawn on *in* receptivity”.⁶⁴ One does not “move from an impression, conceived as the bare reception of a bit of the Given, to a judgment justified by the impression.”⁶⁵ Rather, one already receives the world as something which is conceptually ordered at the level of receptivity. That is, while for Davidson experience can be seen as part of the “realm of law,” something we can understand as causally generated by natural laws, for McDowell, on the other hand, experience is conceptually saturated in a way that allows it to act as a justifier. Our experience of a red ball is not just a result of the causal processes which give rise to it, but is something in which the concepts required to judge, “here, a red ball” must already be in place.

As such, McDowell wishes to see our conceptual apparatus as “deployed” in experience so that our empirical relationship to the world cannot be decomposed into a series of causal relations but remains conceptual “all the way down”. I use this phrase “all the way down” to capture what McDowell means in stating: “So the master thought as it were draws a line: above the line are placings in the logical space of reasons, and below it are characterizations that do not do that”.⁶⁶ Here he intends to show that experience cannot contain anything beneath the conceptual structure of the space of reasons. He wants to show how the passivity of sensory experience is rationally informative and how the activity of thought is conceptually operative in sensation. The picture he wishes to release us from considers conceptual activity to be exclusive to thought, while rendering the passivity of sensory activity as exhaustively causal. The latter conception of our passivity of our sensory encounter with the world emerges from the fact that the occurrence and character of empirical episodes do not result from the active intentions of the agent subject to a given experience; rather, our experience of the world emerges from the agent’s status as a passive recipient of empirical content by extra-agential forces. Thought, on the

⁶⁴*Ibid.*, 9. It is worth noting that at the end of the sentence in which this phrase features, McDowell makes an important parenthetical claim: “(It is important that this is not the only context in which they are operative. . .)”. The significance of this claim has to do with the aforementioned freedom which is involved with the spontaneity of our conceptual capacities

⁶⁵*Ibid.*

⁶⁶John McDowell, *Having the World in View*, 5.

other hand, is seen to be active because of the aforementioned freedom associated with spontaneity; it involves an agent's active commitment and employs conceptual resources that are only available to a community of speakers.

So, the dichotomy McDowell originally presented us with was one which took our experiential happenings to have their original source in causal processes that could not act as justifiers, and another, which took our beliefs to gain their rational grounding from an infinite regress of other beliefs that could not hope to find rational grounding in the experiences which gave rise to them. His solution attempts to show us that no such dichotomy need exist and that the idea of a conceptually saturated experiential milieu is commensurable with a naturalistic worldview. In particular, he is trying to avoid the charge of idealism which can result from "this refusal to locate perceptible reality outside the conceptual sphere," as it runs the risk of failing to "genuinely acknowledge how reality is independent of our thinking"⁶⁷.

Thus, McDowell wishes to avoid three things. The first two are presented by the two poles of the aforementioned intolerable oscillation. However, the next is a consequence of his own take on the situation which runs the aforementioned risk of "rampant platonism"⁶⁸. It is clear that he takes himself to have eliminated this risk – though I will later challenge this claim. For the time being what is important is that McDowell sees his position as commensurable with a sort of "liberal naturalism", one that doesn't necessarily eliminate or challenge the naturalism of contemporary sciences, but expands it to include "the logical space of reasons".

He attempts to surmount the potential pitfalls of rampant platonism by making a distinction between "first" and "second" nature. The next section shall conclude the exposition of McDowell's position by way of elucidating these notions.

⁶⁷John McDowell, *Mind and World*, 2.

⁶⁸*Ibid*, 77.

1.4.1 Two Natures, the Space of Reasons, and the Realm of Law

This section will examine the distinction that I take to be the most critical to my research: the distinction between First and Second nature. McDowell thinks that if we view nature as exhaustively constituted by the realm of law then we will have no space for the conceptual apparatus of the understanding in the natural world. This is why he claims that “conceptual capacities are in one sense non-natural”.⁶⁹ By this, he simply wishes to emphasize that the so called “bald naturalism”, which identifies “nature with what natural science aims to make comprehensible,” is seen to eliminate⁷⁰ the sort of intelligibility that is expressed by the notion of “the logical space of reasons.”⁷¹ While I take his understanding of “natural science” to be based on naive conceptions of the scientific worldviews that his pejorative phrase ‘bald naturalist’ attempts to capture, I do think that this distinction holds some degree of significance which shall be elaborated upon in the following chapters. What is important is that McDowell takes the properties which emerge from the faculty of spontaneity to be incapable of being explained by natural science. The normative character of thought and the freedom associated with spontaneity are seen to be essential features of rationality and these cannot be easily integrated into the picture of nature as the realm of law. Under this picture, the freedom associated with spontaneity along with the normative constraints on the application of this freedom, are rendered as incommensurable with the scientific world of natural laws. McDowell expresses this as follows:

We must sharply distinguish natural-scientific intelligibility from the kind of intelligibility something acquires when we situate it in the logical space

⁶⁹*Ibid*, 87. Non-natural from the perspective which holds nature to be exhaustively within the purview of the natural sciences.

⁷⁰It is important to note that the eliminative materialism does just this, unashamedly, and does not see the elimination of such a form of intelligibility as anything more than the disposal of an archaic and explanatorily empty series of folk psychological concepts. Things like spontaneity, *the* understanding, and rationality are taken to be too coarse grain to reflect the realities of human behaviour, cognition, and experience.

⁷¹*Ibid*, 70-71.

of reasons. That is a way of affirming the dichotomy of logical spaces, as bald naturalism refuses to. Even so, we can acknowledge that the idea of experience is the idea of something natural, without thereby removing the idea of experience from the logical space of reasons. *What makes this possible is that we need not identify the dichotomy of logical spaces with a dichotomy between the natural and the normative.* We need not equate the very idea of nature with the idea of instantiations of concepts that belong in the logical space—admittedly separate, on this view, from the logical space of reasons—in which the natural-scientific kind of intelligibility is brought to light. On this view, Sellars is right that the logical space in which natural-scientific investigation achieves its distinctive kind of understanding is alien to the logical space of reasons. The logical space of reasons is the frame within which a fundamentally different kind of intelligibility comes into view.⁷²

The claim here that the “natural and the normative” are commensurable is what is unique about McDowell’s position. What is problematic here is that the space of reasons is *sui generis* with respect to the realm of law. This results from the patently normative character of the space of reasons and the descriptive (empirical) character of the realm of law. For Sellars and Davidson the difference in kind entails that “we are forced to renounce empiricism” insofar as knowledge of the empirical world issues from transactions in the space of reasons which cannot feature as a part of the natural order from which our sensory encounter with the world issues.⁷³ This consequence is entailed by equating the realm of law with that of “the logical space of *nature*.”⁷⁴ McDowell does not regard such mutual exclusivity to be necessary and develops a notion of *second nature* by which he tries to articulate a manner of regarding the space of reasons as a feature of the natural world. While the realm of law might govern what would be our *first* nature, the acquisition of the capacity to be rationally responsive to reasons is what might be described as *second* nature.

⁷²*Ibid.*, xix. Emphasis mine.

⁷³It is important to note that Davidson did not use the phrase “space of reasons” though McDowell takes his notion of the “constitutive ideal of rationality” to function as a relevant counterpart (see M&W, xviii).

⁷⁴*Ibid.*, xx.

Here he gives a minimally developmental account of how, through the natural process of inculcation into social practice, human thought comes to possess the set of ordering principles which enable us to navigate within the space of reasons. These ordering principles are defined as ‘secondary’ only insofar as they are not given by our so-called “first natural” biological inheritance. McDowell renders this contrast as follows:

To focus the way this conception can serve as a model for us, consider the notion of *second nature*. The notion is all but explicit in Aristotle’s account of how ethical character is formed. Since ethical character includes dispositions of the practical intellect, part of what happens when character is formed is that the practical intellect acquires a determinate shape. So practical wisdom is second nature to its possessors. I have been insisting that for Aristotle the rational demands of ethics are autonomous; we are not to feel compelled to validate them from outside an already ethical way of thinking. But this autonomy does not distance the demands from anything specifically human, as in rampant platonism. They are essentially within the reach of human beings. We cannot credit appreciation of them to human nature as it figures in a naturalism of disenchanted nature, because disenchanted nature does not embrace the space of reasons. But human beings are intelligibly initiated into this stretch of the space of reasons by ethical upbringing, which instils the appropriate shape into their lives. The resulting habits of thought and action are second nature.”⁷⁵

Socialization gives form to the modes of thought and behaviour which make us sensitive to the rational demands of ethical life. It is important to emphasize that it makes us *sensitive* to the rational *demands* of ethical life.⁷⁶ In making this claim, McDowell emphasizes that this sort of upbringing does not merely endow us with some conceptual scheme but describes the actualization of the natural capacity for human beings to become rationally responsive to determinations that are not given by their biological nature alone. While here the point is made in an ethical context, McDowell extends

⁷⁵ *Ibid.*, 83-84.

⁷⁶ *Sensitivity* here suggests the involvement of receptivity whereas *demands* suggests the emphasis of a normative tribunal on thought. Here we can get a hint of how McDowell is trying to wed receptivity and spontaneity.

this to include the “initiation into conceptual capacities, which include responsiveness to other rational demands besides those of ethics”.⁷⁷ Here McDowell is, with good reason, emphasizing that human life is saturated with sensitivity to principles of thought and conduct which do not get their character from the *mere* operations of our biological systems independently of the way these systems come to grow and develop from within the ecology of human history. Thus, the Kantian notion that thought contrasts with the passivity of sensation, insofar as it involves the freedom to be responsible for our judgments, comes to depend on how our upbringing enables this responsibility. This freedom is what separates Kantian “spontaneity” from “receptivity”. It implies an active element which appears incommensurable with the passive determinism often implied by natural law. In the case of natural law, we are governed by its principles without being able to concede to or reject that governance. In the case of the space of reasons, we are governed by it only insofar as we come to participate in the systems of relations that request our concession to, or rejection of, their determinations.

By way of these two natures, McDowell tries to straddle the line between bald naturalism, which rejects the idea that there are *sui generis* properties to human cognition, and rampant platonism, which situates human thought outside of the natural order. I take him to be correct in emphasizing the undesirability of these two options, though I do not agree with his means of trying to assuage this dissatisfaction. It is fair to emphasize that there are aspects of the human animal that *appear* to be typologically distinct from those properties we find most suited to natural scientific investigations and that these can only be affirmed *as* legitimate if we insulate them against the danger of residing outside of nature as a rampant platonism. I take McDowell to be falling into the very trap he charges other thinkers of falling into when he states:

Ordinary modern philosophy addresses its derivative dualisms in a characteristic way. It takes its stand on the side of a gulf it aims to bridge, accepting

⁷⁷ *Ibid*, 84.

without question the way its target dualism conceives the chosen side. Then it constructs something as close as possible to the conception of the other side that figured in the problems, out of materials that are unproblematically available where it has taken its stand⁷⁸

I will argue that his account of bald naturalism and second nature depends on having tried to reconstruct nature by recourse to conceptual analyses customary to many analytic philosophers. He has, at the very least, relied solely on his understanding of the philosophical tradition, to try and determine a solution to the problem. This is not in itself a flaw, though it is problematic with respect to the sorts of claims McDowell makes about bald naturalists insofar as he does not actively engage with the ideas which he is dismissing as philosophically dissatisfying or ineffectual. He speaks about the realm of law from within the space of reasons. While all speech about the realm of law will consist of transactions in the space of reasons, McDowell describes the realm of law as what “natural science aims to make comprehensible,” and therefore points at the particular discursive domain of natural science. Of course, we must distinguish the entities described by the realm of law from the discursive domain that describes such entities.⁷⁹ This problem issues from a difficulty in understanding the realm of law as epistemically distinct from the space of reasons. The rational arguments given within the sort of discourse characterized by the bald naturalist, are not necessarily different in kind from the sort of discourse McDowell is engaging in.⁸⁰ As such he has constructed a picture of nature “out of materials that are unproblematically available” from where he has taken his stand as a philosopher without showing how the materials used by his

⁷⁸*Ibid*, 94.

⁷⁹This nominalistic problem demonstrates the difficulty in distinguishing the linguistic activity associated with the realm of law with the entities which this activity is supposed to elucidate. This is a significant feature of the problem in distinguishing the intentional act of an agent from the content individuated by this act.

⁸⁰It is important to note that the term ‘bald naturalist’ is extremely vague and that my characterizations of what constitutes ‘bald naturalism’ or ‘the realm of law’ may not be entirely accurate. Nonetheless, my work is an attempt to remedy this by providing reasons for why I take certain philosophers and scientists to qualify as “bald naturalists” and then engaging with the theoretical suppositions that McDowell deems incapable of featuring into a theory of intentionality.

hypothetical opponent cannot be used to construct an adequate picture. To sum up, I take McDowell's diagnosis to be accurate though his cure dissatisfying. There remain too many symptoms of the philosophical illness from which he was hoping to alleviate us. His work doesn't help us "see the world aright."⁸¹

1.5 The Problem with Naturalism: Normativity and the Natural Sciences

Despite being inspired by McDowell's approach, I find his purported quietism unsatisfying. In particular, I take his dismissal of the so called "bald naturalist" stance to depend on a semi-pejorative view of the myriad scientific investigations into our cognitive relation to the world. While there is much to say about what comprises "scientific methodology" to do justice to that question would require its own project, so for the time being, we shall work with the assumption that it means "the practices of individuals involved in the sorts of research denoted by the phrase 'the natural sciences'".

This chapter will then focus on the general issue with McDowell's total rejection of the natural sciences in anticipation of the next chapter which will provide specific examples of theories which rely on them. I do this with the hope of demonstrating that a nuanced understanding of some of these thinkers can be made compatible with McDowell's desire to revise our understanding of human nature by way of the Aristotelian notions of first and second nature.⁸² It will depend on the idea that the notions of "receptivity" and "spontaneity" have not been understood in a way that affords continuity between the realm of law and the space of reasons. The interminable oscillation that concerns McDowell depends, in my view, on two errors: one involving an understanding of what comprises a scientific account of receptivity, while the other results from failure to provide us with an explanation for his theoretically positive claim that "concepts

⁸¹Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, (New York, NY: Routledge, 2001), 6.54.

⁸²I will elaborate on this point in greater detail in Chapter Four.

are deployed in experience”. This will then build upon Patrice Philie’s paper, “Intentionality and Content in McDowell” in which he provides us with compelling reasons to reject McDowell’s purported quietism. This problematization of McDowell’s claim to have made no theoretical contributions to the philosophy of mind or epistemology has far reaching consequences, which go further than those discussed in Philie’s article. I will specifically build upon Philie’s exposition of the aspects of McDowell’s project that justify rejecting his quietest stance. I agree with, for example, the claim that concepts are indeed deployed in experience and that the notions of first and second nature can assist us in providing a framework by which we might understand what this means in light of contemporary scientific developments. But by affirming the fact that McDowell provides us with a positive theory, while refraining from providing the details of this theory (as he does not consider himself to have one), one can be left feeling that his work is somehow incomplete or dissatisfying. I will attempt to respond to this dissatisfaction, not by rejecting McDowell’s project, but by hoping to use it as a platform to head in a direction that he himself would deem dubious if not impossible. This direction will attempt to meet the bald naturalists half way and will aim at a middle ground between frameworks that either totalize or eliminate the role of natural science in their philosophical investigations. In doing so I hope to provide a theoretically compelling account of the manner by which the deployment of concepts in experience stands as a condition for the acquisition of empirical content.

1.5.1 The Failure of McDowell’s Quietism in the Face of Alternative Theoretical Frameworks

In “Intentionality and Content in McDowell,” Philie identifies four features of what McDowell considers as “content” in order to “uncover [the] presuppositions” inherent in McDowell’s stance on intentionality.⁸³ By identifying these features of McDowellian

⁸³Patrice Philie, “Intentionality and content in McDowell”, 657.

Content, Philie thereby challenges us to consider whether they entitle him to his quietist stance. He therefore compares McDowell's work to the later Wittgenstein and provides compelling arguments for why the latter is entitled to this stance in a way that the former cannot be. The features of McDowellian content are as follows:

1. Experiences are intrinsically endowed with content
2. Content is essentially conceptual
3. Content is object-dependent
4. Content lies outside the reach of naturalistic cognitive science ⁸⁴

Here, the general features of McDowell's understanding of content are made explicit. For McDowell, experience is contentful insofar as it is that in which conceptual content is rendered available to us; furthermore, experience is made transcendently possible by way of the intrinsic role of conceptual content. Philie articulates this as follows:

“The thesis of the conceptuality of experience is to be understood in a robust sense: it is not merely that experience is conceptual—it is, rather, the more drastic idea that something, to qualify as contentful, must be conceptual and that experience is the first “level,” so to speak, where there is (conceptual) content. There is no form of experiential content “below” conceptual experience escaping our awareness, such that the contentful, conceptual experiences we enjoy as subjects engaging with the empirical world would be underdetermined by some other form of non-conceptual content, such as, for instance, impressions.”⁸⁵

And finally, the idea that content cannot be captured by scientific approaches to cognition depends on McDowell's refusal to affirm pre-conceptual content and to equate receptivity with transactions in the realm of law. He does this in order to avoid falling into

⁸⁴Patrice Philie, “Intentionality and Content in McDowell”, 667. *I will use the phrase “cognitive science” to denote all scientific approaches to the study of the mind henceforth.*

⁸⁵Patrice Philie, “Intentionality and Content in McDowell”, 659.

the scientifically grounded version of the Myth of the Given. Here “content only exists at the level of experience - above the line – and if experience is irreducibly conceptual, then it follows that whatever content is, it will necessarily be something conceptual.”⁸⁶ Cognitive science then deals with “non-conceptual items, processes or mechanisms” which are proper to the realm of law and therefore cannot hope to capture items in the space of reasons.⁸⁷

Philie then mentions that “[t]he boldness of this view resides in a certain conception of how the philosophy of mind should be pursued as a discipline, one that does not accord with the *Zeitgeist*” and “if McDowell is right, a fundamental concept in the philosophy of mind – content – cannot be described *exhaustively* by contemporary (naturalistic) cognitive science (McDowell 1994a, 352-54). The latter can only, at best, describe what enables the presence of conceptual content. This, if correct, undermines the ambitions of many contemporary research programs.”⁸⁸ As such, we can see that McDowell’s commitment to the conceptual status of experience and content entails “nonnaturalism about content.”⁸⁹ Of course, this is nonnaturalism in the sense McDowell denominates as “restrictive naturalism” which “aims to naturalize the concepts of thinking and knowing by forcing the conceptual structure in which they belong into the framework of the realm of law.”⁹⁰ However, Philie’s remarks about McDowell’s unwillingness to present a view of the philosophy of mind that is in “accord with the *Zeitgeist*” and the manner in which this “undermines the ambitions of many contemporary research programs” might lead us to wonder whether McDowell own liberal naturalism might offer a compelling alternative to these other research programs.

For the purposes the following investigations the most significant of the above enumerated features of content is the fourth, that is, that content cannot be apprehended

⁸⁶*Ibid*, 660.

⁸⁷*Ibid*.

⁸⁸*Ibid*, 661.

⁸⁹*Ibid*, 660.

⁹⁰John McDowell, “Naturalism in the Philosophy of Mind”, 262.

by recourse to cognitive science. The other three will be addressed in view of this last in order to assess whether McDowell's alternative to restrictive naturalism is genuinely satisfying. The preceding three features are what Philie focuses on in order to demonstrate that, unlike Wittgenstein, McDowell proposes a sort of internalism which, due to the object-dependence view of content (which cannot be separated from the preceding two features), supposes a "*relational* account of intentionality."⁹¹ As such, McDowell affirms a distinction between "a conceptual episode and what it is about – to put it dangerously, there is something "internal" and something "external."⁹² This is then in stark contrast with the Wittgenstein's quietism which "does not require a philosophy of mind, understood broadly as a conception of the mind and the nature of mental states. In contrast, McDowell, by embracing an internalism about content, does need to appeal to a *philosophy of mind* in the traditional sense in order to explain intentionality."⁹³ In contrast, Wittgenstein's refusal to engage in traditional philosophy means that, for example, the "question of the conceptuality or non-conceptuality of content is not a genuine one" since taking a stance on this would indeed be an example of the sort of "philosophical debate that Wittgenstein is at pains to denounce as fruitless and meaningless".⁹⁴

Philie then brings our attention Sellars's important distinction between the *manifest* and the *scientific* image. This distinction is, along with much of Sellars's work, clearly operative in McDowell's project. Philie succinctly describes this distinction as follows

"the manifest image is the world as it appears to us – the world of tables and chairs, of institutions, of persons, and so on. The world of the scientific image is the world described from the perspective of our best science, the non-manifest world of atoms, quarks, microparticles, waves, electrons, and so forth."⁹⁵

He then goes on to argue that for McDowell,

⁹¹Patrice Philie, "Intentionality and Content in McDowell", 668-669.

⁹²*Ibid*, 669.

⁹³*Ibid*, 671.

⁹⁴*Ibid*, 668.

⁹⁵*Ibid*, 672.

“the space of reasons belongs irreducibly to the manifest image. We use, outside philosophy, the concepts of reasons, justifications, beliefs, thoughts, and so on. There is nothing mysterious about this unless you are a philosopher. These concepts are used in everyday life, and they work – they are probably essential to the way we live, to our form of life. In fact, they are as ordinary and familiar to us as tables and chairs are.”⁹⁶

This so-far sounds compatible with a sort of quietist stance which endorses a “harmless picture of the mind that we use in our everyday lives”; however, as Philie emphasises, McDowell does not stop here as he should do if he wishes to be serious about his quietism.⁹⁷ Instead, McDowell goes on to make controversial positive claims about the nature of mind, rationality, etc. In fact, he argues for the thesis that, “experience is conceptual and belongs to the space of reasons. It possesses content. It has aboutness. It can be used as a justifier.”⁹⁸ It is here that Philie’s criticisms come to be most relevant to my investigations and where they accord most with my own appraisal of McDowell. In the previous chapter I state that McDowell is in danger of falling into the very trap he criticizes other thinkers of succumbing to, insofar as he stands on one side of the gulf that he takes to problematically divide modern philosophers.⁹⁹ That is, he relies on the sort of conceptual analysis which is customary to the tradition of analytic philosophy, one which he endorses while completely rejecting the scientific naturalists which stand on the other side of this methodological lacuna.

Philie alludes to these very McDowellian remarks, in view of a similar criticism when he states:

“... conceiving of experience as conceptual looks, on the face of it, like a thesis one arrives at when one stands on one side of a gulf (the conceptual side) and attempts to construct something with the resources available on that side resembling what should ordinarily be on the other side (the non-conceptual

⁹⁶*Ibid*, 672-673.

⁹⁷*Ibid*, 673.

⁹⁸*Ibid*, 673 – 674.

⁹⁹John McDowell, *Mind and World*, 94.

realm).”¹⁰⁰

It is this final comment that is most significant insofar as it uses McDowell’s own position to demonstrate that his project cannot be understood as refraining from the sort of theoretical philosophy that he claims to be rejecting. Furthermore, it suggests that McDowell’s failure to be a quietist entails that he cannot ‘stand on one side of the gulf’ while eschewing thinkers who stand on the other side. That is, he cannot dismiss the ‘restrictive naturalism’ of the naturalistic cognitive sciences while also presenting us with a *competing theory* that is at odds with their own take on how the philosophy of mind should be understood. Without providing us with compelling reasons, reasons that directly address the works of such thinkers rather than lumping them into a pejorative category, he finds himself “accepting without question” the “materials that are unproblematically available” where he has taken his stand.

Philie’s paper goes into greater detail about how McDowell’s work possesses specific theoretical commitments that, in contrast with Wittgenstein’s genuine quietist stance, cannot themselves be countenanced as quietist. However, for my purposes the above elucidation of his paper is sufficient as it paves the way to my own analysis of the theoretical inadequacy of McDowell’s approach. I will delineate this in the coming sections.

1.6 Quietist Transcendental Philosophy and Theoretical Evasiveness: The Metaphysical Consequences of McDowell’s Quietism

“What I mean by ‘engaging in constructive philosophy’ is attempting to answer philosophical questions of the sort I have here singled out: ‘How possible?’ questions whose felt urgency derives from a frame of mind that, if explicitly thought through, would yield materials for an argument that what the questions are asked about is impossible. Evidently it can seem sensible to

¹⁰⁰Patrice Philie, “Intentionality and Content in McDowell”, 674.

embark on such a project only if one does not quite understand the predicament that seems to motivate it. If the frame of mind is left in place, one cannot show how whatever it is that one is asking about is possible; if the frame of mind is dislodged, the ‘how possible?’ question no longer has the point it seemed to have. Either way, there is no prospect of answering the question as it was putatively meant. So if I am right about the character of the philosophical anxieties I am to deal with, there is no room for doubt that engaging in “constructive philosophy”, in this sense, is not the way to approach them. As I have put it, we need to exorcize the questions rather than set about answering them. Of course that takes hard work: if you like, constructive philosophy in another sense. And of course that is what I offer in this book.”¹⁰¹

We can here see that McDowell’s project, especially if we concede that it cannot be fairly characterized as abstaining from engaging in “constructive philosophy,” is one which makes explicit claims about the explanatory scope of a great many other research programmes. In effect, McDowell’s idea of what philosophy of mind should look like as a discipline, thereby invalidates these other theoretical approaches. If McDowell is right about this, then the consequence of his work is even more far reaching than he may himself suppose. Since his naturalism seeks to demonstrate the futility a vast number of other naturalistic approaches we must treat his work as purporting something that requires extraordinary evidence if we are to accept it on rational grounds. In some sense, McDowell’s project can be seen as the Janus Face of Patricia and Paul Churchland’s projects insofar as the former eliminates the possibility of doing philosophy in the way practiced by the latter and vice versa.¹⁰²

One consequence of McDowell’s quietism is that it allows him to evade the necessity of explaining how his notion of mind bears on our understanding of other related notions such as *consciousness*, *behaviour*, *intelligence*, *function*, etc., notions at home in the dis-

¹⁰¹John McDowell, *Mind and World*, xxiii – xxiv.

¹⁰²This will be elaborated upon in the next chapter by discussing the distinct ways the Churchlands’ and McDowell have interpreted the Kantian commitments of Wilfrid Sellars.

course of traditions of thought which do not hold his Kantian premises.¹⁰³ In particular, McDowell thinks there is nothing to say about the *mental* lives of other creatures and that these other related notions are actually irrelevant with respect to his own philosophical stance.¹⁰⁴ This is why numerous authors have challenged McDowell to elaborate on what he means when he says that young children and animals lack *experience* but may have something which resembles it, viz. a “proto-subjectivity” with an accompanying “proto-experience.” While McDowell has some things to say about this, most of his remarks focus on what animal (and infant) life cannot be. And what it cannot be is precisely what Philie takes McDowell to be theoretically committed to. That is, animals lack the four features of intentionality outlined above. The proto-subjective happenings which we might mistake for thought or experience fail to qualify for either since they fail to meet the Kantian criterion for contentful rather than empty thoughts and discerning rather than blind intuitions. Animals lack *content* because they lack *concepts* because they lack *spontaneity* and these together mean they cannot have experience understood as “openness to the layout of reality” in which, “the layout of reality [can] itself exert a rational influence on what a subject thinks”.¹⁰⁵ This is because, for McDowell, as for Kant, the absence of spontaneity suggests an absence of self or subjectivity and this

¹⁰³In particular I am thinking of discussions by evolutionary psychologists and philosophers of biology who think that a scientific approach to the mind can allow us to move past the limitations (of what?) by “isolating or deriving a core set of foundational concepts from the intersection of physics, biology, and information theory, elucidating their logical and causal interrelationships, and then building back upward from this groundwork. (A few representative concepts are *function, regulation, computational architecture, adaptation, organization, design, entropy, selection, replication, selection pressure, by-product, environment of evolutionary adaptedness, and task environment*).” John Tooby and Leda Cosmides “Conceptual Foundations of Evolutionary Psychology”, 8.

¹⁰⁴It should be noted here that I am using the term ‘mental’ to mean the explanandum which these distinct explanans seek to elucidate. I do this in order to refrain from presupposing any particular theory of mind before beginning my investigation of what we call mental phenomena. I feel that to do so would be to beg the question. While this may seem superfluous, it is important to note that what we are trying to understand are those properties of persons which have hitherto been denoted by the term ‘mental’ and that many philosophical theories depend heavily on their preferred means of explaining them. We can see reductionist theories as those which claim that the broad tools of natural science are adequate for the task, while other positions (such as McDowell’s) often reject such explanans as unsuited to tackling such problems.

¹⁰⁵John McDowell, *Mind and World*, 26.

consequently means that “the world cannot be in view either”.¹⁰⁶ Again, these preceding statements are rich with what sound like positive theoretical commitments regarding the mental lives of not only ourselves but of other creatures as well.

There are many familiar intermediate steps that allow McDowell to conclude that animals lack experience from the premise that they lack concepts in the relevant sense; these can be found in Lecture VI of *Mind and World*, in McDowell’s response to Dreyfus’s “The Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise” and in any basic understanding of what Kant’s “unity of apperception” entails. As such, McDowell’s way of getting off the epistemological see-saw between the given and coherentism traps him in a problematic *metaphysical* see-saw between the space of reasons and the realm of law. For example, it generates the problem of understanding how certain animals *cannot by definition* have access to the space of reasons while others can, but gives us no way of understanding how these are part of the same natural order.

What follows is an appraisal of thinkers who provide competing naturalistic frameworks which account for intentionality without subscribing to McDowell’s conceptually driven one. We will examine what is appealing about these other frameworks, with a particular focus on the fact that they provide us with a means of understanding what is shared about our lived experience and the lives of other creatures. From there we will demonstrate how they fall short in explaining the *phenomenology of rational import*. By taking McDowell to be proposing a theory of his own, I wish to promote an interpretation of his work which suggests that it has explanatory powers that are missing from other theories, while suggesting that his own work fails to meet its target if it does not itself draw from these other theories. As such, this project can be understood as attempting to demonstrate theoretical continuity between the realm of law and the space of reasons, without collapsing the distinction or prioritizing one of its items. By rendering McDow-

¹⁰⁶John McDowell, *Mind and World*, 114

ell's project as a phenomenological theory of rational import or epistemic salience we can, as Wilfred Sellars says 'Save the Appearances' without negating the role of that which operates beneath them. McDowell, in some sense, can be seen as rejecting the relevance of the noumenal realm, now understood as the unobservable world described by the language of the natural sciences, to the problem of intentionality in a way that Wilfred Sellars did not himself do. Sellars instead relegated this so-called 'noumenal' realm to that of the theoretical posits of science and suggested that we must understand our perceptual relationship to the world as substantively constituted this way despite the transcendental necessity of normativity in appearances. At the same time, his acknowledgement of the space of reasons as something integral to our understanding of ourselves and others, illustrated not only by his famous 'Myth of Jones' but by a great deal of his work, is what motivates McDowell to focus on his 'manifest image' in understanding our mental lives.

The following sections will then explore the following criticisms of McDowell's work:

- 1) His commitment to Kantian Transcendental Philosophy, and his particular normative interpretation of Kantian thought, leads him to reject any theory that does not subscribe to this view *in toto*.
- 2) His failure to be a quietist, in light of these Kantian considerations cannot be well reconciled with his invocation of Aristotelian thought without further elaboration on how what he calls "first" and "second" nature relate to *Nature as a whole*.

These two appraisals of his position are what, to my mind, leads McDowell to fail to dissuade us from being what he has dubbed a 'rampant platonist', that is, someone who understands rationality as:

"an autonomous structure-autonomous in that it is constituted independently of anything specifically human, since what is specifically human is surely natural (the idea of the human is the idea of what pertains to a certain

species of animals), and we are refusing to naturalize the requirements of reason. But human minds must somehow be able to latch on to this inhuman structure. So it looks as if we are picturing human beings as partly in nature and partly outside it. What we wanted was a naturalism that makes room for meaning, but this is no kind of naturalism at all.”¹⁰⁷

Before we go into the precise details of McDowell’s arguments defending himself from being characterized as one of these *rampant platonists*, whom I assume he takes thinkers such as Gottlob Frege and the early works of Bertrand Russell to be, let us first unpack what it means to be a human as an “idea of what pertains to a certain species of animal”.

1.6.1 Can Animals be Transcendentally Silenced? Aristotle, Natural Science, and the Evolution of Reason

When we understand McDowell’s theory of content to depend on the four aforementioned properties, we can understand why he takes other creatures and infants to exhibit a privation of experiential properties. Such living things cannot have experiences since:

- 1) experiences are already endowed with content and
- 2) content is essentially conceptual.

Given that the conceptual realm is only accessible to creatures with the possibility of verbal articulation or rational judgement, it is clear that other creatures lack such conceptual possibilities and consequently lack the possibility of having what McDowell considers to be *genuine experiences*. Of course, a great deal of this rests on what we mean by ‘concept’, ‘rationality’ or ‘judgement’; however, it would beg the question to fail to address McDowell’s way of defining these terms before rejecting at least some of their properties.¹⁰⁸

¹⁰⁷John McDowell, *Mind and World*, 77 -78.

¹⁰⁸So far as the previous sections have served to familiarize ourselves with what he means by these terms, the reader should expect my use of these to mean what McDowell does by them, until I provide my own revised definitions. In what follows, when I invoke the use of alternative definitions by other authors, I will indicate this.

So far, McDowell's project has shown a great deal of promise in providing an account of how to describe the intentionality of human experience. This, in many respects, is a successful account, one that follows Peter Strawson's interpretation of Kant as providing a descriptive metaphysics of experience. That is, McDowell – if he is successfully quietist in *any* respect – provides us with a means of accounting for what we take for granted in our experience of being *knowing agents*. I will later provide arguments for why I countenance his view on this restricted matter but I will now provide reasons for why this fails to be a genuinely naturalistic position insofar as it fails to capture anything about human or animal nature which extends beyond affirming the thesis of the conceptuality of experience by recourse to his understanding of Kantian thought.

Let us start with the notion that without content animals lack *experience* while keeping in mind that its corollary suggests that rationality is unrelated to scientific investigations into behaviour, intelligence, or consciousness. For at least the first two of these, namely behaviour and intelligence, *may* be attributed to other creatures by recourse to the natural sciences, insofar as they have been thoroughly investigated as empirical issues proper to the 'realm of law' rather than transcendental issues proper to the 'space of reasons.'¹⁰⁹ It is not clear whether McDowell thinks this is the case regarding the Hard Problem of Consciousness but for our purposes let us assume he does. This is simply for the reason that if we take my tentative definition of "bald naturalism" as: "the practices of individuals involved in the sorts of research denoted by the phrase 'the natural sciences'" then we can conclude that a great deal of scientists believe that consciousness is within reach of the practices which characterize their research programmes, whether they are correct in this belief or not.

If McDowell wishes to solve – or to be fair to his intentions *dissolve* – the problem of intentionality by relying on the philosophical distinctions central to his work, he must first show that the distinction is itself preferable in light of competing naturalistic frameworks.

¹⁰⁹Of course, thinkers like David Chalmers and Thomas Nagel do indeed think that *consciousness* is outside of the scope of the natural sciences.

More generally, he must at the very least do two things:

- (i) Demonstrate that his interpretation of Sellars’s “space of reasons” can exhaustively capture what it means to be a creature with intentionality (or else dissuade us from trying to understand what it means to be such a creature).
- (ii) Show that the distinction between first and second nature is unproblematically naturalistic (rather than *rampant-platonistic*) while sustaining the notion that these in no way conflict with the natural world understood as a series of nomological relations, viz. relations proper to the realm of law.

These two exceptionally recondite tasks appear especially difficult to reconcile with the claim that, “the idea of the human is the idea of what pertains to a certain species of animals”¹¹⁰.. This is because the idea of being an animal requires that we are understood to be of the same natural kind as other animals – regardless of what distinguishes us from different species. The spectre of rampant platonism is an echo of philosophical systems which understand human life as typologically distinct from that of other species which inhabit this earth. And here, what I mean by ‘typologically distinct’ without going into the specific metaphysics of natural kinds (of which there is a great deal of diverse literature) is metaphysically distinct in its constitution as a creature. I feel that I have the licence to avoid this complex issue insofar as McDowell himself does not even address it beyond alluding to the fact that he is *not* one of those pesky supernaturally inclined thinkers who think the mind is explained by its ability to “latch onto this inhuman structure”. I regard McDowell’s use of the terms ‘bald naturalist’ and ‘rampant platonist’ as a form of name-calling which amounts to little more than ad-hominem or straw-man arguments against those whose views he rejects. He ambiguously identifies sorts of philosophers as undesirables without directly addressing the actual thinkers which hold these positions and explaining specifically why we shouldn’t take them seriously. He

¹¹⁰John McDowell, *Mind and World*, 77 -78.

dismisses them outright as transcendently impossible explanatory frameworks while shrouding himself in a veil of quietist inculpability.

Nevertheless, without discussing natural kinds as a topic in metaphysics, let us look at some theoretical accounts of the mental lives of other animals so that we may understand what McDowell could possibly mean by affirming the fact that we are such creatures while denying the fact that what we share with the rest of the animal kingdom can be relevant to our investigations. The central problem is whether his position that second nature is *sui generis* (in the way he intends it to be) can be made consistent with his affirmation that we are nevertheless a certain species of animal. If the central properties of human life and mind are so distinct from those of other creatures can they then genuinely be thought of as a feature of an animal? If we take McDowell to be accurate in his analysis then we are left with the following problematic conclusions: animals are transcendently silenced and humans – as distinct from other animals – are transcendently endowed with the singular and unique gift of *mindedness*.

1.6.2 What does it mean to be an animal? Biological science and the foundations of naturalism.

An obvious premise to any contemporary account of human beings as *animals* requires that we concede that they, too, are a product of the complex processes described by evolutionary biology. While evolutionary *psychology* is a recent development with a number of difficult interpretative issues, the fact of our evolutionary origin is accepted by nearly every thinker who could conceivably be characterized as a naturalist in its contemporary meaning.¹¹¹ Hence Philie's claim that McDowell is not in accord with the current *Zeitgeist* of naturalistic thinking. This, in itself, cannot be countenanced as a deficiency in his work since the history of philosophy and of science has often depended on the novel and radical thinking of individuals who do not subscribe to the common

¹¹¹I will address some of these nuanced problems in evolutionary psychology in the following chapters.

assumptions of the dominant intellectual trends of their time. Nonetheless, any thinker who wishes to understand human life as *organic*, in the sense of belonging to the animal world, cannot affirm this without also affirming the overwhelming explanatory power of the biological sciences, which are so deeply indebted to the theory of natural selection. McDowell, of course, does not deny that we are products of an evolutionary history or that we share our etiological basis with that of other creatures. He, however, thinks that the sciences involved in understanding the processes by which evolution (as well as those which discuss its consequences, viz. the contemporary utility of some evolved characteristic) are irrelevant to understanding rationality, mindedness, experience, and action. This is, again, an extraordinary claim that would require extraordinary evidence for its verification. McDowell's work leaves us wanting for such evidence due to the elusiveness of his transcendental stance.

Before exploring why I find the transcendental silencing of non-human animals problematic we must take a look at two sorts of naturalistic thinkers who take this transcendental muzzle upon mental activity to be factually disproven and methodologically misguided.¹¹² The first of these are the evolutionary psychologists, in particular John Tooby and Leda Cosmides, who affirm that “[t]he theory of evolution by natural selection has revolutionary implications for understanding the design of the human mind and brain, as Darwin himself was the first to recognize.”¹¹³ And the second of these are those who attempt to understand the active operations of the brain, behaviour, and ‘mental activity’ in functionalist terms which are less concerned with the origins of our cognitive architecture and more concerned with the description of the actual processes which physically underlie the myriad capacities that can be subsumed under the notion of ‘the mental’.¹¹⁴ Some of the main thinkers I will focus on in this regard are Fred

¹¹²Of course, the Kantian distinction between the transcendental ego and the empirical one lies as a specter which motivates McDowell's commitment to this silencing of other creatures however I will later address this when I provide my positive theory of how these positions can be reconciled in light of the contemporary developments of scientific and philosophical thinking.

¹¹³John Tooby and Leda Cosmides, *The Conceptual Foundations of Evolutionary Psychology*, 5.

¹¹⁴Here mental activity is used in a theoretically neutral way to point at the explanandum in view

Dretske, Leda Cosmides, John Tooby, and Paul Churchland, though the list of such theorists could very well exceed the length of this entire chapter – especially if we include the numerous developments in neuroscientific accounts of human life and mind.¹¹⁵ My purposes for including these theorists are twofold. One is merely practical; a survey of the wide range of thinkers who fit into this category – the category that McDowell regards as “bald naturalist” would be far too expansive to fit within a project of this scope. The second is methodological; most of these thinkers directly address the problem of intentionality and can provide powerful argumentative resources for showing that McDowell’s assumptions regarding accounts which restrict their criteria of intelligibility to the realm of law are overwhelmingly simplistic. By a close reading of these theorists we can at the very least render the bald naturalist as being more than a strawman – we can give him a logical skeleton on which to rest his bare head. The exposition of these works will then serve as premises building to my positive theory which will show them to enrich McDowell’s Aristotelian distinction between first and second nature with the help of insights borrowed from the phenomenological tradition with a particular focus on Merleau-Ponty’s *The Structure of Behaviour*.

1.6.3 First Nature: Natural Science as Naturalism Simpliciter

One issue with McDowell’s claim that the space of reasons is *sui generis* is that it, *prima facie*, appears to suggest that our lives are of a different kind than the lives of other creatures and that this difference is what it means to have a mind (and to therefore, on his account, undergo genuine experience). I will later, in the elucidation of my own positive account which will be delineated in the following two chapters, affirm that we can regard the space of reasons as *sui generis* while avoiding this problematic conclusion; I will also do so in a way that widely deviates from McDowell’s own attempt to commensurate sui

without forcing any assumptions on whether the mind is in fact reducible, eliminable to or equivalent to the brain and body of the organism.

¹¹⁵Daniel Dennett and Jerry Fodor, to name but a few, are important thinkers in this field.

generis normativity with naturalism. This will largely depend on what we mean by *sui generis* and whether it is a consequence of a difference in kind or a difference in degree. For now, let us focus on why this issue of typological difference is important.

We are left with two possibilities: either human beings are of the same kind as other animals and thereby require no unique methodological or conceptual assumptions in understanding what makes them the sort of animal they are; or else they are so radically different that their distinguishing features – historically understood under the umbrella term rationality – evade the scope of scientific explanation. Now, *naturalism* is itself a term that is intrinsically ambiguous:

“The term ‘naturalism’ has no very precise meaning in contemporary philosophy. Its current usage derives from debates in America in the first half of the last century. The self-proclaimed ‘naturalists’ from that period included John Dewey, Ernest Nagel, Sidney Hook and Roy Wood Sellars. These philosophers aimed to ally philosophy more closely with science. They urged that reality is exhausted by nature, containing nothing “supernatural”, and that the scientific method should be used to investigate all areas of reality, including the ‘human spirit’ (Krikorian 1944; Kim 2003). So understood, ‘naturalism’ is not a particularly informative term as applied to contemporary philosophers. The great majority of contemporary philosophers would happily accept naturalism as just characterized—that is, they would both reject ‘supernatural’ entities, and allow that science is a possible route (if not necessarily the only one) to important truths about the ‘human spirit.’¹¹⁶

Despite the lack of precision or consensus on the meaning of this term, it is clear that it, at the very least, involves any theoretical approach that avoids ‘supernaturalism’, which is itself a murky term that can only really be understood as a negation of the positive characteristics of a sort of naturalism. McDowell relies on this sort of negative characterization of naturalism by his commitment to avoiding rampant platonism. However, he also fails to give us anything but an *a priori* rejection of the positive

¹¹⁶David Papineau, “Naturalism”, *The Stanford Encyclopedia of Philosophy*, Winter 2016, Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2016/entries/naturalism/>.

meaning of this term – that is as the descriptive contents of the natural sciences. He himself countenances this when states: “we capture the essentials of Sellars’ thinking if we take it that the logical space of nature is the logical space in which the natural sciences function, as we have been enabled to conceive them by a well-charted, and itself admirable, development[...] but what matters for Sellars’ point is not that or any other positive characterization, but the negative claim: whatever the relations are that constitute the logical space of nature, they are *different in kind* from the normative relations that constitute the logical space of reasons.”¹¹⁷ While as I have said above, I agree with McDowell and Sellars in regarding the space of reasons as *sui generis* and that this agreement comes from understanding its relevant contrast with the descriptions of natural science, we must first get a much clearer picture of what those descriptions might amount to if we are then to suggest that they provide an inadequate basis to understanding the sort of rational import that is manifest to us in lived experience.¹¹⁸ The claim that the world has rational import insofar as we are the sorts of creatures whose experience is necessarily a kind of rationally stratified subjectivity is the essential Kantian observation operative in these thinkers.

For now, let us focus on the logical space in which the natural sciences function – or at least some expressions of thinkers who operate in such a space. Only then can we come to understand the negative claim that such a space is inadequate for our purposes.¹¹⁹

¹¹⁷John McDowell, *Mind and World*, xiv-xv.

¹¹⁸It must be noted that Sellars’s own understanding of why it is, while similar to McDowell’s insofar as they both think that the normative *oughts* of the space of reasons cannot be reduced to the descriptive statements of natural science, Sellars himself put greater emphasis on our need to understand nature as exhaustively constituted by the descriptions of natural science despite the fact that within the manifest image of man the space of reasons is still *sui generis*. That is, they both agree -as I do - with the notion that one would be committing a version of the naturalistic fallacy in regarding the epistemic capacities afforded to us by the intentionality of mind as exhaustively explained by the descriptive frameworks of the natural sciences. However, each of us understands the explanatory role of the space of reasons understood as constituted by normative relations, and the realm of law, constituted by nomological ones, in different ways.

¹¹⁹It is important to note that the scientific practices, concepts, and normative principles operating at the level of the space of reasons, which enable it to draw its conclusions, are epistemologically prior to any biological account of intentionality. However, the conclusions we have come to drawn from our best science suggest that the empirical content of these biological accounts – that is, the facts about the world which they have made available to us – are facts consisting of descriptions of the natural world

In view of this aim we must first examine what a basic causal account of intentionality must look like. As such, we must start with an understanding of intentional states as evolved

1.6.4 Biological Capacities as Actualizations of Fitness Confering Functions

Almost all naturalistic candidates for proto-intentional states are organisms with the exception of computers. At least proto-intentional states. Let us begin with Elliott Sober's famous account of what it means for an organism to have an adaptive trait. An adaptive trait is a feature of its biological architecture that was selected for to enable it to perform tasks that are actualizations of capacities whose activity conferred a fitness advantage on its ancestors. This is then an etiological understanding of adaptive traits (including the relevant perceptual and cognitive traits that allow us to treat creatures as potential subjects of thought, experience, and action) which defines such characteristics as follows:

Characteristic c is an adaptation for doing task t in a population if and only if members of the population now have c because, ancestrally, there was a selection for having c and c conferred a fitness advantage because it performed task t .¹²⁰

To unpack this quote, we need to elucidate a few of the evolutionary principles on which it rests. Firstly, understanding characteristic c as an adaptation is not “to comment [...] on its current utility but on its history.”¹²¹ This is what we mean when we understand naturalistic analyses in etiological terms. As such, the notion of adaptive function is understood, not as the active contemporary use of some piece of cognitive architecture, but as a descriptor of the features of that architecture which conferred a fitness advantage on its ancestors. As Sober says, “there is some variation in how evolu-

which are ontologically prior insofar as they are the material conditions which gave rise to and enabled our species to perform such investigations.

¹²⁰Elliott Sober, *Philosophy of Biology*, 85.

¹²¹*Ibid.*, 84.

tionary biologists use terms like ‘function’ and ‘adaptation’ but certain key distinctions are widely recognized. Seeing these distinctions is crucial; how we label them is less important.”¹²² Why this is important for my purposes has to do with the fact that understanding adaptive traits – even those involved in cognition – requires that we understand the relevant characteristics of the organism as produced by law like regularities in the natural world *qua* realm of law. Furthermore, it allows us to understand that “only some of the effects of a device [or characteristic of an organism] are functions of the device (‘the function of the heart is to pump blood, not to make noise’)[...] the heart makes noise, but the device is not an adaptation for making noise: The heart did not evolve because it makes noise. Rather, this properly evolved as a spin-off; there was *selection of* noise makers but no *selection for* making noise.”¹²³

Let us pause and look at some relevant concepts, in particular those of ‘capacity’, ‘utility’, and ‘adaptive function’. This distinction between the *accidental* properties of the operations of some ‘device’ or characteristic of an organism and the properties relevant to making it an adaptive trait can help us understand how it is that contemporary biological theories can be understood in Aristotelian terms that simultaneously lack the strong emphasis on teleological metaphysics which has created so much discussion in the philosophy of biology. Firstly, we must understand *adaptive* traits as particular sorts of actualizations of the possibilities of a creature’s organic features. They are not just any old actualization of some biological capacity but the actualization of that capacity which functions as it does because it conferred a fitness advantage on its ancestors. Using Sober’s definition, “characteristic c (hearts) is an adaptation for doing task t (pumping blood) in a population if and only if members of the population now have c (hearts) because, ancestrally, there was a selection for having c and c conferred a fitness advantage because it performed task t (pumping blood).”¹²⁴ Of course, the example here is not yet

¹²²*Ibid.*

¹²³*Ibid.*

¹²⁴Elliott Sober, *Philosophy of Biology*, 85.

one that discusses characteristics that are relevant to mental activity but we will get to that later. First, we must look at some basic reasons that the Aristotelian framework has been problematic for philosophers of biology and then look at how McDowell's own deployment of certain Aristotelian notions does not show them to be *prima facie* incompatible with his own position or the position of the bald naturalist. Again, Sober provides us with a concise explanation of the anachronistic character of Aristotelian thought in contemporary biology:

“The suspicion – that functional concepts should be purged from biology – is encouraged by the fact that the scientific revolution in the seventeenth century eliminated teleology from physics. Aristotle's physics, like the rest of his view of nature, was saturated with teleology. He believed that stars, no less than organisms, were to be understood as goal-directed systems. An inner telos drives heavy objects to fall toward the place where the earth's center is. Heavy things have this as their function. *Newtonian physics made it possible to think that a meteor may simply not have a function; it behaves as it does because of its conformity to scientific law.* Talk of functions and goals is quite gratuitous. Perhaps progress in biology requires a similar emancipation from functional notions”¹²⁵

As we have seen, Sober does not want to jettison functional notions from contemporary biology but to ensure that they are compatible with it by emphasizing that, as is expressed in his above definition of an adaptation, that, “Darwin was able to show how they could be rendered intelligible within a naturalistic framework”.¹²⁶

Let us now look at the quote that McDowell borrows from Aristotle in establishing his relevant distinction between first and second nature:

“In the case of those present in us by nature, we are first provided with the capacities associated with them, then later on display the activities, something that is in fact clear in the case of sense perceptions. For it is not as a

¹²⁵Elliott Sober, *Philosophy of Biology*, 84 (emphasis mine). I emphasize this part of the quote in order to bring attention to the fact that such an understanding of capacities and their functions is understood as exhaustively describable in terms that can be made commensurable with the realm of law.

¹²⁶*Ibid.*

result of seeing many times or hearing many times that we came to have those sense perceptions; rather, it is conversely, because we have them that we use them, and not because we use them that we have them. But the virtues we come to have by engaging in the activities first, as is the case with the arts as well”¹²⁷

So far, what I am trying to draw out is the connection between capacities which are first “present in us by nature” in such a way that their activity emerges in its possessor as a necessary function of their intrinsic nature. Here ‘intrinsic’ is being used not in the hyper-essentialist way that Aristotelian notions of formal and final cause might suggest (though these are not irrelevant to later parts of our investigation) but in the sense of being present in a creature due to it being the species of creature that is; instead, intrinsic here can stand in for ‘adaptive’ now that we have the tools of Darwinian selection to draw on in informing us about the ways in which untutored functional architecture is present in organisms. For now, we will refrain from analyzing the last sentence of the above paragraph, the one that has to do with capacities which depend on refinement and tutoring. This will be reserved for explaining how second nature can be made compatible with these first natural accounts.

1.6.5 Evolutionary Psychology and the Natural History of Mind

Next, we must look at how this notion of adaptive traits comes to be relevant to the mental lives of creatures. The works of John Tooby and Leda Cosmides can be seen as an investigative paradigm which regards evolutionary biology as a tool which can – once and for all – act as a foundation for a “long forestalled scientific attempt to assemble out of the disjointed, fragmentary, and mutually contradictory human disciplines a single, logically integrated research framework for the psychological, social, and behavioural sciences – a framework that not only incorporates the evolutionary sciences on a full and equal basis, but that systematically works out all the revisions in existing belief

¹²⁷Aristotle, *Nicomachean Ethics*, 1103a27-33

and research that such a synthesis requires.”¹²⁸ It must be noted that I also take these authors to fall into the category – in a semi-pejorative sense – of ‘bald naturalism’ as an undesirable way of understanding our mental lives as consisting of features exclusively describable by the realm of law. They seek to totalize the role of natural science in the investigations of human nature which demonstrates a blindness to the value of the myriad other research programs which their work seeks to dismiss. However, before I elaborate on my critical appraisal of their project I will first elucidate some of their central claims and express my appreciation of the value of these propositions.

To begin with, we should take a look at a few of their central assumptions before moving into more intricacies. These authors propose that evolutionary biology can help us understand the origin of cognitive properties that appear in all societies and therefore cannot reasonably be supposed to be “learned” or “culturally generated”. They make this claim in attempt to debunk what they call the “Standard Social Science Model” (or SSSM).¹²⁹ The SSSM is meant to characterize the idea of the mind as a “general-purpose, content-independent, and equipotential” system, which gains most or all of its organizational principles and contents by way of learning.¹³⁰ The SSSM is a blanket term for theories of cognition that do not draw from the biological sciences to inform their understanding of the mind. Generally speaking, such theories see the mind as an equipotential system, one that employs general learning as its sole functional capacity. Thus, the SSSM model presupposes that the mind is a “blank-slate”. Our cognitive capacities are then said to arise as a result of the manner in which this blank slate becomes organized by, and imbued with, mental contents via socialization. The SSSM then takes the brain or mind to have one general-purpose function and this function is presumed to be something like learning. If learning is taken to be the primary function of the brain, every other cognitive capacity – speaking, recognizing objects, finding a

¹²⁸John Tooby and Leda Cosmides, “*Conceptual Foundations of Evolutionary Psychology*”, 5.

¹²⁹*Ibid.*, 6.

¹³⁰*Ibid.*

mate, aggregating numbers – these can then be rendered as sub-capacities (often called sub-routines in cognitive science) that are ultimately explained by the high degree of cognitive malleability enabled by the function of learning. They then suppose the SSSM as any theory that either fails to consider or appreciate the possibility that human beings might be built with a number of evolved functional systems that play a role in dictating the character of our mental life.

Importantly they state that “[f]or almost a century, adherence to the Standard Social Science Model has been strongly moralized within the scholarly world, immunizing key aspects from criticism and reform (Pinker, 2002; Tooby & Cosmides, 1992). As a result, in the international scholarly community, criteria for belief fixation have often strayed disturbingly far from the scientific merits of the issues involved, whenever research trajectories produce results that threaten to undermine the credibility of the Stand Social Science Model”¹³¹. What I find interesting about these remarks is that they emphasize the sort of intellectual tribalism and single-mindedness which each of these authors is guilty of in one way or another.

Here we can already see that McDowell’s emphasis on second nature fits the bill for the SSSM insofar as it is a theory of mind which focuses on the way that “ordinary upbringing can shape the actions and thoughts of human behaviour in a way that brings these demands into view”.¹³² We will discuss the details of McDowell’s Aristotelian account of what it means for our thoughts and actions to be shaped in this way later in chapters 2 and 3. But it should be clear that, while McDowell is not the explicit target that Cosmides and Tooby are attacking in their use of the term SSSM, he is clearly an author they would deem problematic due to his commitment the notion of “ordinary upbringing” as a way of finding a naturalistic ground to the fact of having experiences with rational import. I find a certain irony in the fact that McDowell uses the imprecise term “bald naturalist” for theories which rely on the natural sciences and that

¹³¹*Ibid*, 7.

¹³²John McDowell, *Mind and World*, 83.

Cosmides and Tooby use the phrase SSSM in an equally imprecise and semi-pejorative fashion. Each of these thinkers is dismissing research projects that do not fit their own methodological and epistemological assumptions in a way that, to my lights, does not fairly appreciate the scope of how many potential theorists fall under their extremely restrictive ideas of how we should understand ourselves as human beings.

So, what is the alternative to the SSSM? This requires that we become familiar with the notion of what evolutionary biologists call the “Environment of Evolutionary Adaptedness” (EEA)

“The EEA for a given adaptation is the statistical composite of the enduring selection pressures or cause-and-effect relationships that pushed the alleles underlying an adaptation systematically upward in frequency until they became species-typical or reached a frequency-dependent equilibrium (most adaptations are species-typical; see Hagen, Chapter 5, this volume). Because the coordinated fixation of alleles at different loci takes time, complex adaptations reflect enduring features of the ancestral world. The adaptation is the consequence of the EEA, and so the structure of the adaptation reflects the structure of the EEA. The adaptation evolved so that when it interacted with the stable features of the ancestral task environment, their interaction systematically promoted fitness (i.e., solves an adaptive problem).”¹³³

This definition suggests that an organism is paired to an ecological milieu insofar as its body and brain has evolved to respond to enduring challenges to survival present in the typical environments in which it evolved. Further, we can understand the EEA as the ‘task environment’ which provided the circumstances under which Sober’s definition of characteristics come to be ecologically determined by selection pressures. So far these are just expositions of some basic principles of evolutionary biology - ones that describe the organism and environment as interlinked by the manner in which the architecture of the former comes to be shaped by the latter. It might be worth pausing to consider that this ‘organism-environment’ relation is in some ways the bald naturalist’s version

¹³³John Tooby and Leda Cosmides, “*Conceptual Foundations of Evolutionary Psychology*”, 22.

of McDowell's 'mind-world' relation. Further, these authors fit the bill of McDowell's characterization of the bald naturalist. Firstly, like Quine, McDowell's archetypal bald naturalist, they think of good theories as ones that have predictive power, "[a] genuine, detailed specification of the circuit logic of human nature is expected to become the theoretical centerpiece of a newly reconstituted set of social sciences, because each model of an evolved psychological mechanism makes predictions about the psychological, behavioral, and social phenomena the circuits generate or influence[...]. A growing inventory of such models will catalyze the transformation of the social sciences from fields that are predominantly descriptive, soft, and particularistic."¹³⁴ A few remarks on this must be emphasized. Firstly, in calling the social sciences descriptive, they are distinguishing them from being explanatory in the sense of being predictive. However, if we remember the sense in which Sellars distinguishes the descriptive from the normative, we can see that these scientific approaches are descriptive in his sense of the word insofar as they do not refer to the space of reasons or any normative structure which shapes thought – rather they are *describing* processes and relations with predictive import that nonetheless remain as items whose transactions are proper to the realm of law.

Furthermore, there are a few features of this notion of the EEA that are especially relevant to our investigations. Firstly, it suggests that causal regularities outside of a particular organism – ecological and other physical properties of the environment – are directly responsible for the character of that creature's mental life. That is, cognition, mind, and life emerge as a consequence of the aggregate of causal regularities which are themselves not alive or subjects of experience. Put in McDowellian terms, the world of nomological relations described by the realm of law is responsible for the emergence of the normative lives of creatures capable of apprehending the space of reasons.

This shows a continuity between the realm of law and the features of 'mindedness' that McDowell takes to stand outside of it. McDowell sees this continuity as accept-

¹³⁴*Ibid*, 6.

able by, as we have seen, expanding our ‘restrictive or bald naturalism’ to what he has called a “liberal naturalism” in his paper “Naturalism and the Philosophy of Mind”. However, this depends on our having accepted the success of his Quietist stance which the opening sections of this chapter have shown to be, at the very least, highly suspect. McDowell and his opponents both require this continuity in order to avoid the charge of supernaturalism.¹³⁵ Nonetheless the bald naturalist is the sort of thinker who deems this continuity unproblematic insofar as the resources drawn from natural science are necessary and sufficient to establish it.

1.6.6 Nomological Continuity of the Mental: A Consequence of Natural Science as Naturalism Simpliciter

Almost all thinkers who might be candidates for the title “bald naturalist are those who think of natural science as the paradigmatic expression of any understanding of what we might call natural. What is significant about this is that they take the development of psychological or mental characteristics to be no different from the development of any other organic feature: they are consequences of nomological regularities and are thereby best understood by explanatory frameworks which capture these regularities. So far it is clear that Cosmides and Tooby hold this view but I will briefly mention two passages that confirm the assent of Fred Dretske and Paul Churchland before returning to some considerations regarding evolutionary psychology.

About halfway into *Plato’s Camera*, Paul Churchland, after giving a thorough exposition of how neural networks and computational models of the mind can capture how “[t]he learning brain [...] very slowly constructs a representation, or ‘takes a picture,’ of the landscape or configuration of the *abstract universals*, the *temporal invariants*, and the *enduring symmetries* that structure the objective universe of its experience”¹³⁶ he states:

¹³⁵This is just another way of saying “in order for them to be entitled to calling themselves naturalists”.

¹³⁶Paul Churchland, *Plato’s Camera*, vii.

“in this way does creature *autonomy* slowly emerge from universal causal order. Not because autonomous creatures manage somehow to *escape* membership in the all-inclusive causal order. Rather, it is because they have gained a sufficiently detailed conceptual grasp of that causal order’s lasting background structure, and a perceptual grasp of its current configuration, to allow them to avoid, on a systematic basis, at least some of its less welcome prospective presentations. Freedom, on this account, lies in the capacity to ‘dodge incoming projectiles,’ so to speak. Accordingly, freedom is not an all-or-nothing affair. To the contrary, it comes in degrees.”¹³⁷

While there is much to be said about this passage, especially with regards to what he means by *freedom* and *conceptual* as opposed to McDowell, I will return to this later in my exposition of his employment of neural networks to explain just how these causal regularities can give rise to freedom and conceptual understanding.

Next let’s turn to Fred Dretske. Again, I will give a more thorough explanation of how it is he understands our minds to issue from causal regularities in nature but for our current purposes the importance is that he sees this continuity as unproblematically a part of the realm of law. In the introduction to *Explaining Behaviour: Reasons in a World of Causes* he states:

“it is the business of this book to show how this apparent conflict, a conflict between two different pictures of how human behavior is to explained, can be resolved. The project is to see how reasons – our beliefs, desires, purposes, and plans – operate in a world of causes, and to exhibit the role of reasons in the *causal* explanation of human behaviour. In a broader sense, the project is to understand the relationship between the psychological and the biological – between, on the one hand, the reasons people have for moving their bodies and, on the other, the *causes* of their bodies’ consequent movements”¹³⁸

In many ways I see the spirit of my project as somewhere in-between Dretske’s and McDowell’s. In any case, what is important about what Dretske is saying here is that he seeks to understand how reasons feature in *a causal explanation* of human behaviour and,

¹³⁷ *Ibid*, 151.

¹³⁸ Fred Dretske, *Explaining behavior*, x.

as he expresses later in the book, the explanation of *intentionality* in the relevant philosophical sense of the term. While these two examples are not sufficient to demonstrate that naturalistic thinking should be understood as thinking grounded in natural science, I think as a preliminary assumption we can move forward considering that as one way of understanding the nebulous term *naturalism*. Furthermore, I hope it demonstrates that many people never took McDowell's "interminable oscillation" between coherentism and the myth of the given seriously, and that they have seemed to progress in their understanding without seeing it as *a priori* limited by a refusal or inability to resolve that oscillation. As I see it, these authors don't think that the payoff of McDowell's epistemological resolution is worth buying into insofar as it generates novel metaphysical consequences which make it hard to see how it is that the 'liberal naturalism' of the space of reasons can be genuinely reconciled with the 'restrictive naturalism' of the realm of law. By sticking to the realm of law they avoid the discontinuity between mind and world that McDowell finds to be so pressing, such authors show that we can still make progress in the philosophy of mind even without subscribing to his Kantian commitments to the transcendental conditions for genuine experience. Again, I will not reject McDowell's Kantian commitments or his insistence that the tension he describes in *Mind and World* is worth resolving. What I am doing is building up to a novel way of resolving this tension by way of generating a positive theoretical model of how these apparently incommensurable domains relate to one another. The details of my resolution will be found in the second part of this dissertation which will consist of chapters 3 and 4.

Here it is important to pause and remember our main problematic: how is knowledge possible? Or more broadly, how is *intentionality*, understood as the sort of relation which underlies all cases of knowledge possible? While McDowell's concern has to do with trying to dissuade us from reducing the *conditions for knowing* to the causal relations which constitute the causal relations on which would describe the state of the knower and the world, the bald naturalist's concern has to do with understanding that knowledge must be

a phenomenon, like all others, that emerges out of the causal order of the natural world. This is the difference between transcendental and causal conditions for knowledge: the former recognizes that the experience of a world of knowers – the experience of language-using humans – precedes any further account of the world which comes into relief due to that unique vantage point. This unique vantage point might be called “subjective events” or “mindedness” which possess “epistemic agency” insofar as it emphasizes that our *active* capacity to know the world is something which precedes any knowledge we gain about it. The latter (bald naturalist) view emphasizes that now that our exercises of knowledge have reaped an ability to grasp causal regularities which act as universal principles of temporally ordered events, we must ask how it is that knowledge came to emerge out of this causal order.

So, from the standpoint of a bald naturalist, the transcendental position that McDowell is espousing fails to value the question of how matter could come to – over the course of millennia – become mind. The bald naturalist is the individual who insists that we must try to understand how the *world* came to give rise to the *minds* which can know it. And what we mean by the *world* here is that which exists independently of us – it is the Kantian Noumena – that thing in itself which exists independently of us. With the rise of contemporary science, the so-called *things in themselves* are no longer outside of the scope of knowledge. If the realm of law is to be understood it must be understood as the achievement of our scientific capacity to reliably look beneath the phenomena of experience and begin to provide a model for that which transcends its scope. We see chairs, not collections of atoms. We feel sorrow and happiness but do not have direct experience of the innumerable neurochemical and environmental causal relations which underlie those experiences. The bald naturalist is someone who thinks that the real answer is to be found beneath the phenomena. The transcendental thinker is one who thinks it is to be found within it. As such we can see McDowell as wishing to ‘save the appearances’, as Sellars would put it, while following Kant’s insistence that his transcendental philosophy

did not revise our picture of the world but only explained how we come to have one. The tension here is between the fact that the possibility of knowing the world precedes the world we know and the fact that our scientific knowledge of the world has shown itself to exceed the scope of the possibilities of experience which precedes it. Experience here ‘precedes’ scientific knowledge in two senses. One is historical – the experiences of our ancestors did not give them knowledge of the underlying material features captured by our best scientific knowledge. The other is logical: one must necessarily first have experiences of the world before those experiences can be interrogated to yield knowledge that transcends them.

The next chapter will now go into some detail about what it means to have a causal theory of intentionality or a theory of mind which takes transactions in the realm of law to be a sufficient explanans to our question.

One only needs to take a quick survey of philosophers involved in discussions of *modularity theory*, philosophy of neuroscience, biology and cognitive science to see that these authors are no exception to the rule. In fact, McDowell is the quintessentially exceptional naturalist and this is in fact what makes his work so interesting. Now we must turn to the details of why these authors think that intentionality can be accounted for in causal terms or in terms at home in the intelligibility suitable to what McDowell calls the realm of law.

Chapter 2

Processes are not Passive: Receptivity, The Myth of the Given, and Natural Law

2.1 Introduction: Working from the Bottom Up

The time is ripe to follow McDowell and others in putting aside the outmoded opposition between analytic and continental philosophy, and to begin the challenging collaborative task of showing how our conceptual capacities grow out of our nonconceptual ones — how the ground floor of pure perception and receptive coping supports the conceptual upper stories of the edifice of knowledge. Why not work together to understand our grasp of reality from the ground up? Surely, that way we are more likely to succeed than trying to build from the top down.¹

These remarks, made by Hubert Dreyfus in his 2005 Presidential Address to the American Philosophical Association, capture issues of explanatory directionality which pervade debates surrounding intentionality, especially those involving McDowell. While I will return to Dreyfus and the Phenomenological tradition in the next chapter, it is important to note that the claim that McDowell is starting too far up, at the “conceptual upper stories of the edifice of knowledge” is largely shared by phenomenologists and bald

¹Hubert Dreyfus, “Overcoming the Myth of the Mental: How Philosophers Can Benefit from the Phenomenology of Everyday Expertise”, 19-20.

naturalists alike. The important difference is what they take as the ‘ground’ from which these more robust conceptual capacities come to emerge. It is worth noting that this ‘explanatory directionality’ can be understood in terms of whether the scientific image of man is to be the *explanans* or *explanandum* of the given problem. Another way of putting this is: does the scientific picture serve as a dialectical starting point or a theoretical conclusion to our particular discourse? Both bald and liberal naturalists prioritize one of the terms of the debate –as I have quoted McDowell before, where he states: “Ordinary modern philosophy addresses its derivative dualisms in a characteristic way. It takes its stand on the side of a gulf it aims to bridge, accepting without question the way its target dualism conceives the chosen side. Then it constructs something as close as possible to the conception of the other side that figured in the problems, out of materials that are unproblematically available where it has taken its stand”² I take the prioritization of one of these ‘dualisms’ to be the main issue preventing these authors from making collective progress in their understanding of mind, knowledge, and, intentionality. While the phenomenological tradition is to be discussed in chapter 3, we will see that they too agree that the prioritization of one of these items is indeed problematic. Therefore, if I am to show that we should not prioritize either item, whether as *explanandum* or *explanans*, I must first do justice to why certain thinkers do indeed prioritize them.

We have already seen why McDowell prioritizes as such, and thus the intention of the following sections is to explore some causal theories of receptivity with ‘intentional potency’, that is, the capacity to reap intentional contents³, and then compare the critical attitude such theories have with the critical attitude that some phenomenological

²John McDowell, *Mind and World*, 94.

³Here, I might as well have said ‘knowledge’ instead of ‘intentional potency’ though I use this phrase to ensure that I do not beg the question and yet presume that McDowell is wrong, that is, presume these causal relations can be genuine states of knowledge. As such ‘intentional potency’ is any capacity or set of capacities that might at least *appear* to be instances of knowledge, or stand as candidates for knowers, insofar as our discussion seeks to provide an adequate explanation of the limitations and benefits of characterizing knowledge in a given way – whether bald or liberal naturalist. Furthermore, this phrase alludes to the discussions of capacities in McDowell’s reading of Aristotle and to the notion of capacity as it is understood in biological terms. I will return to this in the next chapter.

ones possess. In doing so I argue that we can pave the way to a revised understanding of McDowell's work as demanding the creation of what I have called a theory of the 'phenomenology of epistemic import'. To do this we must see why both the bald naturalist and the contemporary phenomenologist take the myth of the given to rely on a misconstrual of what it might mean for something to be 'given' in the first place.

By the 'Given', McDowell appears to mean an "unconditioned epistemic foundation", which, due to his particular form of Kantianism, would be false by definition. For McDowell, it is impossible for something to be 'unconditioned by the activity of reason' and still be considered as experience or knowledge. It cannot be something 'extra-rational' in the sense of not being conceptually shaped by the structural possibility of being articulable. If our contact with the world – the manner in which we receive it – does not have this conceptual property it cannot be considered a case of knowledge nor a case of experience. This is made clear by the four theoretical criteria presented in Patrice Phillie's paper in the previous chapter. McDowell regards the 'Given' to be something that, as Sellars convincingly argues, is problematically at home in the realm of law while being characterized as a citizen of the space of reasons. This, for McDowell, cannot be. The descriptive '*is*' of optical irradiations could never yield the normative '*oughts*' of items in the space of reasons. Nonetheless, Sellars had a particular idea of givenness in mind when he made his famous argument and while McDowell is more or less faithful to this characterization of the given – to the idea of an epistemic foundation that lies outside the conceptual or linguistic realm – he fails to appreciate some of the nuances of Sellars' position. More problematically, one might argue that McDowell's, if not Sellars', notion of the given fails to consider alternative possibilities of what it means to be receptive to a world.

McDowell's commitment to a Kantian notion of knowledge and experience arguably expresses a sort of "Not a Real Scotsman fallacy"; this is insofar as McDowell, when given purported evidence of the knowledge or experience of other creatures, will say that

such evidence is not *really* knowledge or experience but something *like* them. And we may concede that the only experience that we have epistemological privilege towards is the sort that McDowell envisions without holding that it is, *in principle*, impossible for non-concept using creatures to enjoy access to “openness to the layout of reality” even if we think that *in fact* they do not. The causal theories of intentionality do not circumscribe experience in this way and thereby allow us to find a means of understanding the nomological continuity between ourselves and other creatures. I think this is an indispensable benefit of looking at intentionality in causal terms – it suggests that the ‘ground floor of perception’ at least shares some features that are present in other creatures that exhibit signs of intelligence.

2.2 Dretske’s Skepticism Regarding the Epistemological Primacy of Top-Down Models of Knowledge

There are two ways to think about knowledge. One way is to start, so to speak, at the bottom. With animals. The idea is to isolate knowledge in a pure form, where its essential nature is not obscured by irrelevant details. Cats can see. Dogs know things. Fido remembers where he buried his bone. That is why he is digging near the bush. Kitty knows where the mouse ran. That is why she waits patiently in front of the hole. If animals are not conceptually sophisticated, do not possess language, do not understand what it takes to know, this merely shows that such talents are not needed to know [...] This, as I say, is one way of thinking about knowledge. Call it the *bottom-up* strategy. It appeals to those philosophers who seek some naturalistic basis for epistemological theory, some way of integrating philosophical questions about knowledge, perception and memory with scientific concerns about the psychological and biological mechanisms for implementing our cognitive transactions with the world. From a bottom-up point of view, knowledge is an early arrival on the evolutionary scene. It is what animals need in order to coordinate their behaviour with the environmental

conditions on which their survival and well being depend.⁴

This quote from Dretske’s “Two Conceptions of Knowledge: Rational vs. Reliable Belief” is a confident affirmation of the sort of ‘restrictive’ or ‘bald’ naturalism that McDowell is warning against. One which thinks that “the structure of the space of reasons can be *reduced* to something else, which is already unproblematically natural on the modern conception”⁵. Regardless of the issue of the reduction of the normative to the causal, it is noteworthy to consider that Dretske is using examples that do not immediately require explicit reference to any *scientific* notions. Rather, it could be argued that, despite McDowell’s likely objection of anthropomorphizing animals, it is *within* the space of reasons that we understand dogs as knowing where their bowls are and cats as knowing where the mouse ran. Is the idea that dogs know unproblematically natural *from the point of view of natural science* or from the point of view of our everyday understanding of how other creatures operate? I believe that the answer lies in the fact that our ability to realize that these other creatures *appear* to exhibit knowledge is what led us to study how and why they do so by way of the natural sciences. The dog’s knowledge of where it’s bowl is, is the *explanandum*, whereas the scientific theory of how it knows it, is the *explanans*.

Therefore, before we get into Dretske’s account of the causal mechanics that underlie intentionality, it is important to first elaborate further on what is meant by ‘bottom-up’ vs ‘top-down’ theories of knowledge.

We have covered the bottom-up strategy and alluded to it by reference to the work of Cosmides and Tooby; this strategy seeks to see how, like all other organisms, the robust, normative, and propositional character of human knowledge emerged as a consequence of our evolutionary history. However, Dretske rightly characterizes the ‘top down model’, one that can definitely be ascribed to McDowell, as one which “Einstein, not Fido[the dog]” is the quintessential example of what it means to be a creature with epistemological

⁴Fred Dretske, “Two Conceptions of Knowledge: Rational Vs. Reliable Belief”, 16-17.

⁵John McDowell, “Naturalism and the Philosophy of Mind”, 260-261.

capacities.⁶ He goes on to suggest that, top-down epistemologists think that:

If animals and infants know anything, it is only because we charitably adopt towards them (as we do with some machines) a ‘cognitive stance’: we *say* (with an indulgent wink) that they know, remember and see things, yes, but we do so in a figurative way. In central cases that epistemology has been (or should be) concerned – we reserve knowledge for those with the capacity to reason and evaluate their epistemic situation, for those who understand what it *takes* to know and have grounds for thinking they have what it takes.⁷

He then goes on to characterize these two different camps in terms of epistemological externalists vs. internalists. The former are those who think knowledge “is a matter of getting yourself connected to the facts in the right way (causally, informationally, etc.), whether or not you know or understand you are so connected” and these tend to be “bottom-uppers”; the latter are those who think that “it’s not enough to be tracking (Nozick’s term for being properly connected to) the facts. One must also know, be justified in believing, having reason to think, one *is* tracking the facts”⁸. While Dretske goes on to attack Keith Lehrer’s ‘top-down’ account of knowledge – I am not particularly familiar with this author’s work but believe that it should be clear to the reader that McDowell fits into what Dretske calls a ‘top-downer’. Furthermore, Dretske cites Lehrer, stating that he is concerned “with knowledge that a being could in principle and with training articulate”⁹. This fits clearly with McDowell’s insistence that the conceptual character of experience does not mean that every experiential content is already linguistically articulated but is in principle the sort of thing that is available to linguistic assertion; furthermore, the emphasis on that availability being a result of training is clearly central to McDowell’s notion of Second Nature. As such, Dretske’s criticisms can equally apply to McDowell. The emphasis on justification, evaluative awareness, and *belief* are central to McDowell’s theory of knowledge. And this emphasis

⁶Fred Dretske, “Two Conceptions of Knowledge: Rational Vs. Reliable Belief”, 17

⁷*Ibid.*

⁸*Ibid.*

⁹*Ibid.*, 18

on ‘understanding what it takes to know’ can be read as having access to the space of reasons, being guided by the normative *oughts* that are required to evaluate a given knowledge claim. Einstein’s knowledge claims surely have these features – an evaluative awareness of what it is to know and what you ought to think if you are to think clearly about the structure of, for instance, the geometrical properties of space and time – whereas Fido’s knowledge patently does not involve such an awareness.

While McDowell differs from Dretske’s chosen top-downer, Keith Lehrer, we can see that he shares many features with Dretske’s definition of what it means to be one:

There is, however, another strategy, something I will call a *top-down* approach to understanding cognitive phenomena. It takes its point of departure from Descartes, from traditional worries about scepticism, from the normative considerations that dictate proper methods of inquiry and appropriate standards for belief. White-frosted scientists, not furry pets, are the exemplars, the models, the ideal. Patient and objective inquiry, supported by observation, testing, and experiment, leading (if one is lucky) to confirmation of one hypothesis over its rivals - *that*, and not brute perception, is the yardstick to be used in taking the measure of knowledge. Knowledge is what you get when you conduct inquiry, and fix belief, in *that* way. The rest is, at best, true opinion or an inferior grade of knowledge.

According to this second, top-down, strategy knowledge is the result of an assessment and evaluation procedure in which conclusions are reached from premises in conformity with rules that are, if not justified, then rationally justifiable. The whole process need not, in every instance (perhaps not even in *most* instances), take place in a conscious, deliberate way. It may sometimes occur automatically (when the requisite inferences become habitual) or at a level where the evidential connections are used in some unconscious way in arriving at, say perceptual judgments. Nonetheless, whether conscious or not, it is the justificational relations embedded in this inferential structure that determine the epistemic merit of any judgment emerging from that structure. Conscious, critical, rational inference is the ideal; it sets the standard. A belief, is justified, and it constitutes knowledge, only in so far as the process by means of which it is reached conforms to canons of scientific inference and

rational theory choice.¹⁰

McDowell's theory of knowledge does not perfectly fit this description. In particular this description takes top-downers to regard "canons of scientific inference" and "justificational relations embedded in [...] inferential structure[s]" as one and the same sort of way of looking at knowledge. This, of course, goes against McDowell's insistence that the sort of intelligibility in which the natural sciences operate are distinct from the sort of intelligibility in which everyday inferences are made in the space of reasons. Furthermore, McDowell is concerned less with 'white-frosted scientists' and more with everyday reasoning about chairs, people, apples etc. Nonetheless, the emphasis on 'evidential connections' which can operate unconsciously in perceptual judgements and the manner in which these relate to normative considerations regarding appropriate standards of belief appears to me very close to what McDowell is talking about when he uses the phrase "the space of reasons".

Dretske is a self-proclaimed bottom-up theorist and the main point of his paper is to emphasize that if we start from the top-down then knowledge becomes limited to the scope of activities typical of socially inculcated human beings. He thinks that this is an unacceptable consequence which dismisses "the kind of knowledge that animals, young children, and brain damaged adults have".¹¹ This is what I alluded to in the last chapter when I asked the question "can animals be transcendently silenced?" It is clear that Dretske doesn't think so and by way of an exposition of his theoretical approach I will show why he is right to think this. For Dretske it's not enough just to say that there are different types of knowledge – as we often find in discussions of proto-conceptual vs. conceptual reasoning (which I will come to in chapter 3). Though he also remarks that "[t]he question, of course, is whether there *is* a sense of knowledge which distinguishes us from inarticulate beings. Is there a sense of "hunger" or "thirst" that distinguishes us from animals and young children, those who cannot *say* they are hungry or *articulate*

¹⁰*Ibid*, 16

¹¹*Ibid*, 18

what it is like to be thirsty?”¹² and this is the question I propose to provide a clear answer for in the next chapter. What is it that makes our knowledge distinct from other creatures? How can that knowledge be understood, not as the *only* sort of knowledge, but as an instance of the same *type* of knowledge as other creatures have but with additional features? Dretske states that Lehrer is entitled to be more interested in the “cognitive exploits of articulate and reasonable intelligent human beings” but why should what distinguishes us from those creatures be “relevant to whether Fido knows anything at all and knows it, furthermore, in the same sense in which we all know things?”¹³

We have to be careful here, and I do not agree with Dretske in saying that we might know things in the same *sense* that these other creatures do, yet I will emphasize that we must necessarily share some properties of the intentional structures that such creatures possess, which is tantamount to affirming that these creatures do possess a sort of knowledge. Saying that we know it in the *same way* that Fido does fails to appreciate the fact that ordinary human experience is indeed saturated with concepts in the way that McDowell would like us to appreciate. I will, however, agree with Dretske that “One cannot simply *assume* that these are different senses without begging the key issue separating internalists and externalists.”¹⁴ This relates to my earlier charge that McDowell is committing a “not a real Scotsman fallacy”, insofar as he makes the *a priori* assumption that it is impossible for children, animals, and brain damaged adults to have knowledge or experience. My positive theory aims to provide a means of respecting Dretske’s desire to avoid begging the question while also affirming that McDowell is right to think that it would be wrong to assume “Fido’s *got* exactly what we’ve got - knowledge - but he can’t express it the way we can”¹⁵. I must therefore show how the notion of Second Nature can be reconciled with these causal accounts of intentionality. I shall begin with a discussion of Dretske’s causal account.

¹²*Ibid.*

¹³*Ibid.*, 19

¹⁴*Ibid.*

¹⁵*Ibid.*

2.2.1 Dretske's *Reductio Ad Absurdum*: Animals Cannot Be Transcendentally Silenced

In leading up to Dretske's causal account of intentionality, delineated in his famous book *Explaining Behaviour*, we need to explore some further remarks he makes within the paper we have been discussing so far: "Two Conceptions of Knowledge: Rational Vs. Reliable Belief". Within it, there appears to be an interesting case of a *reductio ad absurdum* argument, even if Dretske himself does not present it in this way. The argument goes as follows:

1. Knowledge is not just receiving information (as the externalist view suggests)
2. Knowledge involves having a sort of 'meta-knowledge' (Lehrer's name for the sophisticated sort of knowledge associated with articulate, normatively inculcated, and reasonable human beings) viz. complex normative and evaluative principles that are involved in understanding "what it *takes* to know and have grounds for thinking they have what it takes"¹⁶ – these are unique to Humans.
3. Fido can receive information about the location of his bowl in a way that allows him to use that information to "find to find his food bowl, to avoid obstacles as he moves about the house, and to get the stick he is told to fetch."¹⁷
4. Fido *does not and cannot* possess the conditions for knowledge expressed in (2) above.
5. (CONCLUSION I): Fido cannot know where his bowl is.
6. Seeing is a sort of knowledge.
7. (CONCLUSION II): Fido cannot see where his bowl is.

¹⁶*Ibid*, 17

¹⁷*Ibid*, 23.

I have reconstructed this line of reasoning based on some other remarks in the paper but in particular, based on the following:

If we accept these [*normative, or meta-cognitive*] conditions on knowledge, it means that although poor Fido can get (and use) information - information he clearly needs to find his food bowl, to avoid obstacles as he moves about the house, and to get the stick he is told to fetch, he has no way of knowing any of this. Fido does not know where his food bowl is (though he always finds it when he is hungry), never knows where the sticks are he is told to fetch (though he always brings them back), and cannot know where the doorway is (though he always manages to walk *through* it and not *into* the adjacent walls). Since he cannot know these things, it follows that, despite having good eyesight, he cannot (ever!) *see* where his bowl is, where the sticks (that he fetches) are, or where the doorway is.

To my ear, as (I assume) to most ears, all of this sounds most implausible. In fact, it sounds downright false. Obviously Fido can see where his food bowl is. Of course children, even very young children, can see where things are - their toys and dolls, for instance. Only a philosopher in the grip of theory would think to deny it. If a theory of knowledge has, as one of its consequences, that animals and children cannot see where *anything* is, then it is time to get a new theory.¹⁸

I take this argument as encouraging us to favour theories that avoid the anthropocentric conclusion that human beings are the only begetters and possessors of knowledge. There are intuitive grounds for rejecting the conclusion that other creatures, infants, and cognitively impaired humans cannot have knowledge or experience *by definition* (and by that token, encouraging us to seek another more suitable definition). There are also scientific grounds which suggest that our understanding of how Fido finds his bowl depends on some shared biological conditions that I do when I am looking for mine.

¹⁸ *Ibid*, 23.

2.2.2 Dretske's Theory of Behaviour

Dretske's precise causal mechanics of intentionality can be understood in terms of what he, in *Explaining Behaviour*, understands as triggering and structuring causes. These distinct ways of understanding what it means to give a causal explanation of behaviour provide us with a way of understanding the realm of law as something other than "sheer receptivity" or "sheer passivity". Of course, from the perspective of a genuinely Kantian view of the world, these causal relations remain 'passive' insofar as they do not involve the robust notion of spontaneity required for them to be active in the properly Kantian sense of the word. Nonetheless, this is not a thesis on Kant and it does not purport to be improving upon or demonstrating a better understanding of Kant's first Critique. Rather, it is attempting to understand how these Kantian notions, as they have been deployed within McDowell's work, become problematic apriori commitments in light of a more contemporary understanding of what causal relations and the realm of law really consist in. A complete exposition of *Explaining Behaviour* would require more space than I can allow within this work but the key concepts can be easily understood and their relevance, in my lights, quite clear. Furthermore, it is important to note, that despite the fact that my work does not aim to provide an elucidation of the complexities of Kant's philosophical framework, that Kant himself makes a distinction between 'form and matter' which applies both to forms of intuition outlined in the Transcendental Aesthetic and in the Deduction of the Pure Concepts of the Understanding. As such, from a contemporary point of view the idea of scheme/content dualism, or a distinction between form and matter *at the level of receptivity and 'mere' perception*, can be established within Dretske's naturalistic framework without falling into the myth of the given.

Dretske's goal is, as the title of his book indicates, to explain behavior. It is important that for Dretske behavior is not exclusive to sentient or sapient creatures. Rather, behavior is a way of capturing the complex causal relationships which are studied by the natural sciences as a whole. Despite this, he wishes to show how our behavior –

something which is causally generated – is connected to our “intentions and purposes, by [our] reasons for doing the things [we] do”¹⁹. He identifies behavior with:

A complex causal process, a structure wherein certain internal conditions or events (*C*) produce certain external movements or changes (*M*). If *M* itself brings about some further event or condition, *N*, then assuming the transitivity of the causal relation, *C*’s causing *N* is also a behavior. The rat not only moves its paw; it also presses the lever, releases a mechanism, and awakens the lab assistant. It does so because *C produces not only M* but also (through *M*) more remote events and conditions (movement of the lever, release of the mechanism, awakening of the lab assistant). No matter how remote the effect may be (there is, in principle, no limit to how remote it might be), though the behavior is being identified not with the internal cause (*C*) and not with the effect – proximal (*M*) or remote (*N*) – but with a temporally more extended process: the one thing’s causing another.²⁰

What is particularly important about Dretske’s theory of behavior is that it does not regard behavior as either the cause or the effect of some process. Rather, Dretske is concerned with *the process itself* as a temporally extended structure which organizes the *kinds* of causal relations which are *relevant to the explanation* of behavior and cognition. Dretske gives us a way of understanding the relationship between receptivity, behavior, and intentionality which does not encourage us to bifurcate its elements into categories like ‘mind’ and ‘world’. McDowell’s account of scheme/content dualism seems to suggest that the ‘world’ provides the matter of perception, by causal means, and the ‘mind’ provides the conceptual form by which that matter is made intelligible to the mind. However, the idea of ‘brute’ impacts on sensory consciousness comes from the idea that the realm of law is, as opposed to the Aristotelian worldview, one which reduces all explanations to descriptions chains of *efficient causes*.

As we saw before in Elliott Sober’s account of adaptation, the jettisoning of teleological notions – ones which are at home in an Aristotelian world view – is still something

¹⁹Fred Dretske, *Explaining Behaviour*, ix.

²⁰Fred Dretske, *Explaining Behaviour*, 21-22.

that philosophers of biology have had to struggle with in the 20th century. Nonetheless, what is interesting about Dretske's approach is that, instead of focusing on the issue of whether we should allow Aristotle's *final causes* into our contemporary accounts of biological systems he provides us with a means of seeing the requirement of something akin to *formal causes* in such explanations.²¹ The explanation of behavior will not merely consist in listing a series of efficient causes but must also explain why those particular efficient causes have the effects they do, and this explanation is provided by his notion of structuring causes. With structuring causes he enables us to understand how causes can be understood as formal, at the level of sensibility, despite remaining at home in what McDowell calls the realm of law.

What is important about this temporally extended view of behaviour is that it avoids the identification of behaviour with one of two things: either overt movement or the internal events causing the overt movement. There are a number of paradoxes and issues that Dretske considers as arising if we take either view. Firstly, Dretske gives us good reasons to ignore a completely 'behaviourist' account of behaviour – that is, an account which identifies behaviour with overt bodily movements. To help us understand this he makes a distinction between:

(1) a rat's moving its paw.

and

(2) a movement of a rat's paw.

Since the rat's paw can move without the rat's moving it, there may be something to which (2) refers when there is nothing to which (1) refers. The rat isn't doing anything if I move its paw. It is doing something if it moves its paw. Hence, if it is rat behaviour we are interested in, we should be in the business of explaining (1), not (2)...[however]... the important thing,

²¹I thank Dr. Gabriel Mograbi for bringing my attention to this insight.

is that behaviour, if it is to be identified with movement, must be identified with movements of a particular kind: movements having the right cause. According to this line of thinking, then, the right equation is not between (1) and (2), but between (1) and (3) a (paw) movement *produced by* some appropriate internal cause.²²

Dretske goes on to say that (3) can be understood in two ways, either as “(3a) a movement *which is* produced by some internal cause” or as “(3b) a movement’s *being produced* by some internal cause.”²³ He goes on to say that conflating these two is problematic when we get to understanding an agent’s *reasons* for acting because in doing so one fails to appreciate the difference between the movements or effects caused by internal events with “their being brought about by these events”²⁴. What Dretske is trying to emphasize is that we should not be quick to interpret the behavior of a rat – let alone the *experiences, actions, or reasons of an agent* – as the effect of some cause. Rather, we need to understand how to understand the movement of the rat’s paw as something it *does*. In doing so we do not need to anthropomorphize the rat and ascribe it agency but we need to understand how it can be understood as a causal system which is in some sense responsible for the movements it makes. If we subscribe to (3a), the behavior is merely a single event – the effect of a cause. But if we subscribe to (3b) the effect or event (in this case a movement) is a *part* of the behavior.²⁵ Furthermore, “a conflation of the very real difference between (3a) and (3b) – a difference that is critical to a proper understanding of behavior and what makes it, but not the events composing it, explicable in terms of an agent’s *reasons*.”²⁶

²²Fred Dretske, *Explaining Behaviour*, 13.

²³*Ibid*, 15.

²⁴*Ibid*.

²⁵*Ibid*.

²⁶Fred Dretske, “Explaining Behavior”, 15.

2.2.3 Structuring and Triggering Causes: Expanding the Scope of the Realm of Law

Throughout *Explaining Behavior* Dretske compares plant life, mechanical systems, and animals as examples of things whose behaviour we must explain. This is no accident. Dretske wishes to eventually show how things like ‘beliefs’ and ‘reasons’ can be accommodated by similar explanations, ones that rest on his more basic accounts of thermostats and Venus fly traps. It is in this way that his approach is genuinely bottom-up.

His example of an unusually wired thermostat is especially useful in understanding the distinction between triggering and structuring causes. Dretske asks us to imagine that he has wired his thermostat to the garage-door opener (rather than the furnace) so that when the room gets cold the garage door opens. His neighbor comes over and asks what causes the door to open, presumably while seeing that the thermostat has gone below, for instance 12C. In this case the neighbor is aware of the immediate efficient cause – or what Dretske calls a triggering cause – of the door opening; what he is after is *why and how did you set up the wiring in your house to respond to a drop of temperature in this way?* Why is it structured as it is? In this case, the neighbor is looking for an explanation in terms of structuring causes – he wants to know what is the reason for the *current behaviour* of the thermostat-garage-door mechanism. And to answer this Dretske will have to appeal to *past* events in explaining which of these “brought about those present background conditions in which C (events occurring in the thermostat) cause M_1 (opening of my garage door) instead of M_2 (furnace ignition)?”²⁷ Again this fits with the supposition that scientific accounts of natural phenomena attempt to show how nomological regularities come to give etiological explanations of such phenomena. The reader may be wondering why I’ve rendered Dretske’s structuring causes as akin to Aristotle’s formal causes. Given that Dretske is still regarding ‘structuring causes’ as aggregates of antecedent conditions for the emergence of an organism or system he

²⁷ *Ibid*, 41.

is closer to what Aristotle calls the efficient cause (for the creation of that particular system) rather than the formal cause. However, it is important for us to note that Dretske wants to be clear about difference between conditions gives rise to a certain type of causal structure, one which is explicative of behaviour, and the circumstances which solicit or ‘trigger’ the activity of that type of causal structure. And this emphasis on structuring causes is then an attempt to determine *not* what caused a particular thought or behaviour *but rather* what caused a system to be the type of system that can bring about that particular thought or behaviour. Insofar as it is a theory of causal *types* or a theory of why certain things come to have the sort of form they do (with an emphasis on how these types come to be defined by certain functions they perform in a non-teleological way) this is closer to the Aristotelian notion of formal cause than to our (or McDowell’s) common sense understanding of cause defined as “conditions antecedent to the occurrence of some event”. Dretske has shown us that, even with this latter definition, we can have a richer understanding of the causal basis of the natural world if we come to make a distinction between triggering and structuring causes.

For example, when we think of ‘subjective happenings’ in simple perceptual episodes as effects which are caused by the activation of certain sensory-motor relations, we fail to see that the ‘subjective happening’ is not only caused by the stimulus conditions which solicit it, but also by the structure of the creature which is sensitive to the given stimulus conditions in that way. As such, even with this rudimentary understanding of the distinction between structuring and triggering causes, we can expand our understanding of the realm of law.²⁸ Instead of seeing sensory transactions in the realm of law wherein our sensory apparatus is passively ‘triggered’ by ‘external causes’ and claiming that these triggers alone could not themselves yield knowledge-bearing states, we should understand

²⁸What is interesting here is that, McDowell doesn’t really see the option of expanding or revising our understanding of nature *qua* realm of law so that it doesn’t come into conflict with the natural phenomena of human knowledge, experience, and agency. Instead, he asks us to revise our picture of nature so it includes more than the realm of law. However, the possibility of expanding our knowledge of the realm of law is at the heart of the scientific enterprise, at least ideally conceived, and is reflected in Paul Churchland’s approach to this problem.

what it might mean to have these sensory transactions by being causally structured in a way that involves the active intervention of the creature undergoing them. Here ‘active’ comes to mean something quite different from that suggested by McDowell’s reading of Kant. ‘Active’ does not mean, in this instance, involving spontaneity, but rather, ‘involving a *process* that renders a sensory stimulus relevant to the explanation of the behaviour of some system or creature’.

McDowell’s point, to my lights, is that a given brute causal impact could never serve to render experience as capable of the rational justification of perceptual items. Causal episodes occur or do not – they do not possess the capacity to be ‘justificatory relations’ as McDowell puts it. Causes lack the normative import which might make them rational. Rationality is something possessed by an agent capable of making a judgement and mere bits of matter cannot do this – even humans construed as complexes of causal processes and ‘mere bits of matter’ come to have a deep part of them left out of this picture. This is what McDowell means when he says the bald naturalist ‘disenchants’ nature – it removes meaningful structures, relations, and properties from it – ones that are captured by what he calls ‘the space of reasons’. McDowell’s writing is rife with metaphorical language of this sort, where an item in the realm of law cannot be ‘at home’ in the space of reasons or reduction of nature to the realm of law comes to ‘disenchant it’. For many, this use of metaphor may render his work as something which lacks rigor or precision, but I think it is appropriate for the careful line that McDowell wants to draw between the realm of law and the space of reasons. It is indeed hard to trace such a line, so hard in fact, that many authors will deny that such a distinction exists. In any case, in what follows I hope to show that, in an even more enchanting way, how it is that causal relations between matter have arranged themselves to give rise to the space of reasons.

Attempts at causal theories of intentionality are interesting because they, as noted in the last chapter, enable us to understand mind and life as a consequence of causal regularities which are not themselves subjects of experience. And if we take this chapter’s

opening remarks by Dreyfus and Dretske seriously, understanding how it is that we came to be such remarkable creatures – creatures that can think *about* the existence of God, elementary particles, and why their favourite artist captures the world so exquisitely – does not require that we see this sort of aboutness as radically unrelated to the rest of the natural world. I agree with Dreyfus that we must engage in the “collaborative task of showing how our conceptual capacities grow out of our nonconceptual ones — how the ground floor of pure perception and receptive coping supports the conceptual upper stories of the edifice of knowledge.”²⁹ Though I agree with the spirit of what Dreyfus is saying, I would have used a different sort of language to describe this. I would not only include ‘pure perception and receptive coping’ as the phenomenological bent of Dreyfus’ work would suggest we do, but also causal mechanisms – themselves extra-agential and pre-conceptual – which come to be organized in creatures that we supposed to be capable of perception and receptive coping.

2.2.4 Structuring and Triggering Causes: Dretske’s Representational Systems

Dretske’s bottom up approach often means he refers to basic organisms and plants as examples from which we must start our investigations. Nonetheless, he does not do this “in order to suggest, by the mention of evolutionary explanations, that an understanding of human or animal behaviour will always involve hereditary factors. Some of it doubtless will. Perhaps much of it will. Some ethologists, those behavioural scientists interested in the *biology* of behaviour, seem to think *all* of it will. [...] My present point is rather that the search for the causes of human and animal behaviour, is typically a search for something quite different from the causes of the output (M)”.³⁰ That is, we are not often looking to understand the triggering cause – “the external events that set the process in

²⁹Hubert Dreyfus, “Overcoming the Myth of the Mental: How Philosophers Can Benefit from the Phenomenology of Everyday Expertise”, 19-20.

³⁰Fred Dretske, *Explaining Behavior*, 47.

motion and, hence, help to bring about M , the product of that process. But we are more often interested in the structuring cause: what it is that accounts for the direction that process takes once it is set in motion; what is it that accounts for the production of M rather than then something else.”³¹

He goes on to say that structuring causes are most often now explained in evolutionary terms, in the cases of plants and animals, insofar as it clarifies, “why animals were favored in which processes occurred having M as its product”³². Of course, we can add that structuring and triggering causes are not enough to explain mental behaviour. Dretske is certainly not trying to get us thinking his garage door and thermostat are sentient systems. However, he is giving us a means of distinguishing why a system typically has certain effects as an outcome of certain causes. Such a distinction is essential in explaining how the causal world generates, on its own, as a matter of brute causal fact, difference between form and content. Form is no longer here understood in terms of *criteria for linguistic intelligibility* but in terms of *causal conditions for informational sensitivity*. Later, once we look at Paul Churchland’s *Plato’s Camera*, we will see how the development of neural networks and advanced computational systems is providing us with even more precise means of capturing the intricacies of such informational sensitivity. For now, what is important is that certain causal systems come to have something like ‘directionality’ to their processes; that is, certain causal process come to typically lead from specific causes to specific effects.³³

How do these notions of structuring and triggering causes help us understand intentionality and rationality? We must recall that Dretske is trying to find a place for reasons in the natural world and is thereby different from Churchland, Cosmides, and Tooby, who take the notion of rationality to be decomposed aggregates of more basic cognitive func-

³¹*Ibid*, 47-48.

³²*Ibid*, 48.

³³Neural networks can be seen as systems which become causally organized to produce determinate outputs from sundry sensory inputs and which can, over time, improve the likelihood that the output will be a representation of some feature of the world outside of them.

tions. Nonetheless, he is still a candidate for bald naturalism according to McDowell's picture insofar as he takes the scientific picture to be essential to our investigations even if he does not regard it to be exhaustively capable of explaining rationality. In any case Dretske's theory of belief, representation, and intentionality recruits structuring causes in order to provide us with an account of *reasons*. To do this we must first get a basic grasp of Dretske's theory of representation. This is really a theory of 'three types of representational systems' (RS from hereon), an account of what he calls RS types I, II and III. Type I representations depend on our ability to arbitrarily assign meaning to symbols, symbols which have no intrinsic representational power (he uses the example of using pieces of popcorn to represent the position of basketball players).³⁴ This cannot suffice for explaining intentionality or meaning, since it assumes an intentional agent who is doing the representing. He then moves on to Type II RS and states that "[s]uch representational systems are, in this sense, *doubly*, conventional: we give them a job to do, and then *we* do it for them."³⁵ What he means here is that the meaning given to the popcorn pieces is a function of our intention to represent something by using them and our *use* of them being the only thing which allows them to have such representational capacities (popcorn, on its own, does not say anything about the position of basketball players).

This is clearer once we look at representational systems of type II, which exploit what he calls "natural signs" or "indicator functions". He takes these types of representation to be a "curious blend of the conventional and the natural" and it is worth mentioning that the natural is here contrasted with the conventional or socially constructed.³⁶ Again, this fits into McDowell's picture of restrictive naturalism where the natural is conceived of as that which is outside of the scope of human convention or the achievements of ordinary upbringing and second nature. Here Dretske is mostly thinking of our measuring

³⁴Fred Dretske, *Explaining Behavior*, 52

³⁵*Ibid*, 54.

³⁶*Ibid*, 54.

instruments. These depend on some non-conventional but dependable causal regularities in order to represent what they do: “As long as an instrument is connected properly and functioning normally,³⁷ it behaves in accordance with electrical and mechanical laws whose validity is quite independent of its creator’s or its user’s purposes or knowledge. Furthermore, these laws, by determining whether and (if so) how the pointer positions are correlated with weights, times, pressures, and speeds, determine what these pointer positions indicate about weights, times, pressures, and speeds.”³⁸ This is because these systems indicate things about the world even if they do not represent them.

He gives the well-known example of a tree with 24 rings in its stump. This *indicates* that the tree is 24 years old even if it cannot be said to *mean* that it is 24 years old. The same goes for the mercury in a thermometer. The mercury rises in a glass tube, at certain temperatures, due to its determinate causal relation to change in temperature. These happen independently of our intentions or interventions. Trees, due to complex causal processes responsible for their growth, produce rings *which we can use to represent their age*. Mercury, due to particular thermodynamic properties, expands or contracts due to the external temperature *which we can use to represent temperature*. Indicator relations are different from representations in a number of ways. Firstly, they possess “a lawful dependency between the *indicator* and the *indicated*, a dependency we often express by conditionals in the subjunctive mood.”³⁹ That means nothing can indicate *P* without *P*’s being the case. You can’t have 24 rings on a tree unless it is actually 24 years old and you can’t have mercury expand to a certain degree unless the temperature is accordingly correct.⁴⁰ This is to say that the indicator relation is just a causal regularity which we

³⁷Here it is important to keep in mind his definition of externalist theories of mind in “Two Conceptions of Knowledge: Rational Vs. Reliable Belief” where, as I have quoted before, he states “is a matter of getting yourself connected to the facts in the right way (causally, informationally, etc.), whether or not you know or understand you are so connected”, 17.

³⁸*Ibid*, 54-55.

³⁹*Ibid*, 56.

⁴⁰Obviously, *ceteris paribus*, is implied here. There might be odd cases where tree rings grow faster due to some irregularity or that the mercury isn’t pure or that some other extraneous fact changes the character of the regularity in question. Dretske goes into some detail about this on pages 57 to 59.

have exploited to represent something. The correlation between what P indicates (a 24-year-old tree) and the occurrence of P (24 rings on a tree stump) is dependent on “some condition, lawful or otherwise, that *explains* the persistence of the correlation”⁴¹. For this reason, *indicator relations* are different from representations – cases of genuine intentionality – which have at their core, the ability to misrepresent.⁴² Consequently these can be understood as enduring causal regularities which express *natural signs* that “take the place of symbols as the representational elements. A sign is given the job of doing what it (suitably deployed) can already do”.⁴³ In these cases what we are dealing with is purely descriptive and nomological. Some event is connected to another by causal laws. There is no room for having correctly or incorrectly indicated something – indicator relations are proper to the realm of law – they describe the observation of some feature of the world which is reliably connected to another feature of the world. This reliable connection allows us to represent things using it but doesn’t qualify it as a representation in and of itself.

Dretske reminds us that “what a system *represents* is *not* what its (expressive) elements indicate or mean. It is what these elements have the *function* of indicating or meaning”.⁴⁴ To elucidate this point he explains Type II representational systems as ones which exploit indicator relations to represent one of many things they indicate. For example, if the tank of gas in a car is full, it will indicate that there is “a large downward force on the bolts holding the tank to the car’s frame” and in the case of electrically operated fuel gauges “the amount of electrical current flowing in the wires connecting the gauge to the tank, the amount of torque on the armature to which the pointer is affixed, and the magnitude of the magnetic field surrounding this armature. Given the way these gauges operate, they cannot indicate (i.e., have their behavior depend on) the amount of fuel in the tank without indicating (exhibiting at least the same degree of

⁴¹Fred Dretske, *Explaining Behavior*, 57.

⁴²*Ibid*, 64.

⁴³*Ibid*, 59.

⁴⁴*Ibid*.

dependency on) these related conditions”.⁴⁵ However, we use such systems primarily to represent *quantity of gasoline*. This is what Dretske means when he states that Type II representational systems are partly natural and partly conventional. Without certain laws of nature, the gas meter could never represent what it does by way of what it indicates. But without our rational interests, there would never be a need to use these natural laws in a way that leads us to *represent quantity of gasoline* due to the manner in which those systems have the potency to indicate it. It is important to remember that the functions of the systems of Type II are “restricted in a way that those of Type I are not restricted”.⁴⁶ I will return to this later, when discussing how McDowell’s idea of rationality involves the freedom to derive and assign meaning independently of any causal constraint on it. Nonetheless, it is also relevant that Dretske is here providing us a means of understanding how a causal constraint on meaning can be a rational one. He uses the following audacious example to illustrate this: “You can’t assign a rectal thermometer the job of indicating the Dow-Jones Industrial Average. The height of the mercury doesn’t depend on these economic conditions. The mercury and the market fluctuate independently. Trying to use a thermometer in this way is like assigning a rock a job of washing dishes. My son can be given this job (even if he never does it) because he, unlike the rock, can wash dishes. The functions we assign to instruments are similarly restricted to what the instrument can do, or, if Wright (1973) is correct, what (in the case of artifacts) we *think* they can do”.⁴⁷ As such, it would be irrational to assume that your rectal thermometer is a good tool for making predictions about the stock market, largely due to your understanding that readings on the thermometer *cannot*, as RS Type II, give us the ability to make warranted inferences, judgements, or predictions about economic affairs.⁴⁸ The relationship between the determinate indicator

⁴⁵*Ibid.*

⁴⁶*Ibid.*,60.

⁴⁷*Ibid.*

⁴⁸Of course, as Dretske likes to do, we could conceive of an “science fiction” type example where a collection of miniature rectal thermometers is inserted into every CEO and Trustee of every corporation on the Dow Jones Market, allows us to make some limited but reliable predictions about the stock

properties of things and the less determinate representational functions of persons and animals is significant. While Dretske does not himself state the following, it appears that *representation* does indeed involve a normative dimension regarding what a device ‘should’ represent by use of its indicator properties. It is here where the conventional and the natural are functioning in tandem to generate intentional contents that we find the beginnings of a solutions to our problematic in *Explaining Behaviour*. But these are only beginnings. Dretske’s Type III RS will give us his theory of meaning, rationality, and intentionality. It is here that my own theory will deviate from his even though it stands largely upon some of the assumptions expressed in his work.

2.2.5 Dretske’s Theory of Intentionality, Rationality, and Meaning: RS Type III

Type III RS are what Dretske dubs “Natural Systems of Representation”. These, like RS Type II, exploit indicator functions in order to represent things though by way of “*their own* intrinsic indicator functions, functions that derive from the way the indicators are developed and used *by the system of which they are a part*. In contrast with systems of Type I and II, these functions are not assigned. They do not depend on the way *others* may use or regard the indicator elements”.⁴⁹ For Dretske this is closely related to a creature’s evolutionary past insofar as indicator functions or ‘natural signs’ (not to be confused with natural representations) “are essential to every animal’s biological heritage” insofar as that without them, “an organism has no way to negotiate its way through its environment, no way to avoid predators, find food, locate mates, and do the things it has to do to survive and propagate. *This, indeed, is what sense perception is all about.* An animal’s senses (at least the so called exteroceptors) are merely the

market based on data collected over several years. There might be enough correlations between body temperature, stress, blood pressure, and the value of the stock, which could lead a complex system to *use* rectal thermometers as a reading of the Dow Jones but this would inevitably just be a clever and contrived form of a Type II RS system.

⁴⁹ *Ibid*, 62.

diverse ways nature has devised for making what happens inside an animal depend, in some indicator-relevant way, on what happens outside.”⁵⁰ We can immediately see here a connection to evolutionary psychology insofar as Dretske is suggesting that RS Type III are structuring causes which enable the basic sensorimotor coping skills required for an organism to behave successfully in its given ecological milieu.

While the *faux* intentionality of RS Type I & II are merely “*reflections* of the minds, our minds, that assign them properties, in particular the functions, from which they derive their status as representations”⁵¹ this is not the case for RS III. RS Type III have a few defining properties:

1. They are capable of misrepresentation.
2. They, like RS Type II, depend on the causal powers of their indicator properties.

That means, they recruit indicator properties to function as representations (remember the rings on a tree do not have the *function* of indicating its age – we ascribe it a representational function by using the rings to do this.)

3. They, unlike RS Type I & II have intrinsic representational functions.⁵²

Firstly, misrepresentation is essential to intentionality insofar as demonstrates the presence of something like *evaluative standards of success or failure*. As Dretske puts it “[i]n the game of representation, the game of ‘saying’ how things stand elsewhere in the world, telling the truth is not a virtue if you *cannot* lie”.⁵³ It is in *this* sense that intentionality can be understood as a capacity which involves something like normative properties even if this is not how Dretske characterizes it. On their own, RS Type III do not entail the existence of normative properties, rather they are at the very least susceptible to normative determination. That is, if there is a standard of correctness

⁵⁰*Ibid.*

⁵¹*Ibid.*, 64-65

⁵²*Ibid.*, 62-25

⁵³*Ibid.*, 65.

against which a system can misrepresent, then the *possibility* of it being warranted that one represents things to be thus and so is granted. Put another way, normativity is a special sort of capacity to be aware of standards of correctness - such a way that one should or should not represent things in a certain way depending on their reasons. We can understand the space of reasons as the meta-cognitive apparatus that emerges once the possibility of intentional states is granted in this causal way. I am not making an argument for this claim here though I intend to do so in the following chapter. In any case, for Dretske's RS Type III misrepresentation is essential and the possibility of 'intentional failure' (i.e. that one fail to correctly think about, represent, or indicate some fact about the world) is central to most if not all theories of intentionality. Furthermore, Dretske connects this capacity to get things right or wrong as "something approximating meaning".⁵⁴ This will be clearer once we get a better understanding of the third feature above. We will return to the issue of misrepresentation after discussing this feature.

The third feature of RS Type III, possession of *intrinsic representational functions*, requires elaboration. These depend on the way "[intrinsic] indicators are developed and used *by the system of which they are a part*"⁵⁵ and on the way that they are *supposed*⁵⁶ to function in that system; it is here that we find "a *source*, not merely a reflection, of intentionality. Only here do we have systems sufficiently self-contained in their representational efforts to serve, in this one respect at least, as models of thought, belief, and judgement".⁵⁷ The claim that an organ or system is *supposed* to function in one way or another touches on the problematic specter of teleology insofar as it is easy to take 'supposed to function' to mean 'has the purpose of functioning'. Even if one thinks the issue of teleology has been closed, related issues regarding functional localization and the specification of functional roles are alive in the philosophy of cognitive neuroscience. Dretske was aware of these debates around natural functions. He cites that common-

⁵⁴*Ibid*, 65.

⁵⁵*Ibid*, 62.

⁵⁶*Ibid*, 67.

⁵⁷*Ibid*, 67.

sense and “the explicit avowals, of biologists and botanists” makes the idea that some natural items *do have functions* evident. He however, being aware of the controversies surrounding the topic, states the following:

I do not wish to rest a case for a *philosophical* thesis on what seems evident to common sense or what is taken for granted by biologists. So for the moment I take the biological examples as more or less (depending on your point of view) plausible illustrations of having intrinsic functions – plausible examples, therefore, of sensory systems that, by having such functions, qualify as *natural* systems of representation.⁵⁸

For our purposes, we only need see a way of plausibly explaining how basic sensorimotor systems can be seen as adequately explained as Type III RS. Thus, assuming that *there are* at least in some instances natural items with functions how might we explain their behavior? Before proceeding, it will be useful to reiterate Elliott Sober’s definition of an adaptation to capture what it might mean for something to be a naturally occurring feature of an organism in general⁵⁹:

Characteristic *c* is an adaptation for doing task *t* in a population if and only if members of the population now have *c* because, ancestrally, there was a selection for having *c* and *c* conferred a fitness advantage because it performed task *t*.⁶⁰

If we understand *c* as any feature of an organism that enabled it to perform a fitness conferring task *t*, we can understand Dretske’s natural systems of representation as some characteristic *c* in Sober’s definition. This fits quite nicely with Dretske’s model of RS Type III even if he makes the case for them – not by reference to evolutionary biology – but with the ontogenetic development of an individual in mind.⁶¹ Nonetheless, as we

⁵⁸Fred Dretske, *Explaining Behavior*, 64.

⁵⁹It is no surprise that in the preface to *Explaining Behavior* Dretske expresses gratitude to Elliott Sober, amongst others, “for their criticisms, their encouragement, and (since I am sure I stole some of them) their ideas. After many years of fruitful exchange, it is sometimes hard to know who thought of something first. So I apologize, in advance, for inadvertent thefts”, xi

⁶⁰Elliott Sober, *Philosophy of Biology*, 85.

⁶¹Fred Dretske, *Explaining Behavior*, 64.

saw before, he takes biological examples as at the very least illustrative. Let's take a look at figure 4.1 from p. 84 of *Explaining Behavior*:

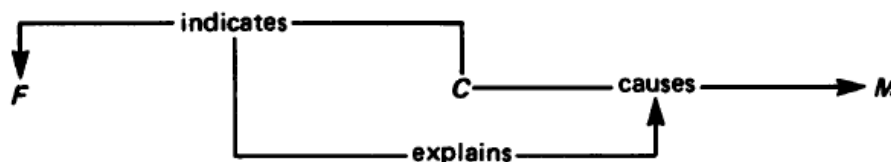


Figure 4.1

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Here we find a basic model for Dretske's theory of belief and meaning, but let us first address it as a model of RS Type III without yet elaborating on those more nuanced and controversial notions. What this diagram shows is that we have the source of genuine intentionality if and only if we have some internal characteristic *C*, which causes movement *M*, *because* it indicates some ecological feature *F*. The fact that *C* indicates *F* has to be the "explanatorily relevant fact about *C* – the fact about *C* that explains, or help explain, *why* it causes *M* [...] Once *C* is recruited as a cause of *M* – and recruited as a cause of *M because of what it indicates about F* – *C* acquires, thereby, the function of indicating *F*. Hence, *C* comes to represent *F*."⁶³ We can then see this as complementing Sober's account in a cognitively relevant way insofar as it renders *C* as a characteristic that enabled the performance of task *t* (or movement *M* in Dretske's model) in a way that suggests that this performance is a consequence of its ability to represent and respond to feature *F* in the environment of evolutionary adaptedness. That is, we can see RS Type III as models for how organisms came to evolve properties capable of indication, which then become recruited *for representation* due to the behavioral demands which ecologically relevant selection pressures played in its phylogenetic development. There can be no criteria for successful or unsuccessful representations until "internal indicators are harnessed to a control mechanism. Only by *using* an indicator in the production of movements whose successful outcome depends on *what is being indicated*".⁶⁴

⁶²Fred Dretske, *Explaining Behavior*, 84

⁶³*Ibid.*

⁶⁴Fred Dretske, *Explaining Behavior*, 70.

Given that ‘successful outcome’ is rendered in terms of reproductive success from an evolutionary point of view (as its ultimate rather than proximate cause), we can imagine that an organism’s indicator properties were those which enabled it to bring into relief the sundry environmental obstacles that a creature must successfully cope with in its given milieu. Dretske provides us with a simple illustrative example that will benefit from some elaboration (he uses this example to emphasize the how we can understand the requirement of misrepresentation): imagine a frog which has a set of neurological features called “bug detectors” (C).⁶⁵ These are connected to its sensory organs and motor functions in such a way that frogs which more frequently caught bugs (M or task t in Sober’s definition), came to survive more frequently in its particular ecological milieu. We can imagine that some other set of indicator functions for detecting motion, or changes in chromatic irradiation, location, etc. were possessed by its ancestors who, for the sake of argument, did not require bug detectors to survive. These come to be recruited to *represent* bugs over the course of evolution, once they come to be tied to motor functions or ‘control systems’ in such a way that a reliable standard of success emerges. Elliott Sober’s ‘task t ’ is then an expression of the harnessing of an indicator to motor functions so that representationally dependent fitness conferring *behaviors* become adaptive characteristics. It is important to remember to distinguish Dretske’s natural systems of representation from the indicator properties themselves; c in Sober’s account here stands for the *system of representation* – the structuring cause – which under relevant circumstances is triggered in such a way as to produce reliable fitness conferring

⁶⁵In reality, this would likely be an aggregate of complex neurological features which may not be localized in some sort of ‘bug detector module’ or something of the sort. One need only look at recent discussions regarding functional specificity, localization, and neural reuse to see that it is much more difficult to ascribe such basic representational functions to particular parts of the brain. However, for our purposes ‘bug detector’ can be understood as an illustrative simplification which identifies *whatever feature (or more realistically set of features)* that enable the frog to be appropriately aware of the presence of prey suited to its nutritional purposes. We will see in Churchland later, partly due to his luck of having been exposed to even more sophisticated scientific accounts of sensorimotor systems, one way of better describing the way aggregates or layers of activation patterns cascade through layers or ‘rungs’ in models of cognition based on neural networks. We can also see how the simplicity of Dretske’s model might have prevented him from decomposing belief and representation into aggregates of even simpler structures.

responses to features in the task environment.

It is important that we remember the pairing of organisms to their ecological milieu for any of this to make sense. As noted in the previous chapter, nomological continuity entails that organisms emerged as a consequence of law-like regularities which govern the inanimate world from which they came. In this way we can see that there is a dynamic relationship between the organism and its environment. The environment, through innumerable causal relations, gives rise to and destroys organic systems. The ones which survive often then contribute to the causal cycles which sustain that environment; they are in fact, a part of that environment and thereby play a role in the lives of other organisms within it.⁶⁶ If the organisms have RS Type III, then they are also capable of bringing into relief specific features of specific things within that environment, in particular, behaviorally relevant items and features. The interdependence of organism and environment has many more important implications, some to be discussed in the following section. What is most significant for our purposes is the fact that they provide us with a way of seeing an interdependent relationship between the intentional subject and the intentional object. That is, the content of representations, or more generally, ‘subjective happenings’, are causally dependent on the organism for its behavioral expression while the organism remains causally dependent on it for its sheer existence.

However, the example with the frog was intended to show us how an RS Type III can be a natural system of representation with the possibility of intentional failure or misrepresentation. In particular, he is concerned with the idea of ‘disabling circumstances’ for instruments, giving the example of a compass which no longer correctly functions when it is taken down a mineshaft.⁶⁷ Dretske asks us to imagine that this frog has been removed from its natural environment and into a lab. In the lab, shadows which simulate edible bugs are projected and the poor frog flicks its tongue at them in vain. In this case,

⁶⁶This is, of course, a highly oversimplified expression of the sorts of complex relations studied by ecologists.

⁶⁷Fred Dretske, *Explaining Behavior*, 68.

since the function of the “bug detector system” is to detect edible bugs, and given that representation occurs when indicators are harnessed to a control system, we can see the frog as misrepresenting bugs by watching the control mechanism fail to act on what it should. Just as the compass misrepresents north in a mineshaft because its *function* is to represent north, the frog misrepresents bugs because the function of its bug detector was to do this.⁶⁸ In the case of the compass, the magnets are still ‘indicating’ something but they no longer indicate what they are supposed to. We might say, that the bug detectors are indicating the presence of small shadows (or a change in luminescence) even though they are not representing them.

RS Type III therefore provide us with a basic schematic by which we can understand how something like ‘representation’ or ‘intentionality’⁶⁹ came to emerge as a consequence of the nomological regularities by which the realm of law intelligibly circumscribes the natural world. This is just to say that Dretske provides us with a fine model for a minimal account of intentionality. It provides us with a means of understanding how nature – conceived of in terms appropriate to the realm of law – can generate a reliable causal system by which organisms can come to differentiate features of their environment without the aid of ‘language’ or the normative inculcation typical of the ontogenetic development of a human being. This gets us close to Dretske’s target in the paper “Reliable vs. Rational Belief” insofar as it aims to provide us with an account of intentionality and representation that are clearly based on causal relations being correctly connected to one another in the bottom-up externalist way he proposes in that paper. This also relates us to his earlier analysis of behavior, not as some overt movement which is the causal outcome of some process, but the process itself; behavior describes the form or

⁶⁸Fred Dretske, *Explaining Behavior*, 68-69.

⁶⁹I say ‘something like intentionality’ to avoid begging the question and to ensure that the reader does not think that this thesis aims and vindicating Dretske’s work, his book is brilliant enough to do that on its own. I am just anticipating the concerns about what is sometimes called proto-intentionality (by McDowell and others) which indicates that an organism has the basic structures which underlie intentionality but doesn’t necessarily entail that the organism has something like beliefs, concepts, or meanings, which constitute the relationship in question.

type of causal processes that make one system typically produce certain effects and another system typically produce others. It is a way of identifying relevant causal relations in a systemic way that, as I mentioned, can be seen as reviving a pseudo-Aristotelian notion of formal causes. This is only insofar as a simplistic understanding of the history of philosophy might see the modern period as the one which finally rid itself of the teleological, formal, and material causes; leaving us with a world that can be captured by the enumeration of efficient causes. And this sort of oversimplified ‘history of philosophy’, more than an accurate representation of the way ideas about nature have changed over time, is a way of understanding how our *attitudes* towards how we think these ideas have indeed changed. That is, if we understand modernity as a jettisoning of Aristotelian thought and the reduction of the world to efficient causes, our attitudes towards contemporary philosophy will depend on whether we think we have thereby lost anything with the consequences of modernity. This seems to be what McDowell means when he states that the realm of law ‘disenchants nature’. My reason for mentioning this is that here is our understanding of whether relegating nature to its chambers is disenchanting or not depends on our understanding of how to understand the realm of law. In any case, I am not suggesting that Dretske’s RS Type III manage to solve McDowell’s problem or ‘reenchant nature’ on their own, just that it provides us with a causal picture which gives us some of the basic resources to do so.

2.2.6 Minimal Intentionality as Differential Availability

I pause here before I move onto a discussion of Paul Churchland’s *Plato’s Camera* for a few reasons. Firstly, Dretske’s basic account of natural systems of representations in terms of structuring causes is simpler than Churchland’s, though it has some relevant similarities and differences which I will explain in the next section. The simplicity of Dretske’s account is sufficient for my account of differential availability as a description of processes that are both genuinely cases of intentionality and those which may just lay

at the bottom of the mechanical ladder of causal systems that resemble intelligent ones. Despite the fact that Churchland's picture will give us a more detailed model of how to understand the particulars of neuronal organization in terms of neural networks, these particulars are indeed insightful and help us get an even more fine-grained look at the complex causal relations that underlie basic intentional states. Secondly, we must remain clear about our target, which is not to vindicate bald naturalism but show the relevance of causal models to the McDowellian concerns explored in the first chapter of this monograph. In particular, the aim is to demonstrate how the *sui generis* space of reasons can be understood as something that emerges out of the realm of law. Finally, the way Dretske understand behavior and representation can be more easily related to evolutionary biology without requiring that we take on all of the assumptions that Cosmides and Tooby employ in their understanding of evolutionary psychology. In particular, Dretske does not require that we accept that computational model of the brain even if we accept some of the other features of the theoretical tenants enumerated at the start of this chapter.

Tenants 1 and 5 are especially relevant.

1. The brain's evolved function is to extract information from the environment and use that information to generate behavior and regulate physiology. Hence, the brain is not just like a computer. It is a computer – that is, a physical system that was designed to process information.⁷⁰

5. Perhaps most importantly, natural selection will ensure that the brain is composed of many different programs, many (or all) of which will be specialized for solving their own corresponding adaptive problems. That is, the evolutionary process will not produce a predominantly general-purpose, equipotential, domain-general architecture.⁷¹

⁷⁰John Tooby and Leda Cosmides, "Conceptual Foundations of Evolutionary Psychology", 16.

⁷¹*Ibid*, 17.

The use of computational language seems unnecessary to me and the definition of a computational system as any system designed to process information just seems to extend the notion of a computer unnecessarily. The claim is that the brain is *literally a computer*. I think it is problematic to make an identity claim between a product of human artifice and a product of natural selection. I think it makes much more sense to start with the notion of information processing systems of which computers are a particular instance. In any case, my objection is not against understanding the brain ‘a physical system designed to process information’. Rather, I think calling any system that does this ‘a computer’ will create unnecessary confusion and requires auxiliary assumptions which a merely informational account does not. Thus, for the sake of parsimony I think it better that reject this identity statement.

Thus, I propose *differential availability of the environment to the organism* as a way of understanding basic sensory relationships to the world in terms of information membranes. We can understand each creature as designed by natural selection to be differentially receptive to the features in its ecological milieu. An organism’s sensory array *is* literally a series of membranes which are designed to receive certain sorts of information rather than others. A beaver and an eagle living in the same forests will both be composed systems designed to extract adaptively relevant information from their environment but what will be available to one creature will not always be available to another. Furthermore, almost all systems within an organism can be understood as cascading layers of membranes whose functional role is to let in certain items rather than others. Lungs can be seen as membranes which capture oxygen and distribute it through the organism by way of the circulatory system. Cells are very obviously membranes which are porous and receptive to certain chemicals rather than others. The basic notion of ‘action potential’ in a neuron and the sodium and potassium channels that create the energy differential required for signals to move through the brain can also be described this way. In any case, the idea that an *organism as a whole* is best understood as aggregates of membranes

is merely a tentative empirical hypothesis that I cannot currently corroborate. However, it does not seem implausible that this basic and ubiquitous biological structure can aid our understanding of proto-intentional and intentional relationships.

Understanding the brain and its sensorimotor relationship to the world as a membrane expresses how one part of nature comes to be informationally responsive to another, in a way that captures the structural and functional characteristics which are relevant to understanding the biological foundations of intentionality. In particular, the notion of *differential availability* is an expression of the very basic boundary between organism and world by which one part of nature comes to be selectively responsive to another. If we are concerned about how intentionality can be understood as a feature of nature then understanding how nature differentiates itself into organism and environment seems to be a basic requirement. And this idea that life differentiated itself from the inanimate world through the evolution of membranes is not a controversial notion in biology. For instance, if we look at a basic textbook description of plasma membranes:

The plasma membrane is the *edge of life, the boundary that separates the living cell from its nonliving surroundings. A remarkable film only about 8 nm thick . . . the plasma membrane controls traffic into and out of the cell it surrounds. Like all biological membranes, the plasma membrane exhibits **selective permeability**; that is, it allows some substances to cross it more easily than others. One of the earliest episodes in the evolution of life may have been the formation of a membrane that enclosed a solution different from the surrounding solution while still permitting the uptake of nutrients and the elimination of waste products. This ability of the cell to discriminate in its chemical exchanges with its environment is fundamental to life, and it is the plasma membrane that makes this selectively possible.*⁷²

This idea of selective permeability is the non-cognitive version of differential availability; the idea that certain substances are allowed to cross the membrane more easily than others parallels the idea that certain sorts of information are allowed to cross the

⁷²Neil A. Campbell & Jane B. Reece, *Biology: Sixth Edition*, 138.

membrane more easily than others. Dretske’s understanding of structuring and triggering causes and their relationship to representational systems captures this quite well. The structuring causes of an organism are the causes of systemic organization that renders that organism sensitive to certain triggering causes rather than others. This applies to organic systems which we regard as sentient as much as it does to those that we do not so consider. Dretske gives us the example of marine bacteria with internal magnets called magnetosomes. These “function like compass needles, aligning themselves (and, as a result, the bacterium) parallel to the Earth’s magnetic field”.⁷³ The point here is that indicator functions arise early in organism, prior to representational functions, but that they are involved in the behavior of organisms both simple- and complex-minded or not.

Finally, we will see in the following chapter how differential availability can be instrumental in helping us understand McDowell’s Aristotelian distinction between first and second nature. It is also worth mentioning that the enactivist approach, notably attributed to Francisco Varela, Evan Thomson, and Eleanor Rosh, provides a similar albeit more sophisticated account of what I am trying to get at with this notion.⁷⁴ In particular, the following quote from Thomson’s *Mind in Life* elegantly captures much of what I wish to say about this relation:

In the case of animal life, the environment emerges as a sensorimotor world through the actualization of the organism as a sensorimotor being. The organism is a sensorimotor being thanks to its nervous system. The nervous system connects anatomically distant sensory and motor processes, subsuming them in operationally closed sensorimotor networks. Through their coherent, large-scale patterns of activity these networks establish a sensorimotor identity for the animal – a sensorimotor self. In the same stroke, they specify what counts as “other”, namely, the animal’s sensorimotor world.⁷⁵

⁷³Fred Dretske, *Explaining Behavior*, 63.

⁷⁴It is unfortunate that I only discovered their works towards the end of my doctoral studies though my reading of Merleau-Ponty’s *The Structure of Behavior* seems to be one of the shared influences that led me to these germane ideas.

⁷⁵Evan Thomson, *Mind in Life*, 59.

What I said about the distinct forms of differential availability of the eagle and the beaver in the same forest above is aiming at capturing this distinction between the sensorimotor identity of the animal and the sensorimotor world of the animal. The idea of differential availability is that creatures come to be ‘sieves’ by which certain aspects of the environment are filtered out while others are brought into relief. Each of these then inhabits the same environment but encounters its totality only in part. The important thing is that the totality of nature is then filtered differentially by parts of nature – namely organisms – so that partial representation of that totality comes to stand as the most basic feature of intentionality. It is significant that this also expresses a sort of ‘scheme-content dualism’ though not in terms of a conceptual scheme and a non-conceptual content. Rather, it captures that an organism as a whole provides the scheme – the systemic relations brought about by its structuring causes – where the representations engendered by its triggering causes become the content.

I will in the next chapter show how differential availability, with some necessary qualifications, can also capture the conceptually mediated intentionality expressed by McDowell’s understanding of the space of reasons and the role of second nature in giving us access to this space. For now, I will merely note that the acquisition of new conceptual resources in language can extend our intentional capacities in a way that increases the scope of what is available to an individual. In particular, the acquisition of the nomenclature of a field of study or practice can increase the scope of thinkable and thereby the scope of what can be rationally countenanced in the experience of a rational agent. That is, while the beaver can never teach the eagle to bring into relief the features of trees that are relevant to building a dam, a carpenter can teach another person how to identify features of wood in a way that endows another person with the conceptual properties of their own informational membrane. The differential availability of the world to an individual can change and grow in a way that suggests a unique human capacity to modulate their relationship to the environment. This modulation through the deploy-

ment of concepts can be seen as ‘puncturing’ new holes in the information membrane by providing novel forms through which the character of the world can come into relief.⁷⁶ Put less figuratively, it enables a person to think about or be rationally responsive to a wider range possible and actual features of the world. Second nature thereby increases the scope of intentional contents.

2.3 Causal Theories Continued: Paul Churchland’s Plato’s Camera

Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals was written about twenty-five years after *Explaining Behaviour*. For that reason, it has a greater number of scientific resources it can draw from. In particular, the successful development of neural networks as computational models for how the brain works was something that Dretske may not have been able to anticipate. However, there are other important aspects of this work which make it relevant to our current investigations:

1. Wilfrid Sellars was Churchland’s doctoral advisor and the influence of Sellars’ thinking on Churchland is vastly different from his influence on McDowell.
2. Churchland is committed to demonstrating the weaknesses of Kantian thinking.
3. Churchland is committed to demonstrating the necessity of jettisoning the legacy of the linguistic turn and encouraging us to understand intentionality as something that *cannot* be dependent on language.

⁷⁶I like to think of this in terms of the traditional notion of form which, in its Aristotelian formulation, states that: “The perceiver is potentially what the perceptible object actually is already [...] When it is being affected, then, it is unlike the object; but when it has been affected it has been made like the object and has acquired its quality” (*De Anima* ii 5, 418a3-6). Taken this way, the manner in which concepts create new possibilities of cognitive actualization suggests that the knower comes to take on the form of the known. As such, the metaphor of ‘puncturing a hole in the information membrane’ suggests that the understanding takes on a new receptive form, one that is isomorphic with the object of its knowledge. The ‘puncture’ in the information membrane is then the novel form which is shared by the object which it can now intelligibly receive.

It is significant that Churchland and McDowell are seen as members of distinct traditions of Sellars' legacy. There are now "right-wing" and "left-wing" Sellarsians with Churchland as a member of the former and McDowell a member of the latter. The right-wing "emphasize Sellars's scientific realism and nominalism" whereas the left-wing emphasize his "insistence on the irreducibility and sociality of rules and norms".⁷⁷ We should recall that McDowell's distinction between the space of reasons and the realm of law is just his own formulation of Sellars's distinction between the scientific and manifest images of man. Furthermore, if we remember that my own aim in these investigations is to reconcile frameworks which "either totalize or eliminate the role natural sciences in their philosophical investigations" the necessity of mentioning at least *one* right-wing Sellarsian should be clear. While it is obvious that McDowell rejects the claim that the scientific picture can help us achieve an understanding of intentionality it must be reemphasized that this means the sort of reconciliatory approach of this monograph is also an unacceptable means of understanding our problematic:

This talk of impingements on our senses is not an invitation to suppose that the whole dynamic system, the medium within which we think, is held in place by extra-conceptual links to something outside it. [...] We find ourselves always already engaging with the world in conceptual activity within such a dynamic system. Any understanding of this condition that it makes sense to hope for must be from within the system. It cannot be a matter of picturing the system's adjustments to the world from sideways on: that is, with the system circumscribed within a boundary, and the world outside it. That is exactly the shape our picture must not take.⁷⁸

For McDowell the issue is that we cannot escape the dynamic and rationally organized structure of the manifest image in order to try to explain its relationship to the scientific one. But as we have seen, unless we find his quietist stance satisfying, we must regard McDowell as providing a theory of mind. And if this is so, we must ask what explanatory

⁷⁷deVries, Willem, "Wilfrid Sellars", *The Stanford Encyclopedia of Philosophy* (Winter 2016), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2016/entries/sellars/>.

⁷⁸John McDowell, *Mind and World*, 34.

powers this theory has and whether these are superior to other competing theories. We must, of course, ask the same question of Churchland and the other theorists we have discussed. But before we take a look at Churchland's approach there are a few comments about Sellars which are relevant. The first of these is that Sellars is aware of the fact that "the scientific image presents itself as a *rival* image. From its point of view the manifest image on which it rests is an 'inadequate' but pragmatically useful likeness of a reality which first finds its adequate (in principle) likeness in the scientific image"⁷⁹ Churchland, known for his *eliminative materialism*, is then someone who takes this rival image to have won. McDowell is someone who thinks it has lost. Nonetheless, it appears that both have deviated from Sellars in these commitments. McDowell's polemic against the 'sideways on' view is a rejection of a "'synoptic vision' in which the descriptive and explanatory resources of the scientific image are united with the 'language of community and individual intentions,' which 'provide[s] the ambience of principles and standards (above all, those which make meaningful discourse and rationality itself possible) within which we live our own individual lives'."⁸⁰ And as we shall see with Churchland's account, the space of reasons is to be understood in terms of the topography of "distinct high-dimensional structures or maps within a person's neuronal activation spaces"⁸¹; this is a thorough reduction of the space of reasons into spatiotemporal causal relations within the realm of law. Accordingly, he also is rejecting this 'synoptic vision' in his elimination of the manifest image of human nature.

⁷⁹Wilfred Sellars, *Science, Perception, and Reality*, 20.

⁸⁰deVries, Willem, "Wilfrid Sellars", *The Stanford Encyclopedia of Philosophy* (Winter 2016), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2016/entries/sellars/>.

⁸¹Paul Churchland, *Plato's Camera*, 212.

2.3.1 Churchland's Kantian Strawman

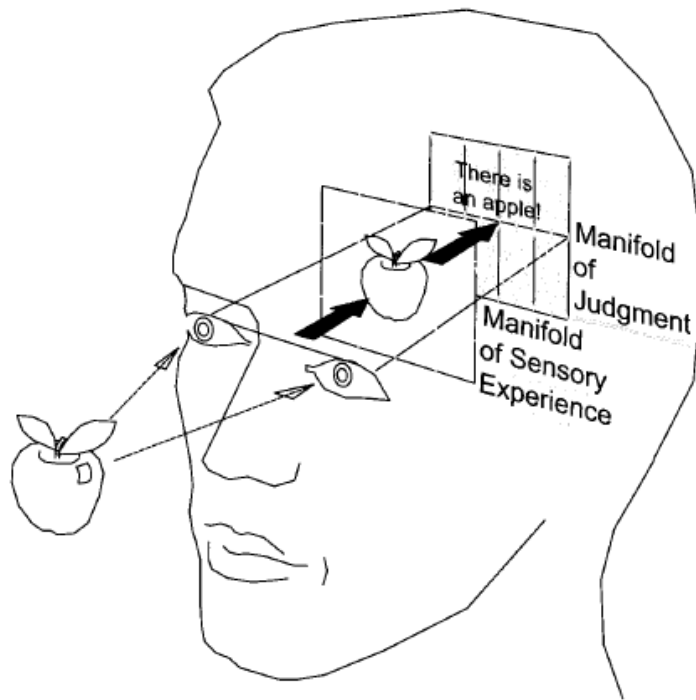


Figure 1.1
Kant's portrait of human cognition.

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Plato's Camera opens with a comparison of the above picture of a purportedly Kantian 'portrait of human cognition' with his own portrait which I will display below. Churchland appears to be satisfied with vanquishing the entirety of the Kantian portrait with this picture and a few paragraphs. Despite not being an expert on Kant's transcendental philosophy, I am far from unfamiliar with it, and I find it rather astounding that Churchland renders it in such an obviously uncharitable way.⁸³ He characterizes Kant as positing "two abstract 'spaces' – of possible human experiences on the one hand, and possible human judgements on the other"⁸⁴ and proceeds to use this as the main weakness compared to his own model has innumerable n-dimensional abstract spaces.

⁸²*Ibid*, 2.

⁸³To be fair to Churchland, he is explicit about the fact that his use of this formation of Kant is only there as a means to create "a useful starting point from which a competing and, importantly different, portrait can be quickly sketched and readily grasped" (1). It would still nonetheless be misleading to a reader who is unfamiliar with the Kantian picture.

⁸⁴*Ibid*, 1-2.

This is clearly *not* what Kant meant by the difference between the forms of intuition and the unity of judgement. The maxim so dear to McDowell regarding the impossibility of blind intuitions and empty concepts is not meant to bifurcate *experience and thought* in this way but to demonstrate the inextricable synthesis between the two. I am also quite sure that Kant never uses the phrase *manifold of judgement* since the manifold is an expression of the synthetic unity of phenomenal experience; this unity involves judgement and intuition inextricably.

Churchland's rendition of Kant is not only oversimplified but oversimplified in a way that is determinately blind to essential features of McDowell's reading of Kant. As noted above, Churchland chooses to ignore the manifest image and thereby takes the phenomenal and transcendental dimensions of Kant's philosophy as misguided. Furthermore, the driving emphasis of McDowell's reading is the impossibility of experience without the unity of concept and intuition. We are otherwise left, not with experience, but with blind intuitions or empty concepts. Further, the character of McDowell's "interminable oscillation" between scheme/content dualism and coherentism is an attempt to show that the maxim "concepts without intuitions are empty, intuitions without concepts are blind" has been misunderstood by the philosophical *Zeitgeist* of his time. He sees contemporary philosophy as trapped in a viciously circular dialectical 'oscillation' which, issue from contemporary philosophical assumptions that end up requiring that we commit to one of the two following epistemological frameworks:

1. Theories which find an epistemological foundation in some-extra rational item that cannot share the conceptual properties of thought in a way that might rationally ground it in something outside of itself. (Within the court of McDowell's experiential tribunal, such theories are guilty of the "myth of the given")
2. Theories that reject epistemic foundations that depend on our sensory relationship to the world and thereby explain our understanding of that very world as rationally independent of it. (Within the court of McDowell's experiential tribunal,

such theories are guilty of coherentist ‘frictionlessness’ which makes it impossible to understand rationality as responsive to the empirical world)

We can understand the pull of these two options as follows. The first takes the requirement of empiricism, of having the world’s impact on our senses yield knowledge, to depend on the world as it is ‘in itself’. This entails that we reject the aspect of Kant which is so famous: the so-called Copernican revolution which asks the question of how the world might be constrained by the conditions by which it may come to be available in experience. And given that experience is essentially and by definition *phenomenal*, theories of this sort often reject any exploration of the character of experience itself; it is no wonder that both Quine and Churchland are eliminativists about nearly all features of the manifest image. The other takes the requirement of rational intelligibility, of having the world make sense in a way which is germane to the experience of an epistemic agent as essential if we are to regard our experience of the world as meaningful. This has the consequence of making the world-in-itself – the *noumenal reality of things* – somehow alien to the phenomenal structure of the very creatures which wonder about the nature of their knowledge of the world. In McDowell’s case, the world-in-itself *qua* realm of law is thereby rendered alien in a way that makes it irrelevant to an understanding of the rational characteristics of human experience.

As a contemporary thinker who can be understood as falling into the first category, Churchland takes the realm of law to be exhaustive in its explanatory scope. And this suggests that he regards the Kantian project to have failed due to the fact that the most accurate judgements about the world are in a language that does not conform to the transcendental conditions of experience. That is, one can interpret Churchland’s work as one that takes modern scientific developments to have invalidated the transcendental and phenomenal features of the Kantian picture. Our ability to know facts about the noumenal realm as it is understood in a Sellarsian context – that is the world of predictively reliable albeit phenomenally occluded theoretical posits (atoms, quarks, neurons,

etc.) – are seen as providing grounds for a dismissal of the transcendental picture altogether. When the most accurate assertions about the universe no longer appear in the propositional form of *apriori synthetic propositions*, we are then forced to concede that “the world-in-itself (the ‘noumenal world’) is certainly not ‘constructed’ by us...” even if “the world-as-perceived-and-thought-by-us (the empirical world of three-dimensional physical objects) does indeed display a substantial component that reflects precisely the peculiar contributions brought into the business of cognition by our own internal cognitive machinery (fig. 1.1.)”.⁸⁵ Nonetheless, this admission of the role of our own internal cognitive machinery is merely an expression of the empirical fact that the human organism possesses the forms of differential availability which are present in all other creatures. As such, it is merely an affirmation of the fact that the brain has a role in processing the deliverances of sensation and nothing more. For that reason, it is explicitly non-transcendental in its employment of empirical facts to explain causal constraints on the character of our cognitive enjoyment of the world.

Churchland’s separation of the forms of intuition and judgement belie an even more significant deviation from the traditional Kantian picture. Robert Hannah, a famous contemporary scholar of Kant provides a clear expression of why this is so:

[for Kant] the unity of the spatiotemporal forms of intuition and the unity of propositional content in judgments is *identically the same* unity, namely the unity imposed by the faculty of rational self-consciousness in accordance with the categories, when it is directly combined with the faculty of imagination and its figural synthesis. In other words, according to Kant the spatiotemporal *intuitional* unity of the content of our conscious perceptual representations is necessarily also a fully *logico-conceptual* unity. If this claim were not true, then the unity of conscious perceptions of objects in space and time might be distinct from the unity of judgments, and, assuming transcendental idealism, even though the categories necessarily applied to all objects of experience, there might then still be some spatiotemporal objects of conscious perception to which the categories either do *not* actually apply, or at least not

⁸⁵Paul Churchland, *Plato’s Camera*, 1.

necessarily apply.⁸⁶

Here the idea that if there is no unity between the forms of intuition and the propositional forms of judgement then it is possible that we might cognize things which exceed the scope of phenomenal experience. The developments of contemporary science might then be understood as an expression of propositions (and if not propositions, then theoretical models which are non-propositional)⁸⁷ which do not conform to Kant's transcendental conditions for experience. Even a basic glance at the developments of Einstein's theory of relativity and quantum physics shows that the former deviates from the Euclidean constraints on intuition whereas the latter, with its apparent violation of categories like unity, plurality, causality, and substance, violates the propositional forms of judgement.⁸⁸

⁸⁶Hanna, Robert, "Kant's Theory of Judgment", *The Stanford Encyclopedia of Philosophy* (Winter 2017), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/win2017/entries/kant-judgment/>.

⁸⁷Insofar as they are not expressed in traditional subject-predicate relations but in mathematical and structural models that are not linguistically dependent in this sense. We shall see that for Churchland, all cognitive states are better understood using a model that explicitly rejects this propositional account of our empirical knowledge.

⁸⁸In particular, elementary particles lack the properties of spatial localization and conventional identity which constitute the objects of phenomenal experience.

2.3.2 Churchland's Noumenal Portrait of Mental Phenomena

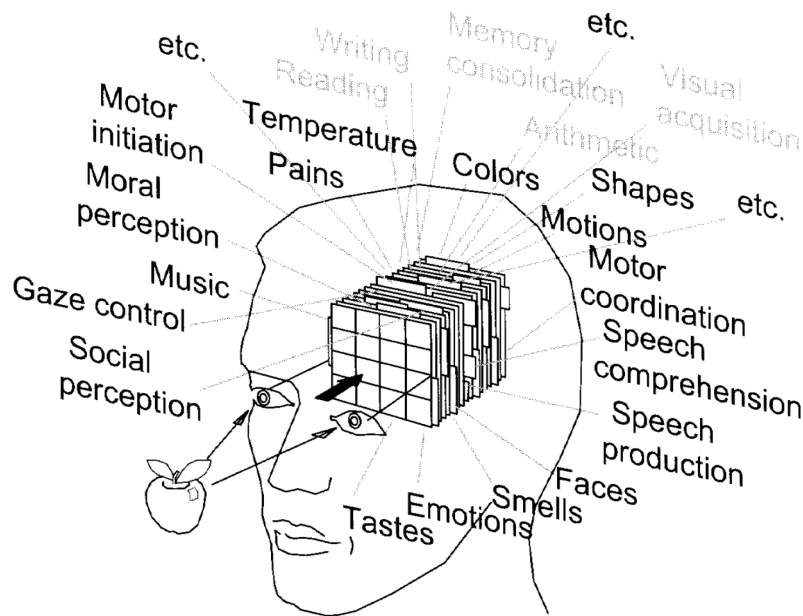


Figure 1.2
The multiple-maps portrait of human cognition.

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After presenting his Kantian strawman Churchland presents us with his rival portrait of human cognition. As we can see in the above diagram, his own portrait of human cognition is meant to have hundreds or thousands of internal cognitive spaces which individually provide a “proprietary canvas on which some aspect of human cognition is continually unfolding”.⁹⁰ Note the similarity with the claim from Cosmides and Tooby regarding the brain being composed of ‘special purpose programs’ which I noted as something which is shared by Dretske’s account. Again, it has become common within theories of mind which draw from the biological sciences to decompose larger scale or course grained notions such as ‘belief’, ‘memory’, ‘rationality’ etc. into a set of more fine-grained functional systems or maps which are modular (at least in the weakest meaning of the term). While this is not true for all bald naturalist accounts – even Dretske seems to affirm rationality as something that is not entirely localized or reductively specialized – it fits with the notion that we can decompose the mind into descriptions of discrete

⁸⁹Paul Churchland, *Plato’s Camera*, 3.

⁹⁰*Ibid*, 2.

causal systems just as we have with other natural phenomena. This ‘atomization’ of items in the world is part of the function of the natural sciences, positing more basic substantive entities or micro-properties that explain the behavioural characteristics of everyday macro-scaled items.

Unlike Dretske, it may appear that Churchland concedes a computational model for the brain. And although he does reject the explicit identity statement ‘the brain *is* a computer’, his recent work suggests that, while we cannot regard the brain to be a computer, our computational models of neural networks are the best tools by which to understand how the mind works. This is a consequence of his use of theoretical tools that account for (some) computational systems and brains alike: that is, the tools of “*vector algebra* and *high-dimensional geometry*”.⁹¹ Despite my aforementioned misgivings about computational models, I do believe that *Plato’s Camera* provides us with a highly convincing and even inspiring account of what a scientifically informed theory of mind might look like. Even if McDowell uses the phrase ‘disenchanted’ to describe these sorts of investigations it is clear that Churchland himself is aware of such concerns. Against them, he remarks, “it is no surprise that most people in academia, if they have any conception of intertheoretic reduction at all, think of it as an operation that sucks the life blood out of its target phenomena. They think of it as an operation that leaves those phenomena shrunken, demeaned, and conceptually abused”.⁹² He goes on to give examples of how the scientific picture has in some sense re-enchanted nature insofar as our picture of the world “is thus dramatically *enhanced* by being made an integral part of an even greater ontological and behavioral glory [through the complexities of intertheoretic reduction]”⁹³. Nevertheless, his commitment to the scientific picture as the noumenal realm renders this enthusiasm with a tinge of scientistic arrogance since this more glorious picture is “understandably *invisible* to those who do not command the new and more comprehensive framework”⁹⁴.

⁹¹Paul Churchland, *Plato’s Camera*, 24

⁹²*Ibid.*, 213.

⁹³*Ibid.*

⁹⁴*Ibid.*

This is an outright rejection of the value of investigations into the manifest image, which has some unacceptable consequences that will be discussed in the following chapter.⁹⁵

2.3.3 Churchland's High-Dimensional Maps: A Rejection of Judgement as Paradigmatic Instantiation of Knowledge

Recalling Chapter 1, McDowell understands the space of reasons as paradigmatically affirmed in linguistic judgements:

Sellars describes the logical space of reasons as the space 'of justifying and being able to justify what one says'. We can see this as a distinctively twentieth-century elaboration of a Kantian conception, the conception of the capacity to exercise, paradigmatically in judgement, a freedom that is essentially a matter of responsiveness to reasons. The twentieth-century element is the idea that this capacity comes with being initiated into language.⁹⁶

This is just the conception that *Plato's Camera* seeks to debunk. As previously mentioned, McDowell's work (along with Sellars and numerous others) is motivated by two historical facts: the development of contemporary science and the linguistic turn. While McDowell's work seeks to vindicate important consequences of the latter at the expense of the former, Churchland's work has an inverse motive: to jettison the baggage of the linguistic turn and affirm the realizations of scientific advancements. This means that judgement, belief, inference, and propositional attitudes are to be regarded as investigative obstacles rather than virtues. Kantian judgements are seen as "peripheral forms of representational activity, marginal even for adult humans, and completely

⁹⁵I will say more about the undesirability of this attitude in the next chapter but before we go onto the details of his account it is worth mentioning a similarity to Cosmides and Tooby's pejorative use of the phrase Standard Social Scientific Model or SSSM. Both emphasize that research programs that do not conform to their methodological assumptions are erroneous, impotent, and out of touch with reality. Such value statements about *how we should understand ourselves* require substantial qualification. They either tacitly or explicitly assume that investigations in the social sciences or humanities are examples of futile research programs that are conducted by individuals who don't know enough about the 'real world', viz. the scientific one, to say anything worthwhile. This does not mean that scientific illiteracy is not problematic but it does not entail that those who are scientifically literate are always better at understanding human nature in its myriad dimensions.

⁹⁶John McDowell, *Having the World in View*, 6.

absent in nonhuman animals and pre-linguistic children”.⁹⁷ This has the obvious virtue of ensuring that animals and pre-linguistic children are not ‘transcendentally silenced’ and emphasizes the necessity of nomological continuity that I emphasized in chapter 2. I agree with Churchland’s claim that this continuity with our “evolutionary brothers and sisters” is a “prime desideratum of any responsible epistemological theory”.⁹⁸ However, these virtues, according to Churchland, require that we get rid of the propositional or lingua-formal basis of knowledge which is essential to the Kantian framework; judgement cannot be the paradigmatic unit of knowledge if we are to share any form of knowledge with other creatures which lack it.

The reader has undoubtedly been waiting for an outline of Churchland’s account by which these critiques and comparisons might be intelligibly situated. *Plato’s Camera* outlines how it is that the brain manages to capture, or construct a picture of “the landscape or configuration of the *abstract universals*, the *temporal invariants*, and the *enduring* symmetries that structure the objective universe of its experience”⁹⁹. This is his way of explaining how the brain captures objective features of the universe despite the fact that our sensory systems are constantly in flux. The question of intentionality becomes: how does the brain generate coherent, consistent, and stable representations of the world despite the dynamic changes which bombard our sensory apparatuses? Churchland is known for his *vector-activation-space* approach to epistemology and his answer to our question depends on understanding what he means by this. A vector-activation-space is a description of how neural-networks create a distribution of similarity and difference relations within a particular representational domain.¹⁰⁰ This is an exceptionally complex and nuanced model of which I can only provide a basic schematic.

⁹⁷Paul Churchland, *Plato’s Camera*, 5.

⁹⁸*Ibid.* It is worth noting that this is also a ‘bottom up approach’ insofar as it starts with features of cognition that we share with other creatures and intends to demonstrate how these, with the increased complexity of the human brain, come to give rise to the higher order cognitive possibilities of ‘white-froked scientists’.

⁹⁹*Ibid*, vii.

¹⁰⁰*Ibid*, 35

2.3.4 Neural Networks as Ladders of Activation Patterns

First, a basic account of neural networks (organic or artificial) requires that we understand these networks in terms of the metaphor of ladders. These networks have a series of rungs with sensory inputs at the bottom which feed information upwards to specific “postsensory neurons”, each of which “constitutes a unique cognitive canvas or representational space [...] with its own structured family of categories, its own set of similarity and difference relations, and its own peculiar take on some enduring aspect of the external world”.¹⁰¹ Here we find a description of how the brain compresses sensory inputs so that the relevant features of the world come to be represented by them. Sensory inputs on their own, without such compression or categorical simplification could not yield any sort of knowledge. This suggests Churchland’s agreement with the impossibility of ‘blind intuitions’. There is also an important temporal dimension here: each rung compresses sensory information in light of projected expectations which are required for an organism to anticipate the succession of items in its sensory field. This pre-emptive dimension is necessary if the sensory system is to be able to anticipate relevant possible configurations of the objective world. For example, our retinal cells or the “air cells” in the cochlea of the ear represent the input rung. The complex network of axonal fibres that connect these to postsensory neurons are responsible for ensuring that irrelevant or impossible expectations do not issue from these sensory inputs; consequently, they ensure that the sensory system transforms what is has received into salient and probable features of the external world. The rung like structure is modelled as follows:

¹⁰¹*Ibid.*

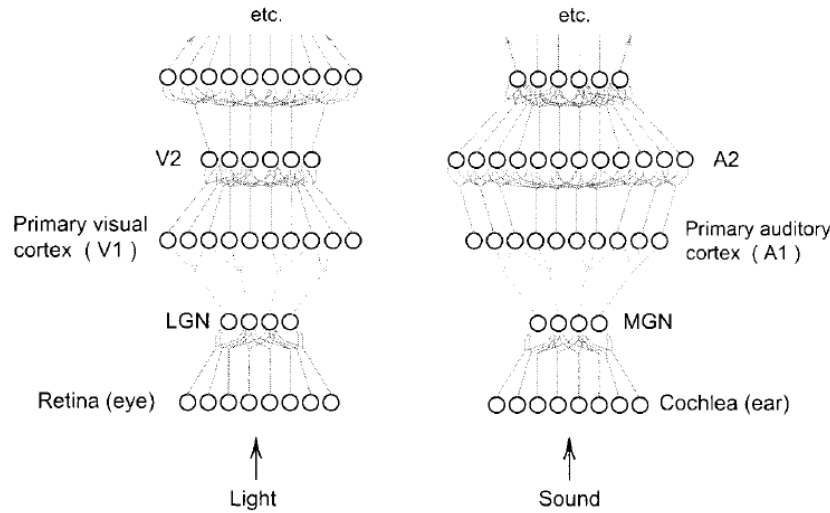


Figure 2.1
The ladder-like structure of the primary visual and auditory pathways.

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The LGN stands for the “lateral geniculate nucleus” which “receives information from the ganglion cells of the retina and sends axons to the primary visual cortex” whereas the MGN stands for the “medial geniculate nucleus” and “receives information from the inner ear, via other brainstem nuclei in the ascending auditory pathway, and sends axons to the primary auditory cortex”.¹⁰³ I cannot go into the details regarding *inhibitory* and *excitatory* neurons and how they play a role in processing this information, but the main idea is that these upper rung neuronal populations are responsible for transforming sensory information into categories by which features of the world become *differentially available* to the representational possibilities of an organism. The notion of something like a ‘primary visual cortex’, while overly simplistic from a neuroscientific perspective, captures the idea that the sensory layer is only the start of what we call perception, representation, or experience. The ‘visual cortex’ which is composed a great deal more structural features than can be captured by that phrase, is then the set of postsensory neurons – the higher rungs in Churchland’s model – which transform the sensory input into something more than ‘sheer receptivity’. Churchland understands

¹⁰²*Ibid*, 36.

¹⁰³Michael S. Gazzaniga, Richard B. Ivry, & George R. Mangun, *Cognitive Neuroscience: The Biology of the Mind (Second Edition)*, 87.

these transformations as changes in “excitation patterns across the receiving population of neurons” which means a literal change of chemical and electrical patterns – based on the distribution of patterns on the sensory rung – which either cause certain populations of neurons to refrain from sending signals to the next rung or induces them to do so.¹⁰⁴ As such, this layered system of rungs is one which ensures that certain patterns of neuronal excitation on one rung cause the next rung to exhibit some other pattern which influences higher rungs to exhibit other patterns in a sort of cascade effect. So, the “collective configuration of synaptic connections is what *transforms* any incoming activation pattern (from, for example, an earlier population of sensory neurons) into a new activation pattern”¹⁰⁵.

2.3.5 Vector Activation Spaces: Neuronal Maps and Sensory Indices

So far so good. However, how does this relate to the notion of vector-activation-spaces? The simple example given above is there to give the reader an idea of how Churchland understands intentionality in purely neuronal terms. Our basic appreciation of sight and sound requires that the brain forsakes “the impossible task of trying to compress *all possible* input information” so that its various information-compression networks can “focus their sparse resources on compressing only the special range of inputs that they typically encounter or are somehow asked to deal with”.¹⁰⁶ This fits with the notion of *differential availability*¹⁰⁷ I have been developing and can therefore be modeled in terms of an information membrane which is selectively permeable depending on the environmental demands of the organism.¹⁰⁸ Nonetheless, the notion of vector-activation-spaces goes

¹⁰⁴Paul Churchland, *Plato's Camera*, 37.

¹⁰⁵*Ibid*, 13.

¹⁰⁶*Ibid*, 61.

¹⁰⁷Churchland uses the phrase ‘high-dimensional information filter’ to describe a Child’s access to the world on 96 of Plato’s Camera. This suggests further agreement with the notion of differential availability.

¹⁰⁸I’d also like to note the similarity with the diagram of rungs with that of layers of information membranes. I do think that this metaphor has far reaching implications which I will elaborate upon in

further in giving a description of the topography of various possibilities of representation. A few distinctions need to be articulated. Firstly, *global activation states* describe the sum total of possible neuronal configurations (which for humans is conservatively stated as “ $10^{100,000,000,000}$ functionally distinct, a priori possible global activation states”).¹⁰⁹ These cannot possibly be explored or actualized within a particular person’s lifetime but describes the sum of all possible representational states human beings could have.¹¹⁰

This global space is then *sculpted* by the manner in which sensory inputs modify the weights of synaptic connections of the upper rungs in more a wider set of domains than the simplistic auditory and visual model above. While I emphasized how upper rungs compress or transform sensory inputs, Churchland also discusses how sensory inputs shape the character of these upper rungs via three types of learning processes. The first describes the structural changes that occur in the typical maturation of a given individual or organism; in short, it tries to capture how ontogenetic development of an organism can be understood as aggregates of structural changes to the brain’s synaptic connections. This process “never ceases entirely, but by adulthood the process is largely over and one is more or less stuck with the [conceptual] framework it has created”.¹¹¹ And by ‘conceptual framework’ Churchland does not mean the set of linguistic categories or inferential possibilities which are available to the mind in McDowell’s sense. Rather, he tries to redefine the notion of what has hitherto been called ‘conceptual’ as a hierarchy of categories which can be captured by the changes of ‘possible activation patterns’ within the neuronal network of the brain.¹¹²

He emphasizes that “during the formative years of childhood [...] Old connections are lost and new ones [are] made; the surface area or ‘weights’ of the existing connections wax and wane under the pressures of experience”.¹¹³ This eventually creates what he

the next chapter.

¹⁰⁹*Ibid*, 17.

¹¹⁰*Ibid*.

¹¹¹*Ibid*, 33.

¹¹²*Ibid*, 33.

¹¹³*Ibid*, 37

calls “background activation spaces” which represent the features of “both the world’s enduring structure and how to navigate it” which Figure 1.2 at the start of this section attempts to convey in the labelled maps or layers. These are the domains in which the “fleeting *activation patterns*” come to present themselves in current perceptual and volitional activities.¹¹⁴ We can then understand the enduring background as something akin to the space of reasons even if it is better expressed as the *spaces of representational or intelligible*¹¹⁵ *possibilities*, whereas the fleeting activation patterns are the current sensory conditions which act as indices that individuate one of the possible representational contents within these spaces.

In order to understand the use of the term ‘indices’ we must mention that Churchland regards these spaces as ‘maps’¹¹⁶ insofar as maps can be indexed, “[t]hat is, a point within a map can be specified, perhaps with a reaching fingertip, as the map-indexer’s *current location*, within the larger range of locational possibilities comprehended by the map as a whole”.¹¹⁷ Indexing is then the function of our sensory array which “indicate(s) to the brain ‘you are *here*’ in the space of possible objective situations”.¹¹⁸ Thus, once a certain background map has been sculpted, say for example a map of possible human faces, a certain sensory activation pattern will then induce the “activation of a specific *point*

¹¹⁴*Ibid*, 50.

¹¹⁵I was tempted to use the phrase “rational possibilities” but this implies inferential relations in a way that is unfaithful to Churchland’s rejection of the propositional or belief-based theory of intentionality.

¹¹⁶It is worth mentioning the Dretske regards beliefs as “maps *by means of which we steer*. And if this metaphor is to have any validity, as I think it does, then what makes the map a map – the fact that it supplies information about the terrain through which one moves – must, in one way or another, help to determine the direction in which one steers.” (Fred Dretske, *Explaining Behavior*, 79). My reason for not elaborating on Dretske’s theory of beliefs is that it is still dependent on the notion of propositional content in a way that Churchland’s is not and I take Dretske’s model as better suited to explaining basic representational behaviour of simpler creatures rather than the more robust notions of rationality and representation at issue with McDowell and Churchland. Furthermore, the use of map metaphors is present in some of the phenomenologically influenced authors that I will discuss in the next chapter. Nonetheless, we can see even in his Type III RS – the necessity of having representation be connected to motor control systems suggests a similar notion despite Churchland’s rejection of indicator semantics. In both cases, the job of the system is to ensure that the relevant features of the environment are made available to the cognitive activities of the organism in question so that it can ‘steer’ successfully through enduring features of its environment.

¹¹⁷*Ibid*, ix.

¹¹⁸*Ibid*.

within that map” yielding knowledge of which face or type of face is being represented.¹¹⁹ This is a complex way of stating that certain patterns of sensory input will either activate the next layer of neurons in the rung or fail to activate them. In cases in which *it does activate them* it is because the upper layers of neuronal populations are ‘weighted’ such that they only become activated by certain sorts of activation patterns and not by others. The higher-level rungs do this in a way that represents the various dimensions by which certain perceptual items within a feature space differ from one another. The distance and similarity relations are represented by the proximity of these synapses and the probability of whether the activation of one array will solicit the activation of another. As such, the array of post-sensory neurons become sensitive to *some external feature domain* in a way that ensures that the brain is responding to the *relevant* aspects of that domain which would be required to “represent the full range of *possible kinds of things*, and, *possible kinds of processes and behavioral sequences*, that a creature expects or is conceptually prepared to encounter”.¹²⁰ The following diagram of an *artificial neural network* models an instance of the sort of process:

¹¹⁹*Ibid*, 63.

¹²⁰*Ibid*, viii.

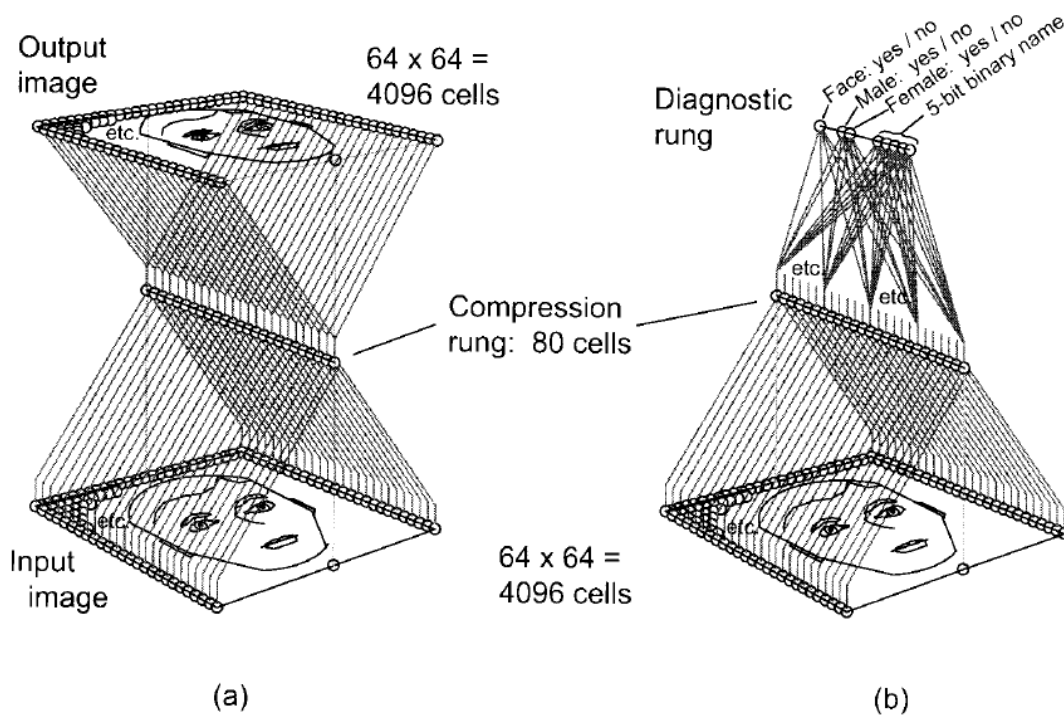


Figure 2.12

(a) A network for compressing face-images into an 80-D space, and then reconstructing it. (b) A network for recognizing faces.

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So (a) in the above figure is an example of a system which – at the sensory rung – receives facial images and, through repeated trials, eventually learns to correctly output *that* input image by having employed the similarity and difference relations expressed in the diagnostic rung on (b). The *diagnostic rung* on (b) then expresses the background activation space which *compresses information into the general features of the relevant feature domain in order to successfully ensure that items in that domain can be individuated*. Phrased differently, the namesake of the book suggests what these compression rungs do: they identify *formal structures*, which abstract away the particulars of sensory experiences of faces while capturing the collection of relevant features required to ‘index’, ‘refer to’ or ‘correctly identify’ a face.¹²² These compression systems are therefore

¹²¹ *Ibid*, 62.

¹²² What is interesting about this very loose connection to Plato is that McDowell, as we have seen, is concerned that the *space of reasons* potentially guilty of ‘rampant platonism’ unless we revise our understanding of nature according to his suggestions. The word ‘concept’ in the sense that McDowell countenances appears to supplant the notion of form as it was understood by the ancients and also by Kant. While Kant’s understanding of form is complex, given that it is operative both at the level

responsible for *all* intentional states according to Churchland; each abstract map – or vector activation space – will be responsible for capturing the relevant abstract dimensions shared by all instances of the sort of thing in question. As such, a well sculpted facial recognition system will then be able to focus its “efforts on the subtle *variations*, on those enduring themes, that each new face presents.”¹²³

Still there are a few more things to say about what (a) in the above figure aims to show us. Firstly, it emphasizes that certain representational spaces have “*preferred input stimulus* for each one of the 80 cells at the second rung”.¹²⁴ As this is a model of an *artificial neural network* – we can understand it as attempting to model only one of the innumerable possible activation spaces available to the human brain. The important thing is that the notion of a *preferred input stimulus* is one which suggests that only certain sensory inputs which *exhibit the requisite formal properties* will excite postsensory diagnostic rungs in a way that will yield an output which accurately represents the object presented to the sensory rung. An input will do this only if it possesses properties which are sufficiently similar to the preferred input stimulus of the network.¹²⁵ The preferred input stimulus is not a preference for some pattern solicited by some particular item in the objective world, but rather is a group of “diagnostic templates [that] provide the most effective armory for collectively *analyzing* any face, entered at the input layer, for subsequent placement in a well-sculpted *map* (viz., the second-rung activation space) of the important ways in which all human faces variously resemble and differ from one

of intuition and the understanding, McDowell’s appreciation of this notion is similarly related to the basic understanding of the ability to abstract general forms of structural understanding from particular instances of things. For McDowell, language is the vehicle of such abstraction. However, Churchland’s anti-linguistic and non-normative account of how it is that we manage to not only capture the abstract generalities of the world but to make ‘inferences’ (viz. connections between activation patterns) about the items instantiating these generalities, affirms the fear of rampant platonism; it assuages us of this fear by *eliminating the manifest image and the space of reasons*. He seems to tacitly agree that if we do follow the normative lingua-formal account, then we end up with rampant platonism or something similar. This is one of the major reasons why his account is so relevant to our investigations.

¹²³*Ibid*, 63.

¹²⁴*Ibid*, 64.

¹²⁵*Ibid*, 64-65

another.”¹²⁶ They are then the generalized patterns which, if given as inputs, will produce “the *maximum* level of excitation at that second-rung cell. It is the input pattern that makes the cell ‘yell its loudest”’.¹²⁷ Here are some examples of such preferred stimuli:



Figure 2.13

The ‘preferred stimuli’ for an arbitrary six of the 80 face-compression cells.

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These generalized templates can then be understood as *gestalts*¹²⁹ by which the fleeting particulars of sensation can be subsumed under conditions for intelligibility (in this case the intelligibility of faces). If you present the system with an apple or a random distribution of pixels, the diagnostic rung will not be able to index this item as one of the possible faces based on the myriad sorts of similarity and differences by which faces are identified. So, what (a) expresses is the successful identification of some face presented to the input rung through the diagnoses of the compression rung; in other words, it is an instance of a sculpted background activation map successfully indexing an item presented to its sensory array. Importantly, it is the entire array of diagnostic cells which will be involved in assaying an individual’s particular facial structure.

Finally, the last important notion to be introduced here is that of ‘vector comple-

¹²⁶*Ibid*, 65.

¹²⁷*Ibid*, 64

¹²⁸*Ibid*.

¹²⁹To be clear, Churchland doesn’t use this word to describe these templates.

tion’. This is the ability for “leaping from partial data to a complete representational interpretation”.¹³⁰ This simply means that, given the generalized ‘*gestalt*-like’ preferred stimuli of compression cells, if one inputs a partial image of a face the system can reconstruct the rest of that image. As we have seen before, the role of the brain is to ensure that information is ‘filtered’ – in line with my notion of differential availability – so that an organism can subsume the innumerable dynamic changes and features of its sensory environment within a smaller map which can capture the relevant enduring features and occlude others. It does this by subsuming the activation of various input patterns into categories which are the indices of its various maps. The brain’s tendency to do this shows something pseudo-Kantian about Churchland’s picture. It suggests that the brain will do its best to ensure that *any sensory happening* is categorized or conceptualized. In other words, it will not accept an intuition as blind and will always try and find a concept in which it can be placed. He phrases this well at the start of Chapter 4:

This reflects the trained network’s automatic tendency to interpret any arbitrary stimulus as being, in some way or other, yet another instance of one-or-other of the enduring categories or causal profiles it has already discovered in the universe of its past perceptual experience. [...] In the real world, no two sensory situations will be strictly identical, so any effective network has no option but to engage in the assimilative strategy at issue.¹³¹

2.3.6 A Sojourn into Second and Third Level Learning

A few brief comments on what he calls second and third-level learning are worth mentioning in place of a thorough elaboration of the details of these models. Second-level learning can be understood as the “*dynamical redeployment* of conceptual resources [which are] already in place”¹³² as a consequence of the synaptic shaping’s of first-level learning. So, second-level learning is the use of concepts acquired through this slower first-level process

¹³⁰*Ibid*, 66.

¹³¹*Ibid*, 187.

¹³²*Ibid*, 22.

of changes to synaptic configurations for the sake of reinterpreting novel stimulus. That is, novel sensory activation patterns will come to index or identify a novel feature space (viz. domain of items in the world) by the application of conceptual resources that would have previously only been used to circumscribe a more limited domain of items. The idea is that we can quickly – rather than over years of maturation – come to understand new features of the enduring world by applying aspects of our already present unity of sculpted and overlapping representational possibilities (viz. sculpted background activation spaces) in novel ways. The quote in the last section regarding vector-completion appears at the start of his explanation of this sort of learning due to the fact that vector-completion is a model of the brain’s tendency to index or categorize *any sensory input* it can. Of course, this often leads to error. The familiar experience of pareidolia, or seeing faces in things which are not faces, exemplifies this. However, this also suggests the possibility of having sensory events which become indexed in representational spaces that were previously only used to categorize a more limited set of items. For example, Churchland explains that a child’s understanding of animals, once it has an adequately sculpted vector map for them, will involve things like assimilating animals that do not *at first* appear to fit a particular category into that category once the child has undergone more experiences and further learning. Young children who are exposed to German shepherds, labs, and golden retrievers later have to assimilate the Pekinese terrier into their conceptual understanding of *dogs* even if they do not directly resemble the prototypical instances of the animal that shaped the child’s first-level representational spaces.¹³³

It therefore seems that first-level learning describes the most universal forms of informational or intentional possibilities of a creature. That is, the ‘sculpting’ of activation spaces yields a subset of a global activation space; which is to say, it actualizes a subset of the sum of possible representational domains by the inevitability of certain sensory constants during maturation. Second-level learning describes our ability to then take

¹³³Paul Churchland. *Plato’s Camera*, 188

conceptual possibilities expressed by these vector maps and do two main things: one is applying them to novel phenomena so as to reuse the concept under unique configurations of activation patterns at the sensory rung. The other is to apply them in new ways to familiar phenomena to make the structures of certain feature domains *differentially available* in a way that the previous deployments of those maps did not. Churchland, as usual, only refers to examples of scientific discovery to discuss this sort of learning or knowledge acquisition.¹³⁴ Using Charles Darwin as an example, he explains that what Darwin did was take conceptual spaces concerned with morphological differences ob-

¹³⁴This is an important comment for a number of reasons which will become clearer in the following chapter. However, it is significant that Churchland regards the brain's main function to be something like 'predictively successful representation'. Novel developments in the arts, ethics, or politics are mentioned in quick passing and the model for epistemic activity still ends up being Dretske's white frocked scientist. This means that the sort of intelligibility which is typically evidenced in the social-sciences or humanities is not seen as central to our brain's ability to make sense of the world. The manifest image and the space of reasons have been eliminated largely due to the rendering of all knowledge in terms of scientific posits (which are, for Churchland, just ways of creating maps with higher and higher resolution representations of feature spaces); his scientific attitude leaves his work unconcerned with forms of intelligibility which do not depend on having accurately represented some enduring feature of the objective universe. This will be shown later to relate to why Churchland thinks the manifest image is dispensable: it is just a low-resolution map of what is going on when people think, hence its dependence on folk-psychological concepts which, for Churchland, are too low resolution to be of any use at all. Again, the emphasis that his position is diametrically opposed to McDowell's is important – this has much to do with what they regard the primary functions of the mind to be.

Works of literature for example do not necessarily teach us something about the world because they provide us with a better map of some objective feature, rather they are thoroughly normative insofar as they help us re-evaluate how we should think about and behave towards, ourselves and others. There are some other relevant considerations regarding Wittgenstein's rejection of the so-called Augustinian picture with the consequent suggestion that it's a fool's errand to find something common amongst all meaningful mental events. The idea that the function of our ability to think is not singular can be found in certain interpretations of his later work in particular. The quietism McDowell so wishes to embody can be better attributed to Wittgenstein for precisely this reason: his work does not appear to suggest that we can find or speak about foundational structures which are shared in all instances of intentional activity. He seems to point at various forms of intentional activity, noting the differences and similarities, but not leading the reader to conclude 'ah ha! Intentionality must be a function of *this*'. Quite the opposite. What is so difficult about the later Wittgenstein is that he appears to render many debates regarding what having a 'mind', 'meaning', 'intentionality' etc. amounts to as genuine pseudo-questions which cannot be answered by pursuing traditional philosophical means. At the same time, he does not outright reject the necessity of investigating the natural world but he is suspicious of many of the investigative motivations that characterized a great many thinkers of his time and continues to influence discourse in analytic philosophy after the linguistic turn. In particular, the investigations we have set out on so far have focused on the question of normativity and the natural world. It is then worth mentioning that, besides Sellars's *Myth of the Given* and his application of the *is-ought* distinction to epistemology, another historically significant motivation for the normativity of thought hypothesis is Kripke's famous *On Rules and Private Language* (endearingly known as Kripkensteinian). This text was maybe more influential than the works of Sellars in generating schools of thought that understood mind, meaning, and intentionality as thoroughly normative.

served from “the processes of *natural variation* and *selective reproduction*” to the feature domain of all living creatures.¹³⁵ That is, he used the familiar concepts and processes which he understood from his familiarity with breeding to ask whether “the same mechanisms might be responsible, over geological time, for the totality and diversity of all species, our own included, that currently inhabit the Earth. The operations of such a mechanism, he saw, need not be confined to the kennels and stables of human farms”.¹³⁶

Third-level learning is most generally an account of cultural learning, natural language, and the uniquely human capacities which authors like McDowell emphasize as foundational. As Peter Carruthers and J. Brendan Ritchie explain in their review of *Plato’s Camera* – a review I will draw resources from in critiquing this work – third-level learning involves “the invention of regulatory mechanisms to improve learning at the second level and to allow for more effective transmission of knowledge. These include everything from record-keeping to shared standards of epistemic evaluation”.¹³⁷ Furthermore, my exclusion of an elaboration on the notion is due to my agreement with these reviewer’s claim that “although Churchland has many insightful things to say in the final two chapters of the book about [...] the role of natural language and cultural institutions in shaping some aspects of human cognition, it remains far from clear that adherence to anything resembling his neurally-inspired story is needed for one to say those things”.¹³⁸

2.3.7 Plato’s Camera: Concluding Remarks

What is significant about *Plato’s Camera* is that it gives us a model by which we can understand intentionality in terms of the brain’s ability to transform *chemical and electrical patterns of activity* on the sensory surfaces into other patterns on the postsensory

¹³⁵Paul Churchland, *Plato’s Camera*, 189-190.

¹³⁶Paul Churchland, *Plato’s Camera*, 190.

¹³⁷Peter Carruthers and J. Brendan Ritchie, review of *Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals*, by Paul M. Churchland, *Notre Dame Philosophical Review* 44 (2012): 426.

¹³⁸*Ibid.*

rungs. Here we find a thoroughly causal story of how sensory events relate to conceptual categories which does not require that we subscribe to the notion of what is conceptual in terms of what is linguistic. Rather, sensory categories become represented in terms of ‘feature maps’ or ‘prototype regions’ which are neuronal encodings of the vector-algebra of n-dimensional activation spaces. Here, let us remember the definition of *dimension* in mathematics as the ‘number of variables required to identify an item within a geometric space’. A thermometer is one dimensional, an old-fashioned road map is two dimensional, and the number of distinguishing features required to identify an instrument or an old friend are n-dimensional insofar as they are oftentimes innumerable. The idea is that the sculpting of synaptic connections over time expresses the sum of probable representational possibilities. A concept is then a space of representational possibilities or differences between things in the world. These are then *indexed* or individuated by the way an input pattern activates a point in that space – which is tantamount to the brain being able to distinguish one thing from another due to the manner in which a sensory stimulus comes to be differentiated by being represented at a different location in that space. Thus, our sensory systems could not be sensory systems at all if they did not differentiate input patterns into categories and our conceptual systems would not be conceptual systems at all if they couldn’t be indexed or activated by a sensory system. This then sounds quite close to a thoroughly ‘realm-of-law’ based appreciation of the Kantian maxim “intuitions without concepts are blind, concepts without intuitions are empty” (even though McDowell and others would recoil at the idea of calling this Kantian at all).

The benefit of Churchland’s theory is that it captures a few properties that must be regarded as operative in the acquisition of second nature but which McDowell’s theory remains silent about. This silence ultimately threatens its status as ‘naturalized’ in any real sense because McDowell does not consider the temporal dimension which is necessarily operative in a Kantian framework that regards ‘language’ as the categories of the

understanding – the conceptual domain which is operative in our sensory happenings. He talks about second nature as acquired but fails to say much about developmental psychology and the crucial question of how a baby which *lacks experience* comes to be endowed with it by way of the normative inculcation which McDowell rightly emphasizes as part of our everyday upbringing. Though Churchland himself does not consider himself to be fulfilling these Kantian commitments McDowell’s own theory might be better served by drawing insights from a framework which emphasizes the causal continuity that enables the physical system of our brain to capture enduring features of the temporal and spatial landscape in which perception occurs. I have mentioned that McDowell’s theory is a response to the development of two twentieth century commitments in analytic philosophy. The first of these is the linguistic turn in which all previously abstract notions of ideas or impressions come to be understood in inter-subjective, public, and verbally expressible ways. And the second is the development of scientific frameworks whose explanatory scope and precision appeared to grow exponentially. As mentioned in the introduction of this monograph, doing philosophy of mind in 2018 requires that one be aware of the vast amount of distinct research programs trying to study what we can at least vaguely call ‘human nature’. The vagueness of this term is not due to some intrinsic incomprehensibility of its subject but due to the complex relationships that emerge from the fact that the biology of human nature comes to be manifest within a historical context. Conceptual resources and modes of thought are inextricably linked to this temporally contingent fact if we come to render Kantian understanding in linguistic terms. If the ability to participate in the practice of giving and taking reasons in the way McDowell intends for us to appreciate is something that a baby acquires as it moves through time and gets exposed to a subset of conceptual resources (part of which is the language one acquires), then this comes to radically change the way that the Kantian understanding comes to bear on the content of intuition. Churchland’s charge that Kant’s model dooms

us to a “frozen conceptual prison”¹³⁹ is not something that captures McDowell’s Kantian interpretation of the conceptual realm of human thought and experience. This is why I think it strengthens McDowell’s point if we understand the space of reasons as a description of the *phenomenology of conceptual activity* that the large majority of humans acquire through ordinary upbringing within their historical era. However, the number of forces – both causal and rational – responsible for shaping the conditions under which an individual develops from a concept-less baby to a mature adult are innumerable. *Plato’s Camera* does a good job at emphasizing this point in its attempt to explain how the causal plethora of sensory happenings can engender such a transformation. However, as we shall see in the following chapter, it fails to capture what it means for maturation to be a process of rational and personal development. Nonetheless, I ask the reader for a morsel or two of patience in waiting for the phenomenological account I have promised to provide. We have few more avenues to explore before we have the resources to justify such a reading.

2.4 Liberal Naturalism and Fido’s Bowl

Though there are some significant differences between the so-called bald naturalists we have explored so far, the purpose of this chapter was to provide a through exploration of the viability of causal theories of intentionality. This is so we could present a fair appraisal of the competing positions of restrictive and liberal naturalists. None of the thinkers we have looked at so far do much work in assessing the arguments of their opponents. As I have repeatedly mentioned, the discursive battlefield in question is littered with the debris of strawmen. Consequently, the elaborate treatment of the bald-naturalists in this chapter aims at providing some of the ingredients we will need to make fair comparison of these positions and understand why it is that their apparent opposition is untenable.

Nonetheless, they all share the ‘bottom up view’ that Dretske elucidates in “Two

¹³⁹Paul Churchland, *Plato’s Camera*, 3.

Conceptions of Knowledge: Rational Vs. Reliable Belief”. This is what distinguishes them from McDowell and ensures that their shared assumptions results in the *reductio ad absurdum* that I reconstructed from Dretske’s paper. That is, because they *all agree that* premise 2 of that reconstructed argument is false. Though they may differ in their agreement with premise 1 of that argument, those who do agree with it do not then think that this entails that knowledge involves having ‘meta-knowledge’ or being sensitive to the space of reasons; this is what ensures they all agree with premise 6 (sight is a form of knowledge) and leads them to regard the conclusion “Fido cannot see where his bowl is” as sufficient to reduce the second premise to absurdity. As a reminder, here are the relevant premises:

1. Knowledge is not just receiving information (as the externalist view suggests)
2. Knowledge involves having a sort of ‘meta-knowledge’ (Lehrer’s name for the sophisticated sort of knowledge associated with articulate, normatively inculcated, and reasonable human beings) viz. complex normative and evaluative principles that are involved in understanding “what it *takes* to know and have grounds for thinking they have what it takes”¹⁴⁰ – these are unique to Humans.
6. Seeing is a sort of knowledge.

We can understand the fundamental difference between liberal naturalists and the restrictive naturalists by their attitudes towards the conclusion of whether it is ‘absurd’ to regard animals as capable of being rendered as ‘epistemologically capable’ in a *very minimal sense*. This is why Dretske uses such simple examples that appeal to common sense ascriptions that persons have to a wide variety of creatures which extend beyond the human species. The liberal naturalist, at least in McDowell’s case, is someone who is defined by the commitment to the notion that *no one and nothing in this universe (other than us) **can** have experience or knowledge in any philosophically relevant sense.*

¹⁴⁰Dretske, “Two Conceptions of Knowledge: Rational Vs. Reliable Belief”, 17.

The consequence is accepted on the transcendental basis on which McDowell defends his version of naturalism – this basis can be boiled down to two primary commitments:

1. The myth of the given is an insurmountable problem. It surely cannot be resolved by reference to any sort of ‘pre-conceptual’ content, whether causal or not.
2. Axiomatic commitment to a particular reading (which I have explained in the first chapters) of: “*intuition without content is blind, content without intuition is empty*”

With regards to the first commitment, this chapter has sought to show that McDowell’s issue with a bald-naturalistic account of *the myth of the given* depends on mistaken assumptions on the manner in which causal theories of intentionality understand the notion of information as a system’s sensitivity to certain characteristics of the environment which can be understood in terms of its *differential availability* to the organism. Nonetheless, he is right to suggest that this, on its own, is not enough to render experience – understood as the manifold in which rationally warranted knowledge can emerge – as something an organism possesses. This of course relates to my earlier claim that McDowell is committing a ‘not a real Scotsman fallacy’ with regards to experience. This suggests, that what McDowell is getting at is experience, as uniquely manifest in the phenomenal presentations that we experience as creatures.

As for the second commitment, we have yet to see how this can – understood in the sense McDowell wants us to – be reconciled with the fact that we are animals which are subject to the same nomological laws as other creatures and items in this universe. This is because McDowell understands our conceptual capabilities as connected to a radical epistemological freedom that renders the world ‘open to us’ in a way that captures Kantian spontaneity – a sort of freedom which *appears* to violate the nomological determinations which make us part of the animal kingdom. I agree with McDowell when he states that we “need to recapture the Aristotelian idea that a normal mature human being is a rational animal, but without losing the Kantian idea that rationality operates

freely in its own sphere”.¹⁴¹ Answering the question of how we might do this is the final aim of the rest of this monograph (alongside reassuring us that Fido does in fact know where his bowl is).

¹⁴¹John McDowell, *Mind and World*, 85.

Chapter 3

The Phenomenological Given, Anti-Foundationalism, and Embodied Agency

In order to ensure that the elaborate expositions of the bald naturalist authors in the last chapter do not fall into the myth of the given I must do more than emphasize that McDowell's idea of their picture is insufficiently nuanced. I need to also show that their account of how it is that we become connected to the world, does not render that connection as one between extra-conceptual anchors and rational judgements. As we saw in chapter 1, this will not do. As Charles Taylor puts it, mental content, when framed in contrast with the scientific picture, is rendered as a "boundary event" between the justificatory relations of the space of reasons and the "causal imprintings within a disenchanted nature"¹. Further he states, "On the one hand, it [intentional content] has to be about the world, present a unit of information, be a small item of knowledge, and hence belong to the space of reasons; on the other it has to be prior to all interpretation, its having the content it has must be a brute fact, not in any way the result of thought or reasoning activity on our part"². Taylor then goes on to emphasize that this is, in part,

¹Charles Taylor, "Foundationalism and the Inner-Outer Distinction," in *Reading McDowell: On Mind and World*, ed. Nicholas H. Smith (New York, NY: Routledge, 2002) 106. In fact, here Taylor is quoting Dreyfus even though the phrase "all the way down" is in fact McDowell's – one he develops during the *Woodbridge Lectures* published in 2009 as *Having the World in View*. Here "all the way down" is an expression of the manner in which the understanding is operative even at the most basic levels of receptivity (leaving nothing 'below the line', to borrow another expression from these lectures).

²*Ibid.*, 109.

a consequence of foundationalist intentions in the history of epistemology, ones which involve the “double move” of “stripping down to the unchallengeable, and building back up. Unless at some point we hit bedrock, if interpretation goes on forever (“all the way down”, in Dreyfus’s apt expression), the foundationalist project is ruined.”³ This is why I used Bertrand Russell’s theory of definite description’s and its reliance on the notion of sensory givens as an example of how one could fall into the myth of the given. Neither Sellars nor McDowell focus on Russell in their treatment of the topic even if, by my lights, Russell’s theory (at least at that stage of his career) exhibits it so clearly. In particular it exemplifies the desire – one which Sellars is warning against – to analyse “epistemic facts [...] into non-epistemic facts”⁴. Of course, insofar as they are still phenomenal representations, Russell’s non-epistemic facts wouldn’t appear like facts to contemporary bald naturalists. However, this is irrelevant since the foundationalist project simply wishes to find something that could act as the ‘bedrock’ which Taylor is talking about – no matter its character. Hence Sellars’s emphasis that it need not matter whether these non-epistemic facts are phenomenal, behavioural, public or private.⁵ Taking seriously his application of the *is-ought* fallacy to epistemology means never trying to ground the ‘oughts’ of reasoning in *any* sort of ‘is’.

The importance of the phenomenological tradition, with particular emphasis on the works of Martin Heidegger and Maurice Merleau-Ponty, cannot be overstated. I contend that a careful reading of Merleau-Ponty’s *The Structure of Behaviour* provides some incredibly powerful insights regarding a surprising number of topics that appear in much later developments in the philosophy of mind. As I said in the last chapter, I do think the neurophilosophical and enactivist approaches to the philosophy of mind, are moving in the right direction. They provide us with admirable examples which avoid many of the aporias and dualisms that inevitably emerge in the mainstream of the so-called ‘analytic

³Ibid.

⁴Wilfrid Sellars, *Empiricism and the Philosophy of Mind*, 19

⁵Ibid.

tradition'. Nonetheless, it is important to be aware of the way phenomenological thinkers have largely been appropriated by analytic authors and this current work should not be seen as an exception to that rule. As such, my subsequent claims about Heidegger and Merleau-Ponty are mostly responses to the way that Hubert Dreyfus and Charles Taylor have drawn them into the (largely analytic) epistemological boxing ring.⁶ I am not claiming to be an expert on these thinkers nor am I suggesting that the way I have read them captures their original intent. Rather, reading Merleau-Ponty, again, a little too late into working on my project, illuminated core elements of our problematic more than any other author.⁷

In any case, let us first look at what is common amongst Dreyfus and Taylor; both of which are – to varying degrees – sympathetic to McDowell's account of second nature and the space of reasons. Dreyfus is the one who disagrees most with McDowell even though he does think that "McDowell has taught us a lot about what is special about human experience, and he raised the crucial question as to how perception grounds knowledge"⁸. They each think that what is special about human experience can only be made intelligible on the basis of insights they have drawn from phenomenological thinkers. Furthermore, each of these authors, suggest that this phenomenological grounding is not necessarily at odds with the bald naturalistic picture – even if they are all suspicious of the latter's purported explanatory scope. Their work, at the very least, suggests that the bald naturalist picture can help give causal legs to phenomenal givenness.⁹ I take this suggestion to be worth following. The bald naturalist frameworks I exposed in the last chapter can render the insights of these thinkers in a way that fulfils the requirement of

⁶What is interesting about this debate between 'analytic phenomenologists' and McDowell is that it is unclear whether they are in fact defending, bolstering, or enriching his account, misreading him entirely, or providing a finishing blow to his desire to ensure that epistemology and the philosophy of mind stays squarely away from the hands of the bald naturalists.

⁷In lieu of having devoted my project to his work, I thought this acknowledgement appropriate.

⁸Hubert Dreyfus, "Overcoming the Myth of the Mental: How Philosophers Can Benefit from the Phenomenology of Everyday Expertise", 61.

⁹. Ultimately, it is the neurophenomenological school of thought that emphasizes the necessity of seeing the compatibility of these pictures most avidly.

nomological continuity without reducing our mental lives to the minutiae of causal descriptions. Furthermore, the stronger claim, that the bald naturalist frameworks would be unintelligible without first having phenomenological access to the world remains important but harder to justify. Let us start with the first claim, that bald naturalism can enrich the phenomenological picture. We will later return to the issue of whether the phenomenological picture is a precondition for bald naturalism in an interesting way.

3.1 Phenomenology in Analytic Philosophy: Embodied Coping and Pre-Conceptual Content

While there is now a great deal of authors in the tradition of analytic philosophy who draw on these famous phenomenologists, the focus is on those who have responded to McDowell's neo-Kantian and pseudo-Aristotelian 'quietist' account. In each case the emphasis is on the necessity of affirming pre-conceptual content while also avoiding the myth of the given. How do these authors do this and what is it about phenomenology which entitles them to do so? The first thing is an emphasis on the notion of 'embodied coping' which Dreyfus employed as a means of arguing what he calls the "Myth of the Mental". After revising his position due to exchanges between himself and McDowell, he later called this the "Myth of the Pervasiveness of the Mental" and is arguing against the "the thesis of the pervasiveness of the conceptual."¹⁰ It is worth noting that this thesis resembles the four properties that Patrice Philie attributes to McDowell's theory:

1. Experiences are intrinsically endowed with content
2. Content is essentially conceptual
3. Content is object-dependent

¹⁰Hubert L. Dreyfus, "The Myth of the Pervasiveness of the Mental" in *Mind, Reason, and Being-in-the-World: The McDowell Dreyfus Debate* (New York: Routledge, 2013), 27.

4. Content lies outside the reach of naturalistic cognitive science¹¹

It's worth bringing these up again because Dreyfus wants to affirm 1, 3,¹² and 4, while rejecting 2. Dreyfus believes that, of course, *some* content is conceptual but his emphasis on embodied coping seeks to reject the notion that *all* content is essentially conceptual. This is one of the main points that is shared by the analytic phenomenologists: the talk of intentional content. This way of understanding intentionality is "particularly central to the analytic tradition derived from the study of Frege and Russell".¹³ The idea that the mind 'contains' the elements of the world in it – oftentimes by way of the notion of representation – is ubiquitously operative in this tradition. However, the dissolution of the mind-world distinction that is central to the relevant phenomenological thinkers means that they themselves do not talk in these terms. In any case, the analytic phenomenologists sometimes do and they are our focus for now.

In this context, "embodied coping" must be understood as the blending of four distinct notions which have been drawn from different sources to emphasize a pre-reflective relationship to the world.¹⁴ This gives us two clues as to why it stands as such a sig-

¹¹Patrice Philie, "Intentionality and Content in McDowell", 667.

¹²It could be argued that it is not so much 'object dependent' as it is ontologically dependent on being the sort of creature for which object dependence is a possibility. This is just to say, that as we shall see, phenomenology does not understand the substantive basis of action, thought, or experience, as something made intelligible because an 'object' impresses upon a 'subject'. The non-inferential character of a phenomenological stance towards intentional states suggests that thought does not directly depend on referents or objects in the world. Rather, the objectification of the world, its enumeration into objects with properties and so on, is one of the manners by which beings such as ourselves come to disclose features of nature or Being. This then relates to the notion that our contact with the world is not by way of some inferential relation between it and the mind, but that the world is already available to us prior to such a decomposition. Consequently, I've said that Dreyfus affirms the 'object dependence' dimension of McDowell's theory only insofar as he has a theory of content which generally entails a referent to which that content is indebted.

¹³Siewert, Charles, "Consciousness and Intentionality", *The Stanford Encyclopedia of Philosophy* (Spring 2017 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2017/entries/consciousness-intentionality/>>.

¹⁴These are: 1) The notion of *ready-to-hand* (*Zuhandenheit*) from Heidegger's *Being and Time*. 2) The notion of *phronesis* from Aristotle's *Nicomachean Ethics*. 3) The notion of "affordances" from James L. Gibson's *Ecological Approach to Visual Perception*. 4) The notion of the "intentional arc" from Merleau-Ponty's *Phenomenology of Perception*. Each of these notions warrants, at the very least, an entire chapter to be elaborated on in any meaningful way. Nonetheless, the notion of 'embodied coping' as it has been appropriated by the analytic phenomenologists can, at least in the context of our discussion of McDowell, take the role of a helpful simplification even if it does not genuinely capture the

nificant challenge to McDowell's position: firstly, it emphasizes the body as the primary agent and patient of intentional content.¹⁵ Secondly, 'coping' here suggests something that involves capacities which are actualized in situation-specific actions rather than deliberation. As such, it reframes the problem of intentionality, as the quote at the start of Chapter Two suggests, as something which is both literally and figuratively *embodied* in our 'bottom up' relationship to the world. A consequence of this, is that reflective thought does not appear at the center stage of the intentional relation. Rather, reflective thought is seen to interrupt the already ongoing skillful coping that is operative in our ongoing pre-reflective engagement with the world. Consequently, the central focus of the debate between McDowell and Dreyfus is dependent on how we should interpret these pre or non-reflective relationships to the world. Dreyfus insists that McDowell's picture must be wrong due to the manner in which discursive thought interrupts skillful coping; he takes this interruption to prove that experience cannot be *intrinsically* endowed with conceptual content. However, before elaborating on his reasons for thinking this, it's worth getting clearer about what he means by 'skillful coping'.

3.1.1 Being-in-the-World: Escaping the Mediational Picture of Intentionality

While Dreyfus does draw a great deal of insight from the phenomenological tradition his account of skillful coping is his own. This marks a genuinely significant contribution to the bridging of these traditions. Dreyfus does not understand experience in terms of

meaning of these concepts within the context of the works in which they feature. In fact, it might be wise to reserve the notion of embodied coping to Dreyfus's meaning of the phrase rather than engage in debates over whether this meaning captures the intentions of the authors he is referring to.

¹⁵This of course, expresses Dreyfus's commitment to Merleau-Ponty's emphasis on the body as the interrogative domain in which phenomenological discourse is to be situated while leaving behind the complexities of Heidegger's *Dasein*. However, this is important to our investigations for another reason. As I brought up in part II of chapter 1 when McDowell states that "the idea of the human is what pertains to a certain species of animals" (Mind and World, p. 77-78) he is tacitly emphasizing that we must see ourselves as organic bodies despite his insistence that our biological characteristics are irrelevant to the problem at hand. I take this to be a significant problem with his claim to be a naturalist and therefore endorse the role of embodiment as essential to rendering McDowell's position and genuinely naturalistic.

concepts and objects, facts and judgments, or mind and world. Rather he sees it as a network of *affordances* which *solicit* action; this avoids the distinctions just mentioned. The world's openness comes as an openness to act in response to *solicitations* of these affordances. Our intentional relationship – or basic contact with the world – begins with items of experience that prompt possibilities of *acting towards*, rather than thinking *about* things.¹⁶ An apple affords the possibility of being eaten and solicits us to either do so or not – it pulls our attention or draws us towards modes of activity without requiring the intervention of our conscious deliberation or attention. We often eat ‘mindlessly’ while doing other things. As I write this, I often grasp for my glass of water or for a cigarette without thinking at all about either; my mind is preoccupied with the themes of this thesis and my body unreflectively manages to quench my thirst and satisfy my addiction to nicotine with ease. These actions are in the background of my experience of writing and do not involve reflective deliberation or active conceptualization. Importantly, “one must not notice them *as* affordances, but rather, as Heidegger says, they ‘withdraw’ and we simply ‘press into them’”.¹⁷

This is of course, until things go wrong. If I spill my water, burn myself with the cigarette, or ash all over my clothes, these items suddenly come into the foreground. Here we can see Dreyfus channeling the distinction between ‘*ready-to-hand*’ and ‘*present-to-hand*’ that Heidegger’s *Being and Time* is famous for.¹⁸ Dreyfus makes explicit mention of this, and in particular, discusses the famous example of hammering that is often cited to explain this distinction. He states: “when hammering is going well, the hammer is not what I focus on. The hammer simply affords hammering; the less I perceive it the better. If, however, the hammering is unusually difficult, I may experience the hammer as having the *situational aspect* of being too heavy under these conditions. And should things go

¹⁶Hubert Dreyfus, “Overcoming the Myth of the Mental: How Philosophers Can Benefit from the Phenomenology of Everyday Expertise”, 56.

¹⁷Ibid.

¹⁸For our present purposes, the distinction between ready-to-hand and present-to-hand will be simplified to stand for the distinction between Dreyfus’s skilful coping and reflective or conceptual thought.

even more badly so that I have to abandon my activity, the hammer may appear as an object that has the context-free *property* of weighing five pounds.”¹⁹ In the revised version of Dreyfus’s objection to McDowell, he then states that when things go badly in this way “a distance opens up between the copier and what he is acting on which is bridged by a situation specific-concept. The copier can make the *judgement* that the hammer is too heavy”.²⁰ We can see that Dreyfus is employing these Heideggerian notions to show a spectrum of intentional relations which start at fully absorbed and situation-specific relations to context-free ones. Importantly, the phenomenological tradition, both in its origins and appropriation by analytic thinkers, take the philosopher to have made the error of starting with context-free judgements as paradigmatic instances of knowledge. This then means that all the embodied, pre-reflective, and context dependent aspects of our lives come to be relegated to an epistemologically inferior status. This is the fundamental error which Heidegger thought himself to be remedying with his project in *Being and Time*. When *judgement* – that is, the ability to participate in the activity of identifying things as correctly or incorrectly instantiating an articulable concept – comes to be the foundational basis of our intentional relationship to the world, we then render ourselves as inextricably disconnected from it.

Hence, Heidegger’s reason for introducing these notions was to ensure that – *inter alia* – we understand our experience of the world as capable of disclosing *the things in-themselves*. Heidegger’s rejection of traditional philosophy is famously critical of our preoccupation, since the enlightenment, with the numerous sophisticated attempts to prove knowledge of external world. He states:

The ‘scandal of philosophy’ is not that this proof has yet to be given, but that *such proofs are expected and attempted again and again*. Such expectations, aims, and demands arise from an ontologically inadequate way of starting with *something* of such a character that independently *of it* and ‘outside’ of

¹⁹Hubert Dreyfus, “Overcoming the Myth of the Mental”, 60

²⁰Hubert Dreyfus, “The Myth of the Pervasiveness of the Mental”, 19

it a 'world' is to be proved as present-at-hand.²¹

Here because Heidegger's investigative starting point is ontological rather than epistemological, asking how we might know an external world doesn't get us far. He mentions Kant's refutation of idealism as one of the most sophisticated attempts to reconcile this bifurcation of internal and external, or mind and world but, despite his respect for this famous argument, he believes it to be based on the erroneous epistemological starting points of Descartes and his descendants.²² This particular aspect of Heidegger's contribution is central to the projects of the analytic philosophers in question. As Taylor puts it the issue of the 'inner outer distinction' is what generates the problem between coherentism and scheme content dualism that McDowell is concerned with. The characterization of mental content as a 'boundary event' between the 'external' deliverances of sensation and the 'internal' activity of the understanding is dependent on "a mediational epistemology" which has "held us captive" as a consequence of this cartesian bifurcation of mind and world.²³ This is the understanding of intentionality as capable of yielding knowledge of reality only because "[w]e grasp the world *through* something, what is outside through something inner".²⁴ As such, Taylor (as well as Dreyfus) takes his main task as showing "how Merleau-Ponty, following Heidegger, helped to break the thrall of the mediational picture. They didn't just deny it, they worked their way out of it, which meant they articulated it and showed it to be wrong, to need replacing by another picture"²⁵. Further, he emphasizes that supposing our "grasp of the world [...]" is, in principle, separable from what it is a grasp of [...] was obviously central to the original Cartesian thrust that we are all trying to turn back and deconstruct" ("we" here

²¹Martin Heidegger, *Being and Time*, trans. John Macquarrie & Edward Robinson (Oxford: Blackwell, date), 249

²²*Ibid.* 247

²³Charles Taylor, "Merleau-Ponty and the Epistemological Picture," in *The Cambridge Companion To Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, United Kingdom: Cambridge University Press 2005), 26.

²⁴*Ibid.* Emphasis mine.

²⁵*Ibid.*, 30

seems to include both his fellow analytic phenomenologists as well as McDowell).²⁶

In any case, what Dreyfus and Taylor take from this is that, prior to any understanding of the world as something outside of us which is then apprehended by the mind, we are already inextricably *in* that world. It is only when we step back from it and reflect upon it – think about it in terms of concepts which mediate our relation to the objects in the world – that the appearance of an epistemological problem of getting *outside of our beliefs* emerges. Taylor makes reference to Richard Rorty and Donald Davidson as examples of thinkers concerned with this problem in the way that poses a challenge for the coherentist picture that McDowell presents on one side of his epistemological oscillation.²⁷ McDowell emphasizes, as I mentioned in the first chapter, that Davidson’s point is that “[n]othing can count as a reason for holding a belief except another belief”²⁸. However, Taylor aptly expresses the problem with taking this principle too far in a way that has made explicit some intuitive suspicions I have had since first encountering this position:

This is clearly a representationalist view. Beliefs are the only accepted denizens of the space of reasons. But I want to note something more here. This view is not put forward as a surprising finding. It is articulated as a truism. *Of course*, nothing can justify a belief except another one. Why is this so obvious? Because, they insist, the only way you could find an alternative would be to “get outside our beliefs and language,” in Rorty’s formulation. Davidson makes the same point in talking of the possible alternative of confronting our beliefs “with the tribunal of experience. No such confrontation makes sense, for of course we can’t get outside our skins to find out what is causing the internal happenings of which we are aware.”²⁹

Taylor goes on to say that this way of thinking makes it so that we are stuck with

²⁶Ibid., 33

²⁷Ibid., 29

²⁸Donald Davidson, “A Coherence Theory of Truth and Knowledge,” in *The Essential Davidson*, (New York: Oxford University Press, 2006), 266.

²⁹Charles Taylor, “Merleau-Ponty and The Epistemological Picture”, 29.

a problem of comparing our internal representations with “reality”, as if that was something external to us.³⁰ Why this is important as a critique of McDowell is because of the similarities between his intentions and those of the phenomenologists. McDowell also sees himself as freeing us from a certain picture – one in which we feel obliged to resolve the apparent lacuna between mind and world. When he talks of “unmasking” the appearance of certain familiar philosophical obligations in the introduction to *Mind and World*, he uses the medical metaphor of curing “some characteristic anxieties of modern philosophy”.³¹ I think it is no coincidence that this shares with Wittgenstein – especially given McDowell’s quietist ambitions – the notion of seeing philosophy as “a battle against the bewitchment of our intelligence by means of our language”.³² His use of diagnostic medical metaphors also alludes to Wittgenstein’s claim that “[t]he philosopher is the man who has to cure himself of the many sicknesses of the understanding before he can reach the notions of the healthy human understanding”.³³ And this is why Dreyfus thinks McDowell “sounds like he is channeling Heidegger when he speaks of ‘our unproblematic openness to the world’”.³⁴ It appears that, like the phenomenologists, he wishes to rid ourselves of the notion that there is a boundary between the two by revising our picture of what it means to have experience in the first place. Further, in both cases, the emphasis is that problems which make it difficult to understand how we know the world are the consequence of philosophical and linguistic confusion; and while they understand this in different ways, they speak of what McDowell calls ‘un-problematic openness to the world’, as something prior to the scandalous and bewitching considerations that force the philosopher to ask questions about how this might be so.³⁵ The

³⁰Ibid.

³¹John McDowell, *Mind and World*, xi

³²Ludwig Wittgenstein, *Philosophical Investigations*, Trans. & Ed. G.E.M Anscombe (Oxford, United Kingdom: Blackwell Publishing, 2006), 109.

³³Ludwig Wittgenstein, *Remarks on the Foundations of Mathematics*, Ed. G. H. von Wright, R. Rhees, & G.E.M Anscombe, Trans. G.E.M Anscombe (Cambridge, Massachusetts: The M.I.T Press, 1967) 157e.

³⁴Hubert Dreyfus, “The Myth of the Pervasiveness of the Mental,” 15.

³⁵John McDowell, *Mind and World*, 155

difference lies in what these authors then regard ‘intelligibility’ to mean and require.

Nonetheless, the way McDowell hopes to “effect this deletion of the outer boundary” between mind and world is still concerned with the possibility of “falling into idealism”; he wants to delete this outer boundary “without slighting the independence of reality”.³⁶ This already, suggests that he is bewitched by the mediational picture that Taylor is warning against. Insofar as his concern about falling into idealism can only emerge against the backdrop of such a picture. McDowell’s concern about the possibility of falling into rampant platonism exemplifies this. And while McDowell is not concerned with traditional sceptical issues about the external world, he is still worried about how the internal structure of the space of reasons might connect to the external structure of the natural world. Thus, while his question is different from Descartes, his concern with epistemological foundationalism is inherited from it via. Kant. Hence, McDowell’s warning that there is a “danger of falling into interminable oscillation” between the Given and coherentism is a consequence of Kantian epistemological questions rather than Cartesian ones. And while I agree, that McDowell’s project, especially as Taylor sees it needs to escape this ‘inner-outer distinction’ by taking phenomenological insights in the way he suggests, it is not so obvious that the phenomenological features of unreflective coping really do demonstrate that McDowell is wrong to render experience as conceptually pervasive.³⁷

³⁶John McDowell, *Mind and World*, 34.

³⁷It may be worth noting at this stage, that while Taylor and Dreyfus take issue with McDowell’s position it appears that Taylor is far more sympathetic towards it. Each one thinks that conceptual activity must be ontologically dependent on the proto-conceptual relationships we have with the world. These are just a fact of our being the sorts of things we are rather than grounds for establishing the sensory basis for the truth of empirical judgements. However, Taylor states that his phenomenological critique of epistemological foundationalism, is “meant as an addition to McDowell’s account, which remains valid, I think, whether or not the view I’ve been propounding is true” (Foundationalism and the Inner Outer Distinction, 110). On the other hand, it is clear the Dreyfus thinks that McDowell is fundamentally mistaken and wishes to take phenomenological insights to invalidate McDowell’s thesis of pervasive conceptuality.

3.1.2 Does Pre-Reflective Imply Non-Conceptual? Conflating Epistemology with Philosophy of Mind

The analytic phenomenologists think that a close inspection of our experience of the world can demonstrate that McDowell's thesis of the pervasiveness of conceptuality is either false or in need of rehabilitation. If so, much of our understanding of the world does not require overt thought and, in fact, is often impeded by conscious deliberation, then how can it be *inviolably* conceptual in the relevant sense? Dreyfus gives a number of different examples of instances of *expertise* that is, the set of skills and behavioural structures which guide embodied activities which exhibit intentionality towards the world. This emphasis on *expertise* is important because it enables us to recognize that certain activities do not necessarily involve the experience of conceptual mediation. Riding a bike, playing baseball, or typing this document are forms of intentional relations to the environment that do not require the active intervention of discursive reasoning in order to be genuine cases of experiential openness to the world. The fact that such activities are often impeded by the intervention of overt conceptualization are taken to demonstrate that it cannot be a condition for them³⁸ Furthermore, our basic ability to successfully move through a treacherous landscape counts as an instance of embodied coping which we share with other animals which lack the possibility of propositional thinking. Consequently, if we take McDowell's point seriously, these animals do not in fact enjoy pre-reflective intentional relationships to the world but only appear to do so.

His Kantian commitments mean that intentionality must always involve the deployments

³⁸The powerful example that Dreyfus employs in his paper "Return of the Myth of the Mental" (which is part of the first series of exchanges between himself and Dreyfus which were eventually collectively published in *Inquiry* in 2007) is that of the baseball player Chuk Knoblauch. This was a man, who being very skilled at his profession, provides an extreme example of how conceptual engagement can be detrimental to the pre-reflective flow of embodied coping. As a second baseman he one day viewed the ball he was to throw, in a disengaged and phenomenologically distant way; he put it as thinking about the "mechanics of it [throwing]". After this point he found it difficult to return to the intuitive absorption of his usual response to the affordances soliciting his actions in a baseball game. However, in high pressure situations, where there was little or no time to think, Knoblauch would often display technical mastery over his sport. Sadly, he eventually retired from baseball because of his inability to resist rational reflection during embodied coping.

of concepts, that is, *articulable* propositions about the features of the world one exists in. These animals then only appear to share such pre-reflective understanding with us. My earlier comments about the problem of transcendentally silencing animals should be obviously relevant here.

In the first bout of debates between Dreyfus and McDowell, Dreyfus admits misreading McDowell as thinking of rationality in the traditional way that renders it as something context-independent, general, and incapable of being situationally-specific.³⁹ This is because, from Dreyfus's reading of Heidegger and Merleau-Ponty, conceptual activity is that which breaks unmediated contact with the world and that it only emerges when the flow of embodied activity is interrupted by something going wrong. The distance that is created by this disruption – as in the example with the hammer being too heavy or my spilling my water on myself – is when conceptual activity emerges. That is, this is when we begin to think propositionally that items feature in the space of reasons. I spilt my water because I didn't notice that the grease from the pizza I ate earlier had coated the outside of the glass. Soaked and frustrated, it no longer operates in the ongoing background of my pre-reflective activity. I come to stand at a distance from it; it emerges in the foreground of my attention. It interrupts my writing and prompts me to formulate what caused this inconvenience in conceptual terms. In this sense, it generates an interrogative for me and forces me to question why things went wrong. This is when I have to start thinking about things in the way that is paradigmatically instantiated in language. As Taylor puts it "[t]hrough language, we (humans) have the capacity to focus on things, to pick out an X out as an X; we pick it out as something which (correctly) bears a description "X", and this puts our identification in the domain of potential critique (is this really an X? Is the vocabulary to which X belongs the appropriate one for this domain/purpose? And so forth)"⁴⁰.⁴¹ That is, the items of this experiential episode

³⁹Hubert Dreyfus, "The Return of the Myth of the Mental," *Inquiry*, Vol. 50, No. 4, (August 2007) 354

⁴⁰Charles Taylor, "Foundationalism and the Inner-Outer Distinction", 110.

⁴¹Note the relevance to the historical basis of the linguistic turn and its relationship to rampant platon-

come to be explicitly involved in the space of reasons. I may ask myself whether I spilt the water *because* the glass was greasy or because I wasn't paying enough attention, or I might note that this particular glass is especially smooth and that next time it might be better to use a mug. In any case, what was part of the unreflective background comes into the foreground as a possibility of linguistic articulation.

Nonetheless, McDowell sees no issue with this. As Dreyfus acknowledges, McDowell “claims that human agents are ‘*embodied*’ and ‘*involved*,’ indeed, even ‘*immersed*’ in the world,” yet even in his revised riposte to McDowell, he still thinks that “for McDowell, as minds we are always nonetheless *distanced* in the sense that we are never *merged* with the world.”⁴² The question this subsection seeks to address is whether this is really a fair rendering of the consequence of McDowell’s thesis of conceptual pervasiveness. Is Dreyfus still stuck in a picture of the mental as something disembodied? This is exactly where their debate gets especially puzzling. And as Sebastian Gardner mentions, “Dreyfus and McDowell understand themselves to be arguing about the same topic, namely the extent to which content is conceptual, and accordingly regard their respective theses [...] as contradictory”.⁴³ However, he emphasizes that McDowell is concerned with transcendental and *a priori* conditions for “the possibility of knowledge as such, and allows itself to be extended into the sorts of domains which occupy Dreyfus” with the aim of showing “that the sphere defined by justification is not too narrow to encompass the data which Dreyfus cites as evidence for [nonconceptual embodied coping]”⁴⁴. On the other hand, Gardner points out that Dreyfus and his compatriots⁴⁵ treat the works of Heidegger and Merleau-Ponty as works in the philosophy of mind even though the latter characterize “their claims and concerns as transcendental”.⁴⁶ And what I want to take

ism I noted in Chapter One. Particularly, the manner in which Russell’s theory of definite descriptions became a model for the relationship between sensory givens and the truth of propositions.

⁴²Hubert Dreyfus, “The Myth of the Pervasiveness of the Mental”, 17.

⁴³Sebastian Gardner, “Transcendental Philosophy and the Given” in *Mind, Reason, and Being-in-the-World: The McDowell Dreyfus Debate*, 111.

⁴⁴Ibid.

⁴⁵That is, those I have dubbed “analytic phenomenologists”.

⁴⁶Ibid. We will return to what transcendental must then mean for these authors in the next sections.

from Gardner’s illuminating paper is minimal considering its exceptional appraisal of the debate between these two authors. That is, while McDowell’s concerns are *transcendental in the epistemological sense intended by Kant*, Dreyfus’s concerns fall into the domain of the philosophy of mind in a way which depends on *a posteriori* theorizing. So, I wish to borrow Gardner’s following question, “How does it come about that in the *Inquiry* debate certain claims which apparently belong to the context of transcendental philosophy are treated as being on the same level as empirically grounded theories of mind?”⁴⁷

Of course, epistemology and philosophy of mind are related subjects but the conflict between Dreyfus and McDowell has to do with their failure to see some fundamental differences between the two. Dreyfus is “recasting themes in phenomenology for broadly naturalistic purposes” that concern the nature of the mind. McDowell is prioritizing “normative considerations” which concern the possibility of knowledge of the world. With these cross purposes in mind, the question about whether embodied coping involves conceptual content is must be understood carefully.⁴⁸ McDowell is *not* claiming that the mind is ‘*never merged with the world*’ as Dreyfus thinks. As I understand him, he is stating that human experience, regardless of how much we share pre-reflective characteristics with other creatures, is always *epistemically potent*. That is, it is not only the sort of thing which is readily available to rational reflection but rather *always presents itself as something which is available to rationality qua space of reasons*. Any experience can solicit an interrogative stance towards things; experience is, as Kant likes to see it, the domain of possible knowledge, the domain in which the presentation of objects has epistemic import. For this reason, what I have called *differential availability*, while shared with other creatures, is distinct for us. All discriminations *can* become judgements even if they do not always do so. In what follows, I will show how my notion of differential availability, understood in context of McDowell’s pseudo-Aristotelian notions of first and second nature can resolve the tension between Dreyfus and McDowell while drawing

⁴⁷*Ibid.* 134.

⁴⁸*Ibid*

insight from the ‘bald naturalists’ discussed in the last chapter. This will then require a short detour through some themes in Merleau-Ponty’s *The Structure of Behaviour* insofar as it explicitly deals with the three major approaches to intentionality outlined so far: the critical or Kantian view, the pre-reflective coping view, and the causal or bald naturalist one.

This shared reconciliatory intention is obvious when we consider how, in the introduction to this remarkable text, he appraises the discourse of his time, posing the question that he thinks must be answered, and suggests a method by which he intends to resolve it:

Thus, among contemporary thinkers in France, there exist side by side a philosophy, on the one hand which makes of every nature an objective unity constituted *vis--vis* consciousness and, on the other, sciences which treat the organism and consciousness as two orders of reality, and in their reciprocal relation, as “effects” and as “causes”. Is the solution to be found in a pure and simple return to critical thought? And once the criticism of realistic analysis and causal thinking has been made, is there nothing justified in the naturalism of science – nothing which, “understood” and transposed, ought to find a place in transcendental philosophy?

We will come to these questions by starting “from below and by an analysis of the notion of behaviour. This notion seems important to us because, taken in itself, it is neutral with respect to the classical distinctions between the “mental” and the “physiological” and thus can give us the opportunity of defining them anew. It is known that in Watson, following the classical antinomy, the negation of consciousness as “internal reality” is made to the benefit of physiology; behaviour is reduced to the sum of reflexes and conditioned reflexes between which no intrinsic connection is admitted. But precisely this atomistic interpretation fails even at the level of the theory of the reflex (Chapter I) and all the more so in the psychology – even the objective psychology – of higher levels of behaviour (Chapter II), as Gestalt theory has clearly shown. By going through behaviorism, however, one gains at least in being able to introduce consciousness, not as psychological reality or as cause, but as structure. It will remain for us to investigate (Chapter

III) the meaning and mode of existence of these structures.⁴⁹

It seems the conundrum facing us today is not so different from the one he was concerned with 75 years ago. The myth of the given, conceived of in bald naturalistic terms, is close to what Merleau-Ponty describes when he speaks of thinkers who take the relationship between organism and consciousness to be a matter of cause and effect. The only difference is that consciousness, at least in the case of the authors involved in our present discussion, is not being discussed by their contemporary counterparts; rather, experience, thought, and meaning are taking its place as effects within the organism. McDowell stands, quite obviously, as our contemporary counterpart to the individuals who must have thought a return to critical thought – or Kantian transcendental philosophy – might resolve our understanding of an organism’s intentional relationship to the world. The reduction to the ‘sum of conditioned reflexes’ is most closely linked to the picture I have drawn by reference to Churchland’s work even if he himself would not condone such a reading (this is because he thinks that instincts and reflexes, embodied cognition and reflective thought are not different in kind)⁵⁰. The significant relation is in the notion that ‘no intrinsic connection is admitted’. The earlier comments about Churchland’s failure to acknowledge phylogenetically inherited traits is salient here: without them, the intrinsic connections in question cannot be affirmed. Nonetheless, the forthcoming relationship between non-conceptual coping and the biological basis of cognition needs emphasizing. Not only does Churchland fail to emphasize intrinsic structural relations between the brain and the world, but further, he says nothing about the structural relations involved in the experience of our intelligibility of it either. This is prevented by his eliminativist commitments which say ‘intelligibility’ *qua* McDowell, and experience *qua* phenomenology, are to be excluded from our ontology for lacking any explanatory value in the representational sense he is committed to.⁵¹ Furthermore, Merleau-Ponty’s

⁴⁹Merleau-Ponty, *The Structure of Behaviour*, 4-5.

⁵⁰Paul Churchland, *Plato’s Camera*, 49-50.

⁵¹It is ironic to see that Paul Churchland, the champion of the most extreme version of scientific

remarks about starting with behaviour ‘from below’ fits with the comments by Dreyfus and Dretske cited at the opening of the last chapter. Finally, the reader may notice that the structure of this thesis aims to approach our problematic in a way that is germane to Merleau-Ponty’s in *The Structure of Behavior*. That is, I too, after explaining the problematic in McDowellian terms (Chapter 1), began with Dretske for precisely this reason. He understands behavior in terms that are neither purely psychological or causal but which are explicitly understood as dynamic processes. Dretske’s account might be too rigid for Merleau-Ponty’s point of view but provides us with a necessary dialectical starting point from which the limitations of each perspective can be more clearly illuminated.

3.2 Differential Availability, Nature, and Value: In-between “Full Spontaneity and Mere Mechanism”

As I read him, in *The Structure of Behavior*, Merleau-Ponty is suggesting that we can gain insight into our intentional relationship to the world, not by staying at one level of description or prioritizing one way of understanding it over another. Rather, by investigating the explanatory scope and relevance of each theory he shows us what insights can be drawn from it, and then elucidates how such theories further problematize rather than resolve our understanding certain aspects of our problematic. This is obvious when tracing the multiple dialectical moves he makes throughout the text. However, the notion of *gestalt* as something ontologically basic, powerfully eliminates the need for the sort of dichotomous thinking that fuels ongoing debates of this sort. The debate between Dreyfus and McDowell ends up making it seem as if we have to choose between the following two possibilities:

reductionism, is proposing an account of cognition which is dangerously equipotential. As I mentioned, an evolutionary account of the mind – which any scientific one must be – is vehemently against seeing the mind as equipotential in favour of one which is composed of functionally specific modules.

1. Conceptual capacities are somehow ways of transforming non-conceptual embodied coping into warranted empirical judgements. This is Dreyfus's position and is explicitly stated in his presidential address when he states that "the time is ripe" to "begin the challenging collaborative task of showing how our conceptual capacities grow out of our nonconceptual ones – how the ground floor of pure perception and receptive coping supports the conceptual upper stories of the edifice of knowledge"⁵².
2. Conceptual capacities are *always* operative in experience whether explicitly or not – the character of experience is thoroughly permeated with rationality. Therefore, there is no distinction between the ground floor of pure perception and that of discursive reasoning that is relevant to our understanding of Intentionality. This is, of course, McDowell's position.

But Taylor suggests a third resolution, which if carefully interpreted, better captures the value of the relevant phenomenological insights:

1. "There is something in nature between full spontaneity and mere mechanism"⁵³.

To my lights, this should be our target and seems, at first glance to be what Dreyfus *and* McDowell are hoping to accomplish. Dreyfus, by explaining that pre-reflective coping is not just mechanical response, though it *lacks* spontaneity, and McDowell, by explaining that pre-reflective coping is not just a mechanical response *because* it is inextricably permeated by spontaneity. Furthermore, Dreyfus seems to be ignoring that McDowell's intention is to ensure that 'full spontaneity' is nonetheless constrained insofar as "[w]e need to conceive this expansive spontaneity as subject to control from outside our thinking, on pain of representing the operations of spontaneity as a frictionless spinning in the void"⁵⁴. Of course, McDowell says this while emphasizing that the desired

⁵²Hubert Dreyfus, "Overcoming the Myth of the Mental," 61.

⁵³Charles Taylor, "Foundationalism and the Inner-Outer Distinction," 111.

⁵⁴Joh McDowell, *Mind and World*11.

friction cannot be achieved by means of the sort of epistemological foundationalism expressed by the Myth of the Given. In any case, this has already been elaborated upon and our current target is to find a means of figuring out how resolve the false dichotomy his conflict with Dreyfus represents. For in doing so we might find a way of ensuring that our body and mind share the same grounds of intelligibility.

To achieve this, we need to understand McDowell's project with greater care. Throughout this thesis I have emphasized the problems with his approach but at this stage it is important to stress the nuanced depth it also contains. McDowell, following Kant, is trying to ensure that spontaneity and receptivity operate in tandem. As such, despite its autonomy, spontaneity is necessarily answerable to the world – this is why he is so focused on ensuring we can preserve its autonomy without “slighting the independence of reality”. McDowell's insists on his position “precisely [because] it enables us to acknowledge that independent reality exerts a rational control over our thinking, but without falling into the confusion between justification and exculpation that characterizes the appeal to the Given.”⁵⁵

So first, let us elaborate on what is wrong about Dreyfus's interpretation of McDowell before emphasizing what I think McDowell has gotten right.⁵⁶ Gardner's focus on the way these two authors erroneously take themselves to be working on the same problem points us in the right direction. Conflating content *qua* epistemic feature with content *qua* phenomenal or psychological feature is the essential thing that gets Dreyfus and McDowell into such a terse and puzzling debate. This is why I mentioned that Dreyfus's attachment to the notion of content at all – his novel appropriation of the phenomenological thinkers to make claims within the contemporary field ‘philosophy of mind’ – leaves

⁵⁵*Ibid.*, 27.

⁵⁶I should emphasize that I agree with a great deal of Dreyfus's claims insofar as he, along with Taylor, is right to point out the necessity of embracing phenomenological insights as a means of escaping his ‘interminable oscillation’. The previous sections aimed to show this agreement. However, I still think that Dreyfus in particular – more than Taylor – has misunderstood essential parts of McDowell's picture. As such, the reader should not be surprised if my criticisms of Dreyfus's reading also involve some affirmations of his own position. The aim is to show how they can both be right about their respective insights and wrong about one-another.

him with the problem of having to affirm ‘non-conceptual content’ as an objection to McDowell based only on the fact that one is not actively deliberating in certain situations. Even in his later, “The Myth of the Pervasiveness of the Mental”, and despite his earlier acknowledgement of having misread McDowell, Dreyfus continues to try to point out cases in which the experience of being human doesn’t involve overt conceptualization. He keeps stressing these as if they, on their own, are enough to invalidate McDowell’s position. To be sure, he goes further in this paper, and doesn’t only emphasize instances in which experience lacks overt conceptual content but discusses how socialization *shapes* human life in a way that is *meaningful* but not conceptual. That is, he, with good reason, emphasizes that McDowell’s account of second nature, restricts socialized behaviour of *all kinds* to “rational behaviour, which in turn depends on mastering a language”⁵⁷. And this, as a critique of McDowell’s lack of a developmental story by which second nature is acquired, is one which would genuinely threaten McDowell’s position if it were one that sought to give such a story (as mine is). But remember McDowell’s intentions as a quietist, despite my claim that he fails to meet them, aim to ensure that experience is the sort of thing that can act as a rational constraint on deliberative, inferential, and verbally instantiated empirical judgements. He is trying to bring into focus the fact that our experience of the world, prior to any philosophical deliberation, is saturated with the potency of judgement. It is not to say that we need to be conscious of every reason or conceptual content in order for one to be present in experience. It is to suggest that experience is *epistemically fertile* or *potent*; it is the sort of thing that has the intrinsic quality of being rationally organized. Nonetheless, McDowell’s account remains dubious without an explanation of how, in his account of intentionality, the acquisition of second nature *endows a certain creature with experience while denying all others of it*. As I said before, as soon as McDowell starts speaking of us as animals his theory must then demonstrate how what he is saying is compatible with our understanding of ourselves as

⁵⁷Hubert Dreyfus, “The Myth of the Pervasiveness of the Mental,” 23.

biological systems.

So, McDowell is emphasizing that *all human experience, whether you are good at articulating it or not*, has the potency of being articulable or brought into relief as a series of reasons. These can include reasons for action as well as those for verbal reports even if a particular person never learns to articulate them. That is, McDowell's emphasis that the conceptual is not the specific *description* of people's verbal reports in their particular language but that, as language speaking creatures, the question of "why does this situation seem to have these properties? How can I get a better understanding or grip on the situation? Etc." are interrogative attitudes which are always available to us. In the following chapter I will argue for why we should understand the experiential manifold of human organisms as saturated with what I have called *biological interrogatives* which distinguish us from other creatures. But this requires that we find a means of reconciling Dreyfus's phenomenologically inspired notion of pre-conceptual coping, McDowell's epistemological concerns, along with the course grained descriptions of the so-called bald naturalists. We must ensure that such a unity is not only possible but necessary if we are ever to get a clearer understanding of the problem of intentionality or related questions regarding the constitution of human nature. Drawing a schematic of what such a theory might look like, using resources drawn from the main thinkers we have encountered so far, is the final desideratum of this thesis. Questions of mind and meaning, knowledge and reality, are still ones to which there has been no common convergence. The study of human nature, or what we might like to call, the 'human sciences (hard and soft)' is a collection of pluralistic methodologies, histories, and frameworks. Philosophy tries to reel everything in, trying to be the most general of all. However, the time is ripe for the academic world as a *whole* to see the study of human nature as the most elaborate and multifaceted object of study possible. Recognizing this, trying to see why some people want to 'save the appearances' while others can't wait to see them disappear, is essential to understanding the importance of the study of the creature we are and how that crea-

ture fits into the rest of this world. Ultimately, these questions end up with problems concerning the ‘ontology’ of human nature. All these discussions about how we fit into the world means that we have trouble defining certain characteristics that are common to us.

But first, a few more comments on the misunderstanding between these two thinkers are in order. This is less for the sake of further elucidating the details of their disagreement but rather provides a context in which my forthcoming model demonstrates its ability to avoid the possibility of getting into such a debate.

1. Dreyfus conflates second nature with culture whereas McDowell means something like conditions for culture.⁵⁸ We must keep in mind that second nature is not just another word for “nurture” but stands for the features of human nature which fall outside of the explanatory scope of the natural sciences. In this sense, McDowell can only be talking about the *phenomenology of epistemic import* and the *pervasive interrogative potential* contained within human experience from the point of view of the manifest image or the phenomenology of average everydayness.
2. Dreyfus fails to see the possibility that concepts may be operative in the background of coping because he (and McDowell) conflate the content of phenomenal experience with the content of epistemological justification. The former is a matter of what is presented to one’s consciousness. The latter is a matter of understanding that whatever is presented in one’s experience the potential to act as a justifier or reason.
3. McDowell, especially in his response to Dreyfus’s emphasis on tacit social norms in their second exchange which culminated in the creation of the book *Mind, Reason, and Being-in-the-World: The McDowell-Dreyfus Debate*, fails to see the possibility that the subtle and tacit norms might be constitutive features of the space of reasons. He here emphasizes the fact that ‘rationality does not inform everything

⁵⁸Nigel DeSoza, “Pre-Reflective Ethical Know-How”, 281

we do', while elsewhere speaking as if rationality need not inform everything we do, but, be informed by anything we do. This prevents him from seeing how our cultural norms, while describable and contingent systems of social organization, still have a profound effect on rationality and vice versa. Furthermore, this has to do with the metaphysical dualism between the space of reasons and the realm of law which arises as an unfortunate consequence of McDowell's 'theory'.

4. McDowell – due to this dualism, is still in his own way being trapped in Taylors I/O distinction. He fails to feel the need to bring attention to the fact that as an *acquired* trait it emerged in time due to certain causal outcomes and neurological changes in the brain and body which enable human beings to apprehend reasons in the way he'd like to emphasize we can. This is why I emphasized the linguistic turn and the biological sciences of the mind as important factors that McDowell's work is indebted to as the sort of strange analytic Aristotelian neo-Kantian quietist with sympathies for phenomenology.
5. McDowell fails to see that there is something *contingent in us* which gives rise to second nature even if an account of second nature does not consist in a description of these contingencies. Furthermore, even if the space of reasons and second nature *qua transcendental condition of possibility* stand outside the scope of naturalistic sciences, he fails to see how particular instances of conceptual shaping will literally change the manner in which the form of embodied coping is organized both materially and phenomenally. A corresponding difference in the active concepts operative within the life of an individual is also a consequence which suggests that such a person will experience the world differently. As such, second nature – while on some level describes a transcendental condition of the possibility of meaning, rationality, or ethical conduct – is still something that emerges in the ontogenetic development of a member of the species and is therefore subject to the material and historical conditions involved in their development.

6. This has to do with McDowell's failure to see how the linguistic turn and the development of the natural sciences of the mind have drastic implications in light of the considerations he is concerned with. Without recognizing that, at the very least, his work *suggests a theory to the reader even if it doesn't argue in favour of it*, McDowell then gives himself licence to ignore questions of consciousness, intelligence, sentience, (I mentioned these in the second part of Chapter 1) etc. which all relate to the notion of rationality in almost all other contexts. Even if rationality, understood in his transcendental way, is not describable, then if concepts are deployed in *describable experiences* how do we understand their relation? This is an obvious consequence of having confusions about content *qua*. epistemic condition for empirical knowledge and content *qua*. feature of experience.

While there is a great deal more that could be said about the above claims, much of it has already been addressed or suggested. Any of the above comments which have not been addressed directly are issues which will either be resolved or else, my intention is to ensure they no longer seem so pressing in light of the forthcoming elaboration of my proposed picture of intentionality as differential availability. Nonetheless, its worth stating at this stage that the complexities of our problem issue largely from the manner in which Kant blurred the lines between metaphysics and epistemology. And since intentionality is the sort of relationship between creatures which, at the very least, *appear* to know things, questions about the nature of what is known and questions about the way the knower achieves their epistemic feat become muddled.

3.2.1 Relevance and Value: Phenomenology and Non-Mythical Givens

A significant consequence of the way analytic phenomenologists wish to distinguish themselves from the foundationalism of classical epistemology, is the rendering of *value*, *valence*, and *relevance*, as 'givens' which are constitutive of the *phenomenal* world. That

is, these are the conditions under which the possibility of experiencing of a world arises. It is only when we start off with the notion of the world as a series of ‘present-to-hand’ aggregates of contextless objects that we come to think of value as something imposed upon an object by a subject. The erasure of the boundary between mind and world necessarily has this consequence for phenomenology – at least insofar as it has been influenced by Heidegger. Remember: the world conceived of as discrete objects with properties emerges only as a consequence of some interruption of pre-reflective coping, and this interruption signals the *emergence* of concepts *as mediators* between the agent and her world. As such, Heidegger insists that a “conception of reality as consisting of essentially contextless objects can arise only derivatively from a more ‘primordial’ way of being absorbed in a meaningful life-world. Such contextless objects are by-products of the ‘disworlding of the world,’ and so cannot be thought up of as the basic components from which the world is built up”⁵⁹. While there are metaphysical consequences to this statement (such as, the realm-of-law cannot be seen as exhaustively constitutive of nature or Being) what is most relevant to our purposes is the notion that foundational or ‘primordial’ intentional structures are ones which are context-dependent, value-dependent, and *intrinsically available* as a consequence of having certain interests.

In “The Myth of the Pervasiveness of the Mental” Dreyfus, quotes Heidegger stating:

[W]hat is first of all “given” is the “for writing,” the “for going in and out,” ... “for sitting”. That is, writing, going-in-and-out, sitting, and the like are that wherein we *a priori* move. What we know when we “know our way around”⁶⁰

It is such *relevance conditions* that enable the world to come intelligibly into relief at all. In the old I/O model, relevance, meaning, or value, would appear as *projections of our interests onto things; consequently*, they would take on an ontologically diminutive

⁵⁹Charles B. Guignon, Introduction to *The Cambridge Companion to Heidegger*, ed. Charles B. Guignon (New York:USA 1993), 13.

⁶⁰Martin Heidegger *Logik, Die, Frage nach der Wahrheit*, Gesamtausgabe, vol. 21. trans. Hubert Dreyfus, (Frankfurt am Main: Vittorio Klostermann, 1976), 114.

status as something akin to Locke’s “Secondary Properties”. This way of understanding the disclosure of the world in experience, while counterintuitive to our belief in a context-free “things-in-themselves”, makes a great deal of sense if we consider it carefully. First, if we follow Merleau-Ponty in naturalizing Heidegger’s insights – that is, letting the natural sciences inform our understanding of intentionality – we can see that the structure of any given *organism*’s relationship to its environment means it is selectively sensitive to certain features of the natural world. Further, each organism has conditions of *preference* which draw it towards certain circumstances that optimize those relevancies. As such, the ‘givens’ of experience are not discrete units of sensory information that provide the ‘matter’ to the ‘form’ of our empirical judgments; they do not fit with the foundationalist concerns which lurk behind the myth. Rather, they express that all experiential happenings are relational and dynamic processes by which the organism modulates its behavior until it is ecologically situated way that maximizes the availability of salient affordances to thought and action (this is one way of understanding Merleau-Ponty’s notion of maximal grip as it applies to other creatures as well as ourselves)⁶¹. This of course, will depend on its interests. As I said before, there is nothing in an eagle that could make it sensitive to the dam-building properties of wood in the way that a beaver is. They are just never going to be relevant to it in the same way.

These are the only admissible givens: givens, not in the sense of the raw content of experience, but the saliences which underlie the behavioral possibility of relating to things at all. They are given, in a revised transcendental sense, insofar as they act as conditions of relevance, or domains of intentional possibility. *They* are foundationally

⁶¹Hubert Dreyfus, “Merleau-Ponty and Recent Cognitive Science” in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, United Kingdom: Cambridge University Press 2005), 137. It is worth noting that ‘salient’ here is a neutral term with respect to valence even if it implies it. That is, salient is a way of describing something being in the creature’s interests and some of these will be things that are in its interest to avoid while others will be in its interest to act upon in some way. The most obvious examples of salient stimuli of this sort would be predators and nutrients; without an ability to successfully cope in a way that reduces to probability of being killed by the former and increases the probability of acquiring the latter the likelihood for survival is slim.

responsible for an organism's ability to direct their perceptual, cognitive, and motor resources towards and away from relevant features of the environs. Such capacities bring into relief structural relations between organisms and affordances. They provide it with the means of estimating and evaluating its course of action based on how the organism is structurally constituted. This is why relevance terms describe domains of intentional possibility; without them, there could never be natural events in which the world is experienced by a creature. No finite being could ever experience the world without having that experience be constrained by standards of relevance which determine what sorts of things are eligible occupants of that experience. Furthermore, such capacities do not need 'epistemic approval' or the intervention of discursive justification in order to be foundationally operative; they are foundational in an ontological sense. Consequently, it would be wrong to think of such givens' as projections of the organism onto the world – this would defeat the purpose of the laborious efforts required to rid ourselves of the mediational picture. Understanding the lives of creatures as structured processes suggests that their overtly intelligent behaviour (relative to their respective task domains) expresses, at the very least, that awareness, understanding, and intelligence are not contingent upon conceptual acquisition. To this end, it is important that these domains of intentional possibility be understood as 'embedded' in what is often called 'pre-reflective background'.

The 'pre-reflective background' can be understood as the general architecture of the world which is so familiar that it involves basic modes of understanding which we don't ever really need to even notice we have. The way the brain is, for example, always aware of how to exercise precise control over the body and ensures that most of the time we step in the right place, reach far enough to grab our glass, (so long as we are physically intact and neurotypical) is something we barely need to think about. When we reach for our wallet or operate our sink, we often do so without deliberation even though these imply a whole set of complex infrastructural relations we take for granted

as operative each time we use them.⁶² Even the economy and plumbing infrastructure are features of a much more expansive undelimitable background which, “couldn’t all be focussed on, not just because [the pre-reflective background] is very widely ramifying, but because it doesn’t consist of some definite number of pieces. We can bring this out by reflecting that the number of ways in which the taken-for-granted background could in specific circumstances fail is not delimitable”.⁶³ The example regarding plumbing emphasizes how the dynamic ecological changes, discussed in the next chapter, ensure that our ongoing coping is historically situated and that our capacities to know and act are dependent on such historical contexts. However, for the time being, our focus is on sentient organisms in general.⁶⁴

Since other animals, inhabit the same world we do, they too depend on a pre-reflective understanding of the undelimitable background in order to do what they do.⁶⁵ Some examples include the basic negative and positive valences which render food desirable and bodily harm undesirable, sensory-motor competencies that enable, for example, the pigeon’s tacit understanding of aerodynamics in flight, and other such means by which the

⁶²Regardless of whether Churchland’s model is exhaustively accurate it is worth noting that his emphasis on the manner in which an activation space becomes sculpted explains how our brain might come to be so unreflectively content at dealing with enduring features of the world. He makes explicit reference to how unreflective coping can be explained by his theory and even mentions Dreyfus on page 50 of *Plato’s Camera*.

⁶³Charles Taylor, “Foundationalism and the Inner-Outer Distinction,” 113.

⁶⁴I will return to Taylor’s point and its relationship to the McDowell-Dreyfus debate in the following chapter. In particular, how it is that we can understand these basic forms of coping which we share with other creatures in a way that endows us with access to the space of reasons. For now, I will just mention that nearly all phenomenological thinkers take this wholistic pre-reflective background as a general condition for the possibility of discrete propositional thinking. The cartesian error is then to start with the latter with the aim of retrieving the former.

⁶⁵This is true despite the fact that the differences in conditions of relevance will give different organisms distinct forms and degrees of accessibility to certain features of the world. While there will be some invariants that feature in the pre-reflective understanding of any complex organism (such as certain temporal and spatial features) much of what is ‘naturally understood’ by one organism will differ from another. Fictional tales involving animals – especially those designed for children – often make this obvious. I’m reminded of Dr. Seuss’s *Horton Hears a Who!* where an elephant is capable of hearing the tiny voices of a civilization existing on a spec of dust while the other animals ridicule him for his concern. Thus, the elephant in the story only hears them because he *values* life and because he has the requisite organs to sense them. Even if the other animals valued life as much as he, they would not be able to *know of it* due to the differences in their organic structures. Consequently, his concern for a spec of dust remains absurd and unintelligible from their point of view.

structure of the organism ensures that it is capable of coping with its environment. Such facts evidence a pre-reflective understanding of the indefinitely extending background in which it is embedded. Understood thusly, there is no fundamental discontinuity between an organism and its world, since this relationship must be understood as “holistic from the start. [t]here is no such thing as the single, independent percept. Something has this status only within a wider context which is understood, taken for granted, but for the most part not focussed on”⁶⁶. Furthermore, it provides a clear means of seeing how we are related to other organisms to varying degrees. This is, in part, because the pre-reflective background is one instance of how Merleau-Ponty’s ontologization of gestalt retains a transcendental character. His point is to emphasize that, intelligibility is the consequence of an ontological interdependence between the organism and its environment. As beings-in-the-world, animals ‘know their way about’ in the way that involves what Taylor calls ‘pre-understanding (which is close to pre-reflective know-how in Dreyfus though it exhibits some significant differences that will be elaborated upon in the following chapter).

3.2.2 Transcendental Attributes of the Phenomenological Picture

We now are starting to have a rudimentary idea of how transcendental insights and intentions are carried forward into the phenomenological tradition. The context-free items described by the natural sciences – especially physics and chemistry – cannot be rendered intelligible in an absolute sense; for how could they be known, experienced, or sensed without having been contextually dependent on the conditions of possibility the knower imposes on them? Merleau-Ponty expresses this transcendental concern in a way that demonstrates a keen awareness of the problem of starting with contextless sensory objects, which, as in traditional empiricism, shapes the behavior of the organism

⁶⁶Ibid.

by way of repeated stimulus which eventually reap the ‘correct’ response⁶⁷. This suggests a connection between his critique of ‘reflex theories’ of behavior and McDowell’s rejection of the notion of ‘sheer receptivity’ or scheme/content dualism. In both cases the authors are suspicious of theories which suppose that the determination of behavior, experience, and thought, rests on an extra-conceptual and contextless stimulus to which the organism is passively subject.

In *The Structure of Behavior*, Merleau-Ponty deals with this explicitly. First by quoting the German physician Victor Von Weizscker, stating, “the reflex carries within itself the condition(s) of a correct localization movement” and posing the following question:

⁶⁷ Again, note the similarity between the theory of reflex that Merleau-Ponty is critiquing and Churchland’s n-dimensional vector maps. In both cases the repeated exposure to certain sorts of stimuli are seen to be necessary and sufficient to account for intentional relationships between the organism and its environment. While I omitted Churchland’s emphasis on Hebbian learning, whose catchphrase is “neurons that fire together wire together”, such a view of how repeated stimulus shapes cognition appears to me as a neurocentric equivalent to the theory of reflex which Merleau-Ponty is here criticizing. (*cf.*, Chapter 3 of *Plato’s Camera*.) Furthermore, the tendency to build theories which regard the stimulus as the determinant of the mental life or behavior of a creature almost always reflects a desire to *get rid of the appearances* due to the fact that our best science has reaped its greatest rewards by doing so. In the case of early behavioral psychology, the aim was to ensure that the study of the nebulous problematic, “the mind”, could take on the increasingly respectable status of an empirical science. This of course led to famously absurd conclusions like “pain *is identical to* pain behavior” and nothing more; what makes this absurd is that the explanandum of subjective pain experience was jettisoned in favor for the more reputable explanans of the natural sciences. I would go so far to say that many such thinkers, especially in the early 20th century but in ours too, were trying to ensure that the study of life and mind could keep in step with the radically successful march of science fuelled by industry (and pragmatic industriousness). Consequently, it is no coincidence that Quine, who was himself a behaviorist (and an eliminativist with regards to a wide variety of what many of us would call subjective or mind-dependent states) and the Churchlands regard the natural sciences as exemplars of what it means to know anything at all (despite their being rather recent sorts of human activity in the grand scheme of things). Nonetheless, I think it is worth considering whether these attitudes are fundamentally grounded in reason. Might it be that certain people are psychologically drawn - due to nuanced and idiosyncratic personality traits and life experiences - towards trying to get rid of the appearances or else to save them? It is clear that both these authors regard the natural sciences as the only sort of trustworthy mode of investigation available to the species. They thereby take the context-free objects - uncontaminated by subjective, personal, or ‘inner’ phenomena - as the only possible building blocks of such phenomena. Other thinkers, like Davidson or Rorty go in the other direction. The tribunal cannot, for these latter thinkers, be understood as issuing from the causal world since the causal world lacks the evaluative and normative dimensions required for it to be a tribunal in the first place. On the other hand, unless the context-free world is in fact the arbiter of empirical truths, we succumb to the frictionless that McDowell is concerned about. The tendency towards the totalization or elimination of natural science in our investigative practices does not appear to be based on an appreciation of the objects of our investigation but on our own psychological tendencies towards certain modes of inquiry and certain types of thinking. The apparent mutual exclusivity of so many competing frameworks within contemporary philosophy appears to me unacceptable on the grounds that what we are studying is too multifaceted to be reduced to a single model, whether biologically reductive or staunchly anti-reductive.

“[f]rom where does it get them since they are not immediately given with the local stimulation?”⁶⁸ Later in text he answers this is by suggesting a sort of nativist account of organisms which possess “a ‘sensory-motor *a priori* [...] which differ from one species to another”⁶⁹. Taken this way, the idea of a stimulus as something independent of the organism is rendered unintelligible:

The true stimulus is not the one defined by physics and chemistry; the reaction is not this or that particular series of movements; and the connection between the two is not the simple coincidence of two successive events. There must be a principle in the organism which ensures that learning experience will have a general relevance.⁷⁰

This may seem, at first glance, *too Kantian* or at least expressing a sort of anti-realism about the natural world. Here we find that the objective world is somehow dependent on the structure of the subject or organism. Aren’t we back in a sort of transcendental idealism which is empirically real? Not quite. Merleau-Ponty’s willingness to even speak about *organisms* rather than *Transcendental Subjects*, *Dasein*, or even *Agents* is quite out of place both within the continental vein of the Kantian legacy and the Analytic one (for the most part). In particular, the *ontologization of gestalt* allows us to understand now more than ever, why there are problematic outcomes issuing from dogmatic attitudes in the philosophy of mind. In its most general form, Kantian or critical thought renders the world’s intelligibility as a consequence of the conditions set by the intelligibility criterion which subjectivity requires for the world to be presented to *anyone* at all.⁷¹ Consequently, the world – despite Kant’s attempts to comfort his readers about its reality – is still rendered in a way that appears arbitrated by the subject. In this view, experience can be no tribunal. Instead the subject is rendered as that which evaluates

⁶⁸Maurice Merleau-Ponty, *The Structure of Behavior*, 29. I will elaborate on the role of transcendental thought in phenomenology in chapter 3.

⁶⁹Ibid. 100

⁷⁰Ibid. 99

⁷¹Of course, by “anyone” Kant here means a rational agent possessing the transcendental conditions of experience.

the testimonies of experience and judges them according to its own standard of value: inference, rationality or conceptuality. On the other hand, the ‘restrictive naturalists’ have a causal currency which determines which proposition is worth betting on based on its ability to participate in a game of modeling and anticipating complex causal relations. This is, of course a reframing of McDowell’s problem in light of the insights we have gained from Merleau-Ponty and Taylor. The phenomenological picture has thereby provided us with a means of understanding the biological constitution of the organism in a way that makes it impossible to deny that each creature has a nuanced, non-inferential accessibility to the world. The world is what shaped the organism and the organism is what must live in the world. It need not merely represent that world but live within it, and the demands of living require at a pre-reflective familiarity with its enduring structures.

With the ontologization of gestalt we find a reciprocal shaping of the structure of behaviour by the world and a shaping of what Thomson calls “the sensorimotor world” in which that behaviour is active.⁷² The organism ‘shapes’ the world, not by constructing it, but by bringing into relief gestalt structures which enable it to successfully cope with the proximate goals of evolutionary theory. These gestalt structures are the specific set of affordances and obstacles that an organism must at least be minimally capable of coping with in order to survive for long enough to achieve the ultimate goal of reproductive success. Understood in purely material terms, ‘surviving long enough’ means sustaining the structural integrity of its body through its ongoing activity. However, the organism is also shaped – by way of its evolutionary inheritance and the ontogenetic development that issues from this – by structural features of the environment in which it evolved.⁷³

⁷²Evan Thomson, *Mind in Life*, 59.

⁷³This is of course in two senses. One is that which is responsible for the phylogenetic development of its species due to dependence on the selection pressures in its environment of evolutionary adaptedness. The other is due to how the ecological conditions of a particular member of a species influences its ontogenesis. Merleau-Ponty does not speak in these terms so this must be understood as my own appropriation of the ontologization of gestalt in light of insights taken from evolutionary biology. The following chapter will elaborate on this in more detail.

So, the ecological determination of the conditions of selection for any creature somehow implies that, as a contingent outcome of various causal processes, organisms are nonetheless ‘logically ordered’ to exist (as dynamic processes) within and by means of the material conditions of the environment (which are also dynamic processes) in which it evolved. Consequently, the behaviour which defines an organism and its corresponding environment bring into relief certain rhythms and structures – infinitesimal fractions of the total order of things – in a way that shows the intelligibility of the world to consist neither in some internal representation of the world nor in some external determination of the world on the mind. Rather, intelligibility is a structurally inherent ontological feature of the universe which is brought into relief by the existence of living things. So, the structure of an organism is a transcendental condition for the presentation of the world while the world is responsible for the ontological constitution of the organism which possesses such transcendental structures. As Ted Toadvine explains succinctly:

Merleau-Ponty argues that neither approach [Kantian and reductive scientific realism] is tenable: organic life and human consciousness are emergent from a natural world that is not reducible to its meaning for a mind; yet this natural world is not the causal nexus of pre-existing objective realities, since it is fundamentally composed of nested Gestalts, spontaneously emerging structures of organization at multiple levels and degrees of integration. On the one hand, the idealist critique of naturalism should be extended to the naturalistic assumptions framing Gestalt theory. On the other hand, there is a justified truth in naturalism that limits the idealist universalization of consciousness, and this is discovered when Gestalt structures are recognized to be ontologically basic and the limitations of consciousness are thereby exposed.⁷⁴

Hence the notion of ‘first natural’ differential availability being the set of organic functions and structures responsible for the accessibility of relevant ecological features

⁷⁴Toadvine, Ted, “Maurice Merleau-Ponty”, *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2018/entries/merleau-ponty/>>. Accessed on August 15 2018.

by which an organism can ‘intelligently’ respond to its environment by directing its action and attention towards and away from features of the world that are relevant to its interests. It should be clear that the phenomenological tradition’s characterization of transcendental conditions does not succumb to the now untenable Kantian notion that the world as we know it is indebted to our minds for its very possibility at all.⁷⁵ Rather, as Evan Thomson puts succinctly:

This transcendental orientation [in phenomenological thought] in no way denies the existence of a real physical world, but rather rejects an objectivist conception of our relation to it. The world is never given to us a brute fact detachable from our conceptual frameworks. Rather, it shows up in all the describable ways it does thanks to the structure of our subjectivity and our intentional activities⁷⁶

The idea is that a great deal of what goes on in embodied coping is a consequence of the creature being bestowed with particular biological structures which gives it sensitivity to sensory items that ensure easy access to certain affordances rather than others. Dretske’s indicator semantics outlined in the previous chapter gives us an excellent means of understanding how it is that the constitution of an organism – its structural form – comes to endow it with particular sensitivities whose representational fidelity depends on its activities. Recall that for Dretske, an indicator is merely a causal dependency which *can* be exploited to represent something but possesses this dependency regardless

⁷⁵Furthermore, my earlier discussion of how we can understand contemporary developments in science as providing us access to the noumenal realm, as Churchland points out – or rather – depends on as a theoretical assumption makes a scientifically informed phenomenological picture incapable of accommodating this notion. This is in part due to the discovery of successful scientific models which violate the possibilities of phenomenal experience and demonstrate that there are features of the world which are intelligible in ways that do not depend on the Kantian conformity of the world to the structure of the mind.

⁷⁶Evan Thomson, *Mind in Life*, 82. Note that the assumption that our conceptual frameworks rest on “the structure of our subjectivity and intentional activities” insofar as they depend on particular interests and frames of reference fits with Taylor and Dreyfus’s emphasis of the pre-conceptual background as providing the structural familiarity which is transposed into the conceptual order but does not act as a mechanistic given. Furthermore, it is also neutral to the different uses of concepts by Churchland and McDowell insofar as in both cases these are describing the means by which a creature or agent comes to make discriminations or judgements which can never capture the totality of the world in the objectivist sense Thomson is referring to here; that is, the sense that objectivity is – to borrow a phrase from Thomas Nagel – a view from nowhere.

of whether it does represent anything at all. Hence, the rings on a tree will have been indicating the age of trees for longer than our species has been alive, but they did not come to represent the age of a tree until human interest came to exploit that causal dependency for the sake of representing the age of trees. Furthermore, indicators cannot *misindicate* since they are not expressions of genuine intentionality on their own. Drawing from Paul Grice he states “nothing can mean that *P* in the *natural* sense of meaning if *P* is not the case. This distinguishes it from non-natural meaning, where something (e.g. a statement) can mean that *P* without *P*’s being the case”⁷⁷ (hence my discussion of intentional failure as a condition for genuine intentional states in 1.5 of the last chapter). He compares indicators to measuring instruments, which, *ceteris paribus*, behave “in accordance with electrical and mechanical laws whose validity is quite independent of its creator’s or its user’s purposes or knowledge”⁷⁸. Mercury will expand or contract with temperature change regardless of whether we stick it in a tube and attach pointer positions to it. The quartz in a quartz clock will continue to oscillate at a frequency that indicates but does not represent time. Thus, the inclusion of some form of indicator semantics provides us with a cogent model of how nomological regularities come to play a role in a creature’s representational capacities.⁷⁹ We can understand evolved behavioral capacities as internal measuring devices with a creature’s interests, desires, and valences, as determining the ‘pointer positions’ which allow it act upon what is being represented when the *relevant* measurement is presented to them. Thus, the grasshopper’s auditory equipment doesn’t just register any old sound but a certain range of frequencies, which

⁷⁷Fred Dretske, *Explaining Behavior*, 54.

⁷⁸Ibid. 54-55.

⁷⁹It is worth noting that the word ‘presentational’ might better capture how indicator semantics will feature in my own account in order to avoid the I/O distinction outlined above. While Dretske and Churchland rely on the notion of representation as central to their accounts of intentionality, I am suspicious of this term insofar as it suggests a cleavage between represented and representor. While there are innocent ways to understand this distinction – insofar as any exteroceptive intentional relation will distinguish the intentional object from the intentional subject – it is too often suggestive of a sort of cartesian theatre. Nonetheless, it might still be appropriate to describe these causal structures as representational when thinking about them in terms of the realm of law, which describe the organism-environment relationship from an external vantage point, while reserving the notion of presentation to how this relationship features in the lived experience of a creature.

are relevant to how it is embedded in its ecological milieu. Further, even within this band of frequencies there will be some that stand out more than others with positive or negative valences that ensure the creature copes with their sources appropriately. These too can be seen as gestalt structures in which the grasshopper comes to be the ground under which the figure of it's mate's call can be intelligibly contoured.

3.3 Biology and Nomological Continuity: Differential Availability as Universal to All Accounts of Intentionality

Differential availability of the environment to the organism, as simple or broad as it may seem, is no less broad than the traditional intentional definitions of 'aboutness' or 'representation'. All traditional definitions have run into problems, as warned against by readings of Wittgenstein which eschew the notion that *all instances* of meaning, knowledge, or mental episodes share some universal defining 'property'. His notion of family resemblance, so far as I understand it, attempts to emphasise that our recognition of what is shared by these is not necessarily delimitable; a taxonomy of behaviour which categorizes some things as mental and others as not, is seen as one of the core bewitchments of language. This is why Taylor connects the notion of undelimitable background with Wittgenstein⁸⁰. But so far as we have seen, each of the thinkers we have looked at have tried to find a singular – and inevitably limited in its explanatory scope – means of defining intentionality.⁸¹ What I am proposing may at first glance, appear like much of the same: a singular means of identifying all intentional states. Nonetheless, differential availability is designed to avoid the dualisms that force us to understand intentionality as either something shared by all living creatures (as the bald naturalist suggests) or as something unique to the concept using primates which write documents of this sort.

⁸⁰Charles Taylor, "Foundationalism and the Inner-Outer Distinction", 8.

⁸¹With of course, the exception of Merleau-Ponty and Heidegger.

Besides Merleau-Ponty, none of the authors, including his analytic protgs have succeeded in avoiding such dualisms (even if they suggest that it must be done). So, the intention of this notion is not to, once and for all define intentionality, but to provide a theoretical framework which renders previous attempts to do so as misguided. The wayward theoretical approaches emerge out of the intellectual tribalism in which explanations are provided “out of materials that are unproblematically available” from their side of the lacuna between mind and world.⁸² The irony of McDowell’s suggestion that this is precisely what is at issue should be clear to the reader by now – especially in light of the discussion surrounding Patrice Philie’s paper “Intentionality and Content in McDowell”.

As I mentioned in the last chapter, I’ve distinguished two distinct forms of differential availability: first and second level. It is no coincidence that these appear to correspond to something like first and second nature. Nonetheless, they better capture how I think we should understand the relevant Aristotelian sources of this distinction from within the current *Zeitgeist*. This is because it enables nomological continuity with the rest of nature conceived of in terms of the realm of law while also showing how there is nothing strange about the *sui generis* properties of the space of reasons. The notions which McDowell employs in his appropriation of Aristotelian thought – those of capacities which precede activities and activities which precede capacities can now be clarified from within a modern context.

3.3.1 First Level Differential Availability: Capacities that Precede Activities

Basic differential availability that is shared with other creatures is the structural configuration of the organism responsible for the manner in which each creature comes to make available structural relations which can organize its behavior in conformity with its interests. This must be seen as a literal consequence of matter coming to organize

⁸²John McDowell, *Mind and World*, 94.

itself into structures we call ‘living’, ‘organic’, or ‘biological’. It must be seen as the consequence of matter *becoming* mind in a way that doesn’t violate scientific laws, fall into ‘rampant platonism’, or exhibit any other ‘spooky’ characteristics which impede it from being understood as continuous with the rest of the universe. In accepting the scientific picture at all we must see ourselves and everything else in nature as the causal outcome of the entropic distribution of matter issuing from the big bang.⁸³ We must take seriously the awesome fact that the galaxy we live in, the planet we inhabit, and the solar system in which it resides is the consequence of approximately 13.8 billion years of causal

⁸³It is relevant to note that by “cause” here we of course mean “efficient cause” in the Aristotelian sense. The importance of this fact is something which deserves more attention than can be given at present. However, I will mention a few of the relevant things that I take to be impossible to ignore within the present investigations. Firstly, we can understand the enlightenment – in the way that it is often understood as defined by the shift that Descartes *Discourse on Method* suggests – as the jettisoning of the Aristotelian notion that “one must not seek out precision in all matters alike but rather in each thing in turn as accords with the subject matter in question and insofar as is appropriate to the inquiry” (*Nicomachean Ethics*, 1098a27-29). The rejection of this notion meant that the birth of universal, quantifiable, and ‘tradition-free’ forms of knowledge became desirable and possible. It turned out that we *could* explain almost all-natural phenomena by enumerating the configuration, position, velocity, of “that which acts as a cause of that which is acted upon and that which brings about the change is a cause of that which is being changed” (*Metaphysics* 1013a30-35). Furthermore, Descartes was right that science could move towards a universal rationality which is not dependent on tradition, historical circumstance, or personal disposition; the equations of thermodynamics or even Newtonian physics are indifferent to the historical and psychological characteristics of persons. But since:

- (1) most of us now agree that Descartes was wrong to see the subject as some disembodied “thinking substance”
- (2) we see persons or agents as subjects with a history, personality, identity, and so on, then
- (3) the scientific consequences of this cartesian inkling came to show that ‘true’, ‘universal’, or ‘objective’ knowledge depended on the evacuation of the role of subjectivity conceived of as (2)
- (4) The tools which enabled us to understand the impersonal and objective world – by eliminating the role of the *person(al)* in knowledge – have come to be seen as the epistemic standard by which all other knowledge is to be measured.
- (5) A big issue in contemporary discussions within the philosophy of mind, or any philosophical enterprise which seeks to understand persons or other creatures with mental properties, is that the epistemic attitudes of the natural sciences which succeeded because they eliminated subjectivity are being used to study subjectivity itself.
- (6) All discussions surrounding reductionism, restrictive or liberal naturalism, and other familiar questions about the possibility of a causal, nomological, or scientific theory of mind appear to be – at least in part – a consequence of the history of subjective evacuation as the standard of epistemic success.

activity.⁸⁴ Further, living in an age in which we can even begin to make such claims with confidence is taken for granted insofar as its vast implications (along with the rest of those we have only recently come to understand by way of the natural sciences) have not drastically changed the way we do philosophy; or if they have, they have not done so in a way that demonstrates the importance of the relationship between these distinct forms of inquiry. The Churchlands can be understood as reactionaries to the lack of emphasis on the genuinely astounding developments in natural science that we currently enjoy.⁸⁵ McDowell can be seen as a reactionary to the growing agreement with their sentiments. I think it is right to see these scientific developments as essential to the philosophical enterprise but am also certain that they have explanatory limits at which a different sort of knowledge is essential to understanding our target phenomena. This is my own way of understanding the distinction between the ‘realm of law’ and the ‘space of reasons’: where the explanatory powers of one reach their limit, the explanatory powers of the other come to display their potency. I will elaborate in greater detail on the notion of explanatory limits in the forthcoming account of second level differential availability.

We must understand first level differential availability as the outcome of uncountable causal events, culminating in the creation of sentient life forms, so that we can capture the most general feature of what would make a physical system a candidate for inten-

⁸⁴What is even meant by ‘causal activity’ or the consequence of ‘nomological regularities’ at this scale is barely intelligible to anyone who is not familiar with the most advanced cosmological sciences of our times and I’d expect that even these individuals must struggle to comprehend the innumerable relations that these broad terms explain. Furthermore, the birth of Quantum theory and Einstein’s Theories of Relativity makes these terms all the more nebulous. What is certain though, is that our best science does not describe the world in terms of what Taylor calls ‘post-Galilean naturalism’ in which causal interactions are understood as discrete impacts of certain items on others. Brute receptivity, or the idea that sensation is just ‘impacts’ from the world, may turn out to be unintelligible in light of a richer understanding of the material universe. This is one of the metaphysical consequences of the sort of Kantian thinking Sellars, among others, subscribes to; that is, the understanding of the *noumenal realm* as that which is described by the natural sciences. As such, this gives us even more reason to be suspicious of McDowell’s rendition of bald naturalism as thinkers who situate everything in the ‘realm of law’; this term remains conceptually empty without a clear elaboration on what he means by this and without providing examples of the sort of intelligibility he associates with it.

⁸⁵This is what renders them as ‘right-wing-Sellarsians’. Since Sellars was unclear about whether the manifest image could be – given he sees it as a series of theoretical posts – eliminated due to the belief that “in the dimension of describing and explaining the world, science is the measure of all things, of what is that it is, and of what is not that it is not” (Empiricism and the Philosophy of Mind, 41).

tionality in the first place. And the notion of an information membrane seems to be the most suitable physical model to describe the way certain configurations of matter (living things) come to interact with other configurations of matter (the environment or world) in a way that allows the latter to become informational due to it being relevant or valuable to the former. So, to continue with the affirmation of a scientific attitude, one which understands all things to be part of the same continuum of events we call ‘the history of the universe’, we must then endorse evolutionary biology as another revolutionary means of understanding the natural world; in particular the configurations of matter we call living things. Evolutionary biology gave us a means of starting to understand how it is that living things and thinking things could emerge as a consequence of the same laws which govern the rest of the inorganic universe; these laws provided us with a means of understanding how certain nomological regularities caused certain configurations of matter to ‘sieve’ the world through information membranes. Hence the necessity of referring to the works of Cosmides and Tooby insofar as they attempt to exhaustively understand what has hitherto been called mental or psychological in terms of evolutionary theory. This aspect is what is explicitly lacking in Merleau-Ponty’s account and my hope is that the following chapter shows the necessity of affirming it so as to enrich the insights we have derived from his thinking.

While first level differential availability may not be sufficient to explain intentionality in the robust sense that implies agency or the existence of mental events, it certainly stands as a necessary condition for it. In particular, it enables us to see how it is that basic organisms come to respond intelligently to their environment – in a way that at the very least suggests a form of proto-intentionality – due to the evolutionary conditions responsible for their status as extant creatures. Metaphorically speaking, the process of evolution provided ‘solutions’ to the problems (selection pressures) that an organism faced in a particular ecological milieu. The structure of that organism eventually came to be one which mirrored its environment in a way that ensured that its physical organi-

zation is capable of successfully coping with the sundry obstacles within it. This means that the sensory apertures and control systems within the organism are directly suited to making available the features relevant to the proximate goals of its task environment ensuring that it can achieve these goals and live long enough to propagate. Taken simply, the organism can then be understood as a set of evaluative and predictive capacities required for it to perform whatever fitness conferring tasks might have been necessary in its task environment. In a sense, the organism is a ‘mold’ of the environment insofar as it provides negative space in which parts of that environment might be contained or received by its sensory (and post-sensory) membranes; furthermore, we can take this metaphor of ‘empty space’ which is shaped to suit the relevant objects in its environment as the set of possible behavioural tasks afforded by its physical structure.⁸⁶ As such the structure of the organism is seen to be an ontological basis for the transcendental conditions of lived experience. It is in this sense that we should understand the ontologization of gestalt by Merleau-Ponty as paving the road for the reconciliation of transcendental, biological, and phenomenological modes of investigation. The ontological or *actual structure of the entity as a part of a larger world* comes to delineate the conditions of possibility by which that world can come into relief. An organism’s *being (and becoming) in time* suggests that it always emerges against a background of antecedent causal actualizations. Starting with a priori conditions for *any* possible experience without an acknowledgement of the pattern of causal determination which directly precedes and continues throughout the life of the organism ends up making it attractive to jettison transcendental thought altogether. Ending our investigations with a nod to the causal

⁸⁶This is, so far as I understand, what Merleau-Ponty means when he talks about “virtual space”, at least in its early formulation in *The Structure of Behavior*. The organism is not just passively receptive to the world, even to space and time. Rather, it actively situates itself towards concrete space – that is, the “sensible sector” it is currently situated towards. Virtual space is a “horizon” that surrounds the properly visible expanse being abolished at the same time. He states “Each perceived position has meaning only as integrated into a framework of space which includes not only a sensible sector, actually perceived, but also a ‘virtual space’ of which the sensible sector is only a momentary aspect. It is in this way that the perceiving subject can move himself in a stable space, in spite of the movement of the eyes and body which jostle the punctual excitations at the surface of the receptors at each instant” (Merleau-Ponty, 90).

world in a way that suggests our explanandum will be accounted for by better capturing these patterns is what makes the rejection of bald naturalism so compelling. This is why I earlier quoted Merleau-Ponty's introduction to the *Structure of Behavior* where he suggests that we must proceed in our investigations by finding a means of reconciling transcendental philosophy with "realistic analysis and causal thinking [viz. scientific naturalism]".⁸⁷ The rest of the passage is telling insofar as it suggests that we must understand behavior in a way that avoids the dualism between 1) a physiological reduction which negates "consciousness" or the *subjective vantage point of experience* and 2) a transcendental reduction which negates "realistic analysis" and "causal thinking" as "an objective unity constituted *vis-à-vis* consciousness".⁸⁸ The affirmation of natural science shows that it is impossible to reject the manner in which it has captured the substantive, ontological, or causal analyses which it has brought into view within the last century. At the same time, we must remember that these sorts of investigations, as I elaborated in footnote 74, have achieved their universality and the right to be dubbed 'objective' due to their ability to abstract the subject away from their analyses of the world.

If we first understand the dynamic structure of an organism's behaviour, in its simplest form, as constituted by information membranes that provide that creature with differential access to the layout of reality, then we can achieve a means of avoiding the apparent incommensurability between the transcendental and scientific approaches in question. First of all, this is because the notion of a membrane – something which is *selectively* permeable – implies at the very least the notion of *valence* and at the very most the notion of *value*. Insofar as a selectively permeable membrane has preference for (or has a structure that gives it access to) certain things rather than others – we can understand it as possessing a basic form of valence. Even simple anaerobic bacteria have conditions of preference without which they could not survive – this is not to say anything about whether such simple life forms are conscious or even sentient but to sug-

⁸⁷Merleau Ponty, *The Structure of Behaviour*, 4-5.

⁸⁸*Ibid.*

gest that valence is a basic feature of any living thing. Valence is often, if not always, realized in the form of a membrane which determines which aspects of the world that thing is drawn towards or from. Such a structure is then certainly also operative in cases in which a thing *does* have experience, consciousness, or intentionality.

Chapter 4

Naturalistic Foundations of Epistemic Agency: Second Nature as Dynamic Ecology

4.1 Introduction

This thesis seeks to reconcile the dichotomy between philosophical approaches that totalize and those that eliminate the role of natural science in their understanding of intentionality. In particular, it aims to show a continuity between the causal descriptions of restrictive naturalists and the normative emphasis of liberal ones. The lacuna between Sellars' manifest and scientific images of human nature has compelled philosophers to remain steadfast in their commitment that the discipline should stay squarely on either side. Thus far, we have seen arguments which attempt to convince us that philosophy has no business describing intentionality in causal terms or else that it *must at least begin if not end with such a description*. In what follows I will attempt to draw a schematic of how we might affirm the causal picture in a way that necessitates the role of the normative one.

As we saw in the Chapter 1, McDowell is concerned with resolving a tension between a 'disenchanted' view of nature on the one hand, and the *sui generis* character of human nature on the other. It is important to emphasize that nature is, from McDowell's point of view, disenchanted when understood as the totality of descriptions given by the

natural sciences. That is, the fact that natural science has provided us with such precise descriptions of the natural world is the starting point from which McDowell's problem arises. The supposition that we have now discovered the fundamental building blocks of the universe – or are at least capable of rendering these intelligible in a way that vastly surpasses previous eras of scientific thought – is what makes McDowell so concerned about the place of human nature within it. He is not alone in his concern that this impersonal description of an austere and mechanistic universe might expel the personal attributes of lived experience from the world. There are numerous 'rebels against bald naturalism', in both the analytic and continental traditions of philosophy, who are concerned with what might be lost if we take these scientific achievements as exhaustive in their explanatory scope. All anti-reductionist authors are in some way or another concerned with this. In fact, many authors in the continental tradition were dismissed by the early analytic philosophers for their refusal to see the achievements of science and mathematical logic as the ultimate philosophical panacea. As Charles Taylor puts it:

It is now fashionable in virtually all philosophical milieux to be extremely impatient with this way of thinking [McDowell's], and to claim to have transcended or "deconstructed" it. But McDowell is rightly unconvinced by the loud cries of victory arising on all sides. It is all too easy to think one has laid the problems to rest, even escaped the image, while remaining prisoner of its assumptions at a deeper level.¹

I think McDowell is right to be suspicious of this dimension of the current zeitgeist. We do find thinkers who take traditional philosophy to have been rendered irrelevant, either by the emphasis on the progress of science, or by the emphasis on the inescapably subjective, historically contingent, or relativist nature of science as a subset of human practices.

This chapter seeks to show how, by recruiting the phenomenological thinkers to which the last chapter was devoted, we can emphasize the importance those dimensions of lived

¹Charles Taylor "Foundationalism and the Inner-Outer Distinction", in *Reading McDowell: On Mind and World*, ed. Nicholas H. Smith (New York, NY: Routledge, 2002) 107.

experience which escape the scientific picture. However, this requires that we accept that the phenomenological and scientific pictures are not only compatible but mutually reinforcing. This structure allows us to trace a nomological continuity between first and second nature albeit in a way that has the consequence of requiring an affirmation a phenomenological picture understood in McDowellian terms. That is, it aims to show how the scientific picture of human nature, sufficiently understood in its causal consequences, gives rise to conditions that render the experience of being human as something which cannot be fully captured in these causal terms. Intentionality, in the robust sense McDowell is talking about, must be understood from the perspective of an *agent of experience* insofar as the space of reasons renders the world according to uniquely human modes of relevance and interest; that is, in interrogative terms which involve the normative determinations that McDowell takes as necessary and sufficient to account for our target phenomena.

4.2 Distinguishing Human Nature: A Metaphysically Innocuous Account of *Sui Generis* Properties

The question of what distinguishes human rationality from the intelligent behavior of other creatures has played a central role in our discussion so far, with a particular emphasis in chapter 2. We are still left with the question of whether there can really be anything genuinely *sui generis* about human thought if we are to consider it as part of the same natural phenomena of which all other organisms and items are a part. If we take the view of the bald naturalists we are forced to consider that the mental life of human beings is of the same kind as other animals but with a greater degree of complexity. The decomposition of our cognitive life into more fine-grained biological features – aggregates of Cosmides and Tooby’s ‘special purpose programs’, Dretske’s structuring causes, or Churchland’s high-dimensional maps – suggests that human beings only differ

in the quantity and scope of these functional systems. Furthermore, the suggestion that often follows from this claim, especially as it is understood by authors such as Cosmides and Tooby, is that understanding human nature requires no unique methodological or conceptual assumptions. It can be studied in the way that we study all other creatures and for this reason many thinkers agree with Cosmides and Tooby in espousing a total rejection of the importance of the social sciences and humanities. From their point of view, studying human nature in any non-scientific way is either pointless (as expressed by Cosmides and Tooby's polemic against the SSSM) or remains in the realm of the aesthetic or interpretative which may be interesting but not insightful. For example, the value of reading literature as a means of getting a better grip on human nature disappears by being relegated to the realm of entertainment or aesthetic satisfaction.

On the other hand, an emphasis on the space of reasons or the manifest image requires that we investigate human nature from the perspective of our experiences as living beings. The ordinary "world of tables and chairs, of institutions, of persons, and so on"² is not usually best understood in terms of the posits of scientific theories. A clear expression of this can be seen in the different experiences a person might have when seeking help from a psychiatrist as opposed to a counsellor or psychologist. While the former commonly assesses mental illness as a biological phenomenon, one that can be remedied by the intervention of drugs which causally induce changes in neurochemistry, the latter does so by interpersonal investigations into the thoughts and experiences of the individual. What might a psychiatrist learn from reading the journals of her patient? And what might a psychologist learn from a closer understanding of the neurochemical background operative in what ails their patient? While it may be true that some psychiatrists do embrace both ways of engaging with individuals, common experience appears to suggest the contrary. After expressing a list of symptoms or filling out a questionnaire, a prescription is filled and what is experienced as personal strife comes to be remedied

²Patrice Philie, "Intentionality and Content in McDowell", 672

through the impersonal effects of psychotropic drugs. These claims are not an attempt to criticize either of these therapeutic methods but to emphasize that the limitations of each has to do with whether the field is founded upon assumptions which are at home in either the realm of law or the space of reasons.³ As such, this is only one instance of many, in which finding a reconciliatory ground between these two ways of understanding human thought and experience, has value which extends far beyond the scope of philosophical questions about intentionality.

Even so, understanding human nature from any perspective that does not easily conform to the quantitative and causal analyses of the natural sciences remains philosophically problematic. The question of whether the character of human thought and experience is *sui generis* depends on whether we understand agency, rationality, and freedom, as so radically different from the intelligent behaviour of other creatures, that they cannot be understood as organic in the sense intended by the biological sciences. This is McDowell's point. His desire to extend the scope of what is called natural aims at preventing the distinguishing features of human nature from appearing as an 'occult power'. That is, the picture that McDowell wishes to free us of is one which suggests that, if rationality is structured by something other than what is captured by natural sciences then it is de-facto non-natural. But the familiar experience of rational thought

³The following passage from the Psychiatrist R.D Laing suggests a similar concern: "One's *relationship* to an organism is different from one's relation to a person. [...] The science of persons is the study of human beings that begins from a relationship with the other as person and proceeds to an account of the other still as person. For example, if one is listening to another person talking, one may either (a) be studying verbal behaviour in terms of neural processes and the whole apparatus of vocalizing, or (b) be trying to understand what he is saying. In the latter case, an explanation of verbal behaviour in terms of the general nexus of organic changes that must necessarily be going on as a *conditio sine qua non* of his verbalization, is no contribution to a possible understanding of what the individual is saying. Conversely, an understanding of what the individual is saying does not contribute to a knowledge of how his brain cells are metabolizing oxygen. That is, an understanding of what he is saying is no substitute for an explanation of the relevant organismic processes, and vice versa. Again, there is no question here or anywhere of a mind-body dualism. The two accounts, in this case personal and organismic, taken up in respect to speech or any other observable human activity, are each the outcome of one's initial intentional act; each intentional act leads in its own direction and yields its own results. One chooses the point of view or intentional act within the overall context of what one is after 'with the other. Man as seen as an organism or man as seen as a person discloses different aspects of the human reality to the investigator. Both are quite possible methodologically but one must be alert to the possible occasion for confusion." (Laing, 2010, p. 21f.)

is not ordered, at least from the perspective of the rational agent, by causal laws. The *act* of thinking is an event that is of course – like all others – part of the causal order. However, even if causal structures are necessarily operative in thought, thinking itself is not the sort of thing that is *made intelligible to thinkers* by reference to causal laws. Of course, our understanding of causal laws can help us describe what goes on when people are thinking – but the fundamental fact that people’s thoughts *can and do* make sense to them does not depend on such understanding. The sense of pre-understanding that was discussed in the last chapter is important here. Without it, rationality, understood as an expression of the unique epistemological capacities which are paradigmatically instantiated verbal reports, remains something that cannot be informed by the causal background which is undeniably operative in mental happenings. Furthermore, the experiential character of those happenings generates anxieties about how to understand this apparent difference. For McDowell:

We fall into rampant platonism if we take it that the structure of the space of reasons is *sui generis*, but leave in place the equation of nature with the realm of law. That makes our capacity to respond to reasons look like an occult power, something extra to our being the kind of animals we are, which is our situation in nature. But in Aristotle’s conception, the rational demands of ethics are not alien to the contingencies of our life as human beings. Even though it is not supposed that we could explain the relevant idea of demand-*ingness* in terms of *independently intelligible* facts about human beings, still ordinary upbringing can shape the actions and thoughts of human beings in a way that brings these demands into view.⁴

But as I have pointed out in chapter 1, this way of thinking, while resolving McDowell’s epistemological oscillation, appears to leave us with a metaphysical dualism which bifurcates nature into that which is nomological and that which is normative. Reading McDowell as proposing a theory, thereby denying him of the luxury of his purported

⁴John McDowell, *Mind and World*, 83. *Emphasis mine*. Recall, the phenomenological authors do not think that such facts are independently intelligible. They are intelligible only as a ‘figure’ against the ‘ground’ of the totality of relationships constituting the organism and the ongoing background in which it is embedded.

quietism, leads us into familiar metaphysical issues concerning the reduction of mental states to physical ones. Even if he believes that he has circumvented these issues by avoiding ‘rampant platonism’, he does so in a way that is dissatisfying not only to thinkers who equate nature with the realm of law, but also to those who wish to provide arguments against such an equation. Familiar anti-reductionists come to mind, but as has been mentioned, thinkers influenced by the phenomenological tradition also provide compelling theoretical frameworks against such an equation.

Consequently, a model which avoids the epistemological and metaphysical dualisms that have been outlined so far, is the desideratum of this chapter. In what follows I will present my understanding of human history as a *dynamic array of ecological niches* (referred to as a dynamic ecology from hereon) and will employ this notion in establishing a distinction between biological imperatives and biological interrogatives⁵. My resolution to McDowell’s dualisms, in light of the multitude of other competing frameworks, will be achieved by demonstrating the following:

1. The modulation of differential availability by dynamic ecologies is the causal consequence the developmental processes which endow us with what McDowell calls second nature.
2. Second nature gives rise to what can be understood as biological interrogatives rather than imperatives. These are then the *transcendental conditions* for access to the space of reasons.
3. The experience of being a creature with these phenomenally salient interrogative characteristics is what must be meant by openness or sensitivity to the space of reasons.

⁵I have taken the phrase “biological interrogative” from a wonderful poem written by my dear friend Kirsten Gelevan which was written in response to individuals trying to convince her that having children was biological imperative that she must dutifully follow. Her poem emphasized that, as a rational agent, whether or not to have children was a question rather than a duty or imperative.

4. These assertions are compatible with the previous frameworks discussed in chapter 2, even if those frameworks are not themselves sufficient to account for the theoretical commitments I am appropriating from McDowell's work.

4.3 Oscillatory Resolutions: Aristotle, Innateness, and the Two Orders of Nature

While I agree with many of the motivations that drive McDowell to rely on the notion of second nature, his rendering of the notion leaves it as something which remains frictionless insofar as it circumscribes the character of lived experience, the nature of mind, and the totality of philosophical inquiry, within parameters that exclude important scientific and phenomenological insights into our nature. Second nature is an admittedly vague notion, one that he renders as the acquisition of the conceptual capacities required for sensory stimulus to have rational import. Second nature is what makes us sensitive to the space of reasons and allows our experiences to be rendered as capable of rational justification. Nonetheless, he merely points towards it as that which makes our responsiveness to the space of reasons possible, without explaining how or why human beings come to have this unique capacity. Ultimately, he uses it as a term to describe the sum of intentional capacities which could not be possessed without socialization; he does not recognize the more nuanced and fine-grained distinctions that will allow us to more clearly understand what it is to have acquired by socialization those supra-biological capacities which seem natural to human beings. As such, we need a clearer understanding of the precise distinction between the terms 'first' and 'second' nature before we can understand what is unique about the capacities gained by the latter. In particular, how can we understand normative constraints as operating on a biological system, namely the human organism?

This is where my use of the notion of *differential availability* comes to be most relevant. I want to emphasize that I take the inbuilt, evolutionarily generated, and genet-

ically endowed features of the human organism as the total set of *possible* experiential, behavioral, and intentional capacities of the species. This fits with Churchland's *global activation states* mentioned in the previous chapter. Notably, he emphasizes that these cannot be possibly explored within the lifetime of an individual:

It is within this almost incomprehensible volume of distinct activational possibilities [$10^{1,000,000,000,000}$ functionally distinct, apriori possible global activation states] that a given individual's moving activation-point must craft its one-shot, three-score-and-ten years, idiosyncratic cognitive excursion – that individual's conscious (and unconscious) life.

That space is far too large to explore any significant portion of it in a human life time ($\approx 2 \times 10^{11}$ distinct points, leaving fully $5 \times 10^{99,999,999,998}$ points unvisited.⁶

One of the most significant reasons of mentioning this passage is to emphasize the scope of possibilities that are afforded by the overwhelming complexity of the human mind.⁷ The scope of things it can do is genuinely unimaginable insofar as the sum of actualizations of those possibilities are too great to enumerate. This theme of the *unimaginable scope of possible intentional contents* shall be operative throughout the rest of these investigations. Further, such an understanding of cognitive scope, is essential to a genuinely naturalistic account of the space of reasons as the realm of freedom. Furthermore, I believe that the relevance of McDowell's employment of the Aristotelian distinction between first and second nature can be bolstered by an appreciation of the scope of possible brain states emphasized by Churchland. It is now appropriate to remind ourselves of what McDowell means by the relevant Aristotelian notions. The quote McDowell is most fond of in his appropriation of Aristotelian thought is from the opening passages of Book II of the *Nicomachean Ethics*. If we remember that Sellars' issue with myth of the given is an epistemological version of the *is-ought* fallacy then it is easier

⁶Paul Churchland, *Plato's Camera*, 17.

⁷One of the central motivations of this thesis is to emphasize that most authors have underestimated the complexity and scope of the problem at hand. My use of a multitude of authors with highly distinct methodological and philosophical backgrounds is due to a desire to stress the inadequacy of assuming a singular tradition or methodology could be sufficient to account for the phenomena in question.

to understand why McDowell relies on Aristotle's ethics rather than the *De Anima* to inform his theory of mind. But before we return to the problem of normativity, I must follow through on my promise to show how it can arise as a consequence of nomological continuity which is central to a causal picture of our natural world. It is now worth reiterating the relevant passage from the *Nicomachean Ethics*:

[...]in the case of those things present in us by nature, we are first provided with the capacities associated with them, then later on display the activities, something that is in fact clear in the case of sense perceptions. For it is not as a result of seeing many times or hearing many times that we came to have those sense perceptions; rather, it is, conversely, because we have them that we use them, and not because we use them that we have them. But the virtues we come to have by engaging in the activities first, as is the case with the arts as well. For as regards those things we must learn how to do, we learn by doing them – for example, by building houses, people become house builders, and by playing the cithara, they become cithara players. So too, then, by doing just things we become just; moderate things, moderate; and courageous things, courageous.⁸

We shall see that the distinction between first and second level differential availability roughly corresponds to this distinction between capacities which precede the activities and activities which precede capacities. The idea is that the distinction captures the distinction between proprioception and pirouettes; the former is required for the latter, but the form of the latter cannot be determined by the former. However, before I can elaborate on that connection there are a few remarks regarding the content of Chapter 2 that are worth now bringing into the foreground. The first of these is that a central weakness of Churchland's position is that it doesn't do much work in addressing the difference between innate representational and volitional possibilities and those which are acquired by the changes in synaptic configurations which constitute his notion of first-level learning. As I mentioned with regards to his caricature of Kant, the review by Peter Carruthers and J. Brendan Ritchie cited in support of this criticism also emphasizes

⁸Aristotle, *Nicomachean Ethics*, 1103a27-1103b3

that one of the major weaknesses of this work, despite its many virtues, is its failure to address important competing frameworks charitably. Churchland repeatedly builds strawmen that he easily fans away with a wave of his n-dimensional vector maps.⁹ Their review then emphasizes that even if his state-space theory of basic representations in the brain is plausible and even popular in the cognitive sciences:

[...] there is nothing in such an account to exclude a significant role for innateness. Churchland is resolute in opposing any such role, however, citing the small number of genes contained in the human genome when compared with the astronomical number of neural connections. But no actual nativist thinks that individual neural connections are directly coded for in the genome. Rather, all believe that innate systems result from interactions between genes, developmental variables, and environmental influences. To a first approximation, the minimal commitment of nativists in cognitive science is that some features of our neural and cognitive systems are acquired or develop without learning, rather than that they are directly coded in the genes.¹⁰

While I will not elaborate on the myriad ways in which ‘nativism’ has been understood, it is important to emphasize that Churchland’s theory fails to capture certain features of the informational relationships between organism and environment about which Carruthers and Ritchie are discussing. It is significant, for if we are to understand what might be meant by “first-nature” we are talking not only about the aspects of human life which can be captured by the natural sciences which seek to explain all extant functions that emerge as a consequence of ontogenesis but also those which can be characterized as innate. These remain important if we are going to understand the distinction between

⁹It is worth noting that many of the significant authors mentioned in this monograph employ straw-man arguments against their (poorly defined) opponents. The failure for such authors to be genuinely charitable to competing thinkers is one of the frustrations that has motivated me to embark on this reconciliatory project. In particular, we have three significant examples of this. 1) McDowell’s dismissal of bald naturalists (of which he mentions only one – Quine). 2) Cosmides and Tooby’s dismissal of the entirety of the social sciences and humanities (which, at least in my incomplete reading of their work, they do not directly address either). 3) Churchland’s repeatedly unsatisfying evaluations of both historical figures (like Kant, Hume, and Locke) as well as more contemporary frameworks (such as Jerry Fodor, Ruth Millikan, and Fred Dretske).

¹⁰Peter Carruthers and J. Brendan Ritchie, review of *Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals*, by Paul M. Churchland, *Notre Dame Philosophical Review* 44 (2012): 426.

first and second nature in a way that enables us to clarify the supposed tension between scientific and non-scientific views. There are, of course, classical issues of ‘nature’ vs. ‘nurture’ and while these are certainly related, we can discuss them in more philosophically interesting terms if we stick with the distinction between the restrictive and liberal naturalists elaborated upon in the previous chapters. We can see that Dretske’s theory has room for what is innate and, in a sense, depends on it. Furthermore, the work of Cosmides and Tooby, is essential despite some of its problematic assumptions. They exemplify the necessity of understanding ourselves as part of the same evolutionary continuum as the rest of nature. It is also clear that Churchland’s theory skips over this too quickly while also providing us with a useful schematic for understanding how it is that experience and learning modify the capacities that would otherwise be called innate. The debate between ‘nature and nurture’ is too messy and, in some sense, often too shallow, to be the focus of this chapter. The interesting philosophical question regards our understanding of the interaction between what is endowed by genetic inheritance and what is acquired through experience; in particular, how such interaction can be seen as responsible for the possibility of intentional content. I cannot hope to give a final and definitive answer to this question but I do aim to – at least in the case of humans – emphasize the interesting necessity of understanding intentional capacities as a result of both. And the distinction between first and second nature, as McDowell would like us to see it, suggests a meaningful way to understand this relationship from a philosophical point of view. So, no thought or action that I might have within my own life can be anything other than the manner in which my experiences, which are laden by social inculcation, have shaped my ability and volition to think about certain things rather than others. And this must be appreciated in a way that understands thought as an actualization of capacities which were given to me by the brute fact of my cellular constitution as a child and those which I have inherited through the tools given to me by my ecological circumstances. What is available to my mind and body, as possibilities of thought and action, are necessarily a

consequence of how what I was from birth came to be what I am now. We are interested in, for example, how it is that the word ‘intentionality’ is meaningful to me, and how it is possible for me to think *about* it. In particular, we are interested in understanding how this ability results from having requisite biological capacities which have been employed in accordance with the prescriptive dimensions of the linguistic, historical, and social factors involved in my having this word or thought as a possible content in my mind.

4.3.1 Restrictive Naturalism and First Nature

It would be easy to think of first nature as what is innate or genetically endowed – as the term ‘nature’ in the distinction between nature and nurture. It would be equally easy to see second nature as something like *culture* or *nurture* but again this would fail to capture the relevant idea which McDowell is getting at. So, what does the distinction really capture? Simply put: first nature is that which the descriptive and explanatory practices of the natural sciences can capture. Second nature is that which they cannot. This, of course, is exactly what makes second nature sound like an ‘occult power’ or something supernatural. However, we still need to clarify a few aspects of so-called restrictive naturalism – the naturalism concerned with the descriptions of first natural features of persons – before we can situate second nature in a context that doesn’t render it as inadmissibly spooky.¹¹

¹¹A few preliminary remarks are in order. Firstly, the observations made at the start of this chapter, regarding the everyday way we relate to one another, and the way a counsellor differs from a psychiatrist, hints at what second nature is all about. In particular, second nature concerns some features of human experience that (at least at our current understanding of what we call science) cannot be adequately understood by recourse to the same tools that we use to understand the rest of the natural world. Of course, culture, history, and the sundry other things studied by individuals in the humanities and social sciences are being explored by way of causal methodologies in a way that would surely make Cosmides and Tooby quite happy. But a great deal of content within these fields concerns things which are not so easily understood by recourse to those tools. This is not to say that, for example, the emergence of certain religious traditions or cultural moors are not a consequence of causal regularities; it is to say that the understanding of such traditions oftentimes need not involve a causal model for their intelligibility. Understanding St. Anslem’s ontological proof does not require an analysis of his brain or even the causes of his commitment to that proof. The study of the causal basis of second nature is of course significant. But for our purposes, the question becomes: how does a person’s ability to understand, experience, or think about certain things remain unintelligible from outside of the perspective in which the world they

The comments regarding Churchland’s failure to address nativism are particularly important. As Carruthers and Ritchie point out, “innately channeled domain-specific learning mechanism(s) specialized for faces [...] can perform at least some aspects of its function without learning”.¹² They cite several studies, some which show that human beings and macaque monkeys process facial representation using six homologous cortical regions¹³. Studies which show that both human and monkey infants can “discriminate between faces and non-faces (such as scrambled facial components at birth)”¹⁴ and studies which show that “monkeys which have never had any exposure to faces at all [...] nevertheless show capacities for fine-grained discrimination among both human and monkey faces that are close to normal”¹⁵ are put forward as evidence for the innate capacities in question. More obviously, they cite the fact that certain creatures are born with capacities whose function is ready at birth: namely animals that can walk or run at birth and who thereby demonstrate an innate awareness of the enduring causal background that Churchland takes vector activation spaces to represent.¹⁶ Nonetheless, Dretske’s understanding of representational systems as sorts of structuring causes *can* account for such phenomena. *Explaining Behaviour* provides us a wide range of examples by which the distinction between structuring and triggering causes can explain intrinsic informational capacities. These range from why trees shed leaves in the fall¹⁷, to a cricket’s sensitivity to the call of its mate¹⁸, and emphasize that an explanation which

experience is already endowed with meaning?

¹²Peter Carruthers and J. Brendan Ritchie, review of Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals, by Paul M. Churchland, Notre Dame Philosophical Review 44 (2012): 426.

¹³Tsao, D., Moeller, S., and Freiwald, W. (2008). Comparing face patch systems in macaques and humans. Proceedings of the National Academy of Sciences, 105, 19514-19519.

¹⁴Farroni, T., Johnson, M., Menon, E., Zulian, L., Faraguna, D., and Csibra, G. (2005). Newborns’ preference for face-relevant stimuli: Effect of contrast polarity. Proceedings of the National Academy of Sciences, 102, 17245-17250.

¹⁵Sugita, Y. (2008). Face perception in monkeys reared with no exposure to faces. Proceedings of the National Academy of Sciences, 105, 394-398.

¹⁶Peter Carruthers and J. Brendan Ritchie, review of Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals, by Paul M. Churchland, Notre Dame Philosophical Review 44 (2012): 426.

¹⁷Fred Dretske, *Explaining Behavior*, 46-48.

¹⁸Ibid., 149.

merely describes the causes initiating, for example, the shedding of leaves, captures only the triggering causes and underlying mechanisms thus triggered. They do not, for that reason, give us a complete explanation of that behaviour due to the absence of an understanding of structuring causes. They tell us “*how* trees shed their leaves [but not] *why* they shed their leaves.”¹⁹ As such, I take Dretske’s theory, alongside some relevant considerations from Elliott Sober and Cosmides and Tooby, to provide us with a helpful starting point from which the necessity of affirming the role of innate characteristics can proceed. Finally, Churchland’s account cannot make sense of minimal forms of informational competence or intentional potency which are possessed by simple creatures without brains such as jellyfish or bacterium. Most obvious is the case of bacterium, which Dretske cites as able to ensure that they can move themselves away from hazardous oxygen rich environments by basic mechanisms that at least warrant their being ascribed a minimal form of informational competence. Furthermore, Churchland’s account doesn’t give us a naturalistic means of understanding how the sensory layer itself comes to do its job. This fits well with another one of Carruthers and Ritchie’s criticisms, which is that despite Churchland’s claim to be an empirically informed thinker, he has limited reference to scientific research and relies heavily on “computational rather than experimental” methods.²⁰

Moreover, the notion of *differential availability of the environment to the organism*, understood as an information membrane is broad enough to encompass the manner in which nativists and non-nativists, bald and liberal naturalists, frame intentionality in its most general form. It is sufficiently organic to account for proto-intentional states in basic creatures while providing us with a means of understanding how some intentional capacities can be understood as inherent: these would be the layers of the membrane which make available certain features of the world by the mere existence of the biological

¹⁹Ibid., 45.

²⁰Peter Carruthers and J. Brendan Ritchie, review of Plato’s Camera: How the Physical Brain Captures a Landscape of Abstract Universals, by Paul M. Churchland, Notre Dame Philosophical Review 44 (2012): 426.

apparatus in question. That is, as the set of possible representational capacities that are present in us by nature by our phylogenetic inheritance and are then appropriately shaped by sensory stimulation in a way that fits with something like Churchland’s learning models. This then provides the basic first level of differential availability which is the total set of possible intentional contents, representational domains, or informational sensitivities endowed to us by our biological architecture. It is also what Cosmides and Tooby identify as the “special purpose programs” which have been ‘designed’ by natural selection.²¹

Differential availability also captures how it is that the acquisition of new conceptual resources generates novel ‘apertures’ into the world, that is, it expresses how ‘openness to the layout of reality’ can grow by increasing the number of possible things a person has informational sensitivity to. This will then be referred to as second level differential availability. Finally, I take it to fit – in this case more metaphorically – with the phenomenology of novel conceptual acquisition. When one comes to learn the nomenclature or behavioral norms of a practice, whether it be woodworking or chemistry, experience comes to have certain features become salient and available in a way that means certain things stand out in experience while others don’t. The familiar experience of learning a new skill – for example gardening- means that certain features of the garden, the tools of the gardener, and one’s body come into relief that were occluded prior to training.²²

So, on the one hand, there is a sort of first natural differential availability which

²¹With the qualification that, as I remarked at the end of chapter two, the interpretation of these as ‘programs’ is too literal a computational interpretation of our biological architecture.

²²In his paper, *Pre-Reflective Ethical Know-How*, Nigel DeSouza makes a number of exceptionally relevant distinctions which can help elucidate the relationship between first and second nature. First, he distinguishes “pre-reflective ethical know-how” from “unreflective ethical expertise” (280). What is significant about this is that it emphasizes a “sensitivity to the ethical without which we would not be able to understand what the [ethical] rules are about in the first place” and goes on to say this also applies to “pre-reflective bodily know-how”. What is important about this distinction is that it acknowledges that conditions of *valence*, *value*, and *relevance* direct a child’s attention towards those features of their social world which are required for ethical awareness. As such, first nature can be seen as the propensity to be – by the fact of biological constitution – sensitive to normative demands in a way which is distinct from Dreyfus’s emphasis on pre-reflective expertise. As I understand him, he endorses a ‘proto-conceptual’ *first natural* disposition to acquire *second natural* normative determinations and I deem this to be an essential feature of adequate resolution to our current problematic.

is independent of social inculcation. Feral humans, while rare, would in their adult states exhibit this sort of differential availability; they would still possess an information membrane which enables them to successfully cope with and cognize features of their environment.²³ Basic sensory functions, like those which ensure that the rapid growth of an image on the retina indicates that an object is getting closer, must be in place for these persons. Nonetheless, they lack many of the agential properties and normative dimensions that McDowell associates with the space of reasons. This should not, as in the case with animals and young children, imply that they lack *experience or knowledge* though it does imply that they may lack certain dimensions of freedom associated with self determination and epistemic agency. Another significant example is that of autistic savants who can apprehend complex mathematical series without social inculcation. In these cases, certain intentional contents are available to them in a way that would require training for neurotypical humans. Furthermore, there is evidence which suggests that children with autism *lack* inferential sensitivity to certain social features which neurotypical individuals possesses. The example cited by Cosmides and Tooby comes from the work of the psychologist Simon Baron-Cohen²⁴. His experiments have shown that 4-year-old children, like adults, “automatically note eye direction in others and use it to make inferences about the mental states of the gazer”; for example, they can infer that “when presented with an array of candy” which one the gazer is particularly interested in.²⁵ However, while autistic children can track eye direction correctly “they cannot use that information to infer what somebody wants. Normal individuals know, spontaneously and with no mental effort, that the person wants the candy he or she is looking at. This is so obvious to us that it hardly seems to require an inference at all. It is

²³Note the compatibility with notions of embodied coping which do not explicitly rely on the sort of inculcation into the space of reasons that McDowell associates with second nature. This helps us understand the importance of the phenomenological emphasis on openness to the layout of reality as grounded in preconceptual intelligibility of the world in terms of *affordances* rather than conceptually grounded epistemic foundations.

²⁴Simon Baron-Cohen, *Mindblindness: An essay on autism and theory of mind* (Cambridge, MA: MIT Press, 1995).

²⁵Cosmides and Tooby, *Conceptual Foundations of Evolutionary Psychology*, 18-19.

just common sense.”²⁶ Note the similarity and difference with Merleau-Ponty’s focus on “ocular fixation reflex” by which an organism directs its sight towards objects and keeps their presentations stable in its vision despite the jostling of its body. However, what is interesting about such an experiment is it shows that the embodied comportment that is required for us to be sensitive to relevant social features may not always be accompanied with the capacity to make rational inferences which rely on that embodied activity. As such, I feel it shows the importance of emphasizing the role of the space of reasons within our embodied relationship to the world.

I mention these examples in passing, as they deserve more attention and richer references to empirical evidence. However, their explanatory value should become clearer once I present my account of how first natural differential availability comes to give rise to the *sui generis* sort which depends on the influence of second nature in the ordinary maturation of human beings. This will of course, rely on a thorough elaboration of my interpretation of the relevant Aristotelian notions of capacities which precede activities and vice versa. In particular, it will help give naturalistic legs to the forthcoming phenomenological picture of the space of reasons. It is important to mention that, as we have seen biologically innate characteristics can be understood as responsible for the pre-conceptual background which frames the availability of embodied affordances.

It should be clear that the precise line differentiating innate and acquired capacities is an empirical question to which we currently have no complete answer. It is feasible that the biological sciences of the mind will eventually find a means of individuating functions which are afforded to us by the sheer possession of our biological apparatuses. This would of course also have the consequence of clarifying which of those require ‘ordinary upbringing’ in order to be possessed. In any case, it is clear that organic events which might be called an instance of intentionality, will always, in humans, require the presence of innate functions as necessary but not sufficient conditions for the apprehension of

²⁶Ibid., 19.

content. Second nature is requisite in this sense. A hominid is not an agent until they acquire it. But what makes this so? The next section will paint a causal picture of how this came to be a part of who and what we are.

4.4 The Causal Basis of Second Nature: History as a Dynamic Ecological Milieu

Human beings have managed to live in every ecosystem and have even begun to find means of living in the inhospitable conditions of outer space. We, more than any other organism, have had drastic effects on the natural world and can be understood as creatures who are at least partially defined by a capacity for active ecological modification. The term *Anthropocene*, which has recently been used to describe the disastrous effects of human activity on this planet, provides us with a powerful and terrifying example of this capacity.²⁷ As such, we are creatures that are largely defined by our ability to change the conditions under which each successive generation comes to be exposed to experiential contents. Figuratively speaking, we each receive, *secrete, emit, or discharge*, artifacts, norms, forms of speech and behaviour along with innumerable other deployments of material and social structures into the environment in which successive generations mature. For example, every object in the office in which I am writing is a consequence of aggregates of the efforts of mostly unknown individuals who, through imagination, thought, and action, engendered the unimaginable number of activities, technologies, experiences, social interactions, etc. which are responsible for their existence. This is part of the undelimitable background of our current dynamic ecological milieu.

Understanding the immensely complex set of conceptual and material conditions which enabled people to do this is mind boggling. From the creation of the various inks that colour the walls or bindings of books, to the necessary developments in electronic engineering involved in the illumination of lightbulbs, to the foundations of logic

²⁷W. Mauser. "Global Change Research in the Anthropocene: Introductory Remarks," 14.

that eventually came to be embodied in the semiconductors involved in the operations of the computer by means of which this work is being composed – all of these examples touch upon a tiny fraction of the aggregate of human efforts involved in the possibility of me being surrounded by such imminently intelligible items. And not only the possibility of my being surrounded by such items but having these items play meaningful roles in the everyday experiences and goings on that comprise the character of my life. This is not to mention the innumerable and extensive social forms of organization that are necessarily involved in the genesis of these material artifacts. Even then, this still barely accounts for the aggregates of normative shaping's which are naturally involved in the ontogenetic development of the countless persons participating in the configurations of the current ecological conditions of our historical era. I have not invented a single word even though my innermost thoughts depend on my inheritance of the languages I speak. Still, words must have been 'invented' or somehow generated by previous individuals to whom I am indebted for my ability to write this document. Again, this still is a meagre itemization of the aggregates of cognitive efforts which are involved in the dynamic historical changes in question. Second nature as a dynamic ecology is an attempt to describe the genuinely innumerable aggregates of 'secretions' which shape the environment in which an individual develops. The contingencies which culminate in the background in which a child grows into maturity determine the particular sets of sensory items to which they are passively subject. Passively subject in the sense that no person chooses when or where they are born; when and where they are born is what determines the material, conceptual, and normative resources that both *causally* and *rationaly* shape the character their body and mind.

The causal shaping is what chapter two aimed to capture in its exposition of Churchland's account of the 'sculpting' of our neuronal configurations. The rational shaping is what was emphasized in chapter 1 while discussing McDowell's rendering of the Aristotelian notion of second nature. In what follows I will attempt to show that these

‘shapings’ or ‘sculpting’ of cognitive capacities are essentially interdependent rather than mutually exclusive.

4.4.1 Second Nature as Distance from the Environment of Evolutionary Adaptedness

The picture of second nature as the cognitive causes and consequences of historical change suggests that most of human civilization can be understood as a gradual movement away from the so-called *environment of evolutionary adaptedness* (EEA) which I will reiterate at this juncture:

The EEA for a given adaptation is the statistical composite of the enduring selection pressures or cause-and-effect relationships that pushed the alleles underlying an adaptation systematically upward in frequency until they became species-typical or reached a frequency-dependent equilibrium (most adaptations are species-typical; see Hagen, Chapter 5, this volume). Because the coordinated fixation of alleles at different loci takes time, complex adaptations reflect enduring features of the ancestral world. The adaptation is the consequence of the EEA, and so the structure of the adaptation reflects the structure of the EEA. The adaptation evolved so that when it interacted with the stable features of the ancestral task environment, their interaction systematically promoted fitness (i.e., solves an adaptive problem)²⁸

This definition suggests that an organism is paired to an ecological milieu insofar as its body and brain has evolved to respond to enduring challenges to survival present in the typical environments in which it evolved. Recall how chapter two described Dretske’s RS Type III as models for how organisms came to evolve properties capable of indication, which then become recruited *for representation* due to the behavioral demands which ecologically relevant selection pressures played in its phylogenetic development. The discussion of Dretske’s ability to give us a model for innate capacities is relevant here. The set of representational possibilities and inevitable dispositions of groups of hominids can

²⁸L. Cosmides and J. Tooby, “Conceptual Foundations of Evolutionary Psychology,” 22.

be understood in terms of aggregates of his RS Type III or Sober's 'characteristic *C*'. However, the aforementioned capacity for active ecological modification implies that the problems faced by agricultural homo-sapiens came to differ from those faced by their evolutionary ancestors. These novel problems are a consequence of the emergence of *social history* (rather than natural history). Evolutionary bestowal of comparatively superior problem-solving capabilities relative to other organisms can be said to be responsible for the emergence of what I have here called *social history*. The complexity of our global activation space ensures that there are innumerable subsets of possible subsets of sculpted background conceptual frameworks which Churchland emphasizes as the primary process of learning.²⁹ Social history is then to be understood as actualizations of subsets of the cognitive and behavioural possibilities afforded by our evolutionary architecture. In fact, we can understand this process as one in which we modify the ontogenetic conditions of human development by way of our creative employment of our phylogenetically endowed attributes. As such, because the behaviour of human beings radically changes the environment in which the next generation of persons come to develop, the ontogenetic development of a modern person occurs in conditions which are a far cry from those responsible for the phylogenetic development of the species as a whole.³⁰

Consequently, we can see that each successive generation of persons comes to face a new subset of possible problems since the activity of species always modifies the conditions under which future activities occur. Aggregates of behaviours from previous generations create the social norms, artifacts, and practices which distinguish one generation from another. And because our physical architecture evolved to deal with the sorts of problems present in the EEA, the necessity of *artifice* in the solving of these novel problems was inevitable. When our fists wouldn't do, we built spears. When our grunts

²⁹As was noted in the last chapter, what Churchland means by a concept is drastically different from Kant and McDowell and, in recruiting his work at this stage, this is the sense in which I am using the word.

³⁰My references to Churchland and Dretske here only serve to emphasize that the former helps understand how the cognitive changes caused by dynamic ecologies occurs and the latter helps us understand how we could have ever begun with capacities that could cause such changes.

wouldn't, we created languages. When the natural checks on desire were insufficient we created taboo. In each case the human organism has come to rely on the ability to create solutions to problems that were not exclusively solved by the behavioural regularities proceeding from our evolutionary ancestry. Further, these solutions then come to be bestowed on future generations as a natural part of their upbringing. The role of emulation in the ordinary upbringing of human beings cannot be emphasized enough. A central part of our ecological world is the overwhelming influence of the people around us in providing us with models of thought and behaviour. That is, the normative constraints on thought and action are an inevitable part of our maturation and are endowed to us both tacitly and explicitly.

These novel solutions then create new problems which demand the genesis of new problem-solving capacities. To give a few clear examples from recent history: our creation of antibiotics was a solution that has saved millions of lives, though it has begun to generate the problem of antibiotic resistant 'superbugs' that may then threaten millions of more lives in the future. More obviously, the aforementioned notion of the *Anthropocene* demonstrates that the development of a highly industrialized civilization – a consequence of aggregates of scientific solutions to a wide range of engineering problems along with economic solutions to a wide range of resource distribution problems³¹ - has created the potential for environmental disasters which are often described under the familiar term, 'climate change'. These are just a few examples that will hopefully allow the reader to understand how the genesis of novel solutions to ancestral problems gives rise to novel difficulties that require the creation of further conceptual solutions.

This relationship between the problematic by-products of previous solutions and the creation of new ones, describes the feedback-loop responsible for our dynamic ecology. As such, the interrogative character of human experience issues from the necessity of re-

³¹This is of course an exceptionally simplified account of what gave rise to industrialized society. Furthermore, depending on one's political beliefs, what I have called 'economic solutions' might not be regarded as solutions at all. Nonetheless, a discussion of the merits of our largely capitalist and consumerist societies is not relevant to the current concerns of this project.

sponding to novel experiential happenings in order to generate solutions that go beyond our untutored cognitive responses to such happenings. The manner in which these experiential happenings require the active deployment of cognitive resources to generate novel forms of understanding is how second nature comes to give rise to the characteristics that McDowell associates with the space of reasons. This of course requires qualification and further justification which will be presented after the causal story in progress has been expressed fully.

4.4.2 Interrogatives and Exaptation

The previous section described the changing conditions in which human life transpires. We are still left wanting for an account of how this comes to distinguish the mental life of the organism subject to these changes; that is, how it comes to justify the claim that our mental life has *sui generis* properties. This requires that we introduce the notion of *exaptation* in contrast with conventional *adaptations*. Exaptation is defined as characteristics, behaviours, or capacities which “evolved for other uses (or for no function at all), and [were] later ‘coopted’ for their current role”³². That is, exaptation can be understood as the reuse of adaptations for the performance of tasks which such biological structures had not evolved for. A great deal of human behaviour can be understood as exapted. For example, the parts of the brain that I have been using to write this dissertation, along with the features of my nervous system involved in the sensorimotor task of typing, clearly did not evolve because writing philosophical theses conferred a fitness advantage on our ancestors. Though there are relevant objections to the claim that such behaviours are exapted, it is at the very least certain that the particular task was not one performed by our ancestors in the EEA.³³

³²S. J. Gould & E. S. Vrba, “Exaptation – a missing term in the science of form,” *Paleobiology* Vol. 8 No. 1 (1982) 4-15.

³³A natural objection, might be that the scope of tasks selected for is broad enough to include the activity of writing this article. One could say that parts of the organism involved in communication and fine motor coordination evolved to enable a wide enough range of activities so as to include the

However, there are other examples that, to my lights, express incontestable examples of the relevant phenomena. These are celibacy and self-immolation. Celibacy, is clearly in direct violation of the imperative to reproduce and demonstrates the ability to question whether the compelling experience of lust should or should not be acted upon. In experiencing arousal, the human organism comes to be confronted with a great deal of moral, practical, and spiritual questions about the role this desire should play in their lives. Thus, the experience of lust, for individuals no longer living in the EEA, whether celibate or not, stands as a strong example of what I have called a biological interrogative. It would then appear that, due to the ecological milieus of historical eras in which celibacy must have emerged, the problems and priorities of individuals within that society differed from those of their ancestors, and the behavioural possibility of celibacy became an alternative to the highly convincing allure of sexual activity.

The famous act of self-immolation performed by the Vietnamese Buddhist Thich Qung c, stands as one of the most powerful examples of the freedom from biological imperatives enabled by the interrogative status of our embodied experience of the world. On June 11th 1963 this Buddhist monk set himself on fire in protest of the persecution of the Buddhists by the South Vietnamese government.³⁴ Firstly, we can see the ecological conditions, under which this happened, as those political circumstances which were largely created by institutions, historical conflicts, and religious beliefs; these then serve as good examples of active ecological modification being discussed. The other thing that must be understood is the role of Buddhist practice and philosophy in enabling the monk to reject the biological imperative to avoid harm and pain. He was evidently performing this act for purposes that do not find their end in surviving progeny.³⁵ Due to the

activity I am currently engaged in. Nonetheless many authors have argued against such a view. For further reading see: S. J. Gould & R. C. Lewontin, "The Spandrels of San Marco and the Panglossian paradigm: a critique of the adaptationist programme" (*Proceedings of the Royal Society of London. Series B, Biological Sciences* 205: 581-598, 1989).

³⁴M. Gouin, "Self-immolation", 176.

³⁵I will purposely ignore the reduction of such behaviours to adaptive frameworks by those who think 'group selection' is sufficient to explain these unique instances of personal decision making. There may be some adaptive benefits to celibacy and self-immolation at the level of group selection but this is irrelevant

capacity to question the nature of his cognitive relationship to the world, this monk had circumvented the withdrawal reflex that pulls a limb away from dangerous stimuli by way of a spinal reflex that occurs prior to the intervention of the brain³⁶. I take this then to exemplify the ability, due to the need to resolve a wider scope of problems for a richer array of interests, to modify the operations of our cognitive architecture in service of ends they had not evolved to serve.

4.4.3 The Myth of Myles

The previous examples have involved familiar enough modern circumstances and phenomena. However, the question of how it was that our hunter-gatherer ancestors came to start acquiring novel behavioural repertoires might make the notion of a dynamic ecology seem exclusively appropriate to descriptions of conventional, post-evolutionary history. The following thought experiment is designed to help dissuade the reader from this view by illustrating a hypothetical scenario in which an early hunter-gatherer came to augment some of his most basic instincts:

Let us imagine one of our earliest hunter-gatherer ancestors called Myles. He is the most competent hunter in his tribe and has, by way of overpowering others, come to be feared for his tendency for ruthless retribution. By emulating his behaviour, younger males continue to challenge his authority in the hopes of securing access resources and breeding partners. Let us also imagine that Myles has killed or seriously hurt each individual who has challenged his authority in this group. This group of hominids have not yet seen an alternative to such violence. The normative constraints *partially* responsible for our moral conduct had not yet been established. Donald, is another male with incredible visual acuity who always manages to forage more successfully than other members of the tribe. One day, in a fit of rage, he attacks Myles for having denied him his fair

to my claim that their actions are responses to biological interrogatives rather than imperatives.

³⁶H. Hultborn. "Spinal reflexes, mechanisms and concepts: From Eccles to Lundberg and beyond," 226.

share of the berries that he had brought back to the tribe. The so-called *fight or flight* response occurs. Myles' hairs stand on end, the pupils of his eyes dilate, his heart rate and blood pressure rises, his liver releases glucose to provide energy to his muscles, his lungs expand and his adrenal glands secrete adrenalin³⁷. He is poised to fight. The same neurochemical processes occur in Donald who, upon remembering the mangled corpse of the last male to challenge Myles, is readying himself for escape. The binary character of this evolved reaction has served this tribe well so far. As is indicated by its namesake, fleeing or fighting have so far been observed as the only two evolved reactions to such situations.

Nonetheless, Myles suddenly realizes that there has recently been a dearth of animals to hunt and that the elimination of Donald might impair the tribe's ability to secure enough food. However, he also cannot submit to Donald in fear of being usurped or, worse, killed. His mind races in search of alternatives – the sensory event poses a question which cannot be answered by the endogenous and autonomic responses of his body³⁸. He slowly backs away towards the supply of berries he had hidden under some rocks. As he reaches for them, Donald begins to flee thinking that Myles is grasping for a weapon but Myles calls out to him causing him to look back. He sees Myles holding out an offering of berries in his hand. Perplexed, Donald slowly moves back towards Myles and accepts the offering. Their heart rates slow and the fight or flight response begins to recede. The rest of the tribe looks on in astonishment at the novel behavioural response to a familiar situation. A new behavioural possibility has been established and, by way of emulation, comes to be part of the everyday life, the *lebenswelt*, of the tribe.

³⁷J. Kagan and J. Segal, *Psychology: An Introduction*, Eighth Edition, 438.

³⁸I am here using 'mind' and 'body' in metaphysically neutral ways and am not supposing there to be some sort of *extra* mental element involved. I merely use it to describe the phenomenology of reasoning and thought involved in the construction of new solutions.

4.4.4 Biological Interrogatives, Freedom, and Spontaneity

This story serves to thematize how the distinction between biological imperatives (*fight or flight*) and biological interrogatives (*why should I fight or flee? Could there be other options?*) might have arisen early on in the history of our species. While this is a highly oversimplified example, the *flight or fight* response is present in nearly all mammals³⁹ and, following the evolutionary hypotheses, it is present because those two options are the most basic fitness conferring behaviours immediately available to the sensorimotor system. Myles' response was an alternative that did not merely require the ability to move one's body in space but also to navigate through hypothetical possibilities which involve more than locomotive affordances. A great deal of semantic and modal relations, which transcend sensorimotor opportunities, must have been cognized in order for Myles to generate this alternative solution. Here we are getting closer to an account of how the space of reasons, understood as that which is available to an *epistemic agent* who exhibits the spontaneity or freedom in the way McDowell associates with the Kantian notion of the understanding.

“According to McDowell, the sentience of mere animals ‘is in the service of a mode of life that is structured exclusively by immediate biological imperatives’ (*MW* 115)⁴⁰. They cannot but follow their natural impulses for *they see no alternatives to acting according to them*. That is, mere animals are entirely contained within the realm of law. .”⁴¹

Given McDowell's insistence that animal life is so constituted, we can then see that Myles exemplifies rationality as that which provides the possibility of generating context dependent and novel alternatives to problems faced by the species. Furthermore, in writing this paper, I have myself performed a series of cognitive tasks that would have not been available to Myles or his kin. This document stands as an artifact that can

³⁹W. T. Keeton, J. L. Gould & C.G. Gould, “*Biological Science: 5th Edition*,” 944-952.

⁴⁰The reference here is J. McDowell, *Mind & World*, 115.

⁴¹Mischa Gubeljc, Simone Link, Patrick Mller and G. Osburg. “Nature and Second Nature in McDowell's *Mind and Word*,” 44. Emphasis mine.

only be understood as causally possible and rationally intelligible in being a result of the radical difference between our current world and the one encountered by our ancestors in the EEA. Our contemporary society is a consequence of aggregates of historically actualized behavioural possibilities enabled by our biological architecture. It is the drastic ecological changes enabled by that very architecture, which has required us to employ it in generating solutions to the new challenges faced in distinct socio-historical eras. Consequently, we can understand biological interrogatives as questions, solicited by experiential episodes that cannot be answered by the untutored behavioural dispositions and cognitive capacities typical of individuals in the EEA. These questions are in turn resolved, not by recourse to the specific behavioural tasks⁴² that our bodies had evolved to perform, but by way of the creation and inheritance of alternative means of employing our evolutionary architecture to perform tasks that they had not evolved to perform.⁴³ The inheritance of these alternative means is what constitutes the normative structure of the second nature. Consequently, we can understand the features of mindedness and rationality, traditionally used to distinguish us from the rest of the animal kingdom, as resulting from the necessity of modulating our evolved dispositions in a way that frees us from the spectre of biological determinism. This is achieved insofar as our ability to reuse or redeploy Sober’s “characteristic C” to perform not only task *t* but an innumerable number of tasks whose scope is nicely captured by Churchland’s ‘global activation space’.

I earlier made brief mention of how differential availability differs between ourselves

⁴²It’s important to emphasize that ‘specific behavioral task’ does not mean that the cognitive or structural relation that enabled this task is specific. I.e. the ability to create complex sequences of actions or interpret complex sequences of sound can be better understood not, for example, as an example of a ‘linguistic mechanism’ but a more general sequencing one that may be involved in other tasks even if we notice it most paradigmatically in verbal reports. Nonetheless, the notion of enduring selection pressures in an environment requires that a species evolves due to selection imposed upon it by reasonably invariable task environments.

⁴³Here I am thinking of Elliott Sober’s following definition of adaptations as task dependent: “Characteristic *c* is an adaptation for doing task *t* in a population if and only if members of the population now have *c* because, ancestrally, there was selection for having *c* and *c* conferred a fitness advantage because it performed task *t*” (*in Philosophy of Biology*, p. 85.)

and other animals; the beaver can never teach the eagle to bring into relief the relevant features of wood for dam building. It can never deviate so far from the representational activities that its evolutionary architecture bestowed upon it, to represent things in ways which are so radically different that they *don't show direct relevance to the sensorimotor tasks* required for it to thrive in its ecological milieu. This is why the notion of second nature as a dynamic ecology is so relevant. As has been mentioned, it is not as if evolutionary psychologists or cognitive neuroscientists are unaware of the radical re-deployment of our cognitive apparatus. The list of assumptions underlying Cosmides and Tooby's position which I outlined at the end of chapter two includes:

4. The cognitive programs of the human brain may not be adaptive now; they were adaptive in ancestral environments.⁴⁴

This is actually an expression of a more general notion than that of exaptation, that of evolutionary by-products. Exaptation is an instance of a more general phenomena in which selected traits end up having effects which they were not selected for. Exaptation is reserved for the co-opted use of adaptive traits in a way that is useful to the organism and its decedents.⁴⁵ However, there are of course instances in which adaptive traits have the consequence of generating negative outcomes for the organism.

A clear example, which fits with the notion of history as a dynamic ecology, comes from the fact that evolution selected for fats and sugars to have high valence for humans. This was because in the EEA fats and sugars were scarce and required high energy expenditure to procure (for example hunting and foraging). However, today, there are literally *tons* of fat and sugar within the ecological milieu of any affluent country. As such, it is no surprise that obesity arises as a consequence of the "ecological mismatch"

⁴⁴Downes, Stephen M., "Evolutionary Psychology", *The Stanford Encyclopedia of Philosophy* (Winter 2017 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/win2017/entries/evolutionary-psychology/>>. (The citation "(18)" is referring to their 2005 paper "The Conceptual Foundations of Evolutionary Psychology".

⁴⁵E. S. Vrba & S. J. Gould, "Exaptation – a missing word in the science of form," (abstract).

between the evolved dispositions for these nutrients and the current historical environment. Furthermore, this fits well with Dretske's understanding of indicator functions. If we remember from Chapter two Dretske gives the example of a compass no longer reading north if taken down a mineshaft and compares this to what happens when you take a frog out of its natural habitat and present it with shadows that resemble flies; in each case "disabling circumstances" inhibit the indicator from performing its representational function properly.⁴⁶ We can see the rise in obesity as similarly a consequence of a miscalibration of our evolved nutritive dispositions to our current environment. While this brings up many controversial issues regarding addiction, free will, and obesity, human beings can interrogate their behaviours and desires in a way that *allows* them to avoid this consequence through conscious deliberation, dieting therapy, etc.⁴⁷ The idea that, since we are disposed this way that *we have to be this way* or that *we should be this way* does not follow from the fact of our high valence for sugar and fat. That would be to commit the naturalistic fallacy while also affirming a sort of biological determinism. So even for our most basic nutritive requirements, we may be compelled or disposed by our biological inheritance, but such inheritance need not necessitate that we are driven by biological imperatives. Asceticism, hunger-strike deaths, and conscious eating are all examples of different ways one can respond to nutritive interrogatives.

Consequently, we can understand dynamic ecologies as generating *the possibility* of freedom from the biological imperatives present in other organisms. And this freedom is what has ultimately led so many philosophers to see us as defined as something more

⁴⁶Fred Dretske, *Explaining Behaviour*, p. 68-69.

⁴⁷It's important to mention that the complex issues involved in addiction, which often feature in overeating, are being overlooked here and that I am not suggesting that persons who struggle with obesity are merely failing to exercise their rational capacities. The example is there to illustrate that changes in the historical environment have brought about questions about how we relate to food which might have not been there for our ancestors. It also is important to emphasize that while freedom from biological drives is *possible* it doesn't mean that it is easy or likely. The examples of asceticism, celibacy, and self-immolation are ones which are exceptions to the regularities of behavior that characterize most of our lives. Nonetheless, they still demonstrate the **possibility** of our having such freedom due to being able to interrogate experiences, desires, and intentions, in a way that so far as we know, is not present in other creatures (at least to the same degree).

than a material body. However, it need not lead us to this conclusion – that would be to fall into rampant platonism of some sort. Instead, understanding human thought as *sui generis* is a means of expressing this radical difference from within the bounds of nature. If this goal was, at least, partially achieved, the desideratum of this project has been satisfied.

4.4.5 Interrogatives and the Second Nature

For human beings, experience has an interrogative character which entails that is not as determinate as it is in other creatures. This doesn't mean that other animals are excluded from the space of reasons or from having second nature on apriori grounds. Rather, it suggests that other creatures *so far as we have observed* have not responded to being alive with either the capacity or desire to make sense of it in a way that is publicly available to anybody else who shares this disposition. So, it's not to say that humans are special in a way that ensures that other creatures, cannot, as a matter of principle be capable of knowledge or experience in the relevant sense; rather, it is emphasizing that being alive for a human being involves being aware of the ability to participate in an interrogative domain whose structure is determined by the activities of prior members of your species. As such, this is how McDowell's emphasis that second nature depends on a "repository of tradition" and that the "[i]nitiation into language is an initiation into a going conception of the layout of the space of reasons. That promises to make it intelligible how, beginning as mere animals, human beings mature into being at home in the space of reasons". Following this he states that *language*, "stands over against all parties to communication in it, with a kind of independence of each of them".⁴⁸ This, in a way suggests that the sorts of questions a person is faced with are determined by values, rules, and principles – in short, normative shapings –always render the world in terms of *public, transhistorical, and collective knowledge*. Our knowledge of things is almost always mixed up in the

⁴⁸ John McDowell, *Mind and World*, 184.

lives of others whether we like it or not. If one becomes interested in race-car driving, they are indebted to every individual who was a participant in the myriad activities that gave rise to this biologically hyper-idiosyncratic behaviour. Not to mention basketball, carpentry, music, dancing, and philosophy. These are *human activities* not because other creatures don't play, build, sing, or dance. But because the form of those activities is not subsumed by an inevitable even if tacit awareness of the historical and social principles which shape that conduct. Even the swagger of an attractive individual or what might be considered charming in a given time period, is a *style* of behaviour which is directly responsive to the evaluative conditions of both contemporaneous and extinct individuals of their species. Their style is inevitably a consequence of a combination of emulation and improvisation. The form must be emulated from others, otherwise it won't be intelligible in a way that those who emphasize the inter-subjective character of knowledge (such as coherentists) pose as an epistemic requirement. Nonetheless, the individual must be responding to absolutely particular sensory irradiations. Nobody is ever subject to the same barrage of photons, pressure waves, distributions of temperature (whatever the complete list of sensory possibilities, biologically conceived, might be) as another person. The particularity of individual existence is in a certain sense absolute. But their participation in a universality is simultaneously inevitable. So, from the cellular to the historical level, no person will be constituted by the same substantive features. This is a metaphysical fact of identity in time. Heraclitus was aware of it, Nietzsche celebrated it, Hume problematized it, and Kripke formalized it. Of course, the reader must take the last sentences in half jest, all that is shared by these thinkers is the notion that identity is unique, as a brute fact if the way things are.

Furthermore, the uniqueness of our individual ontogenetic development, the universality of our phylogenetic inheritance, and the universality of our normative inculcation, helps us understand that, despite our absolutely unique and singular material existence, we can and do intelligibly commune with others. Our evolutionary inheritance gives

us immediate and familiar modes of familiarity with the undelimitable background of embodied activities. Our normative inculcation allows us commune with one another by giving us access to the space of reasons, the domain in which experiences are epistemically potent or fertile which ensures that it is weaved into an evaluative network which spans beyond individual lives.

What is disenchanted about restrictive naturalism is that it describes what it is to be alive in terms which are alien to those which are forced to – out of the sheer chance of having been born (in the time and place and from the people they were) – make sense of what the items of is experience mean to it. Not to mention the larger existential question of what it means to be alive, which has now been relegated to the unscientific, spiritual, or idealistic domain of ‘unserious’ philosophy. But the relationship between existentialism and phenomenology is no coincidence. An analysis of the experience of being alive is evidence that such experiences pose questions for the organism in question. Humans ask these things. This is what we are doing right now, in participating in an institution of learning which is to determine my competence in a field of knowledge by the tribunal of others who have undergone a similar tribunal. What is this piece of writing but an artifact whose understanding cannot be said to be ‘scientific’ in the restrictive sense? Is the criterion of evaluation by which these words might be validated the same as those used by my friend studying genomics? Of course not. This is not because our field of study is archaic, even if it is attached to tradition, nor because it is visionary and free of it; it is because the very practice of doing philosophy evidences a tendency in at least some of us to ask questions which do not necessarily have an answer that can be determined by the nomological subsumption of empirical observations. So, I take the fact of my writing this thesis as a piece of empirical evidence which suggests that the sort of naturalism which thinks intelligibility is only that within the bounds of scientific language must be false. Or else, this work itself must be unintelligible. But it is to be evaluated, so it is intelligible. And this is because it depends on my taking a stake in

the space of reasons, of fighting for a position in a collective tribunal of experience, of holding a responsibility to what I say and mean, even if what I am trying to prove is that such responsibility is necessarily manifest to all rational agents.

Conclusion: Transcending Nature Within its Own Bounds

This thesis has attempted follow Taylor's suggestion that a, "fusion of horizons seems immanent"⁴⁹ though in a sense which extends beyond a fusion between the Continental and Analytic traditions of philosophical thought. Rather, I have demonstrated, not only the desirability, but the necessity of finding a reconciliatory ground between the myriad research programs into our nature. This requires that each understands the limits of its own horizon by admitting the explanatory scope of its epistemological and methodological commitments. What have been seen as opposed modes of thought must be understood as part of a larger complex. We must, as DeSouza remarks, ensure that our understanding of human life is, "complexified to correct for a too homogenous conception of the ethical world, but the fundamental structure and processes do not change as a result. Just as the bacterium makes sense of its environment by enacting a world, so too does the human being learn to make sense of her own, except on many more levels, enacting multiple and interrelated worlds. On the social level, the ethical world is what enables people to make sense of their own lives and their relations with others through a web of interrelated values, goods, virtues, rights, etc. which provide the essential framework for this sense making."⁵⁰ This understanding of multiple levels of explanation and, the multiple worlds or domains of rational and semantic possibility is exactly what this project aims to, at

⁴⁹Charles Taylor, *Foundationalism and the Inner-Outer Distinction*, 108.

⁵⁰Nigel DeSouza, "Pre-Reflective Ethical Know-How", 292.

least as a prolegomena to my future research, accomplish. And while this work has not focused on the ethical world explicitly, my emphasis on the causal efficacy of the conceptual, normative, and second natural dimensions of our lives is most obviously important when it comes to the intentional relations which constitute our dealings with one another and the rest of the natural world. It is no coincidence that I mentioned the Anthropocene as the most striking example of the dynamic ecology of human nature. Unless we gain a better understanding of feedback loop between our biologically given tendencies and capacities, and the ecological conditions in which they are normatively actualized, we will never have a rich enough model which would deserve the genuine title of the “Human Sciences”. The fact that we have almost diametrically opposed fields of study in our institutions, ones which separate the biological, cultural, social, conceptual, economic, ecological, etc. aspects of human nature evidences the truth of DeSouza’s claim that there are many levels of interrelated worlds or as Toadvine calls them ‘nested gestalts’ which are part of a complex totality. The simplification of this totality by means of one conceptual system or another fails to appreciate the genuine complexity of what is at stake in the collective self-reflexive investigations of the species.

Furthermore, to connect the notion of interrogatives with that of freedom and spontaneity we must thereby affirm a sort of semantic indeterminacy to experience. That is, the same sensory irradiations can and will mean different things to different people depending on the ecological circumstances that bring certain concepts into focus rather than others. But more than that, my emphasis on the ability to modulate our nature in accordance with the dynamic ecological demands suggests that, this indeterminacy is not a form of relativism or antirealism about the objects of experience but, just as is emphasized by the phenomenological tradition, experience renders its items in view of the conditions of salience to the interests of the organism. While many human interests are of course uniform, in particular, social and material needs that are required for survival in the EEA; the variety of possible conditions of relevancies is enormous.

From building model trains, practicing ballet, to painting and building weaponry, these interests change the scope and character of meaning. The ontologization of gestalt allows us to understand human nature as an array of distinct horizons or domains of semantic and rational import or potency.

By demonstrating that McDowell fails to provide us with a genuinely quietist position, one that would assuage our concerns about the relationship between mind and world, I have shown the necessity of regarding his work as one, which despite its admirable efforts, fails in this task. At the very least, his position *generates corollaries* with significant theoretical consequences that cannot be ignored; at the very most he has proposed a theory, implicitly, without his own intentions driving its genesis. And regardless of which of these appraisals one endorses, both show that failing to address how his position bears on that of others renders his rejection of such positions untenable. Chapter two showed the value of investigating the causal or bald naturalist theories that he takes to be *impossible*; it provided us with clear examples of how causal theories of intentionality are in fact possible while demonstrating the value of their explanatory powers. Most importantly, they allow us to understand ourselves as *animals* in a way that ensures nomological continuity with the rest of the natural world. McDowell's emphasis on second nature as being a natural feature of the human animal is thereby rendered unintelligible, since his use of that term deviates from almost every other account of what it is to be a living organism. I have shown that, unless his work can help us better understand our relationship to the natural world, it must be pitted against theories that do. And the staunch rejection of biology or the natural sciences as a means of understanding nature is untenable in light of the vast explanatory powers that have been gained by these modes of investigation. Nonetheless, these on their own are also insufficient in their explanatory scope. This is demonstrated by way of the phenomenological analyses of chapter 3. Bald and liberal naturalists both endorse the bifurcation of mind and world. The former takes the world to determine the mind whereas the latter takes the mind to determine what it means for something to

be a world; neither of these positions are explicitly false but their purported incommensurability cannot be sustained if one appreciates the genuine complexity of what is being investigated. As such, the ontologization of gestalt by Merleau-Ponty provides us with a means of avoiding this unnecessary opposition. The third chapter then demonstrates that the positions outlined in the first two chapters cannot be regarded as anything but mutually reinforcing. By avoiding the trap of epistemological foundationalism, it enables us to affirm ontological continuity with the rest of the natural world without taking a single position as capable of explaining intentionality, experience, and rationality, within its limited explanatory scope. Finally, chapter 4 draws on the resources of the previous chapters to demonstrate we can thereby explain the *sui generis* character of human rationality, not as something typologically distinct from nature *qua* realm of law, but as something which emerges as a structurally distinct consequence of complex aggregates of mutual causal influences between the human organism and its environment. Rendering human experience in terms of biological *interrogatives*, which arise out of causal changes in the ecological conditions of our ontogenesis, explains how it is that rationality can intervene in the untutored regularities of our evolutionary inheritance by modulating the information membrane by which the world comes into relief.

Consequently, none of our activities can be understood as exhaustively explained by recourse to the natural sciences nor to the linguistically and conceptual analysis of normatively inclined philosophers. Furthermore, I have demonstrated the failure for these distinct modes of inquiry to find a middle ground requires an urgent revision of our understanding of human nature. As I say in chapter 3, “[q]uestions of mind and meaning, knowledge and reality, are still ones to which there has been no common convergence. The study of human nature, or what we might like to call, the ‘human sciences (hard and soft)’ is a collection of pluralistic methodologies, histories, and frameworks. Philosophy tries to reel everything in, trying to be the most general of all. However, the time is ripe for the academic world as a *whole* to see the study of human nature as the most

elaborate and multifaceted object of study possible. Recognizing this, trying to see why some people want to ‘save the appearances’ while others can’t wait to see them disappear, is essential to understanding the importance of the study of the creature we are and how that creature fits into the rest of this world. Ultimately, these questions end up with problems concerning the ‘ontology’ of human nature. All these discussions about how we fit into the world mean that we have trouble defining certain characteristics that are common to us.”

So, the totalization or elimination of natural science from the investigations of humanity have impeded our progress in understanding what it is for something to have the unique property of ‘mindedness’. McDowell, with his insistence that natural science has nothing to do with it and the bald naturalists with the insistence that natural science is *exhaustively* and *uniquely* capable of addressing the problem. We can see that, in the social sciences, economics, applied psychology, and even self-help, which has taken the place of philosophy in which, teaching can become life, various political agendas required that we reject the wholly impersonal description of persons in terms of biological features which rarely figure in the language that individuals use to understand themselves and one another. On the other hand, McDowell is one of many who took this impersonal description to be one which reduces us to objects without recognizing that objects are not only lumps of inert matter but dynamic systems with incredibly rich dynamic levels of structural relations; such a view of the material world is far from disenchanted. If anything, its miraculous that I am a collection of atoms – an integrated network of complex relations between subatomic distributions of energy – which can interrogate its own existence in such a way that gives it the freedom to wonder whether such a description is sufficient to capture the question of its own existence. Such a view is not disenchanted. The richness of the natural world, as it is understood by the natural sciences, but maybe not by philosophers who single-mindedly take these sciences to be exhaustive in their explanatory scope, is worthy of the sort of awe that renders the charge of disenchantment

preposterous. How did matter culminate to produce this very work you are now reading? Answering such a question doesn't mean we need to be reductionists, it simply means we need to appreciate that somehow one consequence of the big bang is the genesis of creatures that inevitably and obsessively wonder about the seemingly miraculous fact of their existence.

Ethical Consequences of Differential Availability

In particular, there are a few extremely important ethical consequences to seeing a continuity between these two ways of understanding human nature. The first involves psychiatric disorders. These all involve the general manner in which normative inculcation – and the ecological conditions in which it occurs – can modify the way the brain responds to various ethically salient stimuli (hence what I have called semantic indeterminacy). In the first case, psychiatric disorders like anorexia appear to be the consequence of someone having inherited normatively shaped conceptual modes of self-attestation that have somehow modulated the manner in which their visual system, and possibly even their cortical homunculus, (not to mention many other complex systems involved in our meta-cognitive self-evaluations); is operating due to the deployment of certain concepts in experience. If one still sees themselves as overweight, despite their factually being the opposite, isn't this the result of the causal consequence of the deployment of certain concepts in their experience? Finally, a more striking example is that of a slave owner who, upon witnessing the beating or lynching or torture of what they have conceptually understood as their property, simply sits and enjoys their cup of tea without much emotional affect. Does this not suggest that the historical background – the dynamic ecological conditions in which they are situated – means that the slave emerges as a conceptually stratified figure which negates their humanity? In terms of the realm of law, does it not imply that this individual's limbic system, along with the myriad other brain func-

tions involved in emotional and empathetic relations to others, is functioning differently than mine would? Imagine, that some contemporaneous individual was taken back to this time after acquiring the conceptual resources to affirm something like human rights. Then imagine that this individual could not stand by and sip tea while witnessing this event but was instead enraged by it. Does this not imply that, somehow, the conceptual resources that have shaped their information membranes, that is, their brain and body by which they sieve the deliverances of sensation, in a way that is distinct from that of the tea sipping slave owner? Isn't the world's availability different for this individual? Are not some features occluded while others admitted? Whether this is understood in terms of having different structuring causes, which mean the murder of a certain race of individuals does not act as an empathic trigger, or in terms of vector activation spaces in which certain input patterns do not index that individual in the vector map in which moral categories are salient is quite irrelevant. The fact is, the same stimulus, situated in distinct ecological conditions which are shaped by the collective interests, "relevance terms" (to borrow a phrase from Taylor), and most generally – the normative world that they are a part of – will change the manner in which the brain processes and responds to that stimulus. As such, an investigation into the causal efficacy of ideas, concepts, and ideologies is what the conclusion of this thesis beseeches us to take seriously. My hope is that it has done just that.

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