

**Interpreting Kant in Education:
Dissolving Dualisms and Embodying Mind**

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Declaration

I, Sheila Webb, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

Immanuel Kant is one of the most influential thinkers of modern philosophy but he receives some fierce criticisms by theorists of education - mostly for intellectualism, a disconnect between mind and reality, and a 'detached' mind making and imposing meaning. This thesis challenges the typical 'Kantian' picture that is widespread in education, suggesting that some deep-seated assumptions about mind and world rooted in empiricist epistemology have shaped interpretations. Drawing on contemporary literature from philosophy of mind and epistemology, it argues that Kant can be read in quite a different way - as non-dualist, with mind as embodied and his subject responsive and sensitive to context. In the increasingly 'standards' culture in education, in which knowledge is too readily seen as a commodity, Kant's first person 'capacity' view, with judgement at its core, offers a way to think about knowledge that has more in common with Aristotle than the dominant paradigms in education of empiricism and constructivism. Kant's epistemology when read through a non-dualist lens offers rich conceptions of knowledge, mind and cognition that, due to the prevalence of the conventional 'Kantian' picture, have yet to be appreciated in educational thought.

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Introduction

Immanuel Kant is one of the most influential thinkers of modern philosophy, but he receives some fierce criticisms by theorists working in the philosophy of education; criticism is typically aimed at dualisms, intellectualism, and a conception of mind as disembodied or detached from real life. This thesis draws on contemporary readings of Kant in philosophy of mind and epistemology in order to challenge the typical 'Kantian' picture in education that is widespread. Its focus is metaphysical; it seeks to reveal some deep-seated assumptions rooted in empiricist epistemology that are presupposed in interpreting Kant's philosophy, and which have led to 'dualistic' readings that tend to reinforce the conventional 'Kantian' picture - and criticisms of it. But Kant can be read in a very different way, with rich pictures of mind and knowledge that have yet to be appreciated in educational thought. This thesis concentrates on the aspects of Kant's epistemology that challenge the 'dualist' picture in education and show mind (as a capacity for knowledge) as embodied, and his subject in touch with and sensitive to her context.

The background and motivation for this thesis is the increasingly 'reductive' or 'standards' culture in education in which knowledge is all too often treated as a commodity, a 'portfolio of skills', and empirical knowledge is seen as the only kind that counts. The rising tide of scientism is increasingly reflected in educational policy and practice, and has rightly been the focus of a sustained critique from diverse perspectives. Two illustrations of such critique draw attention to various dualisms that are frequently pointed out as a root of the problem. Richard Pring, for instance, is a long-standing critic of the commodification of education, arguing that despite "the centrality of knowledge and understanding in the development of the educated person, one too often adheres to a narrow interpretation of such knowledge and

understanding” (2014, p.11)¹. Knowledge can be too readily seen in terms of facts or propositions, easily disseminated and assessed, and skill “has become the generic term for knowledge, understanding, mental capacity, practical competency, and interpersonal sensitivity, thereby blurring important distinctions” (Pring, 2007, p.329). Judgement, Pring argues, is “relegated to insignificance in a world of mechanical rationalism” (2013, p.69). I share this dissatisfaction, and in this current climate there appears little appetite for philosophical work (let alone metaphysical work) on the nature of knowledge. For Kant, judgement is central to his view, for he draws attention to something more fundamental than facts and propositions and this is our human *capacity* for knowledge.

Pring points to the ‘wars’ between the two dominant paradigms of knowledge: one he characterises as naïve realism and the other is constructivism – the first “believes in ‘an objective reality’” while the other sees reality as “a ‘social construction of the mind’” (2000, p.251). He writes:

“The division between the two has become quite sharp, reflected in their respective languages or in different logical configurations of otherwise familiar words – objective/subjectivity, reality/multiple realities, truth/consensus, knowledge/opinion, understanding/perception and so on. It is as though the Cartesian dualism has returned in a more subtle form to entrap the unwary, even those who would so roundly condemn it in its original formulation. ... Thus, the contrast is drawn between the objective world (out there independently of our thinking about it) and the subjective worlds (in our heads, as it were, and individually constructed); between the public discourse and private meanings; between reality unconstructed by anyone and the ‘multi realities’ constructed by each individual”. (Ibid, p.248)

This thesis argues that a form of dualism does indeed ‘entrap the unwary, even by those who would condemn its original formulation’, and this has

¹ In asking what counts as an educated person, Pring refers to Bruner: “Jerome Bruner took up this theme of education as being an introduction to the distinctively human life. Learning to be human was at the centre of his educational enterprise” (2014, p.14). In many ways, the reading of Kant I present in this thesis resembles Bruner’s emphasis on a distinctively human life.

shaped interpretations of Kant's philosophy in education. Kant tends to be associated with one or the other of these prevailing paradigms or approaches to knowledge; either with the foundationalism of empiricism or read as a constructivist. But while Pring sees dualisms *between* these paradigms, I will point to dualist assumptions about mind and world inherent in *both* of them, revealing the extent of these assumptions that are presupposed in typical characterisations of Kant in education. With different understandings of his terms, Kant's critical philosophy can be read in a way that identifies the very philosophical misconceptions that give rise to the dualism that entraps the unwary, and (again contra to typical interpretations) provides non-dualist conceptions of mind and knowledge.

Paul Standish is another long-term critic of the scientific culture, with its preoccupation with measurement, empirical data and statistics, which are presented as "offering hard and often incontrovertible evidence" (2010, p.6). The push for empirical methods, evidence and measurable impact devalues conceptual work and philosophical research, the impact of which cannot be measured in quantitative terms². Like Pring, Standish identifies dualisms, arguing that the "hardening of the subject-object dichotomy generates crude accounts of objectivity, where objectivity is thought to be synonymous with numerical measurement" (2011, p.3). Of the fact-value dualism, Standish quotes Hilary Putman:

"Every one of you has heard someone ask, 'Is that supposed to be a fact or a value judgment?' The presupposition of this stumper is that if it's a value judgment it can't possibly be a [statement of] fact, and a further presupposition of this is that value judgments are subjective (Putnam, 2002)." (Standish, 2010, p.4)

Judgements are assumed to be subjective, with subjectivity understood as untrustworthy and not based on fact - and in opposition to objectivity,

² See Paul Smeyers, et al, (2014), who rightly argue that the emphasis on quantitative measuring of scholarly output of academics disadvantages philosophers of education.

considered synonymous with numerical measurement³. Both Standish and Pring call on the philosophy of education to challenge such dualisms and reclaim a place for philosophy in educational research. This thesis responds to the challenge. Kant offers a *non-dualist* view, with conceptions of subjectivity and objectivity that do not stand in opposition. In identifying the assumptions that give rise to such dualisms, Kant provides the conceptual resources for rethinking and challenging these in educational thinking⁴. “Kant’s entire theoretical philosophy aims to think through precisely this [opposition] as the source of a fundamental unclarity in modern philosophical thinking” (Conant, 2016, p.89).

Critiques of the increasingly scientific trends in education come from different directions, much of it from constructivists; as the immensely influential alternative approach to knowledge and cognition, Nel Noddings notes “[f]ew scholars today would reject the notion that knowers actively construct their own knowledge” (2007). Critique also comes from various kinds of postmodern approaches, as well as from those who look to Aristotle for richer accounts of knowledge and rationality. What is interesting about this critique is the frequent reference to (and criticisms of) Kant as a philosophical source of the ‘reductive’ culture; with charges of an absolutist Reason, a mechanical rationality, disembodied subject and a disconnect between thought and reality, Kant is routinely cast as the adversary of whatever theory is being presented. Many of the theories presented have been very influential and rightly so. While this thesis does not engage with (or take a stand for/against) the positions these theorists take, it does challenge

³ Kant has quite a different conception of subjectivity that is not conceived as separate from objectivity.

⁴ Other such familiar dualisms include mind/world, subjectivity/objectivity, thought/reality, reason/nature, fact/value, nature/nurture, theory/practice, qualitative/quantitative, scheme/content, knowledge that/knowledge how, internalist/externalist, all of which can be found in educational literature, and which are possible to be conceived of in less oppositional ways.

their interpretations and portrayals of Kant. A look at some of these provides a sense of Kant's current status in educational theory⁵.

Paul Hirst first tells us that it was his reading of Kant that motivated his influential *Forms of Knowledge* in the early days of the philosophy of education. He writes:

“to acquire knowledge is to become aware of experience as structured, organized and made meaningful in some quite specific way, and the varieties of human knowledge constitute the highly developed forms in which man has found this possible. To acquire knowledge is to learn to see, to experience the world in a way otherwise unknown, and thereby to come to have a mind in a fuller sense”. (1974, p.31)⁶

This passage is in tune with the reading of Kant that is developed in this thesis. However Hirst continues by distancing himself from Kant, rejecting the idea “that being rational in any sphere is a matter of adherence to a set of principles that are of their character invariant”, and that “any elements in thought that can be known to be immune to change, making transcendental demands on us” (ibid, p.92-93). Such a reading of Kant (that being rational is adhering to invariant principles that are immune to change) gives life to what has become the conventional picture that is so widespread⁷.

That Kant is either read as a constructivist or associated with the foundationalism of empiricism, reflects the dominance of these prevailing ways of thinking about knowledge in education. For instance, Daniel Royer writes “[c]ertainly much of Kant's foundationalist epistemology has been refuted or corrected in the last century” (2006, p.61). And Wilfred Carr

⁵ The examples quoted here are discussed in depth in Part Two of the thesis.

⁶ Hirst famously argued for around seven distinct domains or forms of knowledge, and his work was enormously influential in late 20th century educational philosophical theory, policy and practice in education (see 1963; 1973; 1974).

⁷ Hirst later tells us that he has moved away from his “Kantian inspired” propositional view of knowledge for an emphasis on practical knowledge (2008). But a non-dualist reading of Kant shows that these are not in opposition, and that action and practical reason are incorporated in Kant's overall view of knowledge in a way I believe Hirst is looking for.

criticises “Kant’s ‘foundationalist’ philosophy” with its “absolutist and *a priori* conception of reason” and “disembodied rational autonomous subject” (1995, p.79). He writes of

“Immanuel Kant’s attempt to provide the philosophical foundations for universal principles of rational justification that are independent of particular historical, social or cultural circumstances and that are grounded in the capacity of enlightened human reason to achieve objectivity and truth.” (2006, p.143)

Kant’s subject is portrayed as disembodied, and again reason and principles are seen as independent of culture and history. Feminist theories (making significant impact on epistemology since Carol Gilligan’s (1982) *In a Different Voice*) also tend to be opposed to Kant’s philosophy. Claudia Card criticises Kant for his disembedded reason and disregard of particular cultural circumstances (1996), and Lorraine Code similarly gives voice to the general antagonism towards Kant’s view by feminist and postmodern thinkers (2006).

While some align Kant with traditional empiricism, many more read Kant as a constructivist. However their criticisms are aimed at the same dualisms and detached conception of mind, whether in relation to knowledge or ethics. For instance, David Carr interprets Kant as ‘thoroughgoingly constructivist’ with a conception of reason as disembedded and internalistic, making for a disconnect between inner thought and outer reality (2003, 2007). He argues:

“to the extent that moral judgements constitute a type of prescription that is utterly dissociated from the normal workaday motives, wants or inclinations of agents, they are entirely innocent of empirical content or any necessary connection with sensible experience. For Kant, then, morality requires to be understood in terms of the rational *imposition* of rules or principles or pure practical reason on the rough and tumble of human practical experience.” (Carr, 2003, p.94) ⁸

⁸ Carr acknowledges that Kant’s *epistemology* is less radically constructivist, as it involves rational principle *and* sensory input; but I hold that his moral theory grows out of his epistemology, he does not have two different and incompatible theories.

A disconnect between mind and sensible experience is frequently characterised, as is the imposition of rules or reason onto experience. Wolff-Michael Roth also portrays Kant as constructivist and as providing “an epistemological subject that has no hold in and on this actual world that we inhabit” (2011a, p.23). Mind, in Kant, is “rationalistic” and “superior to the senses” (2011b, p.6), submitting them to order and taking “entire charge of the integration” (ibid, p.45). That mind is superior to the senses, detached from the world, and imposes rules on the rough and tumble of human experience again fits with, and reinforces, the typical ‘Kantian’ picture of Kant that abounds; this thesis seeks to challenge this picture.

Not all theorists writing in education are critics of Kant; a few have appropriated this typical picture - of mind ordering experience and imposing rules and meaning – in order to philosophically support some radically constructivist (and relativist) positions. David Jardine, for example, writes that human reason is, “as Kant defined it, a synthesizing faculty that, in the act of knowing something in the world, actively constructs orderliness out of the chaos of experience” (2006, p.23). Likewise, Ernst von Glasersfeld credits Kant for the idea that mind imposes meaning onto reality, for “we cannot even imagine what the structure of the real world might be like” (1990, p.2). David Elkind also credits Kant for the idea that “a child creates and re-creates reality out of his or her experiences with the environment” (Elkind, 1989, p.115)⁹. It will be argued that what these theorists who *appropriate* Kant have in common with the above *critics* of Kant, is the fact they employ the same philosophical assumptions that give rise to a dualism: a conception of mind (as bound within the head) that goes to work on (orders, organises and makes meaning out of) sense data that is given in experience, and imposes meaning (or structure or rules) onto reality¹⁰. So rather than challenge, these appropriations strengthen what has become the prevailing ‘Kantian’ picture.

⁹ Again, the examples in this introduction are discussed and challenged in Part Two.

¹⁰ This is what is referred to as the ‘layer-cake’ conception of cognition and mindedness that, it will be argued, is not Kant’s (following Conant, 2017).

What is most frequently referred to is a dualism perceived to be at the heart of Kant's view. Roland Reichenbach suggests that postmodernists "often refer to the aesthetic mode of judgement ... but, of course, they wouldn't accept Kant's strict dualism of an empirical world and a world of reason" (1999, p.241). Two different worlds are interpreted; 'mind' is seen as separate from the external world, separate from the character of what is given in sensibility. David Hamlyn argues that physical objects "are what Kant called "things in themselves", forever unknowable and outside our experience", giving no grounds for belief (1970, p.170); that physical objects are 'outside our experience' misconceives Kant's conception of experience and implies a gap between this and objects. Wilfred Carr criticises the dualism "implicit in Kant's idea of a transcendental, noumenal 'self' stipulating absolute standards to which the earth-bound, phenomenal self should conform" (1995, p.38). The "idea of the knowing subject, disengaged from the world" he argues, "is a myth" (1995, pp.79,80). 'Two-self' characterisations are not unusual; Sally Sedgwick argues that, for Kant, "the empirical self is not only split off from its noumenal counterpart, but also clearly subordinated to it" (1997, p.80). John White similarly states that "Kant's rationale for his view depends on his "two-world" view of man as consisting of a noumenal self and a phenomenal self", and "[d]etached from desire, the concept of reason in both Kant and Peters becomes obscure, the transcendental arguments of *Ethics and Education* leaving the reader as unenlightened as Kant's delineation of the noumenal self in the *Critique of Practical Reason* and the *Groundwork*" (2005, p.34). Whether it be for his view of knowledge or his ethics, contempt for Kant runs deep for many.

It is argued that these theorists are wrong to attribute the 'disengaged subject from the world' picture to Kant, instead of attributing it to the traditional empiricist epistemology from which it arises. Kant can be read in a different light altogether, as neither an empiricist or constructivist; moreover, he identifies the problematic metaphysics that gives rise to the familiar

dualisms in education, through which, it is argued, his work has been interpreted. In this sense, Kant can be read as a critic of ‘Kantianism’¹¹. Contemporary work on Kant by mainstream philosophers contradicts the criticisms often levied against him by educationalists; but rather than engage with Kantian exegesis, there tends to be a hefty suspicion of grand narratives and metaphysics in educational theory - and perhaps even an aversion to theory, for instance Wilfred Carr claims that educational theory, being deeply rooted in the foundationalist discourse of Enlightenment modernity, has run its course and should be brought to a “dignified end” (2006, p.150)¹².

Scepticism of metaphysics and Kant’s idealist philosophy is not limited to education but can be found in the analytic tradition, for instance at the beginning of the 20th century when some empiricist-minded theorists - considered founders of the analytic tradition – rejected Kant and German idealist thought. Examples include H.A. Prichard in Oxford, who wrote *Kant’s Theory of Knowledge* in 1909 with intense criticisms aimed at the very idea of a mind-dependent view of knowledge, on which “access to a non-mental reality is excluded” (ibid, p.76). Our desire, Prichard argues, is to know things “as they are, i.e. as they are independently of perception” (ibid, p.77). The desire to know things as they are independently of perception can be seen as incoherent on Kant’s view, for it is through perception that we know things. It is the desire to shed or exclude the first person (subjectivity and mind) in an account of knowledge that stands in contrast to Kant’s view, on which we cannot escape subjectivity (through which we perceive/cognise objects); this does not mean the loss of objectivity, only that it is conceived of differently. In Cambridge, Bertrand Russell and G.E. Moore led the refutations and

¹¹ This is taken from Conant’s (2016) paper entitled ‘Why Kant is not a Kantian’, discussed in Chapter Eight.

¹² Carr argues for the “future emergence of a ‘dephilosophized’ or ‘post-philosophical’ strategy for educational inquiry” premised “on very different assumptions” from those of the Enlightenment (2001, p.440). Also see Robin Usher and Richard Edwards (1994), who question the very purpose of education for being founded on Enlightenment ideals (of a self-directing and rational subject), which they see as obsolete.

rejection of Kant, also with 'subjectivist' readings of him as holding that objects of perception are constituted by our mental activity. Such 'hard realists' see mind as separate from the external world in order to achieve mind-independent knowledge¹³. Suspicion of the tradition Kant represents continued with the verificationism of the logical positivists, such as that of A.J. Ayer, in which only claims verifiable through empirical observation were meaningful and truthful - reinforcing the 'scientific' character of this tradition.

Many others in this tradition have engaged with Kant, and some have read him in a more friendly way. For instance Wilfred Sellars criticises foundationalist epistemology with a powerful 'Myth of the Given' argument that mirrors Kant's arguments (1956, 1967). Other scholars of Kant include Henry Allison, Paul Guyer, Allen Wood, David Velleman, Christine Korsgaard, and Nora O'Neill, and of course John Rawls. Most of these focus on Kant's ethics, or implications for political thought in the case of Rawls. Regarding Kant's *epistemology* though, Peter Strawson's reading remains very influential. While appreciating the depth and breadth of Kant's philosophy, Strawson has a 'subjectivist' interpretation in which he famously objects to Kant's 'transcendental subjectivism', "according to which the whole world of Nature is merely appearance" (1966, p.6). This prompts Strawson to read Kant "as closer to Berkeley than he acknowledges" (ibid.) - where Berkeley's 'subjectivist idealism' denies the existence of material objects (which are 'ideas' in the minds of perceivers). This influential reading contributes to the conventional 'Kantian' picture that is widespread in education¹⁴.

For Richard Rorty Kant is the principle target of his critique of philosophy. Illustrated in his enormously influential *Philosophy and the Mirror of Nature* (1979), Rorty associates Kant, and Enlightenment thought in general, with

¹³ Kant can be read in a more 'realist' way, with objectivity firmly in his picture of knowledge, if we understand his terms in a different way.

¹⁴ Strawson's reading is considered in Chapter Ten; but Kant's refutation and criticism of 'subjective idealism' is discussed in earlier chapters.

the foundationalism of the empiricist tradition because he sees them as sharing 'representationalism', the idea of mind as mirror of a mind-external nature – a picture he rejects entirely. Rorty's antagonism was such that while at Princeton University he thought of introducing a new course called 'An Alternative History of Modern Philosophy' that by-passed Kant, but had to abandon it because the history could not be told *without* Kant (Geuss, 2008), for Kant completely changed the course of philosophy with his Copernican insight, with those after him responding to or developing his work¹⁵.

A renewed engagement with Kant and the German tradition has been prompted by the work of John McDowell with his *Mind and World* (1994), and Robert Brandom with *Making It Explicit* (1994) and *Articulating Reasons* (2000), who both draw on German Idealist thought. A fast growing literature has developed around this and their on-going work, with fruitful exchanges between the analytic and German traditions, which are taking the analytic tradition in a new direction. It is this contemporary literature that this thesis draws on for a reading of Kant's epistemology to challenge the conventional picture in education, and show that Kant can be read in a much more valuable light.

McDowell's work is recognised as particularly important for 'dissolving' the long-term 'problem of knowledge' in traditional epistemology: the 'dualism anxiety'. In the basic 'correspondence' or 'representationist' picture of knowledge, mind is conceived of as something separate from the external world in order to achieve *mind-independent* knowledge. But this raises the question of how mind as something separate (inner and non-material) fits into the objective and material world. How to bridge the conceptual gap between mind and an external world? Scepticism is inherent in mind-independent accounts of knowledge. This problem is seen by some to be 'overcome' with the rise of scientific naturalism, for in this science-based approach to

¹⁵ James Tartaglia points out, "Kant was the principal target of Rorty's career, but the antidote to Kantianism he recommended was essentially Kantian" (2016, p.2).

conceiving of knowledge the concept of mind is eliminated entirely from explanations, which are given using the concepts of the natural sciences. This has become an orthodox approach; “[n]aturalism has become a slogan in the name of which the vast majority of work in analytic philosophy is pursued” (Mario de Caro and David Macarthur (2004, p.2). For examples see the work of Jerry Fodor, Paul and Patricia Churchland, Daniel Dennett and Mario Bunge. The contemporary literature that draws on German idealist thought stands in contrast to such naturalist approaches¹⁶, and provides a way to think about knowledge – and the relation between mind and world – that does not embed the dualism problematic¹⁷.

McDowell argues that the perennial dualism ‘anxiety’ of traditional epistemology, (how to bridge the gap between mind and world) is an illusion, for if we conceive of mind and world differently there is no dualism. And here we come to Kant. McDowell draws on Kant to make his arguments and ‘exorcise’ or ‘dissolve’ the perceived dualism. This is because “Kant – to resort to a thumbnail caricature – established that the world ... cannot be constitutively independent of the space of concepts, the space where subjectivity has its being” (McDowell, 1998a, p.306). That is to say, for Kant there is *no dualism* between mind and world, thought and reality - contrary to educational characterisations, exemplified above.

In challenging the conventional ‘Kantian’ picture that is widespread in education, this thesis argues that Kant’s philosophy has tended to be interpreted through a dualist lens. However, much of this is at an implicit level, so some philosophy at a metaphysical level is necessary to make these

¹⁶ McDowell is recognised for putting human nature back into philosophy, in contrast to naturalist positions that eliminate the concept of mind or ‘reduce’ it to the resources of the natural sciences.

¹⁷ Paul Redding, writing on the history of analytic philosophy, writes that there are two directions for the analytic tradition to take: naturalism or idealism. He concludes by recommending that the contemporary idealism brought into the analytic tradition, “with its insistence on the irreducibility of the normative, looks better equipped than contemporary philosophical naturalism to answer” the “problems that have plagued modern philosophy” (2010a, p.288).

dualist presuppositions explicit. This is the work of Part One. It draws on contemporary work by mainstream philosophers, particularly that of McDowell, to expose the conceptual ‘errors’ that give rise to the dualism ‘anxiety’ inherent in the traditional way of thinking about knowledge – through which Kant has typically been read and portrayed by educationalists. For while McDowell argues that the dualism ‘anxiety’ (between mind and an external world) is an illusion, he also writes that “[i]t matters that the illusion is capable of gripping us”, and is why much attention is given to ‘loosening this grip’ through the thesis by introducing different ways to think about Kant’s central concepts that do not give rise to the dualism. The non-dualist picture that is developed through Part One is then used in Part Two to challenge the typical ‘Kantian’ picture in education, and to contest particular criticisms of intellectualism and a detached mind. At the same time Part Two further elaborates Kant’s first person stance and ‘capacity’ view of knowledge to show how his conception of mind can be read as embodied, and connected with and sensitive to context.

There is no one correct reading of Kant, interpretations differ within the Kantian tradition, and across traditions and time. But in the contemporary literature that this thesis draws on, Kant is not a dualist in that mind is not separate from the world it knows. As McDowell says “no one has come closer than Kant in showing us how to find intentionality unproblematic” (2009a, p.3), and argues, “thought and the world must be understood together” (ibid, p.143). In this literature there are some references to interpretations in the Anglophone world, often referred to as ‘two-world’ readings. Robert Greenberg, for instance, argues that “almost without exception”, Kant is read as being concerned with the conditions for possible experience, or the possibility of empirical knowledge, and contends that “this view of the *Critique* reflects a fundamental misunderstanding of the work” (2001, p.4). Pirmin Stekeler-Weithofer also argues that “[t]here are widespread misreadings of Kant’s philosophy, especially in Anglophone traditions” (2010b, p.5). What these theorists are referring to are

interpretations of Kant's central concepts, the distinctions he makes: his sources of knowledge (intuition and spontaneity, or sensibility and the understanding) are interpreted through an implicit dualism and read as two separate realms or entities (see for instance Rüdiger Bubner, 2002; Andrea Kern, 2006, 2017; Stephen Engstrom, 2006; James Conant, 2016; and John McDowell, 2009). But dualist readings "cannot be squared", Engstrom argues, "with what Kant actually says about theoretical cognition and the way understanding and sensibility cooperate in it", and a "proper appreciation" of the capacities "eliminates the appearance of dualism" (2006, p.2). In contrast, the *unity* of thought and reality, mind and world, are emphasised by these theorists. Dieter Henrich (an eminent Kant scholar) talks of the 'indissoluble' correlation between the unity of thought and unity of reality (1994). Sebastian Rödl argues that "a substance and its form enter thought together" (2012, p.205), and Stekeler¹⁸ makes clear "our social conceptual distinctions and our (joint) perceptual access to the object are 'grown together', and embedded in our practices" (2010a, p.15). It will be argued that 'two-world' readings underlie the dualism that Kant is so often criticised for in education, which reinforces the familiar 'Kantian' picture. Understanding Kant's terms differently not only eliminates the appearance of a dualism, as Engstrom says, but brings into view a different way of thinking about knowledge and mind (and related concepts such as perception, cognition, subjectivity and objectivity).

As Pring gave voice to above, the two dominant paradigms of knowledge in education are constructivist and empiricist/realist. While Kant has been an influence on certain, particularly moral, theorists of education, there has been little direct engagement with his epistemology for work on the nature of knowledge; in this respect German Idealism has had little impact. In the mainstream analytic tradition, the 'scientific' emphasis (and growing 'naturalism') has meant that the German tradition has had little impact either. Brandom sums this up, in his usual colourful way:

¹⁸ Stekeler-Weithofer is referred to as Stekeler from here onwards.

“Developments over the past four decades have secured Immanuel Kant’s status as being for contemporary philosophers what the sea was for Swinburne: the great, gray mother of us all. And Kant mattered as much for the classical American pragmatists as he does for us today. But we look back at that sepia-toned age across an extended period during which Anglophone philosophy largely wrote Kant out of its canon. The founding ideology of Bertrand Russell and G.E. Moore, articulating the rationale and fighting faith for the rising tide of analytic philosophy, was forged in a recoil from the perceived defects of a British idealism inspired by Hegel. Mindful of the massive debt evidently and self-avowedly owed by Hegel to Kant, and putting aside neo-Kantian readings of Kant as an empiricist philosopher of science that cast him in a light they would have found more favourable, Russell and Moore diagnosed the idealist rot as having set in already with Kant. For them, and for many of their followers down through the years, the progressive current in philosophy should be seen to have run directly from Locke, Leibniz, and Hume to Mill and Frege, without any dangerous diversion into the oxbow of German idealism.” (2013, p.107)

But while on the one hand there is growing appreciation of Kant and his Copernican insight (that ‘dissolves’ the dualism problem by thinking differently about mind and world), there is also the growth of scientific naturalism (that ‘solves’ the dualism problem by eliminating mind from explanations). This scientific trend, Robert Hanna argues, is a “disastrously regressive turn in philosophy”, which amounts to “the *Copernican Devolution*, a retrograde evolution in philosophy that brings us back, full circle, to naïve, pre-Kantian, pre-critical conceptions of mind, knowledge, and world” (2016a, p.2). He argues for the need to learn Kant’s lessons. Similarly Brandom writes: “[w]e analytic philosophers have failed our colleagues in cognitive science by not sharing central lessons about the nature of concepts, concept-use, and conceptual content that have been entrusted to our care” (2010, p. 151). Kant revolutionised our thinking about what it is to have a mind, he argues, but some of “the most important lessons he taught us are often not yet sufficiently appreciated” (2006, p.1). These Copernican lessons, that identify the self-conscious nature of knowledge, offer an alternative epistemological approach besides the two dominant paradigms in education.

While these new developments in mainstream philosophy are beginning to make some inroads into education¹⁹, as far as Kant is concerned the dualist ‘Kantian’ picture remains in force.

In order to challenge this conventional picture and read Kant anew, it is necessary to set aside some deep-seated assumptions as well as familiar understandings of central concepts of knowledge and think of them in a different way. This is no easy task. Our ordinary English understandings of such words and concepts naturally come to mind. We interpret what we read or hear through our prior understanding of what these concepts capture. But what can get lost in translation are different understandings of what a concept *can* capture, which can vary in different languages and traditions. Standish gives an example of this, he talks of the dominance of the English or Anglophone understanding of the term ‘science’, and the richness that is lost in translation from German:

“In the increasingly internationalized space of educational research, in which English as a foreign language is widely spoken, the term ‘science’ becomes all the more equivocal. As this is the most familiar translation of *Wissenschaft*, the native speaker of German is likely to assume that the term will carry a similarly rich range of reference, and she will perhaps speak unselfconsciously of ‘scientists’ in disciplines where the more natural English expression might be ‘researchers’ or perhaps, better, ‘academics’; the same point applies, of course, with terms comparable to *Wissenschaft* in other languages (the French term *science* included). Now it might be hoped that the broader understanding of enquiry and understanding that the German term captures would then favourably affect the usage of the English term, and that this would be a corrective to scientific tendencies. But the dominance of the research space by Anglophone practice – especially that of the UK and the US, with their philistine aversion to theory in general – means that physical science is indeed taken as the model, and the richer understanding that *Wissenschaft* might suggest is

¹⁹ For instance Jan Derry draws on Brandom and McDowell for her work on inferentialism, which she brings to bear on educational issues (2008, 2011, 2013a, 2013b, 2017). And McDowell is an important influence on David Bakhurst whose contributions to education include *The Formation of Reason* (2011), and papers (2009; 2014; 2016). But this work is not in relation to Kant per se.

effectively colonized by the English term and its associations.” (2007, p.339)

Whether or not we agree with Standish that ‘scientistic tendencies’ are to blame, his point remains that something is lost in translating the German term ‘*Wissenschaft*’ into the English word ‘science’. I maintain that the same is the case with many of Kant’s concepts. Given the complexity of his work and interpretation across time, traditions and language, many of his terms have (naturally) been prone to English understandings in the Anglophone world. But his work can be understood in different ways. For example, “[w]e are apt to misunderstand Kant”, Conant writes of the Deduction section of Kant’s first *Critique*, “if we take ourselves already to understand what terms such as “critique” and “deduction” are supposed to mean independently of our being about to make sense of why his text comes in the very particular shape – with all its initially puzzling twists and turns – that it does” (2016, p.76). A proper understanding, Conant explains, “requires reading Kant’s book in a very different way than it has usually been read. It requires getting fully into view that the structure of a work of critique must be dialectical from the start” (ibid, p.96).

At a time when knowledge is often treated as a ‘*commodity*’ - definitions, facts and propositions - Kant shifts attention to knowledge as a *capacity*, from a first-person standpoint, with education (*Bildung*) as essential to developing this²⁰; he takes over this ‘capacities’ approach to knowledge from Aristotle (Engstrom, 2006; Rödl, 2012; Conant, 2016; Kern, 2017). While some educationalists turn to Aristotle for richer conceptions of rationality than those

²⁰ The German concept *Bildung* captures a wider understanding of ‘education’ than simply schooling, and is more like ‘experience’, a lifelong process of personal growth and cultural development. There is a literature on *Bildung*, useful reading is Allen W. Wood, *The German Bildung Tradition*, available at: <http://www.philosophy.unc.edu/mleldrid/SAAP/USC/pbt1.html>. Also the introduction to *Bildung and the idea of liberal education*, by Lars Løvlie and Paul Standish (2002). Also helpful is *Theories of Bildung and Growth*, (eds.) Pauli Siljander, Ari Kivelä and Ari Sutinen (2012).

found in the reductive ‘objectives’ culture²¹, Kant is normally associated with the latter and portrayed in *opposition* to Aristotle²², rather than as drawing on the same ‘cognitive’ tradition. But there are differences, as Rödl explains: “Aristotle’s metaphysics is not critical” like Kant’s, because “it did not occur to him that one might conceive the forms of thought he describes as projections onto a reality that in itself is alien to reason” (2012, p.43). Coming later in history, Kant *was* faced with the (dualist) development of thought after Descartes, which he addresses with his critical philosophy. The problem has been that the conceptual distinctions Kant makes - to capture what is right and what is wrong with the existing (empiricist and rationalist) approaches of his time - have tended to be interpreted in education through the very dualist assumptions that his critical work is so useful for exposing. But these can be understood in a different way.

In the current educational climate - with an emphasis on empirical research on the one hand, and postmodern scepticism towards metaphysical and epistemological investigation on the other - scholarship on Kant’s epistemology does not appear to have been recognised as valuable. Many references to his work are fleeting or cursory, making it difficult to respond to critics in a meaningful way. Standish rightly questions the benefit of theories that give merely a “professional gloss to otherwise highly technized practice, a protective theoretical veneer”, and also questions “the conceptions of human beings and human agency” that these presuppose (2007, p.336)²³. Standish urges us not to shy away from engagement with mainstream philosophy but to draw on this to open up our thinking and understanding. And if exploring the thought of major philosophers seems too abstract and

²¹ Joseph Dunne’s *Back to the Rough Ground* (1993) has been enormously influential, and many have taken up Aristotle’s concept of *phronesis* as educationally significant.

²² See, for instance, David Carr’s work on Aristotle (2003, 2007), and Jane Green (2011).

²³ This compares with Continental Europe where, Blake *et al* write, “philosophy of education developed out of the educational thought of Kant and Herbart. Here the approach to philosophy of education was always academically more securely rooted in the philosophical canon” (2003, p.9).

theoretical to be of help for ‘impact’ or practical concerns in the classroom, Standish reminds us that metaphysics derives from and returns to socially concrete and practical matters:

“It is a characteristic of educational problems that they involve the most complex and profound questions about human beings and the good life. Push those practical problems hard enough, and you come to questions of ethics and metaphysics, and some of the richest, most far-reaching ways that these have been examined are to be found in the often difficult work of major philosophers, and not just, please note, of philosophers of education. Are we to shy away from this? Let us remember that what we are talking about here has implications for the practical domain. In a serious sense these are practical matters.” (Standish, 2007, p.337)

And Kant’s view is certainly far-reaching, “from metaphysics and epistemology through philosophy of science, philosophy of history and aesthetics to ethics, philosophy of law and political philosophy” with “a unity of conception and execution” (Zoller, 2010, p.66) – Kant offers rich resources for many areas of education, with practical as well as theoretical implications.

This thesis focuses on Kant’s epistemology, drawing on his *Critique of Pure Reason*²⁴, because this informs his ethics and practical knowledge. That is, a different understanding of his epistemology can shape interpretations of his other works; “the fundamental theorems of the first *Critique* remain unchanged and serve continuously as premises in all of Kant’s subsequent work” (Henrich, 1992, p.6)²⁵. However, to adequately bring into view an unfamiliar picture of Kant’s epistemology lies outside the scope of one thesis; rather the scope in what follows is to focus on those aspects of a non-dualist reading of Kant that challenge the conventional picture in education, and show how mind can be read as embodied and in

²⁴ All references are to Kant’s second edition of *Critique of Pure Reason* (1787), from the classic Norman Kemp Smith translation (2007 edition).

²⁵ Kant’s individual works, including his *Groundwork*, should not be read as standing alone, but understood within his wider epistemology. That is, different understandings of his epistemological terms allow different, and more positive, readings of his ethics and practical knowledge.

touch with the world. While this limits the scope somewhat, it involves a whole range of concepts of knowledge (that could each be treated with a thesis of their own), but as their inter-relatedness means they can only be understood with reference to each other, this is unavoidable. And as different understandings cannot be discussed all at once, they are introduced in each chapter in Part One, with a spiral effect. This requires a certain level of 'going with the flow' (which I think is normal when discussing unfamiliar ideas from a different tradition). Nevertheless, I aim to give enough of an explication not only to challenge the typical 'Kantian' picture but also to get to the heart of Kant's epistemological framework for an understanding of his Copernican insight that is novel to educational thought and shows the possibility of a new way of thinking about the nature of knowledge: as a human capacity.

Summary of Chapters

The first five chapters form Part One of the thesis; they examine and make explicit some of the central conceptual commitments from different approaches to knowledge in mainstream philosophy. This is to draw attention to some deep-seated assumptions that give rise to a conceptual dualism between mind and world that, it will be argued, act as presuppositions through which Kant has typically been interpreted in education. The work of John McDowell is particularly valuable to Part One because he uses Kant's framework to articulate the source of the problematic dualism inherent in traditional empiricism; it is this traditional picture that is capable of 'gripping us', and is why reference is made to it throughout the thesis²⁶. Also in Part One, Kant's key concepts and terms are disentangled from their familiar understandings, by introducing alternative ways to understand them²⁷. As these cannot be discussed all at once, they are elaborated in each chapter to develop enough of a non-dualist reading of Kant that is then employed in Part Two to challenge the widely held 'Kantian' picture in education.

Chapter One looks at traditional epistemology in the analytic tradition. It examines a recent illustration of a mind-independent view of knowledge to identify conceptual commitments to the relation between mind and world. A start is made to distinguish and compare these commitments with the 'capacity' reading of Kant's view of knowledge being presented.

Chapter Two introduces some unfamiliar interpretations of Kant's terms. It discusses Kant's Copernican insight, to start to show the embodied nature of mind and our 'rational' relation with the world. Sebastian Rödl's work has

²⁶ McDowell has been influenced by Wittgenstein, Hegel, Gadamer and others, but I use his work insofar as it relates to Kant because Kant is the topic of the thesis and because McDowell continues to use Kant's conceptual resources even in later writings.

²⁷ I draw on mainstream philosophers who, as I read their work, emphasise the *unity* to be found in Kant's view, and that compare with 'two-world' or dualistic readings.

been a major influence on this thesis, and is particularly helpful in articulating Kant's central ideas using language of the post-linguistic turn, making accessible many of Kant's difficult terms.

Naturalism is the topic of Chapters Three and Four, to further distinguish and expand upon Kant's epistemology. Different understandings of familiar concepts are discussed, for they collectively give rise to different metaphysical pictures of how we relate to the world, and acquire knowledge of it. Scientific naturalism is compared with naturalisms that include human nature, and scientific methodology for investigation into 'consciousness' is contrasted with Kant's 'speculative' philosophy and the 'first-person stance'.

In Chapter Five, Richard Rorty's mind-dependent view of knowledge is differentiated from Kant's mind-dependent view. It is argued that, despite rejecting empiricism entirely, Rorty adheres to the same understandings of key concepts of knowledge, thereby illustrating the deep-seated influence of presuppositions from empiricist epistemology, and the need to challenge these for a more fruitful understanding of Kant's philosophy. Rorty has been an influence on constructivist epistemology, and examination of the commitments Rorty makes allows identification (and challenge) in Part Two of such commitments that are implicit in educational characterisations of Kant as a constructivist.

Part Two of this thesis engages with interpretations and portrayals of Kant's work in educational theory. The reading developed thus far is used to contest characterisations of Kant as a dualist and intellectualist, with a conception of mind as detached from reality²⁸. The epistemological work of Part One - making explicit commitments that embed a conceptual dualism - is used to identify these in portrayals (and criticisms) of Kant.

Chapter Six examines several friendly portrayals of Kant's view, which are

²⁸ I engage with educational theorists only insofar as they reference Kant.

used to defend some relativist and radical constructivist theories of knowledge. It is argued that dualist presuppositions identified in Part One have led to Kant's Copernican insight being misinterpreted as a constructivist move, which conceives of mind as actively ordering or making sense of experience and imposing meaning onto reality, and that this mischaracterises Kant's conceptions of knowledge (and cognition) in significant respects.

Chapters Seven and Eight respond to some fierce criticisms of Kant for his dualisms and intellectualist conceptions of mind as detached from reality. It is further argued that such portrayals of Kant as a constructivist overplay the activity of mind and obscure the objective and factive aspects of his view. Such characterisations do not capture the idea that our judgements and empirical knowledge claims depend for their correctness on the way the world is²⁹. Attention is also drawn to Kant's first-person standpoint and the mostly *unconscious* way we rationally respond to things in perception and everyday experience.

Kant's ethics tend to be subject to the same constructivist 'imposition' interpretations (according to which mind imposes a set of rules or maxims on whatever the context) and thus subject to the same criticisms as his epistemology. While not engaging with Kant's ethics directly, Chapter Nine discusses the 'self-determining' nature of mind, and the significance of this for motivation for action, as Kant's moral agent is no different from his epistemological agent in that both are dependent on the particular context for thought about what to do. This further challenges portrayals of a detached mind that obscure the objectivity of Kant's view.

Chapter Ten compares some different interpretations of Kant's terms from mainstream philosophy in order to reinforce the main arguments of the thesis. This is intended to bring more light to the difference between the typical 'Kantian' picture in education and the 'capacity' reading developed

²⁹ This follows the work of Andrea Kern, which has been valuable to this thesis.

through the thesis, with its emphasis on the *unity* of mind and reality rather than their separation. The Conclusion summarises and evaluates the achievements and limitations of the thesis.

Part One

Chapter 1: Empiricism and Dualism

As exemplified in the introduction, Kant's view of knowledge is frequently criticised in educational theory for being intellectualist and dualist, with a conception of mind as detached from real life. This thesis argues that some deep-seated assumptions about mind and world have shaped such interpretations, thereby obscuring significant areas of his view. This first chapter identifies these assumptions; it looks at empiricist epistemology to draw attention to mind-independent accounts of knowledge that give rise to a conceptual dualism between mind and world. It starts with a recent defence of a mind-independent view of knowledge, before introducing the work of John McDowell to expose the conceptual problems with this traditional way of thinking, and to show how Kant's philosophy is used to show that if we think differently about mind and world and their relation, a dualism does not arise. As previously stated, alternative meanings of the many concepts involved cannot be discussed all at once, so a piecemeal and more spiral approach is adopted: in each of the first chapters, different understandings of Kant's central terms are introduced, and these are revisited and elaborated as the thesis proceeds to portray a very different picture of Kant (as McDowell writes of language learning, "light dawns gradually over the whole" (2009b, p.157).

Critiques of traditional empiricism are familiar in educational literature, but it remains the orthodox way of thinking about knowledge in the analytic tradition. Empiricism is far from a homogeneous theory, but a thread that runs through this tradition is the idea of mind-independent knowledge, and this embeds a conception of the relation between mind and world (as separate) that is taken to account for the objectivity of knowledge. Discussion of this involves some detailed metaphysics - that is, the empiricism this thesis is

concerned with is the metaphysics of empiricist epistemology, which is at a very different level to everyday discourse about empiricism in education - empirical knowledge, empirical methodology, empirical research, etc. Empirical knowledge (knowledge from observation) is not an issue; it is epistemological *accounts of knowledge and how it is arrived at* that are considered. And at the core of different accounts are different conceptions of mind, world and their relation. The discussions of this thesis are at this level, making explicit conceptions of these from traditional ways of thinking about knowledge, in order to reveal an inherent dualism between mind and world (thought and reality), which I see as influencing interpretations of Kant in education.

In order to draw out and identify some of the central commitments of empiricist mind-independent accounts of knowledge, a fairly recent defence of it will be discussed. This is Paul Boghossian's book '*Fear of Knowledge; against relativism and constructivism*' (2006), in which he makes a spirited attack on constructivism. Rather than critically engage with the arguments of the book, it is used to identify central commitments for discussion. Boghossian begins:

"It is rare for a philosophical idea to command widespread acceptance in the broader intellectual community of the academy; philosophy, by its nature, tends towards claims of a scope and generality that invite controversy.

Over the past twenty years or so, however, a remarkable consensus has formed – in the human and social sciences, even if not in the natural sciences – around a thesis about the nature of human knowledge. It is the thesis that knowledge is socially constructed.

Although the terminology of social construction is relatively recent, the underlying ideas [...] engage long-standing issues about the relation between mind and reality." (2006, p.iv)

This rightly identifies the underlying ideas about the relation between mind and reality as the root of different views of knowledge. These same ideas also underlie dualist and non-dualist interpretations of Kant, so much of this thesis is a discussion of conceptions of mind, world and their relation. How

these are understood then shapes other concepts - subjectivity, objectivity, truth, judgement, and conceptions of self - all of which affect educational thought, from theories of learning, teaching and assessment to curriculum design and the educational process itself. As will be shown, articulation of the relation between mind and reality reveals the central difference between Kant's view of knowledge and that of the two dominant paradigms in education, that of empiricism and constructivism.

Boghossian starts by criticising postmodernist relativism in social constructivist conceptions of knowledge, and appeals to the "standard, widely accepted Platonic definition of knowledge" as *justified true belief* (ibid, p.15). He characterises the social constructivist conception of knowledge as "the doctrine of Equal Validity: there are many radically different, yet "equally valid" ways of knowing the world, with science being just one of them" (ibid, p.2)³⁰. Boghossian says of this doctrine:

"Equal validity [...] is a doctrine of considerable significance, and not just within the confines of the ivory tower. If the vast numbers of scholars in the humanities and social sciences who subscribe to it are right, we are not merely making a philosophical mistake of interest to a small number of specialists in the theory of knowledge; we have fundamentally misconceived the principles by which society ought to be organized. There is more than the usual urgency, then, to the questions whether they are right." (Ibid, p.5)

Again this reflects the importance of the debate. Metaphysical reflection on mind and reality is not only relevant to epistemologists but to the wider society more generally, and to education in particular - and to understanding Kant's Copernican insight.

Boghossian's 'Equal Validity doctrine', however, constitutes a 'straw man' version of relativism, and while some constructivists may well embrace this,

³⁰ See Kukla (2000) for a discussion of relativist concerns about some educational theories of knowing the world.

not all would argue for the more radical consequences of this doctrine. Even a sympathetic reviewer of Boghossian's book writes:

“his consistent ignoring of large swathes of relevant literature and arguments will make Boghossian's book frustrating to philosophers who work in this area. Equally frustrating are Boghossian's concentration on Rorty, and moreover his attention to only a relatively narrow (if admittedly central) portion of Rorty's work, ignoring other portions in which Rorty is careful to distance himself from certain forms of relativism.” (Harvey Siegel, 2007).

But again, what makes this work relevant here are the conceptual commitments that exemplify mind-independent views of knowledge. When Boghossian writes “there is broad consensus among philosophers” about the objectivity of facts and justification (ibid, p.19), he means scientific conceptions, on which objectivity is associated with the real world and conceived as *opposed to* and *separate from* (an inner and unreliable) subjectivity. Boghossian argues that constructivist knowledge is *anti-objectivist*, and receives support from such analytic philosophers as Richard Rorty, Ludwig Wittgenstein, Thomas Kuhn, and Hilary Putnam, and that these in turn could appeal to Kant, Hume and Nietzsche. Of these, he says, “for all their distinguished intellectual pedigree and for all the attention they have received in recent times, it remains fair to say that such anti-objectivist conceptions of truth and rationality are not generally accepted within the mainstream of philosophy departments within the English-speaking world” (ibid, p.8)³¹. What is central here, is that mind is seen as separate from (a mirror of) the objective world so that beliefs can be checked against it for correctness³².

³¹ There is much to dispute in this, but I think it reflects the strength of empiricist/scientific assumptions that dominate Anglophone philosophy. It does not, for instance, acknowledge the impact of the work of John McDowell and Robert Brandom, who bring German idealist thought into the analytic tradition, nor the growing literature that has sprung from this.

³² Judgements and knowledge claims on Kant's view are also ‘answerable’ to how things are in the world for their correctness, but this entails very different conceptions of objectivity, mind and world.

In this traditional ‘correspondence’ picture of knowledge an inner subjective mind is opposed to an outer objective and material reality. A presupposition here, a deeply ingrained one, is that reality is the (disenchanted) natural world that science describes, an assumption that only physical and material things are understood to be real. With this ontological commitment, all normative phenomena, such as mind and thought, are excluded from what is considered ‘real’. In not being part of physical reality, they are considered something mental, in the heads of individuals - often seen as immaterial and mysterious³³. This way of thinking about mind and reality embeds a conceptual dualism, between the subjective realm of thought (mind, consciousness, etc.) on the one hand, and objective reality on the other, against which knowledge claims are compared for their truth. That mind is separate from the physical world is important to this way of thinking if knowledge is to be recognised as objective, reliable and mind-independent. However, this embeds the conceptual problem of how a separate mind fits into the external world, what is the relation? I argue that it is the deep-seated presuppositions of a physicalist conception of reality and a separate ‘in the head’ subjectivity or mind - that are at the heart of the issue, for they have tended to shape interpretations of Kant’s philosophy (examined in Part Two).

More commitments to mind-independent views of knowledge can be learnt through Boghossian’s critique of Richard Rorty, whose ‘mind-dependent view’ sees knowledge as made or constructed rather than found or mirrored - making it ‘anti-objectivist’. In *Philosophy and the Mirror of Nature* Rorty famously works towards discrediting the traditional empiricist theory of knowledge as being “a whole set of terms and assumptions which center around the image of mind as mirroring nature, and which conspire to give sense to the Cartesian claim that the mind is naturally ‘given’ to itself” (1979, p.97). In contrast, Rorty sees knowledge as arising from social agreement and the linguistic practices that constitute our human lives; this makes it unreliable to Boghossian, compared to his mind-*independent* view. But while

³³ A ghost in a machine, as Ryle later characterises it (1949).

some constructivists may see reality itself as constructed by the mind, Rorty believes there *is* an independent world, but this cannot be *known* without essential reference to language and social solidarity.

Boghossian illustrates what he calls Rorty's "relativistic constructivism", by quoting Rorty as follows:

"[I]t is not clear that any of the millions of ways of describing the bit of space time occupied by what we call a giraffe is closer to the way things are in and of themselves than any of the others." (2006, p.30)

That Rorty sees knowledge arising from social practices and agreement, and not from the object itself, is a significant difference between them³⁴.

Boghossian responds:

"It is one thing to say that we must explain our acceptance of certain descriptions in terms of our practical interest rather than in terms of their correspondence to the way things are in and of themselves; and it's quite another to say that there is no such thing as a way things are in and of themselves, independently of our descriptions." (2006, p.31)

Boghossian commits to, or presupposes, 'a way things are in and of themselves', and appeals to common sense:

"if I were to call the chunk of space-time occupied by the giraffe a tree, or a mountain, or a dinosaur or an asteroid – all of those descriptions would simply be false by virtue of not corresponding to the way things are." (Ibid, pp.31-32)

This is of course right; if we call a giraffe a tree, we are wrong. The suggestion is that Rorty might be happy to call the giraffe a tree, or mountain, or dinosaur. Boghossian expresses a widespread anxiety that if we lose the idea of a foundation and the way things are in themselves independently of mind, then we lose objectivity and truth, and without these anything goes and we can call a giraffe whatever we like. Competing ideas about the mind

³⁴ Rorty's position in relation to Kant is discussed in Chapter Five.

dependency-independency of knowledge then shapes objectivity, perception, justification, etc. Both agree that there is a way things are, necessitating constraints on what we can say, but for Rorty these normative constraints are linguistic and social - if we are wrong, our peers will correct us. For Boghossian the way things are is independent of how we talk about them, and the validity of a claim is warranted by observation, by its correspondence to external reality, not by what others say.

These competing views reflect the dominance of empiricist/realist and constructivist approaches to knowledge in educational theory. Significantly for Boghossian - and reflected in the current educational climate of prioritising 'scientific' approaches - some descriptions do get closer to the way things are in and of themselves, and these are scientific descriptions. His explicit commitment to the knowledge and methods of the natural sciences is illustrative of the deep-seated assumptions about mind and world that are the concern of this thesis, for they have obscured alternative conceptions from the German tradition. The privileging of science is increasingly widespread, as science is held as the exemplar of truth and objectivity. Although Boghossian's book is concerned with metaphysics - philosophical differences in conceptions of knowledge - he insists that the only legitimate ways of forming rational beliefs are by the methods of science³⁵. Boghossian writes:

"we *defer* to the deliverances of science: we assign it a privileged role in determining what to teach our children at school, what to accept as probative in our courts of law and what to base our social policies on. We take there to be a fact of the matter as to what is true. We want to accept only what there is good reason to believe true; and we take science to be the only good way to arrive at reasonable beliefs about what is true." (Ibid, p.4)

³⁵ The idea that conceptions of knowledge (and mind and reality that underlie them) are arrived at through philosophical reflection rather than the methods of science (which *presuppose* them) is touched on below and discussed more fully in Chapter Four.

Boghossian expresses a widely held assumption: “if science wasn’t privileged”, he argues, “we might well have to accord as much credibility to archaeology as to Zuni creationism” (ibid, pp.4-5). The rising trend to privilege science - its methods, values, and assumptions - in educational policy and practice reflects this relativist concern.

I emphasise again that this thesis does not make or entail an argument against science or empirical enquiry. As John McDowell points out, the “role of science in our culture is not immediately the explanation. Science does not itself lay claim to enshrining metaphysical truth; it takes philosophers to make such claims on its behalf” (1998a, p.181). What is being questioned is the privileging of scientific values for reflection on *all* areas, including knowledge; it is claimed that assumptions from the empirical sciences extend beyond this paradigm, shaping the way Kant’s terms have been understood in educational interpretations. A physicalist conception of reality and a separate ‘in the head’ subjectivity (that Boghossian’s mind-independent view encapsulates) can be found in other views that have historically constituted the analytic tradition; a quick look at some of this helps illustrate what is at issue.

The scepticism of René Descartes in the early 17th century has had a lasting effect. Searching for certainty, Descartes believed that the only thing about which he could be absolutely certain, beyond doubt, was that he existed, because he was a thinking being (a *res cogitans*), captured in his famous phrase ‘*cogito ergo sum*’. Everything else *could* be doubted - body, world, objects - but the “I” who does the doubting or thinking must exist. Conceiving the body as material, a machine, Descartes saw the mind as nonmaterial or immaterial - and a mind-body or mind-world relational problem has been a major concern of philosophers ever since - how to fit a nonmaterial mind into the material world. While Descartes was a rationalist, it was the British empiricists, John Locke, David Hume and George Berkeley who took ‘thought’ in the naturalist direction that still dominates the analytic

tradition. As with Boghossian, knowledge tends to be seen as derived directly from objects via the senses, and in these early views, such as that of Locke, mind is conceived as a 'blank slate' on which experience is 'written', or upon which a 'bundle of perceptions' from experience is 'inscribed'.

Hume, especially, sought a naturalist approach, which was a significant move at the time, against the dogma of religion and dominance of Rationalism. In contrast to these, he sought to explain human nature and human knowledge along the lines of the natural sciences; he famously introduces an is-ought distinction arguing that there is no valid inference from descriptions of fact, what *is*, to how things *ought* to be, thereby separating the normative from the factual and introducing the idea of a fact-value dichotomy. (Hume's commitments are compared with those of Kant in the next chapter – for Kant tells us it was Hume who first prompted his critical thinking.) What is emphasised here is the scientific approach these empiricists take in explaining human knowledge.

Later philosophers reinforced these 'scientific' ways of thinking about mind and knowledge. Rudolf Carnap, for instance, rejects metaphysics and idealist philosophy and advocates 'verificationism'; other logical positivists took a similar verificationist approach by sorting statements into fact and value, only endorsing as meaningful those that could be verified logically or empirically³⁶. A conceptual consequence of these 'scientific' ways of thinking about knowledge as mind-independent, is that mind is often left looking 'mysterious' because if it is not part of the material world, then how does it fit into it at all?³⁷ The question about how mind fits into 'reality' - the material world conceived of in terms of the natural sciences - is the type of question that constitutes "distinctive anxieties of modern philosophy" (McDowell, 1006,

³⁶ This movement heavily influenced the analytic tradition of Anglo-American philosophy.

³⁷ That mind looks 'mysterious' is not to say that these philosophers allow anything mysterious into their scientific accounts, quite the contrary; rather mind appears 'mysterious' ('a ghost in a machine') because its place in the material world remains conceptually unaccounted for.

p.xvi). Positivism, as an influential manifestation of these assumptions about mind and reality, is another example.

Other major contributors to this tradition are Bertrand Russell and G. E. Moore. Recognized as founders of the analytic tradition they also refute and reject idealist philosophy, which they see as starting with Kant. In line with other empiricist or mind-independent accounts of knowledge, Russell puts forward a conception of knowledge derived solely from the senses; we receive 'bundles' of 'sense data' or impressions from material objects³⁸. According to this way of thinking, the causal impact from outside of mind is taken as a warrant, a 'tribunal' from objective reality, for beliefs to count as knowledge. Reinforcing earlier naturalist assumptions, sense experience is conceived as a (mechanically) causal relation between mind and reality, with sense data or impressions resulting in beliefs. This 'causal' conception is seen to play a central role in gaining *objective* knowledge, for the immediate 'given' of sense data is seen as ensuring it is *value free*. Claims can be checked for validity against material objects, which are unequivocally there for all to see, independent of mind. The knowledge that results is seen to be neutral, objective and valid *because* justification lies in the mind-external empirical world. These commitments to an inner mind that is separate from the external world, with a mechanically conceived 'causal' relation between them, sets this way of thinking about knowledge apart from Kant, who sees mind as a capacity for (our accumulated) knowledge immediately involved *in* perception and experience, making for a 'rational' relation between mind and world (elaborated as we proceed).

Today such blank slate ideas about mind are likely to be rejected, at least in education³⁹; however what remains enormously widespread and

³⁸ Bertrand Russell used expressions like 'bundles' of 'sensibilia' or 'sense data' to describe the impressions or sensations on our senses by the natural world; see Russell (1905) and (1914a).

³⁹ In cognitive science, though, the idea of 'mind' as a blank slate (as inert and passive) lives implicitly on (Fodor, 1998).

permeates much educational thinking are the assumptions about mind and world: mind (subjectivity) as somehow in the head and unreliable, and separate from the material objective world. For example, early constructivists conceived of mind as an information-processor, receiving data that the mind processed⁴⁰. Again, I hold that it is these assumptions - about an inner mind and external world - that have shaped interpretations of Kant in education and led to (mis)characterisations of his view as dualistic. This has resulted in some (unwarranted) criticisms of intellectualism and 'Rationalism', and to appropriations by others for some radically relativist theories of knowledge (discussed in Part Two). This is why, for a better appreciation of Kant, the work of John McDowell is so important, for he challenges these deep-seated assumptions.

McDowell draws attention to the conceptual dualism problem that arises from these assumptions about knowledge – how to fit an immaterial mind into a material world. He uses Kant to show that, if we think differently about mind and world, this traditional problem '*dissolves*'. The Kant as read by McDowell (and the other philosophers drawn on for this thesis) stands in contrast to the Kant found in educational literature - McDowell's Kant is not dualist. To begin to grasp this more friendly Kant, and his significance to educational thought about knowledge, it is helpful to follow McDowell's articulation of the conceptual inconsistencies in traditional empiricist epistemology⁴¹.

⁴⁰ In ethics too, input-output models of the ethical or practical agent can be found. For example Simon Blackburn's early work compares the ethical agent to a device that takes inputs and delivers outputs; see Blackburn (1998). This is a non-reductive ethical theory (Blackburn is not reducing mind to the concepts of science), but nevertheless presupposes something like empiricist sense data given to the mind, which then makes sense of it. Blackburn has changed his views since the 1990s and McDowell's *Mind and World* has been an influence.

⁴¹ Again, McDowell draws on other philosophers (Hegel, Wittgenstein and Aristotle, amongst others) but I focus on McDowell's use of Kant, for McDowell continues to use Kant's conceptual resources, and has moved closer to German idealist thought in his later work, discussed in Chapter Ten.

McDowell argues that traditional empiricism is conceptually problematic for its conceptual dualism between mind and world gives rise to the problem of understanding how a separate mind fits into the material world. The task of overcoming this conceptual dualism has been the perennial 'anxiety' in the analytic tradition. But McDowell sees the task of bridging "an ontological and epistemological gulf" between mind and world as the "basic misconception of modern philosophy" (1998b, p.409), and argues that the perceived dualism is an illusion arising from deep-rooted presuppositions. In a 'therapeutic' approach McDowell draws on Kant's framework to 'exorcise' the 'seeming task' of bridging an epistemological gulf; that is, by thinking differently about mind and world, the task no longer appears pressing⁴².

Like Rorty, McDowell draws on Wilfred Sellars's 'Myth of the Given' argument in his *'Empiricism and the Philosophy of Mind'* (1997). The Myth of the Given is a powerful argument that mirrors Kant's own critique of empiricism. It highlights the *normative* aspects of knowledge that are missing in (mechanically conceived) *causal* conceptions. McDowell articulates this as follows:

"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." (1996, p.xiv)

Expanding on this, he writes:

"the logical space in which talk of impressions belongs is not one in which things are connected by relations such as one thing's being warranted or correct in the light of another. So if we conceive experience as made up of impressions, on these principles it cannot serve as a tribunal, something to which empirical thinking is answerable.

⁴² The significance of McDowell's work - the challenge to central assumptions within the analytic tradition, particularly by drawing on German idealist thought - has sparked a continually growing literature and fruitful exchanges between traditions.

Supposing that it can would just be a case of the naturalistic fallacy”.
(Ibid, p.xv)

Sellars’s ‘space of reasons’, the normative space in which justification belongs, is a metaphor of which McDowell makes much use in order to contrast it with the mechanical ‘causal’ relations investigated by the natural sciences, usually expressed as the ‘laws of nature’. The Myth of the Given argument criticises the idea that if experience is conceived as an impression by the world on our senses (‘caused’ in us), it cannot at the same time function as a *justification* for a belief:

“What happens there is the result of an alien force, the causal impact of the world, operating outside the control of our spontaneity. But it is one thing to be exempt from blame, on the ground that the position we find ourselves in can be traced ultimately to brute force; it is quite another thing to have a justification. In effect, the idea of the Given offers exculpations where we wanted justifications.” (Ibid, p.8)

As tempting as this picture is, McDowell argues, it is “in fact useless for its purpose ... [t]he attempt to extend the scope of justificatory relations outside the conceptual sphere cannot do what it is supposed to do. [For this would be] a move from an impression, conceived as the bare reception of a bit of Given, to a judgement justified by the impression” (ibid, pp.7-9). This ‘causal’ conception of acquiring knowledge does not account for judgement (or normativity, intentionality, rational freedom). That is, if it is ‘impressed’ or ‘caused’ in us, we cannot help but think it, so how do we know if we are right or wrong? This mechanical picture *does not allow for normativity: for our claims to be right or wrong*, or for us to take responsibility for what we say and do⁴³. Furthermore McDowell argues that although Sellars is talking about knowledge, a normative context is necessary “for the idea of being in touch with the world at all, whether knowledgeably or not” (ibid, p.xiv).

⁴³ This should become clearer as we proceed, when more ideas are made explicit, and Kant’s different conception of the relation between mind and world is discussed.

To recapitulate, traditional empiricist epistemology, and ‘realist’ approaches to explaining knowledge as mind-independent, take the senses on their own (paradigmatically observation) as the source of knowledge; they do not acknowledge the involvement of our rational capacities (our previously acquired knowledge) in ‘sensitivity’, in our contact with the world⁴⁴; for *mind-independent* knowledge is what is thought to make it objective⁴⁵. However, as discussed, this way of thinking about knowledge gives rise to conceptual problems: if knowledge is mind-independent, how does mind fit into the picture at all? How does a separate and immaterial mind connect with the material world? There is a conceptual and epistemological gap - a dualism - between mind and external reality. If sense data are seen as a ladder between an outer world and an inner mind, this mechanical or causal contact (impressed on a passive mind) does not allow for the rightness or wrongness of knowledge claims, for judgement, because we cannot help but think what we do (Kant introduced ‘spontaneity’ as the ‘power’ of mind to account for this, discussed in Chapter Two). I argue that it is this basic picture, with these assumptions about mind as separate from reality, that has influenced interpretations of Kant’s philosophy in education; this has led to criticisms of a disembodied and detached mind, and charges of an intellectualist picture of knowledge, and obscured the real value of Kant’s insights.

McDowell’s characterisation of the traditional (dualist) picture helps clarify why this dominant approach to knowledge is philosophically problematic (which has not been properly appreciated in educational theory); he writes of:

“the tendency to picture the objective world as set over against a “conceptual scheme” that has withdrawn into a kind of self-sufficiency. The fantasy of a sphere within which reason is in full autonomous

⁴⁴ The involvement or role of mind in gaining empirical knowledge is discussed in the next chapter on Kant, and more explicitly in contrasting the layer-cake conception of human mindedness with Kant’s ‘transformative’ conception (Conant, 2017) in Chapter Seven.

⁴⁵ It could be argued that this approach to knowledge drives the current ‘standards’ culture in education with the prioritisation of empirical methods, research and practices which are seen to be more ‘scientific’ because they exclude subjectivity.

control is one element in the complex aetiology of this dualism. The dualism yields a picture in which the realm of matter, which is, in so far as it impinges on us, the Given, confronts the realm of forms, which is the realm of thought, the realm in which subjectivity has its being.” (1998b, p.408)

Reason as ‘detached from the world’ and ‘self-sufficient’, in full autonomous control, is a typical characterisation and criticism of Kant in education. I hold that this is not Kant’s picture but rather a picture that arises from this traditional way of thinking about knowledge, a picture McDowell urges us to reject:

“this picture is hopeless; it is the source of the basic misconception of modern philosophy, the idea that the task of philosophy is to bridge an ontological and epistemological gulf across which the subjective and the objective are supposed to face one another.” (Ibid, p.409)

Objectivity and subjectivity are understood as in opposition, located in different places. Our senses are seen to bridge this gap and provide knowledge, but here we are confronted with the traditional problem of knowledge: how can we rely on our senses to provide objective knowledge (through impressions on our mind/brain) when they may mislead us? What if the external world is an illusion? Such scepticism is inherent in traditional empiricist epistemology. The vast literature on the ‘argument from illusion’ in the analytic tradition is testament to this enduring problem⁴⁶. The ‘Myth of the Given’ argument exposes the conceptual problem: if our contact with the world - our experience - is conceived in merely mechanical *causal* terms, as an impression on mind by the world, it cannot at the same time function as a *justification* for knowledge, for if it is ‘caused’ in us, how do we know if we are right or wrong?

McDowell shows that if we think differently about mind and world then this anxiety about knowledge is ‘exorcised’. Given the ingrained nature of empiricist assumptions about mind and world in general, it is not surprising

⁴⁶ We revisit this in Chapter Ten.

that they are presupposed in educational interpretations and characterisations of Kant as ‘a dualist’. This makes ‘exorcising’ them central to understanding Kant’s philosophy in education, and to appreciate his insights about knowledge (and mind, perception and cognition). To begin to understand Kant’s work as non-dualist, we should not conceive of the world as the mere physical reality as described by the natural sciences, and we should not think of mind (thought, subjectivity, self-consciousness) as something ‘in the head’ and separate from or in opposition to objective reality. Nor should we think of mind as the brain, which is a position some philosophers of mind take (and some educationalists have adopted)⁴⁷. McDowell writes that he intends:

“not just to reject a more specific spatial location for someone’s mind than that it is where its possessor is. It is to reject the whole idea that the mind can appropriately be conceived as an organ: if not a materially constituted organ, then an immaterially constituted organ... the cash value of this talk of organs is the idea that states and occurrences “in” the mind have an intrinsic nature that is independent of how the mind’s possessor is placed in the environment.” (1998b, p.281)

This is a prejudice, McDowell argues, that should be discarded. While a brain is necessary, “[m]ental life is an aspect of *our* lives”:

“the idea that it takes place in the mind can, and should, be detached from the idea that there is a part of us, whether material or (supposing this made sense) immaterial, in which it takes place. Where mental life takes place need not be pinpointed any more precisely than by saying that it takes place where our lives take place. And then its states and occurrences can be no less intrinsically related to our environment than our lives are”. (Ibid)

This is a mind embodied, embedded in, and connected with the environment in which we live our lives. And it is a conception of mind that McDowell draws from Kant, because, McDowell writes, “Kant – to resort to thumbnail

⁴⁷ Chapters Three and Four discuss this; it is relevant to understanding how a conceptual dualism between mind and world is thought to be ‘resolved’ (by collapsing one side of the dualism into the other) and is contrasted with Kant’s philosophy in order to bring the latter into sharper relief.

caricature – established that the world ... cannot be constitutively independent of the space of concepts, the space where subjectivity has its being (1998a, p.306). McDowell is using Kant to argue *against* this dualist picture of knowledge because, for Kant, mind is intrinsically related to the world it knows, there is no conceptual dualism⁴⁸.

For Kant, mind is in touch with the world perceptually, through the senses with a different conception of ‘sensibility’ to the traditional ‘causal’ picture; and while existing independently, the world we know is not independent of mind⁴⁹. Mind and world are *understood together*, the theorists I draw on in this thesis all emphasise their *unity*. Henrich writes that Kant reveals “the indissoluble mutual correlation between the unity of self-consciousness and the unity of the world” (2003, p.22). After being initially drawn to empiricism, Henrich tells us, Kant later regarded empiricism “as the corruption of all fundamental philosophy” (1993, p.100). Hume ‘awoke’ Kant from his ‘dogmatic slumbers’ and started his critical thinking about empiricism. Rödl also stresses the unity of mind and world, thought and reality, and criticises empiricist assumptions about knowledge:

“[w]ithout the notion of spontaneous knowledge of the material nexus to an object by which one gains receptive knowledge of it, epistemology remains stuck in the antinomy of internalism and externalism. This is a

⁴⁸ This shows Kant in stark contrast to the Kant found in educational characterisations.

⁴⁹ I have used in this thesis the language of mind being ‘in touch with’ or ‘connected with’ and ‘in a rational relation with’ the world; in a way this is inappropriate, for it suggests, or reinforces, the incorrect idea that mind is in a different place to world and that they are ‘connected’ (through the senses). This is not the right picture, for they should be understood ‘together’ and not in any way as ontologically or epistemologically separate. However, to say mind and world (subjectivity and objectivity, thought and reality) should be understood as together, in an indissoluble unity, is difficult to conceive of, and given the ingrained presupposition that these are separate, I believe a step towards comprehending their unity is first to understand them as related, connected (in earlier work McDowell talks of mind being in touch with and in a rational relation with the world, and Rödl writes of an internal connection, a material nexus). So I borrow these expressions as a first move towards an understanding of their indissoluble unity.

fair price for isolating the theory of knowledge from the theory of self-consciousness". (2007, p.145)

The debate about internalism and externalism has grown out of the presupposition of an inner mind, separate from the external world; the question becomes where does the mind stop and the world begin?⁵⁰ Kant's theory of knowledge is also a theory of mind, and can be used to 'dissolve' the antimony of internalism and externalism because "it removes the error that is the source of that opposition" (Rödl, 2007, p.145)⁵¹. McDowell too insists, "thought and the world must be understood together. The form of thought is already just as such the form of the world. It is a form that is subjective and objective together" (2009a, p.143). Many theorists point to the same passage by Kant to emphasise this unity: "The same function which gives unity to the various representations *in a judgment* also gives unity to the mere synthesis of various representations *in an intuition*" (B105). That is, the unity of self-consciousness (mind, our conceptual capacities, the knowledge we have gained) is the same as (indissoluble from) the objective unity that we perceive and experience. As Rödl says, knowledge of the particular is only possible through knowledge of the general because "it is only through general knowledge that sense perception gives rise to knowledge of particulars" (Rödl, 2012, p.13).

⁵⁰ See, for instance, the work of Andy Clark (1997) and his work with David Chalmers (1998) on 'the extended mind'.

⁵¹ A proper discussion of internalism versus externalism lies outside the scope of this chapter, for both sides of the debate presuppose a conception of mind as 'bounded', as falling short of the world. Rödl addresses this; he takes from Kant that we can know ourselves both first-personally (self-consciously, through spontaneity) as well as demonstratively, as an object. The latter is receptive knowledge of an empirical object and the former is spontaneous knowledge of our thoughts and beliefs. Rödl argues "This critical solution of the antinomy is out of reach of an epistemology that defines its topic by the phrase "knowing that *p*", not inquiring into the logical form of "*p*", in particular ignoring whether it represents its object first personally or demonstratively. Thus our account cannot be placed on a map of positions whose layout can be described without drawing this distinction. It cannot be classified as externalist or internalist, for it removes the error that is the source of that opposition" (see Rödl, 2007, p.145).

An understanding of the *unity* of the general and particular, thought and reality, mind and world, and subjectivity and objectivity (Kant's non-dualist philosophy) is developed through the thesis; the point here is that for Kant, mind is integrally related to the world (McDowell), in a material nexus with objects (Rödl), making for an indissoluble mutual correlation between mind and world (Henrich). Such non-dualist readings of Kant stand in contrast to the widespread dualist characterisations of a detached and disembodied mind found in educational literature, obscuring the significance of Kant's philosophy for educational thinking⁵².

To conclude, attention has been drawn to some of the central commitments and assumptions about mind and world in mind-independent views of knowledge that constitute traditional empiricist epistemology. It is argued that in education Kant has typically been interpreted through these assumptions, which give rise to and reinforce the conventional 'Kantian' picture; this has resulted in some negative portrayals of his view, which will be challenged in Part Two. On mind-independent approaches to knowledge, mind is left looking 'mysterious' because it is not conceived as part of the material world, which raises the question of how it is connected with objective reality. Exemplified by Boghossian, mind-independent views are considered to be 'scientific' - more objective and reliable - than mind-dependent views. McDowell's work was introduced to show, through the Myth of the Given argument, that this way of thinking is problematic in virtue of the conceptual and epistemological dualism between mind and the external world; by thinking differently about these central concepts, the seeming gap between mind and world dissolves. In the next chapter some of Kant's key terms are discussed in order to begin the on-going process of disentangling them from typical English or Anglophone understandings and to introduce distinct understandings that, together, give quite a different shape to Kant's conception of knowledge.

⁵² Again, typical characterisations and criticisms of Kant by educationalists are discussed and challenged in Part Two, drawing on what may be unfamiliar understandings of Kant's terms that are introduced and elaborated in Part One.

Chapter 2: Kant, Dissolving Dualisms and Embodying Mind

In the first chapter some central commitments of mind-independent approaches to knowledge were discussed, drawing attention to conceptions of mind and reality that underlie the differences between dualist and non-dualist interpretations of Kant. Mind-independent (traditional empiricist) epistemology was shown to be conceptually problematic due to an epistemological dualism between mind and the external world. It was argued that commitments from this traditional way of thinking about knowledge act as deeply held presuppositions that have shaped interpretations of Kant in educational theory, prompting criticism and some negative characterisations. The traditional dualist ‘problem of knowledge’ is dissolved, or ‘exorcised’, if mind and world are conceived differently, and Kant identifies the (erroneous) assumptions that give rise to such dualist thinking. In contrast to the typical ‘Kantian’ picture that is widespread, the Kant found in contemporary exegesis is non-dualist and offers a conception of knowledge and human mindedness in which the subject is always situated in a particular context, with mind embodied and in perceptual touch with the world.

To begin to articulate the reading of Kant to be developed in this thesis, this chapter introduces different understandings of his key concepts and terms. Again at the metaphysical level, his view is differentiated from traditional empiricism (and later from naturalist and constructivist epistemology). It starts by looking at Kant’s conception of experience and his ‘Copernican revolution’, it then discusses some of his distinctions: spontaneity and intuition, sensibility and the understanding, things in themselves and appearances, and receptive and spontaneous knowledge. With alternative but unfamiliar understandings, Kant’s overall picture of knowledge takes on a shape quite distinct to the typical picture found in education. Concepts such as spontaneity, understanding, reason and imagination, carry particular meanings in Kant’s work; also subjectivity, mind, reason and self-consciousness are (variously) used by Kant and by Kantian

theorists. However, for the ease of communicating Kant's central insights, I will mostly use 'mind' as a general term through the thesis, to capture the first personal aspect of all of these concepts of mind, but other terms (such as reason, thought) will be used as context demands. Referring to the different concepts of mind, Kant writes:

"We have already defined the understanding in various ways: as a spontaneity of knowledge (in distinction from the receptivity of sensibility), as a power of thought, as a faculty of concepts, or again of judgments. All these definitions, when they are adequately understood, are identical". (A126)⁵³

As Kant says, with adequate understandings these concepts of mind are identical.

An attraction of empiricism is the common sense thought that we know something through the senses, through experience. If we see something, we *know* it is there. This is right, and the same is the case on Kant's view; however 'experience' and 'sensibility' are conceived of differently, which makes for a different conception of our relation with reality⁵⁴. As discussed, in traditional empiricist epistemology 'causal' impressions are seen to play an essential role in providing *objective* knowledge, as this mechanical 'causal' picture is taken to provide *mind-independent* knowledge. But as the Myth argument shows, experience conceived as an impression ('caused' in us) does not allow for judgement or normativity, for how do we know if we are right or wrong? For Kant this empiricist picture is flawed because it recognises only one of our two sources of knowledge – that of the senses. In contrast, Kant holds that the 'spontaneity' of mind is also a source of knowledge; that is, mind is a *power*, which conceptually accounts for the self-conscious nature of our mental activity, and the *unity* of our knowledge. An

⁵³ This is the only reference to the A edition of Kant's *Critique of Pure Reason*, all other references are to the B edition.

⁵⁴ Again it is different pictures of our contact with reality that underlie different epistemologies. Kant's 'transformative' conception of the senses compares with the 'layer-cake' conception of cognition, discussed in later chapters.

important distinction is that mind (our capacity for knowledge) is involved *in* experience and perception.

Kant does not doubt the importance of the senses, of experience, in gaining knowledge. Indeed, he insists: “all knowledge begins with experience. For how should our faculty of knowledge be awakened into action did not objects affecting our senses partly of themselves produce representations” (B1)⁵⁵. However Kant continues: “though all our knowledge begins with experience, it does not follow that it all arises out of experience” (ibid). That is to say, knowledge through the senses, which Kant calls receptive or empirical knowledge, does not exhaust what knowledge is, there is also knowledge from the spontaneity of mind (self-consciousness, thought), and he critiques empiricism for recognising only the senses. That mind (as the knowledge we have accumulated) is exercised in experience makes Kant’s view fundamentally different from empiricist accounts (of impressions or sense data received by mind, which it then goes to work on). This conception of what Kant sees as our distinctively human contact with the world can be described as a ‘rational’ relation (implicitly drawing on our knowledge), in contrast to a mechanical ‘causal’ relation. It means that for Kant, our rational capacities are not only exercised consciously - in making judgements, knowledge claims and discursive activities - but also *passively* in ordinary experience and perception. Again, our sensory perception, our contact with the world, can be described as ‘rational’ because it draws on the knowledge we have thus far acquired (knowledge and concepts previously learnt). This conception of ‘sensibility’ - experience and perception - in which our intellectual capacities are continually (mostly passively) exercised in our ordinary responses to things in the world, contrasts with empiricist epistemology according to which (an inner) mind receives ‘data’ and goes to work on what is ‘given’. These are two distinct metaphysical pictures of human mindedness and our contact with the world.

⁵⁵ That Kant sees all knowledge beginning with experience is particularly relevant to the discussions in Part Two.

Kant makes some logical distinctions in order to capture and make explicit both what he takes as right and what he takes as wrong in the empiricist and rationalist traditions of his time. One of these distinctions is between intuition and spontaneity; *intuition* is the capacity for receiving representations or content through which “an object is *given* to us”, and the other is the understanding or *spontaneity*, “the power of knowing an object through these representations” and through which “the object is *thought* in relation to that [given] representation” (B74). Concepts are based on the spontaneity of thought, while sensible intuitions on the content given (B75). Of Kant’s two inherited traditions – empiricism and rationalism – he sees their error is that each only recognises one of these two sources of knowledge; Kant insists that it is their (indissoluble) *unity* that provides knowledge. Kant introduces his thinking:

“Our nature is so constituted that our *intuition* can never be other than sensible; that is, it contains only the mode in which we are affected by objects. The faculty, on the other hand, which enables us to *think* the object of sensible intuition is the understanding. To neither of these powers may a preference be given over the other. Without sensibility no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind. ... Only through their union can knowledge arise.” (B75)

Read through the assumptions identified in the previous chapter, rooted in traditional empiricist epistemology - of mind separate from and standing in opposition to the material world - it can look as if intuition and spontaneity are two distinct realms, getting together to produce knowledge. But we need to set aside many of our familiar understandings of knowledge concepts to properly understand this passage. Kant’s concept of intuition is not the causal sense data of traditional empiricism, which a separate mind then actively goes to work on. Intuition is the most obscured aspect of Kant’s philosophy as it is portrayed in educational interpretations (examined in Part Two), and is something to which we will keep returning.

‘Intuition’ is a rich concept for Kant. It provides the material or worldly *content* of thought; that is, *what* is intuited is what is perceived or thought. But intuition also describes a capacity, an ability or power. This ability *to* intuit can thus be distinguished from *what* is intuited⁵⁶. When Kant says intuition is a capacity through which ‘an object is *given* to us’, he is working with a different understanding of ‘given’ to the ‘Given’ of empiricist epistemology; it is a straightforward sense of given and not subject to the Myth argument. McDowell writes: “The idea of givenness becomes mythical – becomes the idea of Givenness – only if we fail to impose the necessary requirements on getting what is given... Avoiding the Myth requires capacities that belong to reason to be operative in experiencing itself, not just in judgements in which we respond to experience” (2009a, p.258). Our knowledge, our conceptual capacities (the concepts we have thus far learnt) are passively exercised in ordinary and unreflective actions, and not only in conscious or discursive activity. Sensibility is ‘transformed’ on Kant’s conception, by our rational capacity, making for a ‘rational’ relation with the world. This mind-dependent account of experience and acquiring knowledge differs from mind-independent accounts, but, as will be argued, does not lose objectivity.

The more human aspects of Kant’s philosophy, particularly its first person standpoint, have been much obscured in educational characterisations, I argue through misunderstandings of his terms. The distinction between intuition and spontaneity (a logical distinction for explaining sources of knowledge) has typically been interpreted as a form of dualism between mind and world⁵⁷. This is also the case with Kant’s other distinctions, such as sensibility and the understanding, which are interpreted as two distinct realms each able to produce representations. Intuition (and sensibility) tend to be interpreted as empiricist sense data, while spontaneity (and the

⁵⁶ This is to say that intuition *describes* our human capacity to receive representations (in perception and experience) but we can also talk about *what* is perceived (the content of perception and experience). See Rödl (2007).

⁵⁷ Again, the many examples from educational literature are discussed in Part Two, once different ways of understanding (many of) Kant’s terms have been introduced.

understanding) associated with a separate ('in the head' conception of) mind - hence the many characterisations of Kant as a dualist. Such 'two-world' readings of Kant have been criticised in contemporary Kantian exegesis. For instance, Steven Engstrom argues that dualist readings "cannot be squared ... with what Kant actually says about theoretical cognition and the way understanding and sensibility cooperate in it" (2006, p.2). McDowell writes of the supposed dualism:

"It is taken for granted in the empiricist tradition, but in this dialectical context that would be an unimpressive basis for defending it. So much the worse for the empiricist tradition, we might say. Resting content with a dualism of the sensory and the intellectual betrays a failure of imagination about the possibilities for finding the rational intellect integrally involved in the phenomena of human life. We should argue in the other direction. Actualizations of conceptual capacities, capacities that belong to their subject's rationality, can present things in a sensory way, and that gives the lie to the dualism." (2011, pp.10-11)

A proper appreciation of the capacities (spontaneity and intuition) reveals Kant's conception of mind as embodied, situated and continually engaged in on-going experience, rather than detached from it⁵⁸.

Of the two opposing paradigms of knowledge that Kant inherited, empiricism and rationalism⁵⁹, he calls the latter 'dogmatic metaphysics', which he describes as "a completely isolated speculative science of reason, which soars far above the teachings of experience, and in which reason is indeed meant to be its own pupil" (Bxiv). This sounds familiarly like criticism of Kant in education, but here he is criticising rationalism for this. James Conant describes Kant's work:

"Kant is conducting an argument on two fronts – one directed at the empiricist and one at the rationalist – while waging a campaign against what is ultimately to be unmasked as a single enemy. The aim is to

⁵⁸ Discussion of the capacities, intuition and spontaneity, is developed in each chapter.

⁵⁹ 18th century classic empiricism was largely from Hume, Locke and Berkeley, while the Rationalism Kant inherited came mostly from theological thinking.

show that what is philosophically fatal in each of the two traditionally opposed philosophical approaches flows from a single assumption – one that they share.” (2016, p.85)

They share an erroneous assumption that their chosen single capacity (the senses or the understanding) is intelligible as a *self-standing capacity*. In contrast, Kant’s aim is to make sense of each capacity only in the light of the other (ibid, p.117). In educational interpretations, it will be argued that portrayals of Kant as a foundationalist tend to inadequately appreciate the role of subjectivity (as spontaneity), while constructivist characterisations tend to overplay the role of spontaneity, losing the objectivity that is captured by Kant’s concepts of intuition and sensibility. To appreciate this we need more of Kant’s philosophy in view.

Most in education will be familiar with Kant’s ‘Copernican revolution’. “Hitherto it has been assumed that all our knowledge must conform to objects”, but this ending in failure Kant wonders “whether we may not have more success in the tasks of metaphysics, if we suppose that objects must conform to our knowledge” (Bxvi). Kant took his inspiration from Copernicus: “Failing of satisfactory progress in explaining the movements of the heavenly bodies on the supposition that they all revolved round the spectator, he tried whether he might not have better success if he made the spectator to revolve and the stars to remain at rest” (ibid).

However, what is less familiar in education are discussions on what Kant *means* by saying that objects conform to our knowledge. Theorists have typically interpreted this as a subjectivist or constructivist move. With knowledge presupposed as something in the head, mind is understood as constructing knowledge and meaning, and imposing it (as structure or rules) onto the world. I argue that ‘imposing’ portrayals misinterpret Kant’s Copernican insight, with a significant consequence being the loss of objectivity. With a different conception of subjectivity, of human mindedness, objectivity is in the picture and so too is the idea that our empirical

judgements and knowledge claims are ‘answerable’ to how things are in the world⁶⁰.

In recognising our distinctively human capacity for knowledge and the self-conscious nature of this (spontaneity, the realm of freedom), Kant introduces a powerful new description of the human condition. We act and experience the world in light of the knowledge and norms we have learnt and are not solely determined by external forces (the causal laws of nature or a Divine Will). Our capacity for knowledge is part of our nature as human beings, and Kant sees education as essential to acquiring and developing our particular conceptual capacities. Born into an already up and running world, the particular norms, beliefs and knowledge we acquire will depend on our culture (giving our capacities a particular socio-historical shape). But mind as a power (spontaneity) means that these particular norms and forms of knowledge can be subject to reflection and revision, challenge or endorsement - they are not fixed. Intentionality, judgement and agency are conceptually accounted for through the concept of ‘spontaneity’: by conceiving of mind as a power, as a rational capacity for knowledge. “The so-called analysis of knowledge in terms of true and sufficiently justified belief is, properly understood, the articulation of a more fundamental characterization of knowledge: knowledge as an act of a rational capacity for knowledge” (Kern, 2017, p.130).

In constructivist epistemology, mind can also be seen as a power, However, I argue that educational interpretations of Kant’s Copernican insight tend to *overplay* the activity of mind. Intuition as a source of knowledge – and a constraint on thought and judgements – is not adequately recognised, nor is Kant’s insight that sensibility is ‘transformed’ by spontaneity *in* experience. This is to say that for Kant perception and experience come already structured, or meaningful, which acts as a constraint on empirical thinking.

⁶⁰ This should hopefully become clearer as more discussion of Kant’s terms are introduced and elaborated.

But with sensibility typically interpreted as empiricism's sense data, reason (in portrayals of Kant as a constructivist) becomes reified and seen as doing all the work - and the world disappears from explanation. This forms part of the widespread 'Kantian' picture in education. Mind is interpreted as actively categorising and ordering, constructing knowledge and meaning, and imposing it onto the world; the receptive or *passive* nature of perception and experience are obscured. This loses *objectivity*. With mind doing all the work (making sense of experience, and imposing rules or structure) there are no objective constraints from the world. This has led to some appropriations of Kant for some radical constructivist theories, and to some criticisms for being too relativist or intellectualist, with a self-directing autonomous mind detached from lived reality⁶¹.

A main concern of this chapter is to distinguish Kant from traditional *empiricist* epistemology, but the same philosophical assumptions are also evident in interpretation of Kant as a constructivist. While this is the argument of later chapters, two quick examples here help to show this tendency in education to interpret Kant's Copernican revolution as a subjectivist or constructivist move. David Carr sees Kant as a "thorough-going constructivist" and writes of Kant's basic insight as:

"a matter of active imposition of meaning-constitutive rules and principles on the brute data of sensory perception: this is the basic Kantian insight that "intuitions without concepts are blind"." (2003, p.100)⁶²

Carr exemplifies the tendency to see intuitions (and sensibility) as empiricism's 'brute data of sensory perception' that the mind then works on by actively imposing rules and principles. Similarly, von Glasersfeld interprets Kant's 'manifold' as "the raw material, the stuff on which constructive

⁶¹ Again, specific examples and consequences of this interpretation for education are discussed in Part Two, once a more philosophically developed picture of Kant's work has been presented.

⁶² Carr's interpretation is not idiosyncratic; many similar examples are considered in Part Two of the thesis.

perception and reason can operate” (1995, p.40). These ‘layer-cake’ conceptions of mind, discussed later in the thesis, in which mind works on the ‘brute data of sensory perception’, are presupposed in characterisations of Kant as a constructivist and are, I claim, influenced by the same assumptions about mind and world to which I have been drawing attention. I repeat Engstrom’s insistence that “a proper appreciation” of the relation of the capacities “eliminates the appearance of dualism and helps allay an associated concern that Kant’s distinction would taint our cognition with an unacceptable subjectivism” (2006, p.2).

Again, Kant’s argument is against *both* empiricism and rationalism; he writes of empiricist John Locke and the rationalist Gottfried Leibniz:

“In a word, Leibniz *intellectualised* appearances, just as Locke, according to his system of *noogony* (if I may be allowed the use of such expressions), *sensualised* all concepts of the understanding, *i.e.* interpreted them as nothing more than empirical or abstracted concepts of reflection. Instead of seeking in understanding and sensibility two sources of representations which, while quite different, can supply objectively valid judgments of things only in *conjunction* with each other, each of these great men holds to one only of the two, viewing it as in immediate relation to things in themselves. The other faculty is then regarded as serving only to confuse or to order the representations which this selected faculty yields.” (B327)

Kant critiques both of these approaches for holding to only one of the two sources of representations and assuming it is intelligible independently of the other. The dominance of empiricist and constructivist paradigms in education reflects the tendency to interpret Kant either as a foundationalist (‘*sensualising*’ all concepts of the understanding) or as a constructivist (‘*intellectualising*’ appearances). But Kant’s argument that these capacities can only be understood in light of the other makes for fundamentally different conceptions of mind and self, perception and experience, world and knowledge.

Robert Brandom credits Kant with “revolutionizing our thinking about what it is to have a mind” (2006, p.1). The problem with any revolutionary way of thinking is that it (naturally) tends to be understood through existing assumptions, and these can be deep seated. After his first *Critique*, Kant complained that he was being misunderstood. In the second edition (of his first *Critique*) Kant reiterates his clear refutation of ‘psychological idealism’ (Bxi, footnote), which we can associate with the constructivist interpretation of his Copernican insight, exemplified by Carr and von Glasersfeld above. To distinguish his position, Kant calls his doctrine ‘transcendental idealism’ or ‘formal idealism’, which is a very different form of idealism that contrasts with ‘psychological idealism’ or ‘material idealism’. He writes:

“I have also, elsewhere, sometimes entitled it *formal* idealism, to distinguish it from *material* idealism, that is, from the usual type of idealism which doubts or denies the existence of outer things themselves”. (B519)

As well as refuting empiricism, Kant rejects what is usually understood by idealism: the view that reality is a projection of the mind. This is important for challenging constructivist interpretations of his work in Part Two of the thesis.

It is interesting that McDowell has also been criticised for being too ‘empiricist’ by some critics and too ‘rationalist’ by others, and in the second edition of *Mind and World* he added an introduction of explanation. McDowell similarly distinguishes his position from two inherited ways of thinking - traditional empiricism and coherentism. He writes “I do not picture objects as speaking to us in the world’s own language. Objects speak to us ... only because we have learned a human language”, but this does not imply that “objects can only be projections of our thinking” (2009a, p.43). He continues:

“Objects come into view for us in actualizations of conceptual capacities in *sensory consciousness*, and Kant perfectly naturally connects sensibility with receptivity. If we hold firm to that, we can see that the presence of conceptual capacities in the picture does not imply idealism” [in the psychological idealist sense]. (ibid)

While Kant's Copernican shift is a shift away from empiricist and naturalist 'causal' or mind-*independent* pictures of knowledge, his view that objects conform to our knowledge of them should not be read as a move to a constructivist position that sees knowledge constructed by the individual and objects as projections of our thinking, or mind as actively imposing meaning or rules on the brute data of intuition⁶³.

Although constructivist epistemology is a major paradigm in education, it is far less recognised in the analytic tradition where, as discussed in Chapter One, empiricist epistemology dominates. So whilst I argue that Kant's Copernican insight has been misinterpreted in educational circles by understanding it as a constructivist move, in mainstream philosophy in the analytic tradition, Kant's Copernican insight is less recognised altogether (except by scholars of Kant), and German idealist thought has generally had little impact. This is why McDowell and Brandom, by drawing on German idealist thought, caused quite a stir in the Anglophone tradition, and why McDowell felt it necessary to carefully spell out the conceptual confusions in the traditional way of thinking about knowledge - by introducing Kant's Copernican lessons - so as to 'exorcise' the perceived dualism. But the strong empiricist/scientific character of this tradition has meant a general undervaluing of the significance of Kant's insight. Andrea Kern argues that the relevance of the German tradition "for contemporary epistemology has been seriously underestimated, to say the least" (2017, p.136). Robert Hanna argues more forcefully, calling the failure of the majority of analytic theorists to learn Kant's lesson 'the Copernican Devolution': a "retrograde evolution in philosophy that brings us back, full-circle, to naïve, pre-Kantian, pre-critical conceptions of mind, knowledge, and world" (Hanna, 2016a, p.2). Hanna further argues:

⁶³ It might be possible to class Kant as a constructivist but this would involve a very different conception of constructivism than that typically found in education. Similarly McDowell wants to hold on to a 'minimum empiricism' but this is a reconceived idea of empiricism that is very different to traditional empiricism.

“David Lewis, Kit Fine, David Chalmers, John Hawthorne, Theodore Sider, and Timothy Williamson, for all their logico-technical brilliance and their philosophical rigor, and even despite their high-powered contemporary professional philosophical status, are every bit as confused and wrongheaded as Christian Wolff. They make all the same old mistakes, just as if they had never been made before. For example, when Sider asserts, without any doubt, hesitation, or irony whatsoever, just as if the previous 235 years of European philosophy had never happened, that “[t]he world has a distinguished structure, a privileged description,” that “[f]or a representation to be fully successful, truth is not enough; the representation must also use the right concepts, so that its conceptual structure matches reality’s structure,” and that “there is an objectively correct way to ‘write the book of the world,’” it simply takes your Kantian breath away. Amazing. That is the Copernican Devolution.” (2016b, p.9)

What Hanna refers to as a ‘devolution’ is the lack of recognition that objects are as we see/know them to be only if we already have the relevant conceptual capacities.

To help understand these Copernican lessons, Sebastian Rödl’s work is invaluable and referred to through the chapters⁶⁴. Rödl emphasises the *unity* of spontaneity and intuition - the intellect and sensibility - in Kant’s view. “That we apprehend substances and their movement through the senses, and forms and their laws through the intellect, are two sides of a coin. In this way the unity of intellect and sensibility,” Rödl argues, “defines the finite intellect” (2012, p.207). Kant’s conception of mind as a power and its connection with the world compares with mind-independent empiricist epistemology. In criticising empiricism, Rödl argues that the concepts of sense experience and perception are not empirical concepts:

“The nature of our faculty of sensory experience is revealed not by empirical inquiry, but by reflection on what we know from spontaneity ... Of course it is possible empirically to investigate the physiology and

⁶⁴ Rödl’s philosophy is significantly richer and more complex than is portrayed in this thesis; I draw on his work (as I understand it, attempting to not misrepresent it) only insofar as to challenge the typical ‘Kantian’ picture in education, in which Kant is characterised as dualist and intellectualist.

psychology of perception in the human species. But such investigations presuppose, and do not provide, knowledge of what human perception is.” (Ibid, p.163)

For Kant “[t]he power of thought transforms human sensibility” (Rödl, 2007, p.70), and this makes for a different conception of our relation or contact with the world – Kant’s Copernican insight.

Kant’s conception of perception and experience (our contact with the world) can be called ‘rational’ because, as Rödl says, the power of thought (our rational capacities) transforms these, and this was a new way of thinking at the time. There is not a dualism with a separate mind receiving and comparing impressions from the world (or projecting meaning onto it); rather, conceiving of reason as a power, our rational capacities are passively and seamlessly drawn into play *in* perception and experience. Kant characterises this ‘power’ with his concept of spontaneity, which accounts for *self*-consciousness and the *unity* or synthesis of our thoughts and ideas. Importantly, spontaneity is a source of knowledge; and as Rödl argues in the quote above, concepts such as perception and sensory experience are revealed by reflection on what we know from spontaneity, rather than through empirical enquiry. To bring this into sharper relief, Kant’s view can be contrasted with the naturalist approach of Hume⁶⁵.

Stephen Engstrom explains that Hume’s conception of reason “implicitly relies on a commitment to ‘the experimental Method of Reasoning’ on which Hume founds his science of human nature”, but that “Kant does not subscribe to this experimental program” (2015, p.20). Engstrom writes:

“Since following this method is a matter of ‘deducing general maxims from a comparison of particular instances (*ECPM* 174⁶⁶), Hume must deduce the general propositions that make up his account of reason

⁶⁵ Regarding Hume in what follows, I do not discuss his rich and comprehensive philosophy, but merely cite some theorists’ comparisons as a way of bringing Kant’s view into clearer light.

⁶⁶ This refers to Hume’s *Treatise* (1739).

from a comparison of actual judgments that constitute particular bits of reasoning. It is accordingly not open to him to develop an account in the way that Kant does, from the self-consciousness that figures in reason's activity." (ibid)

That is Hume attends to impressions from experience only, actual impressions received, which reason compares; this conception of reason 'tracks reality' but it lacks spontaneity, as a *source* of knowledge. For Kant reason, as a power, synthesises our perceptions, ideas and thoughts into a unified worldview. Engstrom clarifies, "both Hume and Kant conceive of human reason as wholly discursive", in contrast to Cartesian epistemology, but there is a difference:

"On Hume's conception of it, this discursive capacity lacks any spontaneous power of combination. The basic power of the mind to unite its ideas is vested solely in the imagination, operating in conjunction with the passions. Hume does not investigate the possibility that reason's discursive activity might be originally synthetic in nature. Nor is he alone in leaving this possibility unexplored. Working out the idea of a synthetically discursive cognitive capacity requires a fundamental rethinking of a standard philosophical conceptions of human knowledge and how it is related to its object and to its subject." (ibid, p.21,22)

Rethinking the 'standard conception of human knowledge' of the time, led Kant to recognise that we do not only have (empirical) knowledge through the senses, but reason is also a source of knowledge, a power that (blindly) unites or 'holds together' these separate and individual impressions into a single body of knowledge (a worldview I can call 'mine'; self-consciousness). Otherwise, Kant says, "I should have as many-coloured and diverse a self as I have representations of which I am conscious to myself" (B134). Moreover, our 'worldview' is drawn on in our contact with the world⁶⁷.

Rödl follows Kant in refuting "the fundamental thesis of any empiricism according to which the knowledge, or at least the perception, of what is here

⁶⁷ This Copernican way of thinking is elaborated through the chapters. (It means, for instance, that we first need some knowledge of what, say, a giraffe is in order to identify one when we see one.)

and now and affecting the senses, is self-standing” (2007, p.11). He writes of Hume’s position:

“David Hume held that the senses deliver impressions that in themselves bear no connections among them. If they appear connected, then this reflects subjective habits to associate them in certain ways. In particular, the unity of a substance, which holds together changeable states ... cannot be found in what is given to the senses. It is a construction put on impressions that on their part do not depend on these forms of unity. Kant argues that we must abandon this conception of sensibility.” (2007, p.179)

On Kant’s conception of sensibility, as our contact with the world, our rational capacities (knowledge and concepts we have thus far learnt) are immediately drawn into play; the senses do not merely deliver separate and individual impressions that reason then goes to work on⁶⁸. Thus the Copernican idea is that our concepts and knowledge of the world (previously learnt) are involved in our human contact with it, and responses to it. The world cannot be perceived mind-independently⁶⁹.

Andrea Kern also points to the different pictures of our relation with the world, illustrated for instance in conceptions of experience. Of Hume she writes:

“when it comes to explaining how “experience” can provide us with knowledge of the world, experience itself “must be entirely silent”, for the mind “cannot possibly reach any experience of [its perceptions] connexion with objects” – i.e. it cannot possibly acquire through experience an answer to the question of how such experience is hooked up with objects in the world. Thus, Hume concludes that “the supposition of such a connexion” between experience and objects in the world “is, therefore, without any foundation in reasoning” [Hume, *Enquiry concerning Human Understanding*, 153f]”. (2017, p.101)

⁶⁸ This is a case of the ‘layer-cake’ conception of human mindedness (that we keep coming across) that is also developed through the thesis.

⁶⁹ See also Jesse Mulder for a clear and insightful argument on the limits of Humeanism (2018).

In contrast, Kant's insight is that experience itself is not disconnected from objects, but rather in (perceptual) touch with them; moreover the supposition (or knowledge) of this connection, that Hume concludes cannot come from reasoning, for Kant does come from reasoning, from spontaneity, for reason is a source of knowledge. To return to Rödl, Kant "recovers the internal connection between thought and sensory perception"; he teasingly writes that Hume is "the enemy of reason, who dissipates human experience into sensory impressions, denies any knowledge that extends beyond the moment, and seeks to unmask the semblance of such knowledge as the projections of subjective habits" (2012, p.2). Again, for Kant reason is a source of knowledge and directly involved in our experience of the world.

This source, from which Kant derived his view, is (to return to Engstrom) "the self-consciousness that figures in reason's activity" and which "is present, at least implicitly, in all thinking, and it constitutes the identity of the thinking subject's conscious activity" (Engstrom, 2017, p.22). Kant characterises reason as self-determining, as autonomous, which is significant for Engstrom who is interested in *practical* knowledge; he writes:

"Hume, as we know rejects the possibility of a practical application of reason, famously claiming to have proved that 'reason is perfectly inert' (TIII.i.1.458). But since Kant's conception of reason derives from reflection on our ordinary understanding of discursive knowledge as a self-conscious synthetic activity, reason as he conceives of it does not lie merely in 'the comparing of ideas', but stands in an active, productive relation to knowledge, as the source of its cognition-constituting unity. His conception is thus open, in a way that Hume's is not, to accommodating the idea that reason has a practical as well as a theoretical use". (ibid, p.26)

Kant's conception of reason as spontaneous and autonomous means that thought alone can move us to act (our actions are determined from within), for "the one great impediment to understanding how knowledge can be practical is the assumption that reason, the cognitive capacity itself, is

receptive in nature and hence passive in operation”, that is ‘inert’ (Engstrom, 2009, p.14).

McDowell too contrasts Hume’s naturalist picture of knowledge with that of Kant; one difference is in respect to conceptions of the world. McDowell argues that for Hume, the world is ‘disenchanted’, there is no meaning or structure in the world, rather meaning is projected onto it by subjects. McDowell writes: “[t]he disenchantment Hume applauds can seem to point to a conception of nature as an ineffable lump, devoid of structure or order. But we cannot entertain such a conception. If we did, we would lose our right to the idea that the world of nature is a world at all” (1998a, p.178). For Kant, the world we know is not independent of mind, and we are in touch with it through the senses⁷⁰. Stekeler also writes of the differences between Kant and Hume; he argues that:

“the reason why Kant departs, and why we all should depart, from Hume empiricism and scepticism is precisely this: Hume fails, in the end, to give a satisfactory account of the differences between animal behaviour and human action, animal cognition and human knowledge, animal perception and human Intuition. Hence, Hume cannot fulfil the task of philosophical anthropology to make the fundamental differences between the form(s) of leading an animal life and the constitutive form(s) of a human life explicit.” (2010, p.4)

What Stekeler is referring to as a difference between humans and animals is Kant’s Copernican insight that human perception and action involves our (distinctively human) ‘rational’ relation with the world, which implicitly draws on the previous knowledge and concepts we have learnt, and is manifested in our responses to it⁷¹.

⁷⁰ Conceptions of the world are discussed further and compared in the next chapter.

⁷¹ Again, ideas such as a ‘rational’ relation with the world and mind as ‘in touch with’ reality are perhaps inadequately expressed but are elaborated as we proceed with a non-dualist reading of Kant; in this respect the reader is asked to go with the flow in these early chapters.

Different conceptions of our relation with the world lead to different views of acquiring knowledge and the learning process. Empiricist approaches tend to see knowledge as (inductively) acquired from encounters with particulars, while for Kant there is knowledge of particulars “through, and only through, knowledge of forms”, or concepts (Rödl, 2012, p.11), so “*empirical knowledge always already contains general knowledge, which therefore is not inferred inductively from the former*”, rather it depends on it for its possibility (ibid, p.13). This Copernican point relates back to the discussion in the last chapter between Rorty and Boghossian about the mind-dependence/independence of knowledge. Rorty’s point was that we do not know a giraffe just by seeing one, we first need the concept ‘giraffe’, or at least some idea of what a giraffe is, to know one when we see one. Knowledge of particulars, Rödl argues, “is possible only because knowledge of the particular always already contains knowledge of its form. In Kant’s words, knowledge of the form is always encountered in the experience of the particular” (ibid, p.204). Put another way, we perceive the particular “only as we apprehend the general in it, and we apprehend the general only as we see it at work in the temporal” (ibid, p.207). And we acquire and develop *general* knowledge through experience (encounters with particulars) and through *Bildung* or upbringing - largely through learning a language, parent-child interaction and schooling⁷². As we encounter particulars in our everyday practices so our knowledge of the general is developed (the unity of general knowledge includes relations between concepts, such as what follows from what)⁷³. The interpersonal and normative aspects of Kant’s view also contrast with traditional empiricist epistemology; McDowell writes:

⁷² While Kant does not explicate an account of learning, his view is pertinent to and rich in resources for this. For instance, Stekeler’s work on intuition is informative for a picture of learning through parent-child interaction, and Rödl, Kern and McDowell all discuss learning and developing conceptual capacities through a process of interaction with a knowledgeable other, which will hopefully become clearer as we proceed with elaborating Kant’s epistemological framework.

⁷³ The general here is not absolute or universally unchanging, rather it is culture-dependent and subject to change, discussed further in Chapter Eight.

“According to traditional empiricism, experience yields a foundational level of knowledge, available to us in perception through the operation of capacities that we have at birth or develop in ordinary biological maturation, and are in no way dependent on acculturation or acquired knowledge. In experience, on this picture, objective reality impresses itself on subjects immediately.” (2009a, p. 91)

The more interpersonal and culture-dependent aspects of Kant’s view are not typically appreciated in interpretations found in educational literature, but neither is the first-person stance of his Copernican insight.

Kant’s first person (human) standpoint is something he takes over from Aristotle⁷⁴, and is inspired by Rousseau. Kant confesses: “I am a scientist by inclination. I know the thirst for knowledge and the deep satisfaction of every advance of knowledge... Rousseau has corrected me. I learned to honor man” (Henrich, 2003, p.55). Kant takes an anthropological approach to his thinking about mind and knowledge (he was the first to introduce anthropology as a subject at university). The idea of a capacity for knowledge lies at the centre of his view. We experience the world from our first-person (subjective) stance; we cannot escape this ‘subjectivity’, we cannot get outside of our minds or skins to know reality independently of our perception, or independently of our knowledge of it - the Copernican point. We can talk of a power or capacity for knowledge in general, and also of specific conceptual capacities that we have acquired and developed (so far) in our lives. These capacities are drawn into play in our experience of particular objects (another way to say this is that our rational capacities are in touch with things in the world, in a ‘rational’ relation). While our capacity for knowledge is fallible, we might be wrong in what we think we see or know - it is nevertheless all we have to go by. This compares with traditional empiricist approaches that search for certainty or foundations *outside* of mind, in the world conceived of as *independent* of mind. As exemplified by Boghossian, many feel a felt need

⁷⁴ There are many similarities between the views of Kant and Aristotle that have not been adequately recognised in educational interpretations.

for solid foundations external to mind. McDowell calls this a 'side-ways on' picture, and criticises the desire for foundationalist thinking. This, he says,

“results from the idea that one could not achieve a justified conviction of objective correctness, in thought about anything, from within something as historically contingent as a conceptual scheme; what is required is to break out of a specific cultural inheritance into undistorted contact with the real.” (1998a, p.37)

However, we cannot escape the knowledge we have; we cannot escape subjectivity for 'undistorted contact', rather our contact with the real is through our (historically contingent) knowledge, concepts, and norms. We can say that from a first person standpoint the conceptual is 'unbounded', as we are in a perceptual relation with the world and cannot break out of this for a side-ways on view; mind is not cut off from reality, but in touch with things themselves. There is no dualism. As McDowell argues, “reflection on an inherited scheme of values takes place at a standpoint within that scheme” (ibid.)⁷⁵; we might be mistaken, but there is no foundation to appeal to outside of thought⁷⁶.

In arguing against the perceived need for external foundations, McDowell quotes Stanley Cavell:

“We learn and teach words in certain contexts, and then we are expected, and expect others, to be able to project them into further contexts. Nothing insures that this projection will take place ... just as nothing insures that we will make, and understand, the same projections. That on the whole we do is a matter of our sharing routes of interest and feeling, modes of response, sense of humor and of

⁷⁵ This point is discussed in Chapter Four.

⁷⁶ In empiricist epistemology, foundation is something external to thought, but it can be conceived as something within thought. For instance, Dieter Henrich writes: “In a sense, Kant’s system certainly has a foundation. It consists in the epistemology of the first *Critique* and the conceptual apparatus operative within it. But it is not a philosophical foundationalism in any strong sense. The key notion that leads to the definition of knowledge and provides the justification of our knowledge claims about objects in time and space is much too weak to suit such a purpose.” (1992, p.3.) This is a foundation within a system, not outside it.

significance and of fulfilment, of what is outrageous, of what is similar to what else, what a rebuke, what forgiveness, of when an utterance is an assertion, when an appeal, when an explanation – all the whirl of organism Wittgenstein calls “forms of life.” Human speech and activity, sanity and community, rest upon nothing more, but nothing less, than this. It is a vision as simple as it is difficult, and as difficult as it is (and because it is) terrifying.” (Cavell, 1969, p.52, in McDowell, 1998a, p.206-207)

This beautifully captures the way learning and concept development (knowledge) is rooted in ordinary social life – what Wittgenstein calls ‘forms of life’⁷⁷. A subject’s capacity for knowledge develops a more determinate shape with the acquisition of particular capacities, by learning language, concepts and norms through being initiated into the social practices that constitute our inherited culture. We cannot break free from this, but can reflect from within it. McDowell describes the terror of which Cavell writes as a sort of vertigo “induced by the thought that there is nothing that keeps our practices in line except the reactions and responses we learn in learning them” (ibid, p.207). “The cure for the vertigo”, McDowell argues, “is to give up the idea that philosophical thought ... should be undertaken at some external standpoint, outside our immersion in our familiar forms of life” (ibid, p.63). Emphasising a first-person standpoint however does not mean taking a constructivist position that sees mind making meaning, knowledge or reality and projecting this onto the world - the metaphysics are quite different.

The shift from external foundations to a first person stance does not mean no constraints at all, but that constraints are conceived differently. One source of constraints arises from our background of cultural norms and practices. McDowell talks of ‘the space of reasons’ that he aligns with Kant’s ‘realm of freedom’, and Rödl talks of a ‘normative background’, within which

⁷⁷ Kern (2015) questions Cavell’s characterisation of Wittgenstein’s ‘form of life’; on Kern’s reading, a ‘form of life’ is defined by a *capacity* for knowledge, hence she agrees that “knowledge rests upon a certain form of life” but this “no longer expresses the idea that knowledge rests upon something that is more fundamental than knowledge. It rather expresses the idea that knowledge rests upon a form of life that cannot *exist* without knowledge” (ibid, p.27).

individual claims and actions take place and are judged. Such inherited norms and practices are part and parcel of our world, so despite the fact that we have only inherited norms and practices from which to appeal, McDowell maintains “it would be a mistake to let this tend to undermine our confidence ... that we have reality more or less within our cognitive grasp” (1998a, p.128). And he responds to those who question this in the following way:

“The right response to the claim that all our assessments of truth are made from the standpoint of a “conceptual scheme” that is inescapably our own is not to despair of our grip on reality but to say, with Hilary Putman, “Well? We should use someone else’s conceptual system?” (ibid)

A first person standpoint need not entail a subjectivist relativism that sees individuals constructing their *own* knowledge and meaning. In the widespread characterisations of Kant as a constructivist in education, the world as meaningful, as a standard or norm of correctness for empirical thought and judgements, is obscured, thus losing the objectivity of Kant’s view. Beliefs and judgements “have objective content in the sense that their truth is dependent on how things are in the world” (Kern, 2017, p.53). But constraints are *within* thought not external to it, and this comes into view through Kant’s concepts of intuition and sensibility, which are developed as we proceed⁷⁸. First though, it is helpful to address a related distinction Kant makes between ‘things-in-themselves’ and ‘appearances’.

As with other distinctions in educational interpretations, Kant’s contrast between thing in itself and appearance has been read as a form of dualism, with the former understood as empirical reality and appearance as something in the head. For example David Carr writes:

“Kant’s epistemology maintained that if the subjective experiences of agents were to be sources of genuine knowledge, such knowledge claims would need to correspond to an objective reality lying beyond

⁷⁸ The idea of constraints by the world is more specifically elaborated in Chapter Five.

experience which he called the *noumenon* or thing-in-itself.” (2003, p.187)

Carr understands thing-in-itself to be objective reality that he reads as lying ‘beyond experience’, which leads him to think that Kant “feels compelled to say that something ‘behind’ appearance is needed to secure the complete objectivity of accurate perceptions” (ibid, p.104)⁷⁹. But the thing in itself can be read as objective reality, and so too is ‘appearance’ objective reality – they are the same empirical reality that we experience, distinguished only for more fine-grained explanation⁸⁰. ‘Things-in-themselves’ tends to be reworded as ‘things as they are in themselves’, or as “the way things are in and of themselves” (Boghossian, 2006, p.31); understood as objective reality, this is then *contrasted* with ‘appearances’, presupposed as something in the head - they are *opposed* to one another. But we need to understand things themselves and appearances as the very *same things*. McDowell argues:

“Kant undermines the idea that appearance screens us off from knowable reality; he offers instead a way of thinking in which ... appearance just is the reality we aspire to know”. (2000, p.112)

They are the very same things under different descriptions, different ways of referring to the same thing. Through sensibility we acquire empirical knowledge of the world as it appears; Kant describes this as ‘receptive’ knowledge, acquired *a posteriori* through the senses. (It shares with empiricism the idea the senses are a source of knowledge, but sees spontaneity as also involved.) I hold that the dualist framework of mind as separate from the external world has shaped interpretation of Kant’s terms. The idea of things themselves and appearances being the same objects may be difficult to (re)conceive, but we return to it many times.

⁷⁹ Many other examples are discussed in Part Two.

⁸⁰ The idea of things in themselves is a limiting concept that Kant uses to show the limits of the senses, compared with the freedom of spontaneity, discussed in Chapter Eight.

Kant contrasts 'receptive knowledge' with 'spontaneous knowledge' (or self-knowledge) which is not acquired through the senses (Rödl, 2007)⁸¹. Self-knowledge stems from spontaneity, and includes knowledge of ourselves as self-conscious thinking and intentional agents. Knowledge from spontaneity is knowledge of ourselves as a thing in itself; it is not receptive knowledge of a separate object. We cannot know a separate object as a thing in itself, only as it appears to us, but as human beings we can know ourselves as intentional agents, as a thing in itself, as well as an object to be observed. This distinction is related to Kant's 'realm of freedom'. Kant first writes that we can "have no knowledge of any object as thing in itself, but only in so far as it is an object of sensible intuition, that is, an appearance", and so "it does indeed follow that all possible speculative knowledge of reason is limited to mere objects of *experience*" (Bxxvi). But Kant's insight is that knowledge is not exhausted by knowledge through the senses, there is also knowledge from spontaneity. His argument is that as rational beings we are on the one hand subject to the laws of nature as described by the sciences (for example illness, maturation, that we cannot change), but at the same time what makes us distinctively human is the spontaneity of mind, the realm of freedom (which can itself be a cause of action). Another way to say this is that being autonomous we are not only subject to the mechanical laws of nature but to the 'causality' of freedom, the power of thought to move us to act. So when it comes to understanding ourselves as humans and intentional agents, we can know ourselves "*in a twofold sense*, namely as appearance and as thing in itself"; we are "necessarily subject to the law of nature, and so far *not free*, while yet, as belonging to a thing in itself, [we are] not subject to that law, and [are] therefore *free*" (Bxxvii). We can know ourselves through spontaneity (self-conscious awareness of what we are doing or intend to do), not only through observation (looking in a mirror).

Rödl gives voice to this insight, that self-knowledge springs from spontaneity and is not receptive knowledge:

⁸¹ This distinction is lacking in typical educational characterisations of Kant.

“Kant states that, insofar as we are under the causality of freedom, we know ourselves not as appearances, but as things in themselves. He means that, as subjects of intentional action, we do not know ourselves receptively; our knowledge in this case does not depend on a faculty of sensibility that mediates between ourselves and the objects we know. Since “appearance” refers to an object known by means of a receptive faculty, our knowledge of ourselves as agents is not knowledge of appearances. The power of this insight has been underestimated.” (2007, p.122 footnote)

Kant’s distinction between receptive knowledge from the senses and knowledge from spontaneity is absent in portrayals of his work in educational literature – illustrated in Part Two. Rödl argues that the power of this insight - that we can know ourselves as thing in itself, as an intentional agent, as well as empirically through appearance - has been underestimated. Two-world interpretations have obscured the explanatory reason for the distinction and resulted in reinforcing the typical ‘dualist’ picture.

Intuition is the most overlooked aspect of Kant’s philosophy in educational theory, with attention mainly focussed on what tends to be seen as a detached mind, ordering experience or imposing rules and principles. While intuition is the English translation of the German ‘*Anschuuang*’, much is lost in translation. The Merriam-Webster dictionary defines intuition as “a natural ability or power that makes it possible to know something without any proof or evidence: a feeling that guides a person to act a certain way”. This subjective feeling or inner state stands in stark contrast to Kant’s use of *Anschauung*: intuition accounts for the *objective* aspects of knowledge. McDowell warns that in thinking about *Anschauung* “we need to forget much of the philosophical resonance of the English word intuition” (2009, p.260). It is not confined to something inner, nor an information or evidence-gathering faculty - “[w]e are equipped with a special evidence-gathering faculty of intuition, distinct from the standard five senses; by exercising this faculty, we are able to know a priori such truths as those of mathematics and logic”

(Boghossian, 1996, p.334)⁸². More typically, intuition is interpreted as brute impressions or empiricism's sense data, but this too we need to put aside.

So how is intuition to be understood? In *Mind and World*, McDowell writes: “[w]e should understand what Kant calls “intuition” – experiential intake – not as a bare getting of an extra-conceptual Given, but as a kind of occurrence or state that already has conceptual content” (1996, p.9)⁸³. More recently McDowell writes: Kant “insists that in intuitions forms required by the understanding come into play without activity on the part of subjects” (2009, p.191)⁸⁴; and that intuitions “directly bring objects into view through bringing their perceptible properties into view” (ibid, p.268). Rödl argues that thought is *only possible* by relating directly or indirectly to intuition. He describes it as ‘sensory content’.

“By “content” Kant means content taken in through the senses. What is taken in through the senses - a sensory content - is what we perceive when we perceive something; Kant calls such a content an intuition”. (2012, p.55)

Rödl explains: “[t]houghts without intuitions are empty: the human, discursive intellect depends on its being given an object through the senses. Thus it is *finite*: it is conditioned by what it represents” (ibid, p.57). This is to say that the intellect is world-dependent for *empirical* knowledge (sensory content),

⁸² Boghossian continues, “The central impetus behind the *analytic* explanation of the a priori is the desire to explain the possibility of a priori knowledge without having to postulate such a special faculty, one that has never been described in satisfactory terms. The question is: How could a factual statement S be known a priori by T, without the help of a special evidence-gathering faculty?” (1996, p.334). This is different to the understandings of intuition and a priori knowledge found in Kantian scholarship.

⁸³ McDowell's early characterisation of intuition in *Mind and World* provoked much response in Kantian exegesis. For instance Günter Zoller (2010) argues that McDowell's intuitions being content-laden or propositional is a relapse into the Myth of the Given. McDowell has since reread Kant's first *Critique* and changed his position (discussed in Chapter Ten). He tells us that he used to assume experiences have *propositional* content but now sees content as *intuitional* in Kant's sense (see ‘Avoiding the Myth of the Given’, 2009, pp.258-261).

⁸⁴ This, McDowell tells us, is his corrected Kant.

the objects given through the senses condition what it represents, and this contrasts with an 'infinite' mind (such as a 'divine' will) that is the source of the *existence* of its objects. (But, as argued, for Kant spontaneity is also a source of knowledge that accounts for knowledge *not* acquired empirically, such as the concepts 'knowledge', 'cause' and those used in pure maths and abstract algebra.⁸⁵) It is intuition though, sensory content, that makes mind 'world-dependent' and this is important for understanding the objective dimensions of Kant's view, so often overlooked, and how mind can be read as embedded, engaged and situation sensitive, rather than detached and abstract⁸⁶.

Stekeler draws our attention to these objective and factive aspects of Kant's view: "a proper understanding of the notion of *Intuition* is of highly systematic importance for understanding the possibility of reference and of world-related content not only of judgements about things present to us but all things in the real world at large" (2010b, p.2). Stekeler also brings out the social and practical aspects of this objectivity. It is "a practical form of identifying real objects in actual experience"; the interpersonal aspects involved in this shared relation with objects compares with mind-independent accounts of individual sense data that mind then goes to work on (2010a, p.10). Stekeler writes:

"Our knowledge does not rest on the ground of phenomenal sense data. Rather than with individual sense data, any knowledge begins with an apperception of things in my or your or our present and object-related *Anschauung* that I can share with you and others, on the ground of

⁸⁵ This is to say that while the human intellect is 'finite' (in that it is connected with reality and thus conditioned by empirical objects), its *spontaneity* (the realm of freedom) means it can think anything, including concepts like infinity and abstract mathematical ones.

⁸⁶ Again, to say that mind is world-dependent, and that the world is mind-dependent, are inadequate expressions, as they suggest ontological opposition, different realms that are somehow connected to the other, and not as one. But, as noted in Chapter One, I have used the language of connection or inter-dependence as a first step away from the ingrained assumption in education of mind as *separate* from the world, and towards an understanding of these as inseparable.

some transformations of perspectives and on the ground of joint conceptual distinctions.” (Stekeler, 2008, p.14)

As a human capacity or ability, Stekeler emphasises the interpersonal and cooperative norms involved in joint perception, which provide objectivity. An educational point here is that this ability is *socially learnt* rather than simply a genetic development in children’s perception of the world. This compares with Piaget’s genetic conception of cognitive development, discussed in Part Two. Intuition is a rich notion and its almost complete obscurity in educational interpretation means important areas of Kant’s philosophy, such as objectivity and sociality, have not been appreciated⁸⁷.

What of spontaneity? The spontaneity of mind compares with empiricist epistemology in which mind is presupposed as an object - a brain, a blank slate, a mirror, or reflection - a recipient of impressions. “Reason has no power to produce anything outside its representations” in empiricism, Engstrom writes , “but serves merely to achieve a true representation of things that are there anyway. It simply tracks reality” (2013, p.138). Again Kant conceives of mind is a *power*, an activity or energy, characterised as spontaneity; this can be the ‘causality’ of our actions in that we are not merely pushed around by external forces (determined from without), rather the power of thought *itself* can move us to act. McDowell argues that we act in the light of reasons, and reasons have a certain grip or hold on us, the authority of which comes from spontaneity. Rödl points out “[a]s is traditional, ‘light’ here signifies knowledge: acting in the light of reasons is not just acting in accord with reasons, but from recognition of those reasons” (2016, p.85). In the same vein Christine Korsgaard writes “reasons direct, guide, or obligate us to act or judge in certain ways” (2003, p.226). Douglas Lavin similarly argues, “the way in which agents are directed by principles is radically different form the way in which mere bits of stuff are directed by physical laws” (2004, p.444). It is the spontaneity or autonomy of mind that is

⁸⁷ As with spontaneity, the notion of intuition is returned to and developed in each chapter.

being expressed by these Kantian theorists. As with Descartes, Kant recognises the activity of mind, the “I” who thinks, but unlike Descartes his conception is not dualist in that Kant’s “I” is not immaterial or separate from body and world, but is the embodied subject of knowledge, engaging in the particular practices of her inherited culture.

Kant’s *Critique of Pure Reason* can be read as an investigation into mind as well as knowledge. Rödl points out that in the German tradition “self-consciousness, reason and freedom are one” and form the starting point of any investigation into knowledge (2007, p.105). He explains that “[t]he concept of spontaneity is broad; it applies to the sentient life of animals and perhaps even to the vegetative life of plants”, but argues that the “spontaneity of thought is of a special kind: it is a spontaneity whose acts are knowledge of these very acts ... such is the spontaneity of *reason*” (ibid, p.14). This relates to Kant’s distinction discussed above, between receptive knowledge and spontaneous knowledge: knowledge from observation is *receptive* knowledge and knowledge from reflection is *spontaneous*, or self-conscious. This differs from empiricist mind-independent accounts of knowledge in that spontaneity is involved even in acts of knowing through the senses; for while we can know *what* we perceive from receptivity, Rödl argues, we know *that* we perceive from spontaneity. He writes:

“Knowing from receptivity that something is the case is an act of a self-conscious power, a power whose acts are known by their subject from spontaneity ... She who receptively knows something knows that she does, not from receptivity, but from spontaneity.” (ibid, p.134)

Empiricism, Rödl argues, does not recognise the self-conscious nature of receptive knowledge (ibid). For Kant, spontaneity is involved even in receptive, that is empirical, knowledge.

Rödl further explains the difference: spontaneous knowledge is “of oneself as oneself” as opposed to receptive knowledge “of an independent object and is of something as other” (Rödl, *ibid*, p.145).

“Unmediated first person thoughts articulate knowledge I possess, not by *perceiving*, but by *being* their object. If I know without mediation that I am F, then I know it, not by perceiving that I am F, but by being F.” (*ibid*, p.9)

A subject knows herself through a self-conscious power of knowledge, and she knows she has this power, by having it (*ibid*, also p.159). This is to say that our knowledge of ourselves thinking, or judging or deciding something, does not arise from observation. Furthermore, while first-person knowledge is non-receptive and non-empirical, Rödl argues that it is nevertheless of a material reality, for it shows “the subject of action and the subject of belief to be, *in such a way as to know herself to be*, material, which knowledge is first personal and not empirical” (*ibid*, p.14)⁸⁸. When it comes to the concept of knowledge, Rödl argues:

“If we inquire into the nature of knowledge, we inquire into our own nature... The science of man, of which the theory of knowledge forms a part, is not an empirical science. It is pursued not by observing men and drawing inferences from these data but by articulating what we know of man by being men.” (*ibid*. p.164)

The nature of knowledge is not best investigated empirically, but through spontaneity – philosophical enquiry.

In conclusion, this chapter has focussed on a number of Kant’s epistemological concepts and introduced different understandings from recent Kantian exegesis in order to begin a non-dualist picture of his Copernican insight. Mind as a power, a self-determining capacity (accounting for freedom, intentionality and agency), was compared with conceptions of mind that lack this power. It was argued that for Kant our conceptual

⁸⁸ This argument is developed in Chapter Three.

capacities are exercised unreflectively in perception and experience, as well as consciously in thinking and reasoning. From a human standpoint an embodied mind is perceptually connected with objects, and a conceptual 'repertoire' or worldview is acquired and developed through participating in everyday social and cultural practices. This begins to articulate the argument that Kant's conception of mind need not be seen as intellectualist, detached from reality, or as imposing meaning, but as embodied and continually engaged in on-going experience. Attention will continue to be drawn to conceptions of mind and world and their relation, because these underlie the differences between dualist and non-dualist interpretations of Kant. While this chapter has been mostly about conceptions of mind, the focus of the next chapter is reality, and what in the world is real.

Chapter 3: Naturalisms, Materialisms and Ideality

An argument has begun that assumptions about mind and world inherent in empiricist epistemology have shaped dualist interpretations of Kant in education, which have drawn criticism and some negative characterisations of mind as detached from real life. Chapter one drew attention to the conceptual inconsistencies in traditional empiricist epistemology that give rise to a dualism between mind and an external world. In chapter two, different understandings of Kant's terms from recent exegesis were introduced in order to distinguish them from familiar English or Anglophone interpretations, and begin to bring into view a non-dualist reading of Kant's conceptions of mind and knowledge.

As discussed, Kant conceives of mind as a power, a capacity for knowledge; we act and react to things around us in light of the knowledge we have acquired. While our rational capacities are active in reasoning, judging and discursive activity, they are also *passively* exercised in perception and experience. This 'rational' relation with the world draws attention to the importance of what we already know in our on-going engagement with it. This chapter focuses on conceptions of world (nature, reality), to further show how mind and world can be understood together. Through a discussion of naturalism, a non-dualist reading of Kant's philosophy is elaborated, as more of his concepts are disentangled from the deep-seated presuppositions that have shaped familiar English interpretations of them, reflected in educational portrayals of his work.

As discussed previously, the conceptual problem of how to fit a non-material mind into the material world has long occupied analytic epistemologists. One response has been to turn to a variety of naturalism, which 'reduces' or completely eliminates the concept of mind from explanations. For instance, 'reductionism' and 'eliminativism' are both naturalist (materialist) positions in the philosophy of mind that involve the

idea that mental phenomena such as mind can be ‘reduced to’ (explained by) physical phenomena. Instead of mind there is the brain, which fits with a physicalist conception of reality, and can be investigated by the methods of science. Naturalism is a growing trend and its theories are understood to be more scientific and objective. In education the influence of scientific values and methodology continues to gain strength; the pressure on researchers for empirical and quantitative work, with measured impact, the rise of brain-based theories of learning, and neuroscientific approaches to educational issues, are all evidence of this trend (despite criticism by many educationalists).

This chapter discusses naturalist epistemology and identifies some conceptual commitments, in order to (1) further argue that such familiar ‘scientific’ understandings of key concepts act as presuppositions through which Kant has typically been interpreted in educational theory, and (2) contrast alternative understandings of these concepts to elaborate and bring further clarity to the reading of Kant being presented in this thesis.

Naturalism is a contested term. Like other concepts discussed so far, the concept of nature can be understood in different ways. Hilary Putnam gives voice to this:

“Today the most common use of the term “naturalism” might be described as follows: philosophers – perhaps even a majority of all the philosophers writing about issues in metaphysics, epistemology, philosophy of mind, and philosophy of language – announce in one or another conspicuous place in their essays and books that they are “naturalists” or that the view or account being defended is a “naturalist” one; this announcement, in its placing and emphasis, resembles the placing of the announcement in articles written in Stalin’s Soviet Union that a view was in agreement with Comrade Stalin’s; as in the case of the latter announcement, it is supposed to be clear that any view that is not “naturalist” (not in agreement with Comrade Stalin’s) is anathema, and could not possibly be correct. A further very common feature is that, as a rule, “naturalism” is not *defined*.

One happy exception to this rule is that in the glossary to Boyd, Gasper, and Trout’s *The Philosophy of Science*, naturalism is actually defined,

namely as “[t]he view that all phenomena are subject to natural laws, and/or that the methods of the natural sciences are applicable in every area of inquiry.” (Putman, 2004, pp.59-60)

Putman continues:

“what is common to most versions of “naturalism” is that those conceptual resources and conceptual activities that do not fit into the narrowly scientific first-grade system are regarded as something less than *bona fide* rational discourse.” (ibid, p.61)

The idea that the methods and values of the natural sciences are the only ones that count for truly objective knowledge was illustrated by Boghossian in Chapter One.

‘Nature’ is sometimes further reduced by privileging physics; ‘physicalism’ offers a very restrictive ontology, with anything that cannot be subsumed under physics simply eliminated from explanations of reality⁸⁹. However such ‘physicalism’ is disputed even from within the scientific camp. J.A. Fodor’s 1974 ‘Special Sciences’ argument continues today. “A typical thesis of positivistic philosophy of science is that all true theories in the special science should reduce to physical theories in the long run”, Fodor explains, for they hold the view “that all events which fall under the laws of any science are physical events and hence fall under the laws of physics” (ibid, p.97). But he famously goes on to argue that the laws of the ‘special sciences’ are too problematic for reduction to the laws of physics, even in principle⁹⁰. Mario De Caro and David Macarthur similarly point out that “a scientific naturalist might think there are entities such as acids or predators or phonemes that

⁸⁹ Under ‘eliminativism’, human beings are not described with intentionality and agency but as, say, “the sum of atoms” - Putman, among others, challenges this impoverished conception, arguing that our ordinary and familiar objects are missing. Putman, (2004, p.68-69).

⁹⁰ What counts as a ‘special science’ is debated; more obviously these would be social sciences, psychology and non-reductive positions in the philosophy of mind, but for some, *any* science other than physics is considered a ‘special science’, including chemistry, biology and neuroscience (see the Wikipedia entry on ‘special sciences’).

chemistry or biology or experimental psychology commits him to that are not (reducible to) physical entities, and that, consequently, the explanations of, say, biology are not reducible, even in principle, to the explanations of physics” (2004, p.5). The debate and literature spawned by Fodor’s argument reveal the extent of disagreement over what really counts as ‘science’ and ‘naturalism’ in the analytic tradition.

In the German tradition there is a richer understanding of ‘science’ (*Wissenschaft*), as enquiry or investigation in general⁹¹; this captures both philosophical investigation, such as Hegel’s *Science of Logic*, as well as the natural sciences. Similarly, it is possible for richer understandings of ‘naturalism’, which we come to below. For the purposes of comparison with Kant’s epistemology, we will take as springboards for discussion, Boyd, Gasper and Trout’s two key commitments of naturalism: *the view that all phenomena are subject to natural laws*, and *the methods of science are applicable in every area of inquiry*.

The first commitment, that ‘all phenomena are subject to natural laws’, is critically evaluated in this chapter to contrast and elaborate more of Kant’s view, while the second commitment (‘the methods of science are applicable in every area of inquiry’) will be discussed in the next chapter for the same purpose. Boyd, Gasper and Trout refer to the causal laws that are investigated and explained by the natural sciences; these share a general ontological commitment: what is considered real in the world is reality explicable in physical or material terms and concepts. As with other mind-independent conceptions of knowledge, materialist conceptions of reality do not include mind or ourselves as part of it; but this is not a problem for these naturalist theorists because the concept of mind is written out and explanations are reduced to scientific concepts of material entities. Even if we put aside the differences between an understanding of ‘science’ as only physics or as combined natural sciences, we are still left with a natural

⁹¹ This was pointed out in the introduction.

scientific conception of the world in which mind, and us and other normative and psychological concepts, are excluded.

A 'scientific' conception of the natural world is deeply ingrained and, I argue, has influenced interpretations of Kant; in order to better appreciate Kant this conception needs to be challenged. Again McDowell's work is of help. McDowell associates what he calls 'modern' or 'bald' naturalism with the rise of science:

"It is commonplace that modern science has given us a disenchanting conception of the natural world. A proper appreciation of science makes it impossible to retain, except perhaps in some symbolic guise, the common mediaeval conception of nature as filled with meaning, like a book containing messages and lessons for us. The tendency of the scientific outlook is to purge the world of meaning ... reality is exhausted by the natural world, in the sense of the world as the natural sciences are capable of revealing it to us. Part of the truth in the idea that science disenchanting nature is that science is committed to a dispassionate and dehumanized stance for investigation; that is taken to be a matter of conforming to a metaphysical insight into the character of reality as such." (1998a, pp.174-175)

The concept of nature (reality, world) is exhausted by natural scientific descriptions, and disenchanting through a 'dehumanized' and 'dispassionate' methodology. As previously discussed, empirical knowledge for Kant does not exhaust what knowledge is; his richer conception includes knowledge from spontaneity. Similarly the concept of nature is not exhausted by scientific description as it can be conceived in a richer sense, one that includes human nature.

The issue is not with science, but with the idea that science should be the framework for *all* investigation. I agree with De Caro and Macarthur who write:

"[i]t must be emphasized that what is at issue here is not respect for the results of the natural sciences. This is an attitude every sane philosopher can be expected to have. Scientific naturalism involves the

much stronger claim that science is, or ought to be, our *only* genuine or unproblematic guide in matters of method or knowledge or ontology or semantics.” (2004, p.9)

Like Putman, McDowell argues that the ‘disenchanted’ conception of the natural world given by the sciences is an impoverished metaphysics; this is in contrast to a Kantian metaphysics in which mind (and thought) can be understood as part of nature.

Günter Zoller writes of McDowell that he pursues Kant’s project “of integrating the Kantian mind into the Kantian world, of embedding the subject of cognition into the world it cognizes and thus of integrating our vantage point on the world into our picture of the world” in a non-reductive way (2010, p.68)⁹². As previously noted, Aristotle’s philosophy is not critical as is Kant’s because, as Rödl explains, “it did not occur to him that one might conceive the forms of thought he describes as projections onto a reality that in itself is alien to reason” (2012, p.43). Kant *was* faced with this development of thought after Descartes, with its inherent mind-body and mind-world dualism. Kant addresses this dualism with his critical philosophy; however, the distinctions Kant makes to explain and critique naturalist approaches, such as that of Hume, have typically been interpreted in education *through* these assumptions - thus Kant is read as a dualist⁹³. Kant takes a first person approach to knowledge from Aristotle; McDowell also appeals to Aristotle for a richer conception of nature and reality, claiming that the rise of modern science makes it difficult now to appreciate Greek naturalism. Discussion of this helps shed light on a non-dualist reading of Kant’s view.

For Aristotle, the natural world is not disenchanted but full of meaning, a place where objects are seen to have a purpose, a *telos*. Reason, or *logos*, is taken to be part of our nature as human beings - a capacity that is actualised through human interaction in a process that moulds our character. McDowell

⁹² Having recognised this, Zoller criticises McDowell’s Kant in *Mind and World* for what he argues are remnants of a dualist interpretation.

⁹³ Again, educational interpretations are discussed in Part Two.

argues that the difficulty of seeing nature as something more than what the natural sciences describe was not a difficulty that the ancient Greeks faced. He writes that pre-modern thinkers:

“did not feel a tension between the idea that knowledge is a normative status and the idea of an exercise of natural powers. Before the modern era, it would not have been intelligible to fear a naturalistic fallacy in epistemology. But the rise of modern science has made available a conception of nature that makes the warning intelligible.” (McDowell, 2009b, p.258)

And with this “new conception of nature, the knowing subject threatens to withdraw from the natural world. That is one way in which it comes to look as if philosophical epistemology needs to reconnect the knowing subject with the rest of reality” - the problem of how to bridge the gap between mind and world (ibid, p.259). A solution is to ‘naturalise’ the mind by collapsing one side of the dualism to the other in scientific causal explanations. McDowell illustrates this naturalist picture by reference to Hume, whom he describes as ‘the prophet *par excellence*’ of the tendency to ‘purge the world of meaning’:

“We have to suppose that the world has an intelligible structure, matching the structure in the space of *logos* possessed by accurate representations of it. The disenchantment Hume applauds can seem to point to a conception of nature as an ineffable lump, devoid of structure or order. But we cannot entertain such a conception. If we did, we would lose our right to the idea that the world of nature is a world at all (something that breaks up into things that are the case), let alone the world (everything that is the case). Hume himself, innocent of the very idea of conceptual articulation, is oblivious of this point; his modern successors lack his excuse.” (1998a, p.178)

A disenchanted conception of reality does not acknowledge Kant’s Copernican insight, that the world we know is *not* independent of mind. The world is not ‘an ineffable lump’ but structured and written through with meaning as a result of human agency and activity. Before this is discussed in more detail however, it is helpful to look at another interpretive issue that

stems from the scientific naturalist claim that all phenomena are subject to natural laws.

Presupposed in this claim are the causal laws of nature as described by the natural sciences. Kant has a wider conception of 'cause', and causality, that form part of his richer metaphysics. In naturalism, 'cause' is understood as an *external* cause, one thing acting on another from outside. A piece of iron or steel will rust if it comes into contact with water and oxygen; water will boil at 100 degrees Celsius at sea level. But as McDowell argues, "[w]e need not see the idea of causal linkages as the exclusive property of natural-scientific thinking" (2009b, p.258).

"This physicalism about causal relations reflects a scientific hijacking of the concept of causality, according to which the concept is taken to have its primary role in articulating the partial world view that is characteristic of the physical sciences, so that all other causal thinking needs to be based on causal relations characterizable in physical terms." (2009b, p.139)

Kant sees the activity of mind as the cause and effect of itself, and this *self-determining* nature of mind is a distinctively human characteristic. The activity of thinking can be the 'causality' of judgement and actions, which exemplify rational freedom⁹⁴. Again Kant makes a distinction to explain this, between the laws of heteronomy and autonomy. Rödl explains: "[a] law of heteronomy is one according to which one thing is determined to act by another thing", something other than it "has solicited its act", while a law of autonomy is "nothing other than itself determines the force acting on it" (2007, p.118). Therefore, "[l]aws of the living are laws of autonomy in this sense, while laws of inanimate nature are laws of heteronomy" (ibid). This relates to Kant's conception of mind, not as passive or inert, but as a power - *autonomous*,

⁹⁴ Kant's broader conception of 'causality' is central to his conception of freedom, of autonomy, as reasons can be a 'cause' of our actions. This is because in this German tradition, reason and freedom are one and the same (Rödl, 2007, p.105). Contrasting this conception of causality from the scientific 'heteronomous' understanding helps shed important light on Kant's conception of mind, which is relevant to challenging educational interpretations in Part Two.

self-legislating. Christine Korsgaard similarly argues that on Kant's view, "obligation derives from the dictate of the agent's own mind" (2003, p.31). Thought and reasons can be causes of action. According to Rödl:

"[t]hought or action in the light of reasons has a cause in virtue of, and only in virtue of, its conceiving that cause as its cause. Thus thought and action resting on reasons are not determined by a cause outside them... to act in the light of reasons is to be autonomous". (2016, p.85)

Kant's richer understanding of causality – with freedom conceived as a kind of causality – marks a significant difference with scientific naturalism and traditional empiricism, in that reason itself (its power) accounts for human agency and intentionality. Changes in the world are 'caused' by human activity and agency - the material world is transformed through such activity. Kant's conception of mind as self-legislating, as autonomous, contrasts with the claim that all phenomena are subject only to the laws of nature understood scientifically (the laws of heteronomy), as claimed by Boyd, Gasper and Trout (which do not account for rational freedom).

To be clear, Kant's richer metaphysics includes the scientific frame within it; it does not deny causal relations in the natural scientific sense. As previously shown, Kant holds that we can understand ourselves in a two-fold sense, as subject to the 'mechanical' causal laws of nature and therefore not free, but also as self-determining agents and therefore free⁹⁵. McDowell reflects this point in response to Simon Blackburn. Blackburn claims that Mary knows there is butter in the fridge because *she observes it*. McDowell acknowledges that "[c]ausal relations between the butter and Mary obviously matter to Mary's acquisition of knowledge that there is butter in the fridge" and that "[o]bservation is possible for us only because we are causally related to the things we observe" (2006, p.217). However, a 'rational' conception of our relation with the world does not rule this out. Blackburn's implication is "that simply insisting on the relevance of the causal facts about

⁹⁵ See for instance, Kant, Bxxvii.

Mary is enough to warrant claiming that a bald scientific metaphysics will accommodate whatever can be said about her in intentionality-involving terms” (ibid, p.219). McDowell’s metaphor of the space of reasons includes within it, not excludes, scientific understandings.

McDowell is sceptical of a ‘sideways-on’ view in the context (characterised in Chapter Two) of “being able to break out of a specific cultural inheritance into undistorted contact with the real” (19981, p.37). He rejects the need for foundations external to mind, as presupposed by mind-independent accounts of knowledge. However McDowell’s scepticism about a sideways-on view is specific to this context, it is not a rejection of the stance taken by science; scientific (empirical, receptive) knowledge is set within a richer conception of knowledge. McDowell argues:

“My skepticism about sideways-on views... have nothing to do with a refusal to acknowledge that, for instance, Mary’s possibilities for observational knowledge depend on connections that are suitable for scientific investigation. It is quite wrong to read the skepticism about sideways-on views, in the specific contexts in which I express it, as implying the idiotic idea that once we have decided to place things in the space of reasons, we are precluded from aspiring to understandings that exploit the terms of a restrictive (“bald”) naturalism – as if being interested in, say, speech acts as meaningful performances precluded being interested in, say, how certain complex musculature enables us to produce articulate vocal sounds. Naturalistic understandings, in that sense, are just fine.” (2006, p.219)

Similarly, Kant does not rule out impressions, laws of nature, or causal relations in the scientific sense, but has a richer metaphysics in which they are incorporated.

McDowell’s conception of naturalism is broader than that of scientific naturalism, for it includes *human nature*. This richer conception, in addition to being more pertinent to educational thinking about knowledge acquisition and development, also helps characterise Kant’s view. McDowell describes our

capacity for knowledge and responsiveness to reasons as our 'second nature', shaped by ordinary upbringing. He explicates this as follows:

"Finding a way to preserve Kant's insight leads, I have claimed, to a conception of reason that is, in one sense, naturalistic: a formed state of practical reason is one's second nature, not something that dictates to one's nature from outside. ...

second nature acts in a world in which it finds more than what is open to view from the dehumanized stance that the natural sciences, rightly for their purposes, adopt. And there is nothing against bringing this richer reality under the rubric of nature too. The natural sciences do not have exclusive rights in that notion; and the added richness comes into view, not through the operations of some mysteriously extra-natural power, but because human beings come to possess a second nature." (1998a, p.192)

McDowell argues that we are born 'mere animals', our first nature, and acquire a second nature, become a person, by developing conceptual capacities through the *Bildungsprozess*. In this way we become an inhabitant of the space of reasons, learning to respond to what is a reason for what. In this picture, children are born into an already up-and-running world, where learning language is key. McDowell writes: "the language into which a human being is first initiated stands over against her as a prior embodiment of mindedness, of the possibility of an orientation to the world... It is a repository of tradition, a store of historically accumulated wisdom about what is a reason for what" (1996, pp.125-126). In distinguishing between our first and second natures, McDowell refers to Hans-Georg Gadamer's description of the difference between an animal mode of life *in an environment*, one dominated by biological pressures, and a human mode of life *in the world*.

"To acquire the spontaneity of the understanding is to become able, as Gadamer puts it, to "rise above the pressure of what impinges on us from the world" (Truth and Method, p.444) ... into a "free, distanced orientation" (p.445). And the fact that the orientation is free, that it is above the pressure of biological need, characterizes it as an orientation to the world." (ibid, pp.115-116)

McDowell argues that we do not need to “see ourselves as peculiarly bifurcated, with a foothold in the animal kingdom and a mysterious separate involvement in an extra-natural world of rational connections” (ibid, p.78). Rather our human life, including our rational capacities, *is* our natural way of being. “If the second nature one has acquired is virtue” then “[t]he dictates of virtue have acquired an authority that replaces the authority abdicated by first nature with the onset of reason” (1998a p.188). Through the *Bildungsprozess* we acquire a mind, our second nature, and this process draws on, and at the same time continually develops, our worldview – our conceptual capacities. What is important here is that McDowell’s concept of second nature overcomes the problem of normative concepts like mind, thought and consciousness as something separate and mysterious, for they are part of our nature.

Sebastian Rödl’s conception of nature is slightly different, but also draws on Kant and Aristotle and is also richer than scientific naturalism. It involves conceptions of cause and causality discussed above. Rödl does not think that McDowell’s concept of second nature is needed to dissolve the problem of mind, thought and action “looking spooky” - “[t]hat would be troubling only if the natural sciences were the measure of what is spooky and what is not” (2011). Rödl distinguishes two understandings of nature, one is the realm of law as conceived by the natural sciences, a mechanical conception, explained above, with one event causing - necessitating - change in something else. Thought and action, like norms and values, lie outside this kind of causality. The second he takes from Kant, and is nature as the *realm of change*: human life is a material life “that realizes itself through change” (ibid). The concept of life, he explains, is the *form* of the teleological unity of changes, which is the *nature* of the species of an animal⁹⁶. Kant uses Aristotle’s concepts of ‘form’ and ‘matter’. Life is the *form* of the unity of changes that constitute the nature of a species; change is internal to it. In the case of a human this is the path of a normal human life, of which our

⁹⁶ Rödl here is influenced by the work of Michael Thompson (2008).

intellectual capacities are naturally a part. So too are norms, values and morality. This wider sense of nature contains the first restricted sense within it. That the realm of law exhausts nature is a judgement or claim, and judgements and claims are not subject to the realm of law in the scientific sense, but are a part of *human* nature.

Rödl points out that McDowell's use of 'first nature' is ambiguous because as well as referring to the realm of law, McDowell also talks of the 'authority abdicated by first nature with the onset of reason' (in the quote above). Rödl argues "[t]he first nature that abdicates authority is the nature of the species of the animal, and that is not first nature as the realm of law, but the first nature of an animal", and further comments "McDowell's ambiguous use of "first nature" is not the cause of, but manifests an idea of reason as transcending nature. The roots of this idea lie deep; deeper than the modern notion of nature as the realm of law" (ibid). So while McDowell talks of leaving our first nature behind with the acquisition of rationality, Rödl sees rationality as part of our first nature, as part of a natural human life. In other words, *Bildung* cultivates what is part of our first nature, our capacity for knowledge. With Kant's freedom (as a causality), intentional activity springs from capacities that are part of the nature of normal human life that is realised through change. The subtle differences between Rödl's and McDowell's conceptions are insignificant for the purposes of this thesis however, for what is important is not whether mind and intellectual capacities belong to first or second nature but that they are part of nature at all. This contrasts with theories committed to scientific conceptions of nature and reality that exclude these. The scientific picture is enormously widespread and, I argue, has been presupposed in educational interpretations of Kant's terms⁹⁷. McDowell and Rödl both give voice to Kant's richer metaphysics, which incorporates and explains human characteristics such as thought, agency and activity. The importance of education is underscored for its role in the acquisition and

⁹⁷ Again, specific examples are discussed in Part Two.

development of these intellectual capacities that are part of our nature as humans.

The richer conception of the natural world includes us and our human activity within it. Conceptions of the world are relevant (like conceptions of mind) for thinking about knowledge of it, also for theories of cognition, the learning process, and objectivity. Already full of meaning, the humanised world is sustained, changed and developed through our on-going social and cultural practices. To help picture this humanised world, I draw on the work of David Bakhurst. In *The Formation of Reason* (2011) Bakhurst defends a socio-historical conception of mind and incorporates this into a view of education. While not a Kantian, Bakhurst's inspiration comes from McDowell, and much of Bakhurst's work, as I read it, is not at odds with the non-dualist reading of Kant I am attempting to defend. However, for a richer conception of the world, I draw on Bakhurst's other work, his remarkable exposition of the Soviet philosopher Evald Ilyenkov, in his *Consciousness and Revolution in Soviet Philosophy* (1991). Ilyenkov, like Marx and some other Soviet philosophers such as Lev Vygotsky, was influenced (indirectly) by the German idealist tradition; a look at some of Ilyenkov's work helps further distinguish a humanised picture of the world from the scientific (disenchanted and dehumanised) conception widely used in educational interpretations of Kant's terms.

Following Ilyenkov (1924-1979), Bakhurst argues that cognition does not start with unprocessed sense experience but with a conception of the world that is inherited 'ready made' from the society one is born into. Ilyenkov criticises empiricism, Bakhurst explains, because empiricist ideas present a picture of 'atomic' minds, self-contained worlds independent from other minds

and reality, making for a separation of subject and object⁹⁸. Ilyenkov is also a critic of the idea that we are our brains:

“The psychological definition of man has its reality, its “being,” not in the system of neurodynamic structures of the brain, but in a broader and more complex system – the system of relations of man to man, mediated by things created by man for man, that is, in the relations of production of the objective-human world and of the capacities that correspond to the organization of this world.” (Ilyenkov 1964b, p.240, in Bakhurst 1991, p.220)

In describing this world, Ilyenkov uses the notion of *ideality*. Bakhurst quotes him:

“Ideality” is like a peculiar stamp impressed on the substance of nature by social human life activity; it is the form of the functioning of a physical thing in the process of social human life activity”. (Ilyenkov 1979a, 148, pp.139-40, in Bakhurst, *ibid*, p.180)

While Ilyenkov uses the concept of ‘nature’ in the restricted sense of the natural sciences, he is interested in ‘ideality’ as the consequence of the ‘humanisation’ of nature by our human activity. He writes:

“Ideality is a characteristic of things, but not as they are defined by nature, but by labour, the transforming, form-creating activity of social beings, their aim-mediated, sensuously objective activity.” (Ilyenkov, 1979a, p.157, in Bakhurst, *ibid*, p.182)

As Bakhurst explains, objects are made and used for a reason; they have a purpose, and come to have symbolic meanings through use in our social practices. In this way artefacts bear a *form*, which embody the meaning for which they were made and are used, and this is different from their natural properties; a chair is a chair rather than a piece of wood or sum of atoms. A natural scientific description of a poppy does not capture its meaning as a symbol of remembrance, or roses as a token of love and beauty, for like

⁹⁸ Empiricism for Ilyenkov was a package of interrelated ideas deriving ultimately from Descartes (*ibid*, p.17). The criticism of independent minds with a separation of subject and object is in line with Kantian critique of empiricism.

currency and kings, these meanings reside in our cultural practices - the *transforming* and *form-creating* activity of social beings. “In activity”, Bakhurst writes, “human beings create and sustain an environment written through with significance; they nurture a world enriched with ideal properties, with value and meaning. This is the world we know” (1991, 217).

Thinking of ideality in this way, as a characteristic of objectively existing things, helps illustrate Kant’s version of idealism - which contrasts with other (subjective) conceptions of idealism, such as that of Berkeley, that do not acknowledge the independence of reality. Alex Levant also discusses the work of Ilyenkov, and explains how “in the empiricist philosophy of Locke, Berkeley and Hume, the ideal took on a different meaning – as something that does not really exist, or as something that exists only in the mind of an individual”, and how “this meaning was challenged by German classical philosophy, returning it to an objectivity outside the individual mind, albeit idealistically” (2012, pp.128-129). Kant is idealist as far as *forms* are concerned⁹⁹. I repeat here Kant’s distinction between form and matter:

“These two concepts underlie all other reflection, so inseparably are they bound up with all employment of the understanding... In every being the constituent elements of it (*essentialia*) are the matter, the mode in which they are combined in one thing the essential form”. (B322)

Form is a characteristic of *objectively existing things themselves*. McDowell also insists that:

“thought and the world must be understood together. The form of thought is already just as such the form of the world. It is a form that is subjective and objective together”. (2009a, p.143)

⁹⁹ Kant: “I have also, elsewhere, sometimes entitled it *formal* idealism, to distinguish it from *material* idealism, that is, from the usual type of idealism which doubts or denies the existence of outer things themselves.” (B519n)

The ideal (artefacts, objects, the material world) takes on this 'formal' but objective existence through human activity. And this culturally and socially shaped activity continually evolves through historical processes.

Stephen Engstrom, in talking about Kant's practical knowledge of 'the good', also describes this formal but objective existence:

"the goodness itself, being a form that is brought into existence or kept in existence through the concept's efficacy, is in those existing things themselves, as their formal constitution". (2009, pp.12-13)

That is, the formal constitution of things themselves (their ideality) objectively exists, brought into existence and maintained through human minded activity. This conception of idealism (Kant's transcendental idealism) is key to understanding the *unity* of the capacities: intuition and spontaneity. Engstrom argues that a proper understanding of these capacities "must be conceived ... not as interacting parts, but as form and matter" (2006, p.2). Forms can be said to 'idealise' matter, and once we have learnt them (forms, concepts) they shape our contact with things, our activity and practices. In this way, meanings (ideality, forms) are understood not as in the head but *objectively existing* in the world, in a richer conception of world. There is no dualism here. The world is not only physical properties, but includes the ideality of objective reality, and the concrete and particular human practices that shape this.

Bakhurst explains Ilyenkov's idea that the world can be seen as an objectification of ourselves, of human consciousness:

"First, as nature becomes "humanized," so it serves humanity as a mirror: Man is able to "see himself in a world he has created" (Marx 1844: 74). Thus, objectification is construed as the basis of a form of self-consciousness. Second, the humanization of the world is held to transform nature into a different *kind* of environment. Ilyenkov reads humanization as idealization. The natural world after objectification is a different kind of place because it is now laden with ideal properties, with

value and significance. It thus confronts human agents no longer as a purely physical environment, but as a *meaningful* one.” (1991, p.187)

Like the non-reductive conceptions of nature discussed above, this view of objective reality includes ourselves within it, as we see consciousness or ideality in the world we have created.

I argue that this is an expression of Kant’s Copernican lessons. Rather than a world that is disenchanted and void of significance (with mind projecting meaning onto it), it is understood as already written through with meaning, made meaningful by historically evolving and on-going human activity, and already established bodies of knowledge. This is what acts as a ‘rational’ constrain on our thinking and as a standard for the correctness of our empirical judgements and claims. Again, our contact with this meaningful world can be described as ‘rational’ in that our rational capacities (knowledge of the world we have learnt) are involved in our responses to it; we act in light of our knowledge of it. With different conceptions of mind and world we can again revisit the difference between Rorty and Boghossian in Chapter One; we cannot know a giraffe merely by seeing one, we first need at least some concept of a giraffe to recognise one when we see one (knowledge we have personally learnt); however we cannot call any old thing a giraffe, for correctness depends (not merely on what our peers say but) on the objectively existing giraffe (already established meaning in the world). It is this *objective material constraint* - the giraffe in the world - that tends to be obscured in portrayals of Kant’s view in education, which lose this objectivity (discussed in Part Two). To appreciate Kant’s Copernican insight (his version of idealism) we need to think of mind and world as inseparable, and accept that the correctness of our judgements depends on how things are in the world¹⁰⁰.

¹⁰⁰ For instance, Kern (2017). We return to objective material constraints on perception and judgements below, and as we continue through the chapters.

Mind or reason can be said to be in the world insofar as it is a “prior embodiment of mindedness” (McDowell, 1996, p.125). Kant writes that when we “approach nature in order to be taught by it” we “must adopt as [reason’s] guide, in so seeking, that which it has itself put into nature”, as ideality:

“Even physics therefore, owes the beneficent revolution in its point of view entirely to the happy thought, that while reason must seek in nature, not fictitiously ascribe to it, whatever as not being knowable through reason’s own resources has to be learnt, if learnt at all, only from nature, it must adopt as its guide, in so seeking, that which it has itself put into nature.” (Bxiv)

This suggests a conception of reason capable of learning *from* nature, rather than projecting meaning *onto* it, but in doing so being guided by what is already there in ideal form, what human minded activity has already ‘put into nature’. That is, ‘put’ into nature through historically evolved social practices, not an individual ‘in the head’ reason imposing meaning onto it¹⁰¹. Robert Stern quotes Kant’s successor Hegel: “To him who looks at the world rationally the world looks rationally back; the two exist in a reciprocal relationship” (2016, p.161). This echoes Henrich’s ‘indissoluble’ correlation between mind and world, and McDowell’s insistence that thought and the world must be understood together. A meaningful world is the result of minded activity, but mind is equally dependent on the world for its content.

The unity of mind and world, thought and reality, is further illustrated if we draw attention to the *practical* nature of our engagement with the world. In expounding Kant’s view of practical knowledge, Engstrom talks of the “existential relation in which practical knowledge stands to what it knows” (2013, p.145). He provides a nice example:

“An artisan’s tool has a specific mode of usefulness, a specific function, present in it as its essential form, and the technical-practical concept, or knowledge, of this form not only governs the tool’s initial production but

¹⁰¹ Constructivist interpretations are discussed in Part Two, and this particular quote revisited in Chapter Six.

also maintains the form in existence through the care and the skill with which the artisan uses the tool and keeps it in good repair.” (2009, p.13)

There is no dualism here, mind is not detached from the world as widely portrayed in educational interpretations of Kant, nor does mind project meaning onto a disenchanted external world. Rather, the meaningful (ideal) world is within the realm of the conceptual; “conceptual content of a perceptual experience can be”, McDowell argues, “an element in the world. We can see experience as directly taking in part of the world” (2009a, p.142). Ideal properties objectively exist as characteristics of things that we perceive in experience. In this way, the world exerts a constraint (rational and material) on our thinking; this is obscured in the conventional ‘Kantian’ picture in education¹⁰².

This is a richer metaphysics than that of scientific naturalism for educational thinking about the acquisition of concepts and the development of mind; this take place in a matrix of social relations and engagement with the already humanised world that constitutes a normative background to learning. Bakhurst quotes Ilyenkov:

“forms of human activity (and the forms of thought which reflect them) are laid down in the course of history independently of the will and consciousness of separate persons, whom they confront as forms of the historically developing system of culture ... a particular process controlled by the laws of development of the material life of society. And these laws not only do not depend on the consciousness and will of particular individuals, but, on the contrary, actively determine consciousness and will. Isolated individuals do not and could not arrive at [*vyrobotat*] the universal forms of human activity, whatever powers of abstraction they possessed. Rather, they assimilate these forms ready made as they are themselves assimilated into a culture, as they acquire language and the knowledge expressed in it.” (Ilyenkov, 1974a, pp.207-8, in Bakhurst, 1991, p.200)

¹⁰² Again, the idea of worldly constraints is elaborated as we proceed.

The laws mentioned here are not the mechanical laws of nature that are the topic of scientific investigation, but cultural norms, rules and standards assimilated through upbringing and education. Children are pictured as developing intellectual capacities as they acquire concepts and the competence to participate in the cultural practices into which they are born. Such education for Kant is essential to becoming a person, in actualising and developing conceptual capacities that are part of our nature as human beings. These are rich resources for theories of learning and pedagogy, for thinking about understanding and autonomy, and for breaking down familiar dualisms. As children develop the competence to make conceptual distinctions, and refer and respond appropriately to an already established world (with the help of others), so subjectivity and objectivity grow together.

Like different conceptions of nature, world and causality, 'materialism' too can be understood in a different way. Ilyenkov, following Marx, calls his vision *materialist*, but with a different conception of materialism. Bakhurst explains, "whereas for Hegel the dialectical structure of reality follows from the dialectical nature of thought, for Marx it is the other way around"; but Marx's materialism "preserves the idea of reality as a self-developing organism or concrete totality" (ibid, p.156). This picture of reality includes the ideal; it stands in contrast to scientific materialism, which conceives of reality in merely physicalist terms. Bakhurst quotes from Marx's *Thesis On Feuerbach*:

"The chief defect of all hitherto existing materialism – that of Feuerbach included – is that the thing, reality, sensuousness, is conceived only in the form of the *object or of contemplation*, but not as *sensuous human activity, practice*, not subjectively." (1845, p.28, in Bakhurst, ibid, p.215)

Marx is criticising "all hitherto existing materialism" for not conceiving reality subjectively, from a human standpoint that cannot escape subjectivity in its contact with the world.

Rödl also follows Marx in conceiving of his theory of self-consciousness as a *materialist* theory.

“All hitherto existing materialism is flawed by its empiricism: it conceives of material reality exclusively as an object of intuition, or as to be known receptively.” (Rödl, 2007, p.122)

For Rödl, material reality is to be known through spontaneity, that is subjectively (in a richer conception of subjectivity that is in touch with and not cut off from the objective world). Furthermore Rödl argues that spontaneity *is* a material reality - something to be conceived of in material terms:

“According to Marx, true materialism reveals spontaneity and its knowledge to be of, and thus to be, a material reality.” (ibid)

Following Marx, Rödl presents his theory of self-consciousness as a true materialism “which conceives material reality not only as an object of intuition, but as human spontaneity” (ibid, p.131). He argues “[t]he empiricism that pervades contemporary philosophy produces a flawed materialism, which is unable to think a self-conscious material reality” (ibid, p.xi)¹⁰³. Again these non-reductive conceptions of materialism compare with science’s reductive and disenchanting material reality, to be known only receptively (empirically) and not subjectively, from a first-person standpoint.

Bakhurst tells us that Ilyenkov’s picture stems from the classic German tradition, and is very Hegelian. Like Kant’s other idealist successors, Hegel criticises and changes aspects of Kant’s view, but does not reject it; he works within Kant’s Copernican framework (Henrich, 2003). Bakhurst explains that the roots of Ilyenkov’s picture of “absolute” reality or “organic totality” lie in Kant’s description of a living organism “as a unity of parts” which “reciprocally

¹⁰³ Rödl’s *Self-Consciousness and Objectivity* (2018) is not claimed as a true materialism, but it could be argued that his position here is not far from that of his earlier work, but expressed differently.

produce each other” and for meaning depend on their place within the whole.

Bakhurst explains:

“Thus understanding the whole is the “ground of cognition ... of the systematic unity and combination of all the manifold contained in the given material” (219-20). This understanding is teleological: The organism is a “natural purpose” realized by its parts. Hegel enthusiastically adopted Kant’s conception not just for the nature of living things, but as a model for the self-development of reality as a whole, or “the absolute.” (1991, pp.154-155)

Hegel’s absolute idealism presents a picture of nature as the unity of a living and continually developing system. This offers a conception of nature as essentially rational. Hegelian scholar Stephen Houlgate explains that “nature is simply *absolute reason itself* existing in a form that is other than that of explicitly self-determining rationality” (2005, p.109). The idea of nature as absolute reason itself stands in stark contrast to the reductive conceptions held by scientific naturalists that completely exclude reason.

These broader conceptions of naturalism and materialism move from the merely physical world as described by the natural sciences to a human standpoint that accounts for ourselves as part of the natural world. The world includes familiar objects as well as the human activity that creates and maintains it. Henrich writes:

“conceptions of a world arise in particular contexts. It is with regard to a context that we can account for the constitution a world exhibits. Such an account requires reference to operations of the mind, without which the world in question would not be disclosed to us and could not possibly adopt its shape.” (1992, p.3)

Objectivity is in the picture - things, with their ideal characteristics and properties, exist objectively, there for all to see and experience. This is not to say things are clearly in view, much of our everyday experience is fraught with obscurity and unclarity. But the point to emphasise is that these richer conceptions include and account for human aspects of reality without losing

objectivity (which is important for arguments in Part Two). Intellectual capacities, as part of our human nature, continually develop and change through everyday experience. This is an embodied mind, immersed and participating in our already humanised world, rather than one detached from ‘real lived life’¹⁰⁴.

The picture of Kant to be found in contemporary exegesis contrasts with typical portrayals in educational theory, which emphasise dualisms and a detached mind. In this chapter, attention was drawn to scientific assumptions about mind and world that go beyond the scientific paradigm and act as deep-rooted presuppositions that have shaped understandings of Kant’s terms. With alternative understandings of concepts - causality, experience, subjectivity, nature, materialism, etc. - Kant can be read in a different light. He shows how thought relates to ordinary objects without a disconnect.

McDowell argues that the scientific conception of the world is a prejudice, a historically conditioned assumption that needs to be challenged. Challenging this assumption not only helps bring into view a more valuable reading of Kant, but fruitful educational thinking can be derived from the richer metaphysics involved. (For instance, Kantian resources can be used to critique and show the limitations of scientific naturalism and the scientific tendencies that many argue drive current educational policy and practice.) However Bakhurst is pessimistic about the chances of McDowell’s attempt to change these entrenched assumptions:

“Paramount among them is ‘the objectifying mode of conceiving reality’ familiar in natural science, which, by representing the constituents of objective reality as bereft of meaning or significance, is unable to find mindedness in bodily movement and is thereby forced to locate mind in an inner realm ‘behind’ behaviour. The fact is, however, that so deeply

¹⁰⁴ Wolff-Michael Roth criticises Kant’s conception of mind for being intellectualist; he reads Kant as providing “an epistemological subject that has no hold in and on this actual world that we inhabit” (2011, p.23), and thought is “above and beyond real, living/lived life” (ibid, p.4) - this is discussed in Chapter Seven.

entrenched is the assumption, not just in theoretical but in everyday discourse, that diagnosing the philosophical misconceptions that encourage it does not suffice, as McDowell hopes, to 'restore us to a conception of thinking as the exercise of powers possessed, not mysteriously by some part of a thinking being ... but unmysteriously by a thinking being itself, an animal that lives its life in cognitive and practical relations to the world'." (1991, p.158)

Bakhurst is right to be sceptical, but I hope this chapter and in what follows will take us a little way towards understanding how to 'restore us to a conception of thinking as the exercise of powers possessed' that are a natural part of our being. In the next chapter we continue with the topic of naturalism, and consider Boyd, Gasper and Trout's other claim, that the methods of science are applicable in all areas of inquiry. This is to further distance Kant's philosophy from scientific understandings that have shaped interpretations, and advance the non-dualist picture defended so far.

Chapter 4: The Methods of Science and the First Person Standpoint

It has been argued that a set of assumptions about mind and world inherent in mind-independent empiricist epistemology have influenced understandings of Kant's terms in educational characterisations of his work. Different conceptions of some central terms have been introduced from recent exegesis, which will be used to challenge the conventional 'Kantian' picture and show that Kant's conceptions of mind and knowledge can be seen as non-dualist.

As discussed, in traditional epistemology mind is conceived as something separate from the external world in order to gain mind-independent knowledge, which is seen to be more objective and factual. But this way of thinking about knowledge embeds the conceptual problem of how mind fits into the external and material world – the traditional 'problem of knowledge'. Scientific naturalism is seen to overcome this problem by reducing the concepts of mind to the concepts of the physical sciences; that is, mind is eliminated from explanations, which are made using the conceptual resources of the natural sciences. This epistemology shares with empiricism a 'disenchanted' conception of the world, making it a 'reductive' conception of reality. Alternative richer conceptions of nature, naturalism and materialism were introduced that include human nature. A conception of world as already made meaningful through human minded activity can be seen as part of Kant's Copernican argument that the world we know is not external to thought, but falls within it. This contrasts with characterisations of Kant's view in educational theory of a detached mind imposing meaning, rules or structure *onto* a disenchanted reality¹⁰⁵.

In the last chapter, Boyd, Gasper and Trout's first commitment to naturalism - *that all phenomena are subject to the laws of nature* - provided a

¹⁰⁵ Such as Roth (2011a, 2011b, 2013); D. Carr (2003, 2007); W. Carr (2006), and others, which will be discussed in Part Two.

starting point for disentangling Kant's concepts from scientific understandings and introducing richer conceptions, of nature, science, naturalism and materialism. This chapter starts with their second commitment - *that the methods of science are applicable in all areas of inquiry*, again as a springboard for discussion. Scientific methods are compared with conceptual investigation - Kant's 'speculative' method. Kant's conceptions of subjectivity and objectivity are distinguished from familiar understandings, and it is argued that for Kant we cannot escape a first person stance, which is fundamental to understanding his view. Attention is drawn to some of the human and social forces that shape how the concepts of knowledge and science are themselves understood.

The view that the methods of science are the best way to achieve reliable and objective knowledge is an enormously widespread assumption. There are many different 'scientific' methods, but paradigmatically these involve an empirical procedure of knowledge acquisition through the senses, typically observation. An emphasis on empirical methodology is reflected in much current educational policy and practice. Indeed, the prioritising of empirical and evidence-based approaches has affected research and funding. The following is a recent entry under Philosophy of Education in the Stanford Encyclopedia of Philosophy:

"The most lively debates about education research, however, were set in motion around the turn of the millennium when the US Federal Government moved in the direction of funding only rigorously scientific educational research – the kind that could establish causal factors which could then guide the development of practically effective policies. (It was held that such a causal knowledge base was available for medical decision making.) The definition of "rigorously scientific", however, was decided by politicians and not by the research community, and it was given in terms of the use of a specific research method – the net effect being that the only research projects to receive Federal funding (until the policy was reversed by the new Obama administration) were those that carried out randomized controlled experiments or field trials (RFTs). It has become common over the last decade to refer to the RFT as the "gold standard" methodology." (Stanford Encyclopedia of Philosophy, 2013)

In the UK too, the push for ‘rigorously scientific educational research’, such as RCTs, is felt by many. Prioritising scientific methods *presupposes* traditional empiricist ideas about the nature of knowledge, and implicit in this is the (mechanical) causal picture in which objectivity is associated with the material world and *subjectivity* is *excluded* to obtain mind-independent knowledge (thus embedding some of the conceptual problems that have been discussed).

There has been much critique in educational theory of the ‘reductive’ and ‘standards’ culture that has resulted from prioritising scientific assumptions about knowledge. This includes the “the loss of trust in the teacher’s engaged judgement” (Cigman and Davis, 2009), the loss of teacher autonomy and professionalism (Green 2011), the loss of *understanding* of what is being learnt (Pring, 2007; 2013), the blurring of information and knowledge (Derry, 2009) and the problems of assessment (Davis 2011; 2013). To take the latter example, Davis, who has written widely on the conceptual inadequacies of current assessment practices, argues that they miss much of the real learning that takes place (2009); he draws attention to the high stakes placed on assessment outcomes, for schools as well as teachers with performance tables encouraging teaching to the test, and writes “the importance of ‘real’ or ‘rich’ knowledge in the curriculum is constantly threatened by accountability pressures” (2015, p.7). Paul Standish has also been a long critic of the ‘standards’ culture and importance given to what can be ‘measured’; he argues “the prevalence of statistics in our lives alters our sense of the real, and this involves a kind of distortion of experience that is particularly harmful for educational practice” (2010, p.6). Presented as ‘hard’ evidence, he argues, statistics and data have become “part of the way we have learned to see things” and “what we expect” (ibid, p.7). The prioritisation of empirical research has encouraged an aversion to metaphysical and conceptual investigation, reducing the status of *philosophical* inquiry.

Kant is helpful for strengthening philosophical criticism of the prevailing 'scientific' culture. In critiquing empiricism he draws philosophical attention to the *limits* of empirical investigation, which is confined to what can be observed, so reducing what can be studied. He writes: "[e]xperience teaches us what is, but does not teach us that it could not be other than what it is" (B762). That is, it doesn't allow for spontaneity as another source of knowledge, which conceptually accounts for new ideas, paradigm shifts or conceptual change (for knowledge is taken to derive solely from the world via the senses). Henrich writes "[t]he empiricism of the allegedly real does not understand what is occurring when history advances.... Kant reproached this kind of practice for having intellectual arrogance and "mole-like vision"" (1993, p.112). McDowell too talks of "the partial worldview that is characteristic of the physical sciences" (2009b, p.139). Stekeler points out that even empirical perception takes place "in a domain of conceptually determined possibilities, not only in a realm of present actualities", and argues:

"what I or you perceive is not just a datum for more or less dispositional reactions determined, as we assume, by causal chains mediated by our senses taken as physiologically describable 'mechanism' but stand already in a whole order of possible things (objects) and possible movements (events, states of affairs). These possible things or processes are, as such, not (all) present, for example if they are things or processes in the past or in the future or if they are or happen too far away from the reach of our sense at present." (2010c, p.4)

Traditional empiricism does not conceptually account for rational freedom, for the realm of possibilities, of what could be other than 'what is'. Stekeler also points out that scientists interpret their empirical, and therefore limited, findings in a speculative and transcendent way, which involves spontaneity and a first person stance¹⁰⁶. Such interpretations of empirical findings draws on a shared normative background, comprising a web of presupposed conceptual relations, and a network of joint human practices through which

¹⁰⁶ Similarly Mulder argues that 'vital categories' - such as life form and life-processes – are irreducible to the concepts used in physical explanations (2016).

these are actualised and maintained. Such human and social dimensions tend to be written out of scientific methods, particularly scientific naturalist approaches, for what is seen as their lack of objectivity, with objectivity conceived of as in opposition to subjectivity. In contrast, for Kant we cannot escape subjectivity - but objectivity is contained *within* this first person stance.

As previously discussed, Kant's Copernican insight, that we cannot break out of a subjective stance, means the world is conceived subjectively, from a first person standpoint ¹⁰⁷. This Copernican insight also applies to methodology. In contrast to scientific 'side-ways on' views that are taken to exclude subjectivity and therefore be more 'objective', on Kant's view we cannot escape our first person stance and our accumulated knowledge - but we should not view this negatively and assume that it leads to the loss of objectivity and radical relativism. As McDowell argues it does not mean we lose our cognitive grip on reality; but we do need to set aside widely held ideas about mind and subjectivity. Inert conceptions of mind (a blank slate, mirror, brain) contrasts with Kant's conception as *power*, accounting for intentionality and agency. Fodor draws attention to the inert blank slate conception of mind in cognitive science, and talks of the deeply ingrained nature of presuppositions in this influential paradigm:

"Most cognitive scientists still work in a tradition of empiricism and associationism whose main tenets haven't changed much since Locke and Hume. The human mind is a blank slate at birth. Experience writes on the slate, and association extracts and extrapolates whatever trends there are in the record that experience leaves. The structure of the mind is thus an image, made a posteriori, of the statistical regularities in the world in which it finds itself. I would guess that quite a substantial majority of cognitive scientists believe something of this sort; so deeply, indeed, that many hardly notice that they do". (1998, pp.11-13)

¹⁰⁷ This was Marx's critique of 'all hitherto existing materialism', that reality is not conceived of subjectively (quoted in the previous chapter.)

In traditional empiricist epistemology the concept of mind may be inert but it is used in explanations; in naturalist theories 'mind' disappears altogether. Physicalist explanations reduce mind to the brain – a material object to be investigated empirically through the methods of science.

As with a 'disenchanted' world, subjectivity is written out of scientific methodology. "Part of the truth in the idea that science disenchant nature is that science is committed to a dispassionate and dehumanized stance for investigation" (McDowell, 1998a p.175). Again we find the idea that subjectivity be excluded in order to achieve mind-independent and therefore more reliable knowledge. This 'dehumanised stance' for investigation compares with Kant's human stance, which is the only stance we can take, for it is impossible to know the world from a position outside of subjectivity (his Copernican insight). As Rödl argues, "the source of receptive knowledge is sensory affection, spontaneous knowledge springs from thinking" (2007, p.ix), which is the source of conceptual investigation (and change).

An example is helpful to compare Kant's first person stance with a 'sideways-on' scientific stance. Famously pushing the 'reductive' programme (explaining mental phenomena in terms of physical phenomena), Daniel Dennett investigates mind, or consciousness, which he takes to be brain processes. He argues, "there is only one sort of stuff, namely matter – the physical stuff of physics, chemistry and physiology – and the mind is somehow nothing but a physical phenomenon" (1991, p.33). McDowell takes issue with this, arguing that "[o]f course there is an organ, the brain, whose proper functioning is necessary to mental life. But that is not to say that the proper functioning of that organ is what mental life, in itself, is (1998b, p.281). He criticises Dennett's "sub-personal, cognitive-scientific account of the operations of our internal machinery" that is presented as 'consciousness'. McDowell writes:

“Dennett alludes to a famous paper called “What the Frog’s Eye Tells the Frog’s Brain”, but he commends a suggestion, by Michael Arbib, that one might prefer the formula “What the frog’s eye tells the frog”. His point is that “sub-personal” content-ascription in the theory of frog perception is controlled by the requirements of a biological account whose topic is the life of *frogs* rather than the doings of their parts.” (1998b, p.347)

McDowell questions this by asking how the frog gets in on the act.

“In accounts of the inner workings, one sub-froggy part of a frog transmits information to another: the frog’s eye talks to the frog’s brain, not to the frog. In the sense in which the frog’s eye tells the frog’s brain things, nothing tells the frog anything ... The “sub-personal” account of a sensory system, which treats it as an information-processing device that transmits its informational results to something else inside an animal, cannot adequately characterize what its sensory systems are for the animal “itself.” (ibid, p.349)

Kant’s heteronomous conception of ‘cause’ is at play here; a sub-personal information system is a physical mechanism responding to impacts from outside of itself. McDowell argues this is a *syntactic* engine and not a *semantic* one. Thus “the attempt to see a constitutive relation between the lower and the upper levels undermines our hold on the fact that animals are semantic engines” (ibid, p.355). There is a conceptual jump from the sub-personal to the animal level. McDowell concludes:

“the real lesson of Dennett’s paper is this: a dualism of intuitions and concepts cannot be made safe by simply removing it from the sphere of the transcendental – by assigning the task of fitting intuitions and concepts together to something empirical”. (ibid, p.358)

The attempt to collapse the conceptual realm into the physical realm is a manifestation of the dualism problem, not a resolution of it. This way of thinking about what consciousness is loses the conceptual resources to talk about psychological, social, normative and practical (the human) aspects of mind and knowledge. As McDowell argues, “there is nothing wrong with having the internal machinery that controls behaviour as one’s subject

matter”, the problem lies “in thinking that truth about it is truth about the mental” (2004, pp.99-100).

There is growing literature in education that explains learning in such sub-personal ways¹⁰⁸. James Zull offers a brain based model for learning in *The Art of Changing the Brain* (2002), and Eric Jensen in *Brain-based Learning: The New Paradigm of Teaching* (2008). David Sousa’s *How the Brain Learns* (2011) is the latest of his series of books on educational neuroscience (2005, 2007, 2008). Other examples include John Geake and Paul Cooper who present future scenarios of using brain scans in parents’ evenings to show that a child has a weak short-term memory circuit for number solutions, in order to explain his inadequate maths (2003). And Usha Goswami has long extolled the benefits to education of neuroscience, which “investigates the process by which the brain learns and remembers, from the molecular and cellular levels right through to brain systems” (2004, p.175, and 2008). References to how the *brain* learns, remembers and does things are all too easy to find.

While Goswami’s work, and that of the Centre for Neuroscience in Education¹⁰⁹, may be important to science and education, such approaches are conceptually problematic¹¹⁰. With causal accounts that do not acknowledge the spontaneity or power of mind, then *interpreting* brain scans, *thinking* what this means, *designing* appropriate curricula and *explaining* this to others becomes conceptually difficult to account for. Bennett and Hacker make this point in their book *Philosophical Foundations of Neuroscience* (2003) in which they write: “[t]alk of the brain’s perceiving, thinking, guessing

¹⁰⁸ Inspiration comes from an explosion of research in neuroscience, with titles such as William Calvin’s *How Brains Think: The Evolution of Intelligence* (1997); and Walter Freeman’s *How Brains Make Up Their Minds* (1999).

¹⁰⁹ Established in 2005 at Cambridge University, this centre aims to “apply the substantial advances in understanding the brain to education”.

<http://www.cne.psychol.cam.ac.uk>

¹¹⁰ Recent critiques of such naturalist theories in educational journals include those by Andrew Davis (2004), and David Bakhurst, (2009).

or believing, or of one hemisphere of the brain's knowing things of which the other hemisphere is ignorant, is widespread among contemporary neuroscientists" (p.3)¹¹¹. Like McDowell, they criticise the idea of ascribing concepts such as learning and remembering to a part of the body rather than to the person; empirical examination of the brain cannot explain intentional action. The fact that their claims have attracted so much controversy within philosophy highlights the entrenched nature of empiricist epistemology and the popularity of the 'reductive' agenda. But the debate cannot be settled empirically because it is a conceptual matter. As Bennett and Hacker rightly argue, conceptual questions are not amenable to scientific investigation because the concepts and conceptual relationships in question are presupposed by any such investigations and cannot be verified by the methods of science. For instance, the view that scientific knowledge is more objective and should be prioritised is a conceptual and normative (metaphysical) claim that cannot be settled by empirical means¹¹².

Again, the problem is not with science *per se*, and Boyd, Gasper and Trout's explicit claim that scientific method should be used for *all* investigation would be rejected by educationalists for the scientism it is. But I argue that the *assumption*, the *idea* that the methods of science are the only really reliable way to achieve objective knowledge is deeply ingrained. And this *implicitly* commits to mind-independent metaphysics about knowledge, and the conceptual problematic inherent in these. To repeat, this is not an argument against science or empirical approaches and methods used in education, or the knowledge this yields (empirical knowledge is part of Kant's metaphysics). Rather the aim is to compare mind-independent epistemology that does not conceptually account for the 'spontaneity' of mind, or recognise this as a source of knowledge, with that of Kant, who does. The concept of spontaneity accounts for our thinking that goes beyond

¹¹¹ For their follow-up discussion, see Bennett and Hacker (2007).

¹¹² Of course, conceptual questions and investigation involve facts and empirical concepts, the point is they cannot be answered solely by empirical means such as observation.

what is given through the senses; whereas for naturalist approaches “[r]eason has no power to produce anything outside its representations”, Engstrom argues, it “simply tracks reality” (2013, p.138). Kern argues that the scepticism that arises from empiricist epistemology is “the failure to see that the fundamental account of knowledge consists in the description of a rational capacity” (2017, p.135). In education, as Pring argues (2007), knowledge is often treated as a commodity – facts and definitions – easily taught and assessed. Writing of someone who has simply learnt facts, Kant writes, “[h]e knows and judges only what has been given him. If we dispute a definition, he does not know whence to obtain another. He has formed his mind on another’s, and the imitative faculty is not itself productive. In other words, his knowledge has not in him arisen *out of reason*”; Kant concludes, “he has learnt well” but “is merely a plaster-cast of a living man” (B864). Kant’s conception of reason as a power provides for ‘rational freedom’, which allows us to think beyond empirical facts and challenge, dispute or reaffirm them.

The development of knowledge necessitates seeing things anew, and disrupting or challenging existing conceptions, but while this “must always be pursued”, Kant states, but “can never be completely achieved” (B593), it is always on-going. “There must be a standing willingness to refashion concepts and conceptions if that is what reflection recommends”, McDowell similarly argues (1996, pp.12-13). Sub-personal, mind-independent accounts of knowledge lack the conceptual resources to account for the refashioning of concepts. While the linguistic turn came after Kant, the role of language is implicit in his philosophy; some contemporary theorists have made this more explicit, particularly Rödl (2012). McDowell, too, writes:

“In being initiated into a language, a human being is introduced into something that already embodies putatively rational linkages between concepts, putatively constitutive of the layout of the space of reasons, before she comes on the scene. This is a picture of initiation into the space of reasons as an already going concern. ... the language into which a human being is first initiated stands over against her as a prior

embodiment of mindedness, of the possibility of an orientation to the world". (1996, p.125)

As previously discussed, Kant argues that even physics "must adopt as its guide" when investigating nature, "that which [reason] has itself put into nature" (Bxiv)¹¹³, because this constitutes, to switch to McDowell's terms 'the layout of the space of reasons' as 'an already going concern' before a human being 'comes on the scene'. However this 'prior embodiment of mindedness' is up for reflection, and even deep seated concepts and norms can be challenged, altered or replaced - "no putative conceptual grasp is ever sacrosanct, fit to be placed once and for all in an archive of achieved wisdom" (McDowell, 2009, p.182). Learning a language gives us 'an orientation to the world', and reconceiving concepts changes this orientation. In the same vein I am recommending we reconceive familiar concepts of knowledge in order to understand Kant's terms in a non-dualist way.

From a first person stance, without foundations external to thought, concepts can only be reconceived from within our inherited culture. McDowell reminds us of Neurath's image: the mariner repairing his ship while afloat – it can be altered piecemeal, but not rebuilt in its entirety at any one time. In referring to different conceptions of 'cause', McDowell writes:

"the role of causation, in scientific thought's well-grounded conception of itself, does not rescue scientific thought from Neurath's boat. Empiricistic naturalism misses the significance of the fact that the Neurathian "predicament" is quite general. If one protests that science is in the same boat, that tends to be misconceived as expressing a relativistic refusal to accept that science is objectively special ... it is a mistake to think we cannot show proper respect for science unless we suppose that truth about disenchanted nature is the sole context in which the material good standing of an exercise of intellect can be directly apparent, so that any good standing that is not that must be either merely formal or indirectly grounded on such truth. Good standing

¹¹³ The meaning 'put into nature' by reason or mind, is not something constructed by the mind and imposed onto a disenchanted world; it can be understood as ideality, put there by the collective social consciousness involved in layers of historically evolved social practices.

is, everywhere, for *logos* to pronounce on, using whatever standards it can lay hands on; nothing but bad metaphysics suggests that the standards in ethics must be somehow constructed out of facts of disenchanted nature.” (1998a, p.187)

Again, to better appreciate Kant’s view (his ethics as well as his epistemology) we need to give up the idea of an external viewpoint, and think of knowledge as something always within a human frame of reference.

“Nature, on this richer conception, is to some extent autonomous with respect to nature on the natural-scientific conception. Correctness in judgements about its layout is not constituted by the availability of a grounding for them in facts of first nature; it is a matter of their coming up to scratch by standards internal to the formed second nature that is practical *logos*.” (McDowell, *ibid*, p.193)

This is not a conception of practical *logos* cut off from objective reality, but a subjective stance in which the knowledge we have so far learnt is constantly called into play, not only in our thinking but in our on-going (embodied) contact with the world.

The following example illustrates the importance of spontaneity and subjectivity even in the paradigm shifts of the ‘reductive’ agenda. In his autobiography, the biologist Edward Wilson (1994) describes his feelings when molecular biologist James Watson arrived at Harvard in 1956, after his hugely significant discovery of DNA with Crick. Kenan Malik describes this meeting in his book *Man, Beast and Zombie*, and paraphrases Wilson:

“[Watson] arrived with a conviction that biology must be transformed into a science directed at molecules and cells and rewritten in the language of physics and chemistry. What had gone before ‘traditional biology’ – *my* biology – was infested by stamp collectors who lacked the wit to transform their subject into a modern science ... it is impossible to imagine the impact that the discovery of DNA had on our perception of how the world works.” (2000, p.165)

Physics was becoming the universal standard for judging all approaches to understanding and describing the world. The concepts of biology were being

reduced to the concepts of physics. Watson later said, “There is only one science, physics: everything else is social work” (ibid). However, Wilson responded to this reductive agenda, not by defending the ‘traditional biology’ that had been his life’s work, but by jumping on the reductive bandwagon and introducing ‘sociobiology’ - a new approach that reduces social behaviour and even human nature to evolutionary and genetic concepts (1975). Malik describes the effort to turn traditional biology into a ‘proper’ science by making it quantifiable:

“Human sociobiology was the attempt to carry through the reductive approach to the study of Man... it allowed sociobiologists to adopt a ‘more reductive than thou’ attitude towards social scientists: if reductionism was the measure of a true science, then human sociobiology, by demonstrating how reductionism could explain human affairs, measured up.” (ibid, p.168)

Sociobiology is now an established field, but this has resulted not from (mind-independent) empirical investigation but from ideas that spring from spontaneity and the power of mind. A picture emerges of Watson and Wilson arguing for their positions, challenging, defending, persuading - exercising intentionality and agency, the very rational freedom that is denied in scientific naturalist views. Rooted in social activity, these human elements shape what ‘biology’ ought to be and the direction it should take. And changes become established through social practices also – debates, articles, books, and peer reviewed papers. This illustrates the movement of thought, and the life of a discipline in motion. Such normative forces that shape what counts as legitimate scientific knowledge are not captured and cannot be expressed by the conceptual resources of scientific naturalism. Kant’s ‘capacity’ conception of knowledge, centred on judgement and freedom, accounts for scientific innovation and paradigm shifts, while not losing objectivity or science, or the idea that the correctness of our empirical judgements depends on how things are in the world.

Of course some scientists do recognise that concepts are not ‘Given’ and unalterable but are subject to change, but Albert Einstein writes of the difficulty in appreciating this:

“Concepts that have proven useful in ordering things easily achieve such an authority over us that we forget their earthly origins and accept them as unalterable givens. ... The path of scientific advance is often made impassable for a long time through such errors. For that reason, it is by no means an idle game if we become practiced in analysing the long commonplace concepts and exhibiting those circumstances upon which their justification and usefulness depend, how they have grown up individually, out of the givens of experience. By this means, their all-too-great authority will be broken. They will be removed if they cannot be properly legitimated, corrected if their correlation with given things be far too superfluous, replaced by others if a new system can be established that we prefer for whatever reason.” (1916, p.129)

Einstein acknowledges the modifiable nature of scientific concepts, but, as he warns, they can easily achieve an authority over us and be seen as unalterable givens. Wittgenstein also makes this point:

“The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something – because it is always before one’s eyes.) The real foundations of his inquiry do not strike a man at all. Unless that fact has at some time struck him. – And this means: we fail to be struck by what, once seen, is most striking and most powerful.” (1958, §129)

As Einstein and Wittgenstein make clear, it can be difficult to recognise what is hidden because of its familiarity. It is the argument of this thesis that some of Kant’s key concepts when read in English have (naturally) been understood in the familiar way knowledge concepts are understood in education in the Anglophone world, and this has obscured other ways of understanding these concepts, which together provide a different metaphysical picture of Kant’s philosophy. It is the work of Part One to suggest alternative understandings of his terms, and different conceptions of familiar concepts – including nature, world, cause, mind, subjectivity – to gradually develop a different overall reading.

To continue with this, on Kant's first person stance subjectivity and objectivity are not to be understood as in opposition, the familiar way of understanding them (with subjectivity something inner and unreliable and separate from the objective world). Standish draws attention to the 'hardening dichotomy' between subject and object in the increasingly 'standards' culture in education:

"The hardening of the subject-object dichotomy generates crude accounts of objectivity, where objectivity is thought to be synonymous with numerical measurement. This helps to explain why the questions that MacIntyre identifies, such as "What are universities for?", tend to be framed within assumptions of economic productivity as the ultimate, perhaps the sole means of justification. In the end this reductivism suggests a shying away from questions of value, a lack of confidence tantamount to a kind of nihilism. It conditions the now familiar pedagogical belief that, if something is not tested, it cannot be learned." (2011, p.3)

Presuppositions of an inner and unreliable subjectivity result in crude understandings of objectivity. The reluctance to accept a first person standpoint was exemplified by Boghossian in Chapter One: if we give up the idea of an external standpoint we have nothing to judge the validity of one claim against another, leading to relativism and radical constructivism. (Indeed, these are typical criticisms of Kant by educationalists addressed in Part Two.) But on Kant's version of idealism, objectivity and the objective world can *only* be understood through subjectivity.

This means we cannot break out "of a specific cultural inheritance into undistorted contact with the real" to achieve objective correctness (McDowell, 2009, p.37). There is no external standpoint from which to judge or experience the world, rather experience (and perception and investigation) always takes place from within a 'subjective' viewpoint. The idea of an Archimedean point of view - a view from nowhere - has been much discussed in philosophy, but there remains enormous reluctance to accept

the idea of a completely subjective or first person perspective. The idea of thinking about the world from nowhere, for complete objectivity, has been theorised, for instance, by Bernard Williams¹¹⁴ (1985, 2002, 2005) and also by the Kantian scholar Adrian Moore (1997). Thomas Nagel too reflects on subjectivity and objectivity in his influential book *The View from Nowhere*. On the one hand, Nagel recognises the importance of a first-person perspective:

“For many philosophers the exemplary case of reality is the world described by physics, the science in which we have achieved our greatest detachment from a specifically human perspective on the world. But for precisely that reason physics is bound to leave undescribed the irreducibly subjective character of conscious mental processes, whatever may be their intimate relation to the physical operation of the brain. The subjectivity of consciousness is an irreducible feature of reality – without which we couldn’t do physics or anything else – and it must occupy as fundamental a place in any credible world view as matter, energy, space, time, and numbers.” (1986, pp.7-8)

Nagel’s argument - that “the subjectivity of consciousness is an irreducible feature of reality” - appears to be a critique of scientific naturalism, and appears to recognise Kant’s first-person stance; at the same time however, Nagel recommends that we work towards a universal conception of the world, *away from* a subjective - or ‘*parochial*’ - one. The idea of even wanting to achieve this is questioned by Rödl:

“The human intellect is situational, and it relates to intuition. That is its essence, according to Kant, its deficiency, according to Nagel. [...] “we can’t free it entirely of infection with a particular human view” (*The View From Nowhere*, p.63).” (Rödl, 2012, p.73)

Rödl argues that the intellect only has content because it is situational; it is intuition-dependent. “Human thought is situational and thus temporal because human thought and intuition form an essential unity” (ibid, p.79). He argues that it “does not think from nowhen”, or nowhere, but represents its

¹¹⁴ Williams has a two-world reading of Kant; he appreciates Kant’s systematic approach to ethical thinking but does not agree with the abstract and detached conception of person that he (mis)reads Kant’s ethical agent to be (1985).

objects in space and time. Without any content our thoughts would be empty, so the idea of freeing ourselves from situational thought means striving after empty thoughts (ibid, p.74). We cannot free ourselves from a subjective standpoint and the knowledge we have accumulated, but this does not lose objectivity.

In education, Harvey Siegel also discusses objectivity and the possibility of an external standpoint. Like Williams and Nagel, Siegel on the one hand questions the possibility of a neutral view from nowhere; he criticises the prioritising of scientific values and methods, and affirms epistemological diversity in educational research (2006). However at the same time, like Moore's argument in *Points of View* (1997), Siegel defends the need for "a local neutrality" for evaluating different epistemologies; that is, he hangs on to the idea of an external viewpoint and talks of "criteria being the property not of any given epistemology but rather of an overarching epistemological and philosophical perspective (or metaperspective) that is *neutral* with respect to them all" (ibid, p.7). Elsewhere Siegel defends the *neutrality* of empiricist knowledge from feminist and postmodern criticisms (2010). The perceived need to be free from a subjective standpoint, and search for objectivity in a reality that is separate from subjectivity, is referred to by McDowell as 'over-objectification'. He argues that if science is the frame for all explanation, this should not exclude ourselves from what is real; "the idea of a view from nowhere is incoherent" (1998a, p.118). Kant's insistence on the human standpoint does not lose objectivity (a natural concern), objectivity is firmly in the picture but is understood as something within thought or mind, as opposed to something external¹¹⁵.

Expanding on the role of intuition can help illustrate the objective nature of knowledge from a first person standpoint, and begin to show how subjectivity and objectivity emerge together. Again, intuition is not to be conceived as

¹¹⁵ The worry about losing objectivity also concerns theories such as that of Rorty, who famously rejects the concept of objectivity completely in his social solidarity view of knowledge; this is discussed in the next chapter.

empiricism's sense data, rather it is a capacity or ability that explains a source of knowledge; it provides the worldly content of *what* we perceive when we perceive something. Stekeler talks of intuition as a competence, a human capacity for joint conduct, and argues that if it is misinterpreted as opinion or subjective feeling then we miss its objective and factive aspects. Kant uses the word *Anschauung*, Stekeler explains, as 'objective perception', that is object-directed perception that is necessary for any shared reference to the world. He writes:

“[T]he word “intuition” is as perfective and factive as the word “murder” is: One cannot murder anybody without him being dead afterwards. In the same vein, we cannot have an intuition of x without x being there. The factive feature of Kant’s notion of intuition is regularly overlooked. But it is absolutely clear that intuition is perfective observation and, as such, guarantees the existence of the observed process or things in just the same way as knowledge of p guarantees that p is true. Moreover, Kant’s whole analysis is misread if we do not keep this in mind.” (2010c, p.5)

The factive dimension of intuition has, Stekeler argues, been regularly overlooked, particularly in constructivist interpretations of Kant in education that are so widespread. “This objectivity has to be understood as a certain situation-invariance of *deictical reference to present objects and object-related processes* like movements, but also changes of qualities” (2010b, p.10). This ability to intuit, to identify objects and movements in experience, which provides the objectivity of thought, presupposes mutual recognition. It is a joint practice (that involves joint attention to real objects in the world) in which normative commitments and concepts are learnt and developed. Such ‘objective perception’ cannot be understood *apart* from subjectivity, objects are perceived only through a first person stance.

Stekeler draws attention to the cooperative and social norms involved. He points out that Kant uses the generic ‘I’, but in an important sense this is also a ‘we’ and a ‘you’. Intuition presupposes mutual recognition as it allows for deictic reference to things through *joint consciousness*: shared knowledge

and shared normative commitments. A first person stance is also a second or third person stance. Kant says that 'I think' must be able to accompany all my representations, this is the self-consciousness of thought. But this 'I think' is also a 'you think' or 'we think', because to become minded means having been initiated into a shared culture and having developed the competence to take part "in a whole system of joint human practice" (Stekeler, 2010d, p.1). Stekeler writes:

"something is an object of *my Anschauung* only if it can (or could) be an object of *your* and hence *our Anschauung* as well. I.e. an object of my intuition already lies in the realm of possible access by present *Anschauung*, which is something like *our present perceptual space*". (2010c, p.6)

Stekeler credits "Kant's deep insights" here, explaining that time and space are forms of intuition:

"The comprehensive form of *Anschauung* is a form of *our practical attitude* with respect to objects *in our perceptual field*. It presupposes that you and I and he, i.e. *we together*, can refer to the *same object* from our different positions of perspectives – if we take these differences of perspectives properly into account. This 'proper account' defines the forms and norms of *one common spatial order*. This order is *space*." (ibid, p.7)

Time and space are forms of intuition (2010b, p.19)¹¹⁶. The point here is that objectivity comes from such joint perceptual access to objects in the world (through subjectivity), and the shared knowledge and understanding involved allows successful reference and identification to be made.

In contrast to the (mechanically) causal role of sense data in empiricist epistemology, this competence to intuit is socially learnt, which underscores the relevance of education and the participation of others. It involves acquiring and developing the ability to change perspectives from one point of

¹¹⁶ Time and space are discussed in Part Two, and an understanding of intuition developed as we proceed.

view to another. Stekeler explains, “practical mastery of perspectival change, including the control of jointness in reference, is part of a normatively constituted social practice. It is a form of cooperation” (2010a, p.19). This socially complex cooperation, he argues, is not a causal phenomenon that comes simply from biological maturity or genetic endowment, but is a competence that is acquired and developed early in life, in order to successfully participate in jointly referring to things in the world. Even young children together gain the competence to refer to the same *object* from their different positions and perspectives; *objectivity* cannot be separated from the subjective stance of subjects.

Kant’s Copernican argument includes the idea that the conceptual unity of an object is not simply ‘Given’, as a mere collection of sense data, but is learnt, and once learnt, the concept or knowledge we have of the object comes into play in encountering particular instances of it. In this sense, objects conform to our knowledge of them. Conceptual unity is learnt along with other conceptual connections and distinctions as children develop the practical competence to identify an object, and refer to the same object over time. Pointing plays an important role early in life, after which language allows reference to (jointly perceived) objects: “a substance and its form enter thought together” (Rödl, 2012, p.205). Subjectivity and objectivity, mind and world, emerge at the same time. Intuition provides the content (how an object looks, smells, feels, it’s weight, texture, etc.), and language (concepts and forms of thought) are learnt to be able to refer to and predicate something of these objects. As Stekeler puts it, “our social conceptual distinctions and our (joint) perceptual access to the object are ‘grown together’, and embedded in our practices” (2010a, p.15). In this way, experience “as Kant uses the word is already conceptually formed” and “must always already be seen as taking part in complex and joint practice” (ibid, p.19). Similarly, McDowell writes on acquiring new concepts:

“If a subject does not already have a discursive capacity associated with some aspect of the content of an intuition of hers, all she needs to do, to acquire such a discursive capacity, is to isolate that aspect by equipping herself with a means to make that content – that very content – explicit in speech or judgment.” (2009, p.264)

Through shared experience and joint intuition, our discursive capacities are developed and our knowledge (our worldview) becomes more refined, discriminating and discerning. This is not a subjectivity that is separate from the world, but connected with it - there is no dualism - and contrasts with criticisms of Kant in educational discourse as someone who adopts a detached and abstract conception of mind, divorced from real life.

To emphasise the argument that runs through these chapters, I repeat McDowell’s claim that mental life is an aspect of *our* lives and “[w]here mental life takes place need not be pinpointed any more precisely than by saying that it takes place where our lives take place. And then its states and occurrences can be no less intrinsically related to our environment than our lives are” (1998b, p.281). As Engstrom insists, a proper understanding of Kant’s capacities shows no dualism, but rather a conception of mind that is practically engaged in joint experience in concrete situations. The practical and social aspects of acquiring the competence to use deictic reference are an important part of acquiring any knowledge of the world.

The aim of these first four chapters has been to identify and articulate the presuppositions and central commitments of empiricist and naturalist mind-independent accounts of knowledge so as to begin to differentiate Kant’s philosophy from these, by introducing alternative understandings of his central terms from recent Kantian exegesis. Some of these reconceived concepts include mind (not as separate from but in touch with the world); world (as ideal, written through with meaning by minded activity); experience and perception (as conceptually informed); nature (as including human nature); cause (as autonomous as well as heteronomous), and materialism and naturalism (as including the minded agency of subjects). Also

reappraised was Kant's Copernican insight (with conceptions of subjectivity and objectivity as not standing opposed), and his first person 'human' standpoint was compared with science's 'dehumanised' stance for investigation. I have attempted to begin to bring into view a different picture of Kant's philosophy, with mind not detached as so frequently found in educational literature, but continuously engaged in ordinary perception and experience. In the next chapter we turn to constructivist epistemology and Rorty's mind-dependent view of knowledge, in order to further explicate Kant's non-dualist philosophy.

Chapter 5: Rorty, Kant and Mind-Dependent Views of Knowledge

It has been argued that assumptions about mind and world and other conceptual commitments from empiricist epistemology have shaped dualist interpretations of Kant in educational theory. This has resulted in criticisms of intellectualism and mind as detached from the activities of everyday life. Alternative conceptions of his terms have been introduced from recent exegesis, according to which Kant's conception of mind, as a capacity for knowledge, is embodied and engaged with the world rather than detached from it. This chapter continues to bring into view this non-dualist picture, through discussion of Rorty's 'social consensus' view of knowledge.

Kant's view has been distinguished from traditional empiricist epistemology in order to argue, in Part Two, that the latter has influenced interpretations of his terms, giving rise to the dualist picture in education. Kant is frequently cast as a constructivist. As the competing paradigm of knowledge in education, the idea that knowledge is constructed and not discovered, has long been immensely influential; as Nel Noddings says, "[f]ew scholars today would reject the notion that knowers actively construct their own knowledge" (2007, p.209). Inspired by Richard Rorty and the rise of postmodern and feminist epistemologies, constructivist views of knowledge tend to be presented in opposition to traditional empiricism. As far as Kant is concerned, Jean Piaget's Kantian inspired theory of cognitive development was enormously influential. Since then, Kant's 'constructivism' has been appropriated in defence of some radical constructivist and relativist theories of knowledge, and criticised by others for intellectualism and detached conceptions of mind and reason. In this chapter Rorty's view of knowledge and his reading of Kant is discussed, to argue that the *same* (empiricist) assumptions about mind and world are also at play, reinforcing the argument that these deeply ingrained assumptions have influenced interpretations of Kant in educational theory, obscuring other ways to read his philosophy.

Rorty is relevant in this context for several reasons. Constructivism, like empiricism, is a hugely diverse paradigm, and it helps to work with one theorist - regarding assumptions about mind and world - in order to allow for a clearer identification of conceptual commitments in this influential approach to knowledge. Educational theorists tend not to make explicit such deep-seated assumptions at this metaphysical level; so in order to better challenge typical characterisations of Kant in Part Two, it is helpful if we have first looked at a philosopher who does go metaphysically further and talk about the conceptual commitments of this 'constructivist' approach to explaining knowledge, even while his overall view of knowledge will differ from other constructivist views. Also, Rorty has had a significant influence on constructivist thinking; it is Rorty who Boghossian blames for inspiring postmodern, relativist and anti-objective constructivism. Moreover, Kant's view has so far been differentiated from empiricist and naturalist *mind-independent* approaches to knowledge; articulation of Rorty's *mind-dependent* view allows it to be differentiated from Kant's *mind-dependent* view, thereby further elaborating the non-dualist reading of Kant that is the concern of this thesis.

Rorty rejects traditional empiricism completely for being "a whole set of terms and assumptions which center around the image of mind as mirroring nature" (1979, p.97). In contrast, Rorty has, as has Kant, a *mind-dependent* view of knowledge. However Rorty defines his pragmatist position *in opposition* to Kant, because he reads Kant (and Enlightenment thought generally) as sharing with empiricism and 'representationalism' the idea of mind as mirror of a mind-external nature. In other words, Rorty aligns Kant with empiricism rather than with constructivism, and we come to Rorty's reading of Kant below. I first examine Rorty's view of knowledge in order to identify key commitments, and consider his exchanges with McDowell to help clarify and articulate them. The aim is to show that, despite rejecting empiricism, Rorty conceives central epistemological concepts - mind, world, objectivity, truth, epistemology - with the empiricist and scientific

understandings that prevail in the analytic tradition. This reinforces the argument of this thesis that empiricist understandings and presuppositions have influenced dualist interpretations of Kant's philosophy in education, whichever paradigm he is associated with. One consequence of such (mis)interpretations is that the embodied, situated and connected nature of mind, as well as the objective and worldly dimensions of Kant's overall view, are obscured.

Rorty is highly critical of the widespread privilege accorded to science, seeing science as one social practice among others. He denies that the natural sciences are in touch with what he calls 'The Intrinsic Nature of Reality', insisting "no area of culture, and no period of history, gets Reality more right than any other" (2000, p.375). This is because, he believes:

"There is no such thing as Reality to be gotten right – only snow, fog, Olympian deities, relative aesthetic worth, the elementary particles, human rights, the divine right of kings, the Trinity, and the like. (Can you get right something that does not exist? Sure. Thanks to advances in archaeology and epigraphy, for example, we know a lot more about Zeus than was known in the Renaissance.)" (Ibid)

As far as Rorty is concerned, the fundamental empiricist idea that something is Given by the world, and that our knowledge claims are answerable to this, is as immature an idea as religious ideas held by defenders of religious belief. McDowell's exchanges with Rorty serve to bring into view the assumptions and commitments at issue, and which underlie different interpretations of Kant. McDowell explains Rorty's thinking:

"What Rorty takes to parallel authoritarian religion is the very idea that in everyday and scientific investigation we submit to standards constituted by the things themselves, the reality that is supposed to be the topic of the investigation. Accepting that idea, Rorty suggests, is casting the world in the role of the non-human Other before which we are to humble ourselves. Full human maturity would require us to acknowledge authority only if the acknowledgement does not involve abasing ourselves before something non-human. The only authority that meets this requirement is that of human consensus." (2000, pp.109-110)

Opposed to empiricist ideas of knowledge and justification as stemming directly from the external world, Rorty argues that these arise from social agreement; knowledge is solidarity, agreement with our fellow peers (1989). Instead of looking at reality, he insists that we should concentrate on consensus.

Rorty famously rejects the concept of objectivity - replacing it with solidarity. He dismisses objectivity because, as we have seen in empiricist approaches, objectivity is seen to derive from the external world, a non-human authority; for Rorty justification comes from agreement with one's peers and *not* with the world. Rorty also discards the concept of truth, on the grounds that "there is little to be said about truth" (1999, p.37). He writes:

"It may seem strange to say that there is no connection between justification and truth. This is because we are inclined to say that truth is the aim of inquiry. But I think we pragmatists must grasp the nettle and say that this claim is either empty or false." (Ibid.)

Instead, Rorty argues, "philosophers should explicitly and self-consciously confine themselves to justification" through as much agreement as possible (ibid, p.32). Epistemology and metaphysics are put in the same empiricist boat as truth and objectivity, along with foundationalism - and rejected. On this picture of knowledge, central epistemological concepts are simply eliminated.

Rorty closely follows the philosophy of Donald Davidson; a brief résumé of this will help identify commitments and assumptions in this approach to understanding knowledge, which will make it possible to differential Kant from these below. Invoking an argument similar to that of Sellars's Myth of the Given, Davidson rejects the very idea of a dualism of conceptual scheme and empirical content. Instead he advocates a coherentist theory of knowledge and truth, which highlights language and the *social* nature of knowledge

(2001). It is through interpersonal communication within our social practices that we learn to speak a language and acquire concepts of knowledge, objectivity and truth at all, despite the hesitant and ungrammatical character of much of our discourse (1986). According to Davidson, we learn standards of correctness by using a public language in our interactions with other people, and it is the shared reactions to common stimuli that provide content and meaning to our concepts. That is, he sees our relation with the world as merely *causal*, an impact on sensibility, but the language and concepts that we use in communicating and justifying what we say are *normative*. Davidson famously argues that ‘nothing can count as a reason for holding a belief except another belief’ (2001), conceiving justification as stemming from our conceptual system of beliefs and not directly from the empirical world¹¹⁷. The emphasis on the social nature of knowledge, through interpersonal communication with others, offers a richer picture than that provided by empiricism, and it is Davidson’s picture that Rorty largely adopts¹¹⁸.

Rorty also urges us to use Davidson’s notion of *triangulation*: a three-way interdependence of speaker, fellow speaker (or interpreter) and the shared world (1991). This compares with empiricism’s two-way picture between individual subject and object. Rorty believes it is better to think of knowledge as this triangulation than as “zeroing in on the way things really are” (2000, p.374). Of the empiricist view he remarks:

“You think you can escape the inescapable, cut off one corner of Davidson’s triangle, and just ask about a relation called “correspondence” or “representation” between your beliefs and the

¹¹⁷ Davidson does not agree with Rorty’s rejection of objectivity and truth. He argues that ‘[s]entences are understood on condition that one has the concept of objective truth’ and ‘[w]ithout a grasp of the concept of truth, not only language, but thought itself, is impossible’. Rorty disagrees with this (2000, p.72). (See Davidson’s ‘Truth Rehabilitated’ and Rorty’s response in *Rorty and his Critics* (2000).

¹¹⁸ Both Davidson’s and Rorty’s views are obviously more philosophically sophisticated than presented here, and there are differences, but they share a coherentist approach to understanding knowledge, which is of relevance below.

world. ... none of the three corners of his process of triangulation can be what they are in independence of the other two.” (Ibid.)

Returning to Rorty’s point about the giraffe in the debate with Boghossian in Chapter One, we do not see a giraffe and immediately know what it is, rather we see a giraffe and through interaction with others, learn how to name and describe it, and learn the norms for applying the concept giraffe in future contexts. Rorty insists on the *inescapability* of triangulation:

“Whereas you can, in the course of triangulation, criticize any given claim about anything you talk about, you cannot ask for agreement that others shall take part in a process of triangulation, for the attempt to reach such an agreement would just be more triangulation. The inescapability of norms is the inescapability, for both describers and agents, of triangulating”. (Ibid, pp.373-374)

For Rorty it is this process of triangulation that provides us with the world of Human Rights and kings, as well as snow and giraffes, and particles and atoms.

This exemplifies the naturalist-normative debate, with Rorty arguing that knowledge and norms are *ours* and are not provided by the world - there is no ‘alien authority’¹¹⁹. Vocabulary gets its content through *use*, he argues, and is not constrained by an external world. He insists that a “normative vocabulary is presupposed by any descriptive vocabulary ... We could not deploy the descriptive vocabulary unless we could also deploy the normative one, just as we could not employ a screwdriver if we did not have hands” (2000, p.372). Not only are norms inescapable, but according to Rorty they ought to be the *focus* of any account of knowledge. The emphasis on normativity contrasts starkly with empiricist/naturalist views that exclude normative notions. And in contrast to the methods of science, Rorty recommends that we conceive knowledge as a ‘conversation’; for it is through

¹¹⁹ Wittgenstein contemplates this philosophical question: “We have a colour system as we have a number system. Do the systems reside in our nature or in the nature of things? How are we to put it? – *Not* in the nature of numbers or colours.” *Zettel*, §357.

social consensus that knowledge and norms come to be accepted, not from reality.

It has been maintained that some deeply held assumptions, rooted in empiricist thinking, need to be challenged in order to better understand Kant. I argue that Rorty, who rejects empiricism entirely (and sets up his view in opposition to it), still adheres to empiricist understandings of key concepts. Consider his conception of 'reality' for instance; in denying that anything is given by the world (no alien authority) and holding that we know objects (cabbages as well as kings) only in virtue of social agreement, reality itself, he insists, is 'normless' and disenchanting. He writes: "'Reality' and 'Our knowledge of Reality' are alternative names for the normless. That is why metaphysics and epistemology go together like ham and eggs" (2000, p.376). Rorty commits to scientific conceptions of reality as bereft of meaning; meaning lies in language, the social and conceptual sphere, and he insists there are no constraints from the world (1998). This compares with a conception of the world as already humanised and conceptually structured, made meaningful by our (historically evolved) minded activity, as discussed in Chapter Three.

Rorty's conception of mind is also naturalist in the reductive sense - for he eliminates it. He holds that mental vocabulary allows us to describe people but does not reveal anything about the nature of mind, for there is no such thing, no such nature. Believing *nothing* to be "written on the face of the world", Rorty writes about the nature of anything:

"You know about the nature of X when you know the inferential relationships which are generally agreed to hold between the sentences using the word 'X' and the other sentences of the language. On this view, you may always learn more about the nature of X, because new scientific developments (for example) may bring about agreement upon new such relationships. But there is nothing beyond such relationships to be discovered." (1982, p.340)

Meaning is not discovered in the world, but is constituted by agreement about inferential relationships between sentences of a language. Rorty conceives meaning as stemming from language, because reality is presupposed as disenchanting.

Along with empiricists and naturalists, Rorty commits to (science's mechanical) *causal* relation between thought and reality, denying a 'rational' relation. This naturalist commitment is reflected in his likening humans to computers, with mind/brain as a kind of information processor. In dismissing the idea that our perceptual relation with the world is 'rational', Rorty criticises McDowell's argument that perceptual experience (in the Kantian sense, in which experience comes already conceptually structured) can be justificatory or warrant a particular belief. In contrast, he describes experience in the following way:

"human beings' only "confrontation" with the world is the sort that computers also have. Computers are programmed to respond to certain causal transactions with input devices by entering certain program states. We humans program ourselves to respond to causal transaction between the higher brain centers and the sense organs with dispositions to make assertions. There is no epistemologically interesting difference between a machine's program state and our dispositions, and both may equally well be called "beliefs" or "judgments." There is no more or less intentionality, world-directedness, or rationality in the one case than in the other." (Rorty, 1998, pp.141-142)

Rorty's conception, with its 'causal transactions' with the world, is mechanistic. He rejects Kant's notion of freedom (with autonomy as a kind of 'cause'¹²⁰). Rorty talks of knowledge as a human phenomenon, but with knowledge as 'aspiring to vocalise in step with one another' and no concept of (or provision for) spontaneity, mind or self-consciousness, Rorty's view is

¹²⁰ As discussed in Chapter Three, mind (thought, intentionality, rational freedom) can be a 'cause' of our actions, which are not mechanistic, for 'cause' can be conceived as autonomous or heteronomous: 'cause' in the scientific sense is from something outside of itself (heteronomous), while as self-determining creatures (autonomous) we are not pushed around by things outside of us but are responsible for (the 'cause' of) our own activity.

behaviouristic – we are determined by the attitudes and judgments of others, with no rational freedom in the Kantian sense¹²¹.

McDowell takes issue with Rorty over his denial of rational freedom; he argues of a similar position: “[h]ow can it be rational to commit oneself if it is up to others to determine what one has committed oneself to?” (2011b, p.10)¹²². But Rorty insists that he has no use for such vocabulary. Mind is a concept he associates with empiricism (as the mirror of nature) and that he rejects. Interestingly, Rorty elsewhere writes:

“[w]e cannot, no matter how hard we try, continue to hold a belief which we have tried, and conspicuously failed, to weave together with our other beliefs into a justificatory web. No matter how much I want to believe an unjustifiable belief, I cannot will myself into doing so” (1999, p.37).

This wonderfully exemplifies Kant’s rational freedom (the power of mind, the spontaneity of thinking, self-consciousness) - which Rorty rejects. In other words, Rorty *presupposes* rational freedom, while at the same time rejecting the vocabulary used to discuss it.

From the above we can see the extent to which empiricist understandings of central epistemological concepts (including epistemology itself) are at play in Rorty’s view. His overall position, while quite different from empiricism, remains committed to *empiricist conceptions of key concepts*, which leads him to reject many of them. I argue that it is these understandings that lead him to read Kant in a negative light. Rorty sees epistemology as centering around “the Kantian picture of concepts and intuitions getting together to produce knowledge”, and both as sharing ‘representationalism’: the idea of mind as mirror of a mind-external nature (1979, p.168). Heavily influenced by

¹²¹ The significance of Rorty’s behaviourism has been lost in the influence of his philosophy, and making it explicit reveals this naturalistic thread of his thinking.

¹²² McDowell is referring to Robert Brandom’s ‘deontic scorekeeping’ approach to meaning in his theory of inferentialism (2011b). Rorty adopts Brandom’s ideas for his arguments against McDowell.

Peter Strawson's critical reading of Kant in *The Bounds of Sense* (1966), Rorty's interpretation is exemplary of a 'two-worlds' reading; he pictures Kant's concepts and intuitions 'getting together' to produce knowledge. This dualist interpretation is typical of those, to repeat Engstrom, "who see these stems as distinct parts, each able on its own to produce representations, which must somehow interact, determining or constraining one another, in order to secure the fit, requisite for cognition, between concept and intuition" (2006, p.2). But this reading "cannot be squared", Engstrom continues, "with what Kant actually says about theoretical cognition and the way understanding and sensibility cooperate in it" (ibid). Andrea Kern similarly argues that spontaneity and intuition are not two separate realms but two aspects of a single capacity (2006). They need to be understood not as interacting parts getting together but as two sources of one single capacity for knowledge.

As discussed in Chapter Two, Kant makes the distinction between the senses and the understanding to express his critique of the two dominant paradigms of knowledge that he inherited. He captures the truth in empiricism that we know objects through the senses, but denies that what is given through the senses stands alone, and draws on the rationalist idea that mind plays a role, but denies an 'infinite mind' that brings material objects into existence. The knowledge (forms of thought or concepts) that we have learnt is exercised (drawn into play) in sense experience. As Rödl argues, "that we apprehend substances and their movement through the senses, and forms and their laws through the intellect, are two sides of a coin", and the unity of these sources "defines the finite intellect" (2012, p.207). For the above Kantian theorists, there is no dualism. Matter and form are the same object, which shapes and constrains human activity. Taking a spoon for instance, the form or concept shapes its initial production, as matter is made into a meaningful object; at the same time this physical matter (a spoon) shapes our action, the way we pick it up and use it. "In Kant's words, knowledge of the form is always encountered in the experience of the particular" (Rödl,

2012, p. 204). This is not a detached or disembodied mind, but an embodied one, connected with what it experiences¹²³.

Rorty's dualist interpretation leads him to disagree with McDowell's reading of Kant. Rorty declines to (re)conceive the world as already meaningful, already conceptually structured (through previous and on-going human activity), which can act as a (rational) constraint, and he explicitly denies a 'rational' relation between thought and world. A conceptual consequence of denying that meaning is in the world is that the world disappears from explanation, and everything (meaning, knowledge, norms, values, etc.) falls within the *conceptual realm*. This amounts to recognising only one side of the mind-world dualism. Unable to see meaning in the world - because this would be admitting to an alien authority, or the Given - Rorty sees all meaning and content residing in the normative sphere of social agreement. The naturalism-normativism debate about the source of knowledge grows out of the prevailing and competing paradigms of knowledge. Both empiricism *and* Rorty's position can be seen as manifestations of the 'Cartesian' problematic, for a dualism is at the heart of the debate - with each side denying a role (or the existence) of the other side. In Kant's terms, Rorty is 'intellectualising appearances' - refusing to acknowledge intuition, sensibility or receptivity. Rorty's denial that any content is given by the world means that all meaning and content lie in the conceptual sphere, which makes it, as McDowell argues, appear free floating and 'out of touch' with the world.

What is at stake and lost in dualist readings of Kant (particularly in constructivist interpretations of Kant's Copernican insight, addressed in Part Two), is the objectivity of his (mind-dependent) view. This can be illustrated by returning to McDowell. McDowell's arguments against traditional empiricism have been discussed, but in *Mind and World* he has *two*

¹²³ The unity of the capacities, of mind and world, thought and objects, continues to be emphasised as we proceed.

epistemological targets: empiricism and (the other ‘horn of the dilemma’) coherentism, associated with Davidson and Rorty. McDowell acknowledges that Rorty was an influence on his thinking, and Davidson even more so, but despite the ‘massive agreement’ McDowell alerts us to what he sees as the dangers of coherentism¹²⁴. He describes a coherentism that does not acknowledge a role for worldly constraint on our thinking; it leaves us out of touch with reality:

“It can seem that we are retaining a role for spontaneity but refusing to acknowledge any role for receptivity and that is intolerable. If our activity in empirical thought and judgement is to be recognizable at all, there must be external constraint. There must be a role for receptivity as well as spontaneity, for sensibility as well as understanding.” (1996, p.9)

This argument is relevant to much constructivist epistemology as well as constructivist interpretations of Kant. With no constraint from the world, McDowell colourfully describes coherentism as “a frictionless spinning in a void” (ibid, p.11). For Davidson a belief can only be justified by another belief, whereas McDowell wants belief to be ‘answerable’ to the world, with the (meaningful) world providing ‘friction’. Kant’s conceptions of intuition, sensibility and receptivity provide worldly (empirical) content and the objective and factive dimensions of knowledge and judgement - and this is being lost. Without intuition thought is empty; the formation of concepts and development of mind is dependent on what it perceives and experiences. Furthermore, intuition ‘situates’ a person, in that it connects her through the senses with her surroundings, and to others who are there. It allows a shared reference to what is jointly perceived in a shared experience. With no acknowledgement of the role of receptivity, sensibility or intuition the world disappears and can lead to the idea of mind imposing meaning, or constructing reality. With no worldly constraint, coherentism “threatens to disconnect thought from reality” (ibid, p.24), McDowell argues, and this returns us to the problem of traditional epistemology, the perennial anxiety: a conceptual divide, with mind out of touch with reality.

¹²⁴ McDowell says that he singles Davidson’s work out as a mark of respect (1996).

It might appear that if we give up coherentism we have to resort to empiricism and its incoherent Myth of the Given, as the other prevailing paradigm of knowledge. But both embed a conceptual dualism between mind and world. McDowell says, we are “prone to fall into an intolerable oscillation” recoiling from one way of thinking into the other” (ibid, p.23). As previously discussed, for the dissolution of this perceived anxiety McDowell draws on Kant. “We can dismount from the seesaw if we can achieve a firm grip on this thought: receptivity does not make an even notionally separable contribution to the co-operation” with spontaneity (ibid, p.9). It is intuition and spontaneity *together*, not spontaneity on its own. As will be argued in Part Two, constructivist interpretations of Kant do not acknowledge the contribution of intuition, thereby obscuring the objective and factive aspects of Kant’s view.

In responding to Rorty’s view of justification, McDowell argues that instead of justification consisting “in one’s being able to get away with it among certain conversational partners”, it comes from the question “in the light of what?” (2009b, p.218). McDowell argues that:

“There is a norm for making claims with the words “Cold fusion has not occurred” that is constituted by whether or not cold fusion has occurred; and whether or not cold fusion has occurred is not the same as whether or not saying it has occurred will pass muster in the current practice.” (2000, p.118)

If cold fusion is jointly intuited (Kant’s ‘objective perception’), then it is in the light of joint intuition (of cold fusion being jointly perceived and experienced) that answers the question whether or not cold fusion has occurred. Intuition (with spontaneity) provides the worldly constraint and ‘friction’ to which, to use McDowell’s words, thought is ‘answerable’. Objectivity also comes from Kant’s concept of ‘appearance’, for, as with intuition, Kant argues that there cannot be an appearance of something “without anything that appears” (Bxxvi); it guarantees the existence of objects, there for all to see. The humanised world, made meaningful through our minded activity, acts as a

constraint on our thinking and knowledge claims. McDowell advocates a ‘minimal empiricism’: “a belief or judgment whose content (as we say) is that things are thus and so – must be a posture or stance that is *correctly* or *incorrectly* adopted according to whether or not things are indeed thus and so” (1996, pp.xi,xii)¹²⁵. Coherentism, McDowell argues, does not provide this. Kant’s resources do, but the objectivity of his view has been obscured in typical characterisations in educational theory¹²⁶.

Rorty rejects both Kant and traditional epistemology because he rejects the idea of an extra-conceptual constraint on our thinking, an alien authority. However, as I am attempting to articulate, this constraint is not extra-conceptual but a conceptual one, because the world is not outside a conceptual boundary. Thought is connected with the objects it perceives, indeed the objects make thought possible (the objectivity of thought). Rödl explains:

“She who expresses a thought with “This pepper is red” asserts something as opposed to nothing because and insofar as she perceives the pepper of which she speaks. It is not just that, in asserting this thought, she relates directly to something she perceives; rather, this is what makes her thought possible.” (2012, p.56)

Objects give content to thought. “The human intellect depends on the independent existence of the object of its thought” (Rödl, *ibid*, p.8). This is a mind that is finite and embodied, with the subject embedded in the world and connected with objects through the senses¹²⁷. McDowell also makes this point, “[o]bjects come into view for us in actualizations of conceptual capacities in *sensory consciousness*, and Kant perfectly naturally connects sensibility with receptivity” (2009a, p.43). Thought is in an *indissoluble unity* with the ordinary and everyday objects in on-going perception. This unity of

¹²⁵ We return to McDowell’s ‘minimal empiricism’ below.

¹²⁶ The objectivity of Kant’s view is discussed in more depth in Chapter Seven.

¹²⁷ Again to note, this way of expressing mind and world, and thought and objects, as connected through the senses, while rightly challenging assumptions of separation, is not meant to belie their inseparability.

thought and reality is not recognised in dualist interpretations of Kant's philosophy, and differentiates his epistemology in important respects from the dominant paradigms of knowledge in education.

In educational interpretations Kant's conception of reason is often portrayed as 'ahistorical' and 'abstract Reason', and characterised as 'procedural': following explicit principles, which are universal or immutable, to be followed regardless of the particular context¹²⁸. Rorty too associates Kant with the 'correspondence' tradition, and writes of:

"habits nurtured by the Enlightenment, and justified by it in terms of an appeal of Reason, conceived as a transcultural human ability to correspond to reality, a faculty whose possession and use is demonstrated by obedience to explicit criteria". (1990, p.28)

I argue that it is not Kant's view that we obediently follow explicit criteria. Our capacity for reason (not Reason) is part of our nature as human beings; this capacity may be 'transcultural' in that it is a characteristic of humans, but because we are always immersed in a particular culture, society and community, any individual's *particular* conceptual capacities will be shaped by the particular knowledge and particular norms acquired through living there. Mind is shaped by the norms of the place and culture in which the subject lives; however, this is not to be understood as deterministic, or following an external set of rules and principles, for Kant's conception of mind as *self-determining* accounts for autonomy. McDowell explains this autonomy in terms of our being responsive to reasons, which is recognising the normative force of our *own* reasons. He writes:

"to exercise autonomy is to subject oneself to the normative force of reasons. That is a self-subjection that is at the same time a self-determination. If one conforms to the authority of a reason one appreciates as such, one's thought or action is determined by the power in one by virtue of which one is able to recognize that authority and think

¹²⁸ For instance, Carr (2007) and Green (2011); examples are discussed in Chapters Eight and Nine.

or act accordingly. And it is in exercising that power that one is truly oneself.” (McDowell, 2011b)

Autonomy, for Kant, means acting from our own reasons (freedom as a kind of causality), rather than obedience to following an external or explicit set of rules¹²⁹.

Furthermore, while mind is active in thinking and reasoning, the *passive* nature of most of our perception and experience is not recognised in the interpretations found in education. In ordinary perception and experience our conceptual capacities are drawn into play *unconsciously*, not through actively thinking according to criteria. In experience, McDowell argues, “a subject is passively saddled with conceptual contents, drawing into operation capacities seamlessly integrated into a conceptual repertoire that she employs in the continuing activity of adjusting her world-view” (1996, p.31). Social conceptual distinctions are something we learn as we develop the competence to jointly refer to things in the world; they are not something merely impressed on our consciousness. As Robert Pippin says:

“Kant held that what distinguishes an object in our experience from the mere subjective play of representations is rule-governed unity. His famous definition of an object is just “that in the concept of which a manifold is united” (B137). This means that consciousness itself must be understood as a discriminating, unifying activity, paradigmatically as judging, and not as the passive recorder of sensory impressions.” (Robert Pippin, 2011, p.6)

This refers to Kant’s Copernican insight that objects conform to our concepts (the knowledge we have learnt); we need to have acquired the relevant conceptual capacities in order to perceive or know an object as the object it is. And we need to *learn* what is contained (and not contained) in particular concepts. However, in education where Kant is mostly portrayed as a constructivist, the idea that mind ‘discriminates’ and ‘unifies’ is over-emphasised and read as mind *always having to* discriminate and unify what it

¹²⁹ This argument is elaborated in Chapter Nine.

experiences in an active act. The *passive* way concepts are drawn into operation in much of our on-going perception and experience is not acknowledged in typical interpretations, as we will see in Part Two.

McDowell gives voice to this in the following quote, in which he is talking about the 'authority' of conceptual constraint.

"In the thick of experience, the conceptual capacities we currently have are drawn into operation in a way that is not up to us. But for them to be intelligible conceptual capacities in the relevant sense, capacities that belong to the spontaneity of the understanding, it must be that in having them drawn into operation we find ourselves answerable to the authority of norms for thought that constitute the content of the capacities. And this subjection to authority comes within the scope of the self-determination idea. So, though our experience at any time is determined, outside our control, by concepts we find ourselves with at the time, we have a responsibility over time to ensure that our acquiescence in the concepts we find ourselves with is not a matter of subjecting ourselves to an alien authority, exercised by dogma or tradition." (2009a, p.97)

That our conceptual capacities are drawn into play 'in a way that is not up to us', and experience is determined 'outside our control' by concepts we have, illustrates the passive nature of much of our contact with the world. This is obscured in typical characterisations of Kant's philosophy in education. On the other hand, our judging, thinking, reasoning and reflecting are active acts, as is our discursive activity. Michael Friedman also articulates the difference between the passive nature of perception and experience and the active nature of other mental acts: "there is a difference between its appearing to us that such and such is the case in experience (concerning which we have no free choice) and our actively judging that such and such is the case in thought (concerning which we have free choice)" (2002, p.34). The passive way conceptual capacities are drawn into operation in experience is overlooked in typical interpretations, as is our embeddedness in a particular place that determines the concepts 'we find ourselves with' at any time (but that come under 'the self-determination idea'). Both Rorty and Kant want to

acknowledge human finitude and see knowledge as a human phenomenon, but for Kant the world (as idealised and humanised) plays an objective and rationally constraining role, while for Rorty, and for constructivist portrayals of Kant in education, this is not the case.

It has been argued that Rorty's view lacks, in Kantian terms, acknowledgement of *intuition* - worldly content, objectivity, external constraint that roots a person in a particular place. Rorty does concede a little on this point, he admits:

“McDowell would be right to point out that I should not speak of “norms set by our peers.” It was a mistake to locate the norms at one corner of the triangle – where my peers are – rather than seeing them as, so to speak, hovering over the whole process of triangulation ... It is not that my peers have more to do with my obligation to say that snow is white than the snow does, or than I do”. (2000, p.376)

However Rorty holds fast to replacing objectivity with solidarity, seeing anything else as alien authority. A consequence of this view has been that without objectivity and worldly constraint, this way of thinking about knowledge can give credibility to some radically relativist positions, and Rorty has been charged with this – by Boghossian for example. But in typical response, Rorty dismisses this as well. In defending pragmatism against charges of relativism, Rorty writes “relativistic” is what the realist calls pragmatists:

“the pragmatist does not have a theory of truth, much less a relativistic one. As a partisan of solidarity, his account of the value of cooperative human inquiry has only an ethical base, not an epistemological or metaphysical one. Not having *any* epistemology, a fortiori he does not have a relativistic one.” (1990, p.24)

Social solidarity, for Rorty, captures all that is needed to talk about knowledge. He is equally disparaging of Kant's conception of rational freedom:

“Just because the notion of “rational freedom” is, as McDowell uses it, so interlocked with other notions I have no use for – notions like answerability and content – I have no use for it. So I construe “rational freedom” as “that funny thing McDowell thinks we would not have if Davidson were right that there is “a merely causal, not rational, linkage between thinking and independent reality”.” (1998, pp.149-150)

Rorty agrees with Davidson’s ‘merely causal’ account. He admits that “[s]ometimes McDowell almost persuades me that I should back off from my highly unpopular attempt to replace objectivity with solidarity” but that “I still cannot see the difference between “expressing a world view” and “merely aspiring to vocalize in step with one another” (2000, p.124-125). Rorty confesses, “my problem is that practically everybody agrees with McDowell that I have a blind spot” (ibid, p.127). Nevertheless, Rorty holds on to his causal conception and rejection of objectivity, claiming his normative view is “as natural as the beaver’s teeth, and equally in touch (causal touch, rather than any sort of “answerability” touch) with the world” (ibid, p.123). Furthermore, “as Davidson teaches us, you and your peers and the world are always bouncing off each other in causal ways. That causal interaction – that perpetual triangulation – is as intimate as a connection with either world or peers can get” (ibid, p.127).

This discussion of Rorty’s view reveals that his conceptions of the key concepts of knowledge - objectivity, truth, epistemology, metaphysics, as well as mind, reality and their (heteronomous) causal relation – are the empiricist/scientific conceptions that dominate the analytic tradition. Correctly recognising the problematic nature of empiricism, for its inherent dualism and Myth of the Given, Rorty rejects the whole vocabulary along with the tradition itself, and turns to pragmatism with a new vocabulary, such as solidarity. However this leaves in place the empiricist assumptions about mind and world, and empiricist understandings of central vocabulary that I have been attempting to ‘dislodge’ in order to better appreciate Kant’s view of knowledge. I argue that these presuppositions have an influence beyond the

empiricist paradigm, for Rorty commits to them despite notably and explicitly disparaging this tradition.

The important point is that Rorty rejects epistemological concepts rather than expose the understandings of them that prevail in the analytic tradition and reconceive them in a different way. As Einstein said, concepts can easily achieve “an authority over us” and we “accept them as unalterable givens”, but nevertheless they can be altered or corrected (1916, p.147). And as McDowell insists, we have a standing obligation to reflect on concepts and conceptions that we inherit. In simply eliminating these central concepts of knowledge, Rorty is eliminating the very possibility of being able to express and discuss the ideas that these concepts represent. It blocks the way to reconceive these same concepts in a different way; a way that provides for a non-dualist reading of Kant, and a rich conception of knowledge that is mind-dependent but does not lose objectivity.

Of Rorty’s rejection of empiricism and its vocabulary, McDowell argues “[i]t is true that Rorty resists the blandishment of traditional philosophy, but the effect of the framework he assumes is that he can do that only by plugging his ears, like Odysseus sailing past the Sirens” (1996, p.147). In contrast McDowell takes the time to diagnose and elucidate the dualism anxiety of traditional empiricism in order to show that it is an illusion, and how this problem can be ‘dissolved’ by thinking differently about mind and world. In holding on to a ‘minimal empiricism’¹³⁰, McDowell is suggesting a ‘reconceived empiricism’, with the world exerting a *rational* constraint on our thinking¹³¹. However, with his empiricist presuppositions, Rorty reads McDowell as he reads Kant, with a dualism between intuition and

¹³⁰ McDowell suggests “Sellars might be aiming to rescue a non-traditional empiricism from the wreckage of traditional empiricism, so that he can show us how to be good empiricists.” McDowell’s paper is entitled ‘Why Sellars’s Essay is called ‘Empiricism and the philosophy of Mind’ (2012).

¹³¹ How far McDowell succeeds in reconceiving empiricism, given its entrenched assumptions, and whether it is worth it, is a topic of debate; interestingly in his later works McDowell moves away from this.

spontaneity. So Rorty charges McDowell with *prolonging* the dualism between mind and world, and prolonging traditional empiricism. Indeed Rorty, who sees “nothing worth saving in empiricism” reads McDowell as successfully *rehabilitating* empiricism (1998, p.150)¹³². Rorty responds to McDowell: “I, of course, think that McDowell has been seduced by an empiricist siren song and that my deafness to that song is an example of hard won intellectual virtue rather than the result of a perverse act of will” (1998, p.151). Rorty concludes: “I simply cannot read Kant as McDowell does” (2000, p.124).

I finish with another exchange between Rorty and McDowell that further illustrates what is at issue in understanding Kant as non-dualist: the entrenched nature of traditional empiricist presuppositions about knowledge. Rorty, like McDowell, sees himself as a therapeutic philosopher. This is how Rorty describes himself vis-à-vis McDowell:

“Like me, McDowell regards himself as a therapeutic philosopher. He hopes, as I do, to create a “frame of mind in which we would no longer seem to be faced with problems that call on philosophy to bring subject and object back together again.” We both want to “achieve an intellectual right to shrug our shoulders at skeptical questions” and to “disown an obligation to try to answer the characteristic questions of modern philosophy.”

But McDowell believes, as I do not, that “a real insight is operative in seeming to be faced with that obligation.” So he thinks that empiricism, expelled with a pitchfork, will return again through the window. ... “So long as the attractions of empiricism are not explained away,” he says, the incoherence of the Myth of the Given will be “a source of continuing philosophical discomfort.” (Rorty, 1998, p.142)

¹³² Certain readings of McDowell might suggest this. For example Marie McGinn explains McDowell’s ‘minimal empiricism’ as “[t]he idea that our thoughts have an empirical content is, he claims, the idea that we take our thoughts to be answerable to something *outside* thought” and “[t]his leads, he claims, to the idea of a *tribunal* that is independent of thought” (2009). This suggests an internalist conception of thought, and reality as independent of it. I do not take this to be McDowell’s position, and it illustrates the entrenched nature of the assumptions McDowell is endeavouring to dislodge.

So while they both see the errors of empiricism, Rorty rejects it and moves on. McDowell on the other hand recognises the entrenched nature of the assumptions involved, and sees that ignoring them will not be enough to dislodge them as the 'source of continuing philosophical discomfort'. I have been drawing attention to these empiricist assumptions and understandings because they continue to influence interpretations of Kant in education. (They also influence much educational thought, including those like Rorty who explicitly denounce positivism and empiricism, discussed in Part Two). So I believe McDowell is right, despite empiricism being expelled with a pitchfork, it returns through the window (such is its implicit influence). And thus McDowell's work in 'explaining away' its attractions is important for educational theorists - to understand the philosophical problematic inherent in empiricist epistemology and appreciate an alternative (mind-dependent) way to conceive of knowledge that does not lose objectivity or science or empirical methods, and provides a rich metaphysics that is novel to educational thought.

Examining Rorty's view of knowledge has allowed us to see that despite being a fervent critic of empiricism, he remains party to what McDowell describes as "the deformations to which the vocabulary of objectivity [knowledge, epistemology, etc.] has historically been prone" (2000, p.121). Thus instead of reflecting on the understanding or conceptions of these concepts, he rejects the concepts themselves. This is how McDowell sees himself *viv-à-vis* Rorty:

"I applaud Rorty's hostility to the sort of philosophy that sets itself up as providing necessary foundations for intellectual activity in general. But I think he is wrong in supposing that the way to cure people of the impulse towards that sort of philosophy is to proscribe, or at least try to persuade people to drop, the vocabulary of objectivity ... The way to cure ourselves of unwarranted expectations for philosophy is not to drop the vocabulary of objectivity, but to work at understanding the sources of the deformations to which the vocabulary of objectivity has historically been prone. If we could do that, it would enable us to undo the deformations, and see our way clear of the seemingly compulsory

philosophical problematic that Rorty wants us to get out from under. This would be an epistemological achievement, in a perfectly intelligible sense of “epistemological” that does not restrict epistemology to accepting the traditional problematic. It is the deformations, to which Rorty’s discussions of truth reveal him to be a party, and not the vocabulary itself, that lead to philosophical trouble.” (McDowell, 2000, pp.120-121)

McDowell’s aim in ‘undoing the deformations’ is to ‘see our way clear of the seemingly compulsory philosophical problematic’. He wishes to ‘dissolve’ the apparent dualist anxiety that is inherent in empiricist ways of thinking about knowledge, by showing that there is no dualism if we think differently about key concepts. The purpose of using McDowell’s work in this thesis is to help ‘undo the deformations’ of epistemological concepts that will allow Kant’s philosophy to be understood in a very different light.

Rorty’s view of knowledge has been discussed in this chapter in order to demonstrate the influence of empiricist understandings of central concepts of knowledge that have shaped interpretations of Kant. Associating him with traditional epistemology, Rorty sees Kant and the Enlightenment project as the *root* of traditional empiricist thinking, and not as an *alternative to it*. Kant’s mind-dependent view was distinguished from Rorty’s mind-dependent view by drawing attention to the objective and worldly dimensions that rationally constrain thought in Kant’s view, mainly through his concepts of intuition, sensibility and receptivity. These concepts also reveal the embodied nature of mind, and embed an agent in a particular place and context. Like Rorty’s solidarity view of knowledge, interpretations of Kant obscure these objective and worldly constraints that play a role in perception and knowledge. As will be argued in Part Two, this is because dualist interpretations presuppose the ‘deformations’ to which epistemological concepts have traditionally been prone. With different understandings, the significance and value of Kant’s view of knowledge can be better appreciated.

The aim of Part One has been to introduce an understanding of Kant's view of knowledge drawn from contemporary literature in mainstream philosophy, in order to later challenge dualist interpretations found in education. It has been differentiated from dominant paradigms of knowledge by introducing alternative conceptions of familiar concepts. Together these reveal a much more positive picture of Kant than those found in educational theory. From a first person standpoint, mind is embodied and the subject rooted in a specific place with its particular conventions, norms and beliefs. Mind as self-determining, accounts for freedom, judgement and agency, as well as the interpersonal and normative aspects of knowledge, which tend to remain conceptually unaccounted for in empiricist and scientific naturalist epistemology. In contrast to Rorty's coherentist or 'constructivist' view of knowledge, the objectivity and worldly constraints in Kant's view were highlighted. It was argued that mind is passively drawn into play in on-going perception and experience, not only in active thinking, reasoning and discursive activity, and that the indissoluble unity of thought and reality is not recognised in the conventional 'Kantian' picture that is widespread in education. In Part Two the reading of Kant that has been developed through these first chapters will be drawn upon to challenge criticisms and dualist portrayals of him in educational literature, allowing for further elaboration of different aspects of the reading being presented.

Part Two

Chapter 6: Kant as a Constructivist: a Disappearing World and the Loss of Objectivity

It was argued in Part One that presuppositions within empiricist epistemology have influenced interpretations of Kant in educational theory, resulting in criticisms of intellectualism and mind as detached from reality. Mind conceived as separate from reality, for mind-independent knowledge, gives rise to a conceptual dualism, and these commitments act as presuppositions through which Kant has been interpreted. Rorty, although rejecting empiricism, adheres to its central assumptions about mind, world, objectivity and truth, which reflects the depth of these assumptions. It has been argued that these central concepts of knowledge need to be understood in a different way in order to appreciate the significance of Kant's view of knowledge, and understand mind as embodied and embedded and not detached from the world.

Alternative conceptions of Kant's terms have been introduced in order to differentiate them from familiar understandings. Mind, as a capacity for knowledge and from a first person standpoint, is not cut off from the world but connected with it through the senses¹³³. This makes our relation with the world 'rational' insofar as conceptual capacities are passively drawn into play in on-going perception and experience (not only in active exercises, such as judging and reasoning), and this affects our responses and actions. Conceiving of our capacity for knowledge as self-determining - autonomous, a 'cause' of our actions and beliefs - Kant brings judgement, intentionality

¹³³ Again I note the inadequacy of this phrasing, as it looks as if mind is in one place, world in another, and they are connected, and this can act to strengthen the dualist picture; rather mind and world, like subjectivity and objectivity, thought and reality, are to be understood together. However as a first step towards understanding their unity, I think the picture of connectivity (through the senses) is helpful, as a contrast to the deep seated and presupposed picture of complete separation.

and agency under the concept of knowledge. While most discussion so far has been aimed at distinguishing Kant's epistemology from empiricist epistemology, and empiricist understandings of knowledge concepts, most characterisations of Kant in educational theory cast him as a constructivist. In this second part of the thesis, the arguments advanced in Part One are employed to argue that despite being a mind-dependent view of knowledge, Kant's epistemology should not be interpreted as a constructivist or relativist position that sees mind as constructing knowledge, organising sense data or imposing meaning or rules onto the world.

If philosophical questions about our relation with the world (such as whether mind is detached or engaged, or knowledge is mind-dependent or mind-independent) may seem far removed from everyday teaching and practical concerns in the classroom, Standish reminds us that metaphysics derives from and returns to socially concrete and practical matters, "[p]ush those practical problems hard enough, and you come to questions of ethics and metaphysics, and some of the richest, most far-reaching ways that these have been examined are to be found in the often difficult work of major philosophers ... In a serious sense these are practical matters" (2007, p.337). Cigman and Davis also remind us of that such questions are "not merely of technical importance" for, say, "which learning method works best" but have deeper relevance: "[w]hat is really at stake are questions about the nature of knowledge and how we learn, of what constitutes human being and the good life. These are of profound importance for our culture as a whole, and they can scarcely be ignored by anyone who teaches, any more than by the administrator and the policy-maker" (2009, p.ix). Engaging with Kant's mind-dependent 'capacity' view of knowledge and comparing this with the dominant approaches of constructivism and empiricism can open up new ideas about the nature of knowledge, mind and how we learn, etc. that as Cigman and Davis argue are of profound importance.

It will be argued in this chapter that the world-dependency of mind is not accounted for in constructivist readings of Kant, which changes the way 'experience' and our contact with the world is understood; this results in a disappearing world and the loss of objectivity. As discussed in relation to Rorty, it is held that key concepts of knowledge (mind, world, objectivity, experience, etc.) are presupposed with empiricist meanings, which shape how Kant is read and how cognition, learning and knowledge are conceived. With empiricist assumptions about mind and world, Kant's Copernican insight - that objects conform to our knowledge rather than the other way round - tends to be understood as (an inner) mind actively constructing knowledge and meaning, and imposing this onto the world. The widespread portrayals of Kant as a constructivist in education (as we shall see) overlook the objective and factive aspects of his view, obscuring its value.

While most contemporary references to Kant in educational literature are critical of his view, this chapter looks at interpretations by theorists who see Kant in a friendly light and appropriate his philosophy in defence of their constructivist positions. However it will be argued that these theorists, like his critics, misinterpret central aspects of his view of knowledge. Engaging with the way Kant is portrayed in these constructivist theories allows articulation of different ways to understand key concepts of knowledge, and bring the reading of Kant so far developed into clearer view.

Constructivism was largely pioneered by Jean Piaget with his enormously influential cognitive approach to knowledge development in the 20th century. Piaget draws on Kant for his theory of cognitive development in various ways. In contrast to behaviourist and empiricist approaches, and also to rationalist innate ideas, Piaget adopts Kant's Copernican insight that knowledge does not emerge from (one way) sensory experience alone, but relies on what Piaget calls a schema, or mental model of the world. He famously describes a process of assimilation and accommodation, in which concepts and categories (as the source of apprehension of the world) are not

innate but constructed by the subject, in an active process of qualitative development in stages, over time (1928; 1936). Piaget takes from Kant the idea that mind is involved in experience, as opposed to a passive mind that simply receives impressions. Piaget writes of empiricism that it:

“tends to consider experience as imposing itself without the subject’s having to organize it, that is to say, as impressing itself directly on the organism without activity of the subject being necessary to constitute it.” (Piaget, 1955, p.362)

Piaget’s influence on educational thinking has been vast, and includes Lawrence Kohlberg’s influential stage theory of moral development (1984). Active learning through discovery and child-centred education have been the hallmarks of constructivist approaches to educational theory, practice and policy.

But Piaget also differs from Kant. A proper engagement with Piaget’s complex theories might show him to be closer to Kant¹³⁴, but drawing on the way Piaget is usually read, two aspects of it stand out as telling differences. Firstly in conceptions of experience: as the above quote suggests, the ‘activity of the subject’ is necessary for ‘organising’ experience, but for Kant concepts are *immediately* and *passively* brought into play in experience, not in a separate step or conscious act by the subject. This is relevant as typical characterisations of Kant as a constructivist exaggerate the activity of mind, leading to accusations of intellectualism. Secondly, Piaget has a genetic epistemology (1971). He sees the process of the child constructing a mental model of the world through experience as occurring due to biological maturation. His stages of cognitive development are universal; children construct a view of reality for each stage, with one stage having to be accomplished before the next can occur. This biological conception of the adaption of knowledge - his genetic epistemology - takes no account of cultural and social affects, or individual differences. His critics, including

¹³⁴ Adequate examination lies outside the scope and relevance to this chapter.

Vygotsky (1934; 1987; 1998), Bruner (1973; 1986; 1990; 1996) and Donaldson (1978), famously point to this lack of appreciation of the effects of social and cultural backgrounds, and also critique his stage theory, arguing instead that development is a continuous process. For Kant, if we appreciate the world-dependency of mind (children as born into an already-meaningful world and being initiated into its linguistic, social and cultural practices) then the particular shape of their rational capacities will reflect these social and cultural norms. And these (socially and culturally shaped) capacities are (unconsciously) brought into play in on-going experience, including making sense of what is being asked of them in educational settings.

While Piaget recognises the involvement of mind in gaining knowledge, his genetic epistemology is cased within biological and scientific-naturalist terms that, I argue, do not adequately capture the *spontaneity* of mind, which accounts for rational freedom and self-consciousness. According to Piaget:

“Accommodation of mental structures to reality implies the existence of assimilatory schemata apart from which any structure would be impossible. Inversely, the formation of schemata through assimilation entails the utilization of external realities to which the former must accommodate, however crudely. Assimilation and accommodation are therefore the two poles of an interaction between the organism and the environment, which is the condition for all biological and intellectual operation”. (1955, p.352-353)

These scientific naturalist resources do not allow for the spontaneity of mind that allows us to think *beyond* what is given in experience, to account for reflection and reasoning, creativity and imagination: autonomy. In this respect Piaget’s genetic epistemology is quite far from Kant’s capacity view and (transcendental) idealist philosophy generally.

Jerome Bruner’s constructivist approach to knowledge and cognitive development has also been extremely influential. It is much closer to Kant in many respects, particularly in utilising the idea of ‘*a priori*’ knowledge. *A priori* knowledge has come to have a contemporary ‘conventional’ meaning, as

knowledge that is known independently of any kind of experience, logically deduced rather than derived from observation or experience; ‘bachelors are unmarried men’. (For Kant, as we have seen, knowledge does derive from experience, but not all of it, spontaneity is also a source of knowledge, which allows us to go beyond what is given in experience.) But we can understand ‘*a priori*’ in different ways, including the more direct Latin translation ‘from earlier’ or ‘from before’. In this more straightforward way, we can understand a subject’s ‘*a priori*’ knowledge simply as the knowledge she has *already* acquired, knowledge she has so far learnt about the world. And this *a priori* knowledge (what she knows) is what is passively called into play in on-going contact with the world. Bruner takes this Copernican insight into his theory of cognitive development, emphasising the importance of the child’s prior knowledge (what they already know) in new learning situations. He sees learning as an active process through interaction with others, in which children construct new concepts based on their current and past knowledge. Bruner’s view of knowledge and learning has much in common with the reading of Kant that I am developing¹³⁵. But rather than engaging with this to pick out implicit Kantian ideas, it is more helpful to turn to other constructivist theorists who explicitly refer to Kant in their appropriations of him, in order to more clearly contrast and elaborate the reading being presented.

Ernst von Glasersfeld is a constructivist theorist who appropriates Kant for philosophical defence of his influential ‘radical constructivist’ view of knowledge. Prominent in mathematics education, Glasersfeld’s work is considered below only inasmuch as it relates to his interpretation of Kant, for examination of this allows identification of the interpretative differences between the Kant typically portrayed as a constructivist in educational

¹³⁵ Bruner was much influenced by the work of Vygotsky, who was himself indirectly influenced by the German tradition, which explains the source of many of Bruner’s ideas about cognition and development, particularly the social and interpersonal aspects such as mother-child interaction, and the role of culture in shaping the mind. See for instance (1973; 1986; 1990; 1996). There are differences though, such as the very language of construction.

literature (subject to criticisms of a detached mind) and the Kant found in contemporary epistemology and the philosophy of mind.

Von Glasersfeld puts forward a view close to that of Rorty, for like Rorty he also rejects traditional epistemology entirely, and sets up his own constructivist theory in opposition to it. The following is illustrative of his position:

“For constructivists, the word knowledge refers to a commodity that is radically different from the objective representation of an observer-independent world which the mainstream of the Western philosophical tradition has been looking for. Instead, knowledge refers to conceptual structures which, given the range of present experience within their tradition of thought and language, epistemic agents consider viable. This constitutes a drastic modification of the relation between the cognitive structures we build up and that “real” world which we are inclined to assume as “existing” beyond our perceptual interface. Instead of the illusory relation of “representation”, one has to find a way of relating knowledge to reality that does not imply anything like a match or correspondence.” (Von Glasersfeld, 1989, p.124)

Despite rejecting empiricism, I argue that a conceptual dualism remains implicit in von Glasersfeld’s view of knowledge. He wonders how ‘to find a way of relating knowledge to reality’ that we can only ‘assume as existing’, and he rejects the language of correspondence that might relate them. He also rejects the concept of truth:

“To claim that one’s theory of knowing is true, in the traditional sense of representing a state or feature of an experiencer-independent world, would be perjury for a radical constructivist. One of the central points of the theory is precisely that this kind of “truth” can never be claimed for the knowledge (or any piece of it) that human reason produces”. (Von Glasersfeld, 1990, p.127)

In dismissing traditional empiricism, von Glasersfeld, as with Rorty, rejects its key vocabulary.

Again following Rorty, von Glasersfeld locates knowledge on one side of a conceptual dualism between (an inner) mind and external reality. He writes:

“What is radical constructivism? It is an unconventional approach to the problems of knowledge and knowing. It starts from the assumption that knowledge, no matter how it be defined, is in the heads of persons, and that the thinking subject has no alternative but to construct what he or she knows on the basis of his or her own experience.” (1995, chapter one, no page number)

Von Glasersfeld commits to an in the head conception of knowledge, and can only ‘assume reality exists beyond our perceptual interface’ (1989). As with Rorty’s coherentist theory, I hold that this picture leaves mind and knowledge (the conceptual sphere) free-floating - “a frictionless spinning in a void” to repeat McDowell (1996, p.11). The arguments against Rorty are applicable here; such a way of thinking about knowledge results in a ‘disappearing’ world, and objectivity and truth with it – a view altogether antithetical to Kant’s.

Von Glasersfeld argues that constructivism “does not purport to describe characteristics of the world but proposes a way of thinking that may be useful in dealing with a good many problems that face us today” (2001, p.31). He uses ‘viability’ in place of truth. We cannot *know* reality, von Glasersfeld claims:

“[g]iven that there is nothing but a hypothetical connection between our experience and what philosophers call ontological reality, that reality has for us the status of a black box”. (1995, p.157)

The world is inaccessible. Following many postmodernists, von Glasersfeld considers his view to be *post*-epistemological. We can see that, like Rorty, central concepts – reality, truth, and epistemology – are understood with empiricist meanings and dismissed rather than attempting to reconceive them in different ways.

I am not challenging von Glasersfeld's radical constructivism here, but challenging his appropriation of Kant, for he attributes his view to Kant. He reads Kant as saying, "no truths about a "real" world could be derived from experience", and unknown to Kant, "Giambattista Vico had come to a very similar conclusion in 1710. The human mind can know only what the human mind has made" (von Glasersfeld, 1990, p.3). Furthermore, von Glasersfeld writes of "Kant's thesis that our mind does not derive laws from nature, but imposes them on it" (1984, p.73). I argue that this mischaracterises Kant's position in significant ways¹³⁶. For instance, he writes above of Kant's view that "no truths about a 'real' world could be derived from experience" (1990, p.3), but as previously discussed there are different ways to understand experience. This is Kant's first sentence in his first Critique:

"There can be no doubt that all our knowledge begins with experience ... with experience all our knowledge begins". (Kant, B1)

Kant has no doubt that knowledge is derived from experience (but he holds that this is not the only source, and that knowledge is also derived from spontaneity; he does not hold that knowledge is derived from spontaneity alone). As discussed in Part One, on Kant's conception of experience spontaneity and intuition are exercised together *in* experience, which is not the same as mind making sense of the data it receives and imposing this meaning *onto* the world. This is an important difference; I argue that in the widespread interpretations of Kant as a constructivist in education, the *spontaneity* of mind is recognised but *intuition* (as the other of two sources of knowledge) is not, and this obscures large areas of Kant's philosophy, including its objectivity. Constructivist interpretations are typical of two-world readings of Kant and a 'layer-cake' conception of mind, which conceive of cognition as mind making sense of the brute sense data it receives from the

¹³⁶ That mind 'imposes' meaning onto reality is repeatedly found in characterisations of Kant as a constructivist in education; on a non-dualist reading, meaning is 'disclosed' - encountered *in* the world (once the relevant concepts have been learnt).

world¹³⁷. Experience (and perception) for Kant comes *already structured* and is not something mind has to make sense of (there is no dualism). Continuation with von Glasersfeld's view of knowledge allows clearer articulation of the difference.

In rejecting empiricism, von Glasersfeld rejects the idea of a true picture of the objective world:

“one can no longer maintain that the cognizing activity should or could produce a true representation of an objective world”. (1990, p.3)

The only alternative to empiricism that appears to be available is a conception of knowledge that is constructed by the mind. This reflects the dominance of the two paradigms of knowledge in educational theory¹³⁸. Talbot J. Taylor encapsulates this choice in asking “[d]o people call certain things ‘boulders’ and others ‘pebbles’ because of some natural, immutable connection between those words and their *nominata*? If so, the laws of logic originate in nature itself and are universal. Or does the source of their appellations lie in human convention?” (2001, p.86). Talbot's question presupposes the source of knowledge to be either ‘in nature itself’ or ‘in human convention, and he advocates the latter (a choice between an unacceptable ‘Myth of the Given’ and a free floating coherentism out of touch with reality). This illustrates McDowell's claim that we are “prone to fall into an intolerable oscillation” recoiling from one way of thinking into the other” (1996, p.23).

¹³⁷ While the ‘layer-cake’ conception of experience (Conant, 2017) is argued more fully in the next chapter, I begin to bring out its significance as we proceed below.

¹³⁸ As has been maintained, these two prevailing approaches have shaped interpretation of Kant: some interpreters associate Kant with traditional empiricism; for instance Rorty, most feminist and postmodern theorists, and in educational theory, Wilfred Carr (1995; 2006). Many others read Kant as a constructivist; see for example, von Glasersfeld (1984; 1990), David Carr (2003; 2007), David Jardine (2006), and Wolff-Michael Roth (2011, 2013). These educational theorists are discussed as we proceed.

However, these alternatives do not exhaust the possibilities; Kant (and others in the German idealist tradition) provide alternative ways of thinking about knowledge, centred on the idea of a rational capacity, the significance of which, I argue, has not yet been properly appreciated in education. As McDowell says, we can “dismount from the seesaw if we can achieve a firm grip on this thought: receptivity does not make an even notionally separable contribution to the co-operation” with spontaneity (ibid, p.9) - intuition and spontaneity are both stems/sources of *a single* capacity, a capacity for knowledge. Elements such as objectivity, truth and justification fall under this concept of knowledge. Andrea Kern argues, “it is impossible to apply the concepts of belief, truth, and grounds for belief to someone without thereby understanding her as possessing a rational capacity for knowledge” (2017, p.183). As with Rorty, von Glasersfeld rejects truth and objectivity because of the way they are used and understood in the empiricist tradition; but to repeat McDowell, the resolution is “not to drop the vocabulary of objectivity, but to work at understanding the sources of the deformations to which the vocabulary of objectivity has historically been prone” (2000, p.121). Such central concepts of knowledge have a place in Kant’s picture, but are understood differently.

Von Glasersfeld’s view that “we cannot maintain that our cognising activity can produce a true representation of an objective world” he credits to Kant (1990, p.3). He similarly writes:

“The final demolition of realism was brought about when Kant suggested that the concepts of space and time were the necessary forms of human experience, rather than characteristics of the universe. This meant that we cannot even imagine what the structure of the real world might be like, because whatever we call structure is necessarily an arrangement in space, time, or both.” (von Glasersfeld, 1990, p.2)

Here Kant is read as holding that we cannot even imagine what the structure of the real world might be like; I take issue with this interpretation. The structure of the real world *is* knowable, and we (come to) know it through a

perceptual nexus. “Objects are *given* to us by means of sensibility” Kant writes, “because in no other way can an object be given to us” (B33); sensibility involves the *world* as well as mind, and the world is already meaningful, which is not the case for (Rorty or) von Glasersfeld, for whom it is a ‘black box’ and unknowable. On von Glasersfeld’s interpretation mind is prioritised and understood as self-standing - and the world disappears.

The reality (that we are to imagine) on von Glasersfeld’s view is described as a ‘buzzing confusion’:

“The ‘manifold’, then, is the raw material, the stuff on which constructive perception and reason can operate. William James called it, ‘one big blooming buzzing confusion’.” (Von Glasersfeld, 1995, p.40)

This is similar to David Carr’s interpretation mentioned in Chapter One: the “active imposition of meaning-constitutive rules and principles on the brute data of sensory perception” (2003, p.100). According to such views, there are brute sense data or raw material on which mind then goes to work: operating, organising and imposing rules. Again, these are typical of two-world readings of Kant, and a ‘layer-cake’ conception of mind, which sees cognition as mind making sense of the brute sense data it receives from the world. However, the question “how the non-conceptual given is converted into a given with conceptual content”, McDowell argues, “should be rejected, not answered” (2009b, p.321). Perception (which is conceptually informed) is *immediate* and *passive* - and not a question of mind actively making sense of data it receives, or of reason operating on ‘a buzzing confusion’.

Deep-seated presuppositions (a mind separate from a disenchanted world) have, I argue, shaped such constructivist interpretations of Kant’s view of knowledge. What is right about these is the recognition of Kant’s Copernican insight “that the world in which we live, move, and have our being (by which I mean the phenomenal natural and social world of our ordinary human existence) is fundamentally dependent on *our* minded nature, and not

the converse” (Hanna, 2016b, p.3). However the Copernican turn should not be interpreted as a constructivist or subjectivist move, for theorists such as Hanna also hold, following Kant, that while the idealised world depends on our minded nature, its existence does not. Kant writes of “the mind’s power of producing representations from itself, the *spontaneity* of knowledge” (B75); but through constructivist lens this tends to be understood as *all* knowledge is supplied from itself, or constructed. As previously discussed, Kant makes a *logical* distinction between “the concept, through which an object in general is thought (the category)” and “the intuition, through which it is given”, but he insists, “[t]o neither of these powers may a preference be given over the other” (B75). Von Glasersfeld is giving a preference to ‘the concept’ (to spontaneity and the activity of mind), and ‘intuition’ drops out of the picture of knowledge. This loses one of Kant’s two sources of knowledge, and the constraints involved with this.

Like scientific naturalist approaches, Piaget’s genetic epistemology does not adequately account for Kant’s concept of *spontaneity* as a source of knowledge, thereby losing autonomy; Von Glasersfeld’s interpretation of Kant loses *intuition (also receptivity and sensibility)*, obscuring the objective and worldly aspects, which is more typical of interpretations of Kant found in educational theory. To repeat McDowell:

“It can seem that we are retaining a role for spontaneity but refusing to acknowledge any role for receptivity and that is intolerable. If our activity in empirical thought and judgement is to be recognizable at all, there must be external constraint. There must be a role for receptivity as well as spontaneity, for sensibility as well as understanding.” (1996, p.9)

Not acknowledging the roles of intuition, receptivity or sensibility means the objectivity (worldly constraints on thought and judgements) that is there in Kant’s view are lost.

In order to bring these obscured aspects into some focus and further distinguish Kant as a non-dualist, I expand on discussions from Part One.

Kant distinguishes his account of *finite* knowledge from the idea of *infinite* knowledge to emphasise the dependence of our (empirical) knowledge on objects in the world); Andrea Kern writes of the difference:

“As Kant characterizes it, infinite knowledge, if there is such a thing, would be infinite in the sense that the knowing subject would not be answerable to the objects of knowledge but instead would bring them into being through having knowledge of them. Infinite knowledge would not be bound by the object of its knowledge but would be the source of what it knows. For this reason, Kant refers to infinite knowledge as “originary” in order to indicate that it is “not dependent on the existence of the object” but instead bring about “even the existence of the object.” (2017, p.16)

With finite knowledge of empirical objects, the knowing subject is ‘bound’ by or ‘answerable’ to these objects of knowledge; I argue that this is lost in typical constructivist interpretations. Claims that the mind only knows what the mind has made, or of children constructing their own knowledge and realities (which we come to below), imply an ‘*infinite*’ intellect that does not depend on the existence of objects. A ‘*finite*’ intellect is *dependent* on objects for (empirical) knowledge of them; it is ‘answerable’ to them for correctness¹³⁹. Judgement is central to Kant’s idea of a capacity for knowledge because judgements “are precisely those acts of the intellect whose defining feature it is that they can be true or false” (Kern, 2017, p.17). The fallibility of our capacity for knowledge means we can be mistaken; but instead of correctness coming solely from our peers or social agreement, it is objects themselves (through intuition) that act as a ‘norm’ or ‘standard’ for correctness. In this way objects act as a (rational) constraint on our thinking; in constructivist interpretations of Kant in education this worldly constraint is not given enough (if any) prominence.

¹³⁹ This refers to knowledge derived through the senses; there is also knowledge derived from spontaneity, such as the content of pure mathematics, or the many concepts like mind and value that do not depend directly on objects but are derived from spontaneity.

As discussed, intuition refers to a competence to (jointly) perceive and refer to objects in the world; as a source of knowledge, it provides worldly content through the senses. This accounts for the objective and factive aspects of Kant's view that are obscured in constructivist characterisations such as that by von Glasersfeld. We do not decide what to perceive or know, rather intuition (and sensibility, receptivity) play a 'constraining' role - the world 'bites back', as it were. That is to say, the already meaningful world plays a (rational as well as physical) role in our responses to it. Rather than mind simply imposing order on it, meaning can be described as 'disclosed' in experience, as our conceptual mindedness (our *a priori* knowledge; what we already know) is passively called into play (Kant's Copernican argument). McDowell writes of this:

"[O]ur relation to the world, including our perceptual relation to it, is pervasively shaped by our conceptual mindedness. ... If an experience is world-disclosing, any aspect of its content hangs together with other aspects of its content in a unity of the sort Kant identifies as categorial. And Kant connects the categorial unity that provides for world-disclosingness with the transcendental unity of apperception. Experiences in which the world is disclosed are apperceptive. Perception discloses the world only to a subject capable of the "I think" that expresses apperception." (2009, p.318)

Once we have acquired concepts, even rudimentary ones, then the world is disclosed in apperception (usually referred to simply as perception)¹⁴⁰. With the idea of an already up and running world, as a child develops the ability to intuit with others, so she acquires and expands her conceptual repertoire - through which the world is disclosed. This does not mean that disclosure is clear and precise, with the world fully 'in view' - perception and experience are mostly passive and at any time our concepts are partial, opaque and underdetermined, and our perception is subject to error. Nevertheless, the objectivity and world-disclosing nature of perception compares with constructivist interpretations of mind making meaning and knowledge from

¹⁴⁰ Another way to say this is that we encounter 'general' knowledge (of concepts) in the 'particular', and the particular in the general (Rödl 2012) - unpacked in Chapter Eight.

the sense data it receives, and the world as unknowable. The important point here is that mind is conceived of as in touch with the world - in Rödl's terms, through a material nexus between thought and objects - and this compares with interpretations, such as that by von Glasersfeld, of the relation between "the cognitive structures we build up" and "that "real" world which we are inclined to assume as "existing" beyond our perceptual interface" (1989, p.124). These are different conceptions of mind and world, and their relation – which shapes how knowledge and learning are pictured.

A dualism is also apparent in what von Glasersfeld says about Kant's concepts of time and space. He writes that for Kant:

"experience as well as all objects of experience are under all circumstances the result of *our* ways and means of experiencing, and are necessarily structured and determined by space and time and the other categories derived from these. The processing of the raw material in Kant's system is governed *automatically* by space and time." (1984, p.8)

He later similarly argues "Kant suggested that the concepts of space and time were the necessary forms of human experience, rather than characteristics of the universe. This meant that we cannot even imagine what the structure of the real world might be like" (1990, p.2). This 'internalist' interpretation mischaracterises what is meant by space and time being forms of human experience.

Kant holds that we cannot perceive time itself, "[t]ime is not an empirical concept that has been derived from any experience" (B46). However, while we do not perceive time itself, we learn to refer (temporally) to things in the world that we do (or did) perceive. We learn deictic reference through joint intuiting, which develops our practical capacity to refer to changes of aspect and time - for instance using 'was doing/is doing/has done' and 'here or there', 'now or then'. We might say, 'Maya is reading' and later 'Maya was reading' which captures a time difference. Similarly with Kant's concept of

space: “[s]pace is not an empirical concept” (B38); rather space and time are forms of intuition. In not acknowledging (or properly interpreting) intuition, or our rational relation with the world, von Glasersfeld interprets time and space as something ‘merely’ subjective, with an ‘in the head’ conception of subjectivity (on one side of a divide with reality) which ‘governs the processing of raw material’¹⁴¹.

Stekeler says of time and space that Kant’s *Transcendental Aesthetic* and *Transcendental Analytic* together provide an account of the temporal and spatial order of things. Intuition acts as a reference point for joint attention and joint perception, and space and time are, Stekeler explains, “names for this joint perspective on things, such that the *unity of space* and the *unity of time* mirror the *jointness of reference*” (2010a P.7). As we learn to refer to jointly perceived objects, we learn the language to talk about where they are and when we saw them, and how “the chronological and spatial order of things starting with our present perceptual field, relate to logical forms in statements about objective things” (Stekeler, 2010a, p.20). The objectivity and situational specificity inherent in this is obscured in educational interpretations. Recall Stekeler’s example from Part One: “[t]he word “intuition” is as perfective and factive as the word “murder” is: One cannot murder anybody without him being dead afterwards. In the same vein, we cannot have an intuition of x without x being there” (2010b, p.5). An appreciation of being in the world, the humanised world, and interacting with it - the *objective* nature of intuition - helps explain Kant’s space and time as ‘forms of intuition’, for intuition presents things “as they appear in the world in such a way that we can *jointly* refer to them, by mediation of our senses” (Stekeler, 2010c). This rootedness in the particular, and connectedness of mind with objects and others, is an important part of the objective and worldly dimensions of Kant’s view that tend to be obscured in educational characterisations.

¹⁴¹ This is an example of the ‘layer-cake’ conception of mind (Conant, 2016), which, it is argued in the next chapter, is not Kant’s.

Like Rorty, von Glasersfeld rejects the tradition of empiricism but presupposes its assumptions about mind, world, objectivity, truth, etc. - and this leaves a conceptual dualism in place. This is evidenced by his question: “how to find a way of relating knowledge to reality that does not imply anything like a match or correspondence” (1989, p.4). Elsewhere he wonders, “how cognitive structures or knowledge might be related to an ontological world beyond our experience” (1984). We must heed McDowell’s warning: empiricism is expelled with a pitchfork but creeps in through the window. An in the head conception of mind over-emphasises its active nature - constructing knowledge and making meaning - and the (already meaningful) world disappears from explanations, leaving a reality that we can never know. I argue that this is not Kant’s position¹⁴².

David Jardine is another educationalist who appropriates Kant for his constructivist view of knowledge (2006) and exemplifies the tendency to overplay the activity of mind. Jardine holds that the mind organises and actively constructs meaning out of the ‘chaos’ of experience, and writes approvingly of Kant and his influence on Piaget. He says that it is the spirit of Kantianism “that filled the intellectual atmosphere of Jean Piaget’s own thinking” (2006, p.24). Jardine writes:

“What is unique in Kant “and of especial interest to educators” is conceiving of knowledge as an active, constructive, orderly and ordering, *demand* made upon things. “To know,” henceforth, is no longer understood as passively receiving information from an object (think of all those old “filling an empty vessel” images of education ...). Rather, “to know” is “to impose structure”, “to (give) order(s),” “to demand,” “to determine,” “to make.” To know is to *act*, in definable, determinable ways. Kant’s work stands at the advent of what has come to be known as constructivism.” (Ibid)

¹⁴² Again, von Glasersfeld has been very influential in education, particularly mathematics, and I only discuss his work insofar as he uses Kant to support his views.

Jardine captures the active or self-determining nature of mind in Kant, which he rightly compares with the traditional idea of mind as 'passively receiving information from an object'. However, in relation to Kant, there is too much emphasis on the active nature of mind, which becomes reified as it acts, orders, determines, makes and imposes structure. There is no mention of the passive nature of synthesis and perception, or the unconscious way concepts are exercised in ordinary experience, nor acknowledgement of the objective or 'constraining' roles of intuition, sensibility or receptivity.

Jardine and others who appropriate Kant's Copernican insight for their constructivism are right to give mind a role, making their accounts mind-dependent views of knowledge, which compare with mind-independent accounts. But they are incorrect in the form in which they conceive of this if they are appropriating Kant. That is, it is right to recognise that mind is self-determining, which is to recognise the spontaneity or power of mind that accounts for autonomy. But in obscuring the objective aspects, Kant's overall view is mischaracterised. The language of construction - makes, orders, constructs, imposes, etc. - implies an active act by the mind; Jardine writes:

"According to Kant, human reason, by its very nature, puts things together in clearly definable ways. It is an actively organizing, ordering, constructive human faculty, not a passive one. It is, as Kant defined it, a synthesizing faculty that, in the act of knowing something in the world, actively constructs orderliness out of the chaos of experience in accordance with human reason's own structure, forms and categories."
(ibid, p.23)

Talk of a synthesising faculty that 'actively constructs orderliness out of the chaos of experience' suggests, firstly, that this is a conscious act, that something like sense data is delivered to the mind that then actively orders and synthesises it. However, Kant insists that synthesis is an *unconscious* act not an active one. "Synthesis in general", Kant writes, is "a blind but indispensable function of the soul, without which we should have no knowledge whatsoever, but of which we are scarcely ever conscious" (B103).

Secondly, experience is conceived of as chaotic, something that requires active ordering and synthesizing, but for Kant experience comes already 'structured' and is mostly passive. As McDowell argues, "it does not take cognitive work for objects to come into view for us. "Mere synthesis" just happens; it is not our doing, unlike making judgments, deciding what to think about something" (2009a, p.35). Jardine, like von Glasersfeld above, does not make the distinction between the passive nature of experience (and synthesis), which accounts for much of our on-going perceptive responses to the world, and the active nature of, say, discursive activity or making judgements. To conceive of mind as constructing orderliness out of the chaos of experience mischaracterises Kant's conception of experience, and in turn of our relation with the world.

We return here to a key point; a central difference between the non-dualist reading of Kant that I am attempting to articulate and constructivist interpretations is the disappearing world – the loss of objectivity and 'constraint' by objects. Again I argue that it is empiricist/scientific (dualist) presuppositions about mind and world that shapes this; the world is disenchanting and void of meaning, and mind (and reason) is 'in the head'. A closer look at Jardine's interpretation illustrates this. In the following passage, Jardine quotes Kant twice, and comments in between:

"The order and regularity in [what] we call *nature*, we ourselves introduce. We could never find [such orderliness and regularity]... had not we ourselves, or the nature of our mind, originally set them there." (Kant, 1964, p.147).

This is starting to sound rather bizarre – the orderliness of the world is our construction? Again:

"[H]uman understanding is itself the lawgiver of nature. Save through it, nature, that is, synthetic unity of the manifold of [perceptual] appearances according to rules [imposed by reason itself], should not exist at all." (Kant, 1964, p.148)"
(Jardine, 2006, p.31)

Jardine interprets Kant as saying that the orderliness of the world is our construction. Note the *addition* to Kant's second text referring to rules: "[imposed by reason itself]". This 'imposition' of orderliness by reason, suggests an internalist conception of mind and reason that is doing the 'imposing' onto a disenchanted 'nature'. This text von Glasersfeld also refers to in explaining that Piaget remained true to Kant's axiom "that reason can see only what she herself has brought forth according to her design" (1992, p.6). Again, with a scientific conception of nature as void of meaning, it looks like an 'in the head' reason is alone responsible for the order, regularity and meaning, which are imposed on the structureless world. Empiricist understandings of key concepts are implicitly accepted, even by theorists who reject the empiricism paradigm (empiricism creeps in through the window), leading to the loss of objectivity.

It is right that objects conform to our knowledge but knowledge is conceived differently if we conceive of the world as already meaningful (with 'ideality' a characteristic of objectively existing things, as discussed in Chapter Three). A different translation of the same Kantian text that Jardine quotes, provides a different picture¹⁴³:

"Even physics therefore, owes the beneficent revolution in its point of view entirely to the happy thought, that while reason must seek in nature, not fictitiously ascribe to it, whatever as not being knowable through reason's own resources has to be learnt, if learnt at all, only from nature, it must adopt as its guide, in so seeking, that which it has itself put into nature." (Bxiv)

This implies that reason is capable of learning *from* nature, *not* fictitiously ascribing something to it (or imposing on it), but being guided by what is already there: the world as a prior embodiment of mindedness. This is ideality 'put into nature' - existing as an objective characteristic of things - and maintained through our historically evolved cultural and social (minded)

¹⁴³ This is by Normal Kemp Smith, whose translation is widely accepted in Kantian scholarship.

activities and practices. Acquiring knowledge of this already meaningful world suggests something quite different to the 'construction' and 'imposition' language that are typical of portrayals of Kant as a constructivist. It matters that meaning is already objectively there in the world and not projected or imposed by individuals because a world written through with meaning is something against which individual judgements can be true or false. Our judgements are 'answerable' to the world not as an alien authority or external foundations, but answerable to the meaning that we have already 'put into' the world, which provides rational constraint and objectivity. It is this objectivity that is missing in constructivist interpretations such as those by Jardine and von Glasersfeld.

"Conceptions of a world arise in particular contexts. It is with regard to a context that we can account for the constitution a world exhibits. Such an account requires reference to operations of the mind, without which the world in question would not be disclosed to us", writes Henrich, and constructivists would agree with this much; however Henrich continues: "but the source from which a world originates [reason] is equally dependent on that world" (1992, p.3). The world-dependency or object-dependency of mind is not adequately recognised or accounted for in constructivist readings. *Without* this worldly (but conceptual) constraint, to which thought and judgements can be judged right or wrong, mind becomes *infinite*, bringing about the existence of objects themselves, and this is not Kant's position. Constructivist interpretations give rise to the idea of a detached mind imposing meaning, structure or rules (which is what Kant is frequently criticised for).

Empiricist presuppositions about mind and world are again evident when it comes to Kant's use of 'things in themselves'. As discussed in Part One, Kant's distinction is "between things as objects of experience and those same things as things in themselves" (Bxxxvii). Things in themselves and things as we experience them (as they appear to us) are the *same* things, the same ordinary empirical objects in our lives. Kant makes not an ontological

distinction but a *logical* distinction for the purposes of explanation - we can know ourselves as a thing in itself through spontaneity, as a self-conscious being, but we can know external objects only as they appear to us. Dualist readings presuppose things in themselves to be the ordinary empirical world; and with things in themselves being unknowable, this is interpreted as: the ordinary empirical world itself is unknowable - as in von Glasersfeld's view. Jardine expresses Kant's distinction, as: a "distinction between nature "in itself" and nature "for us"", which leads him to argue as follows:

"Here lies the great breakthrough of Kantian theory and the great consequence of constructivism: objectivity in the sciences is not achieved by finding out what things "really" are in themselves but by following the rules of human reason". (2006, p.32)

With the world interpreted as unknowable, reason is understood to do all the work.

To expand on previous arguments, Kant does not posit two distinct realms, "one knowable by us and one unknowable by us", because this does not acknowledge "Kant's insistence that appearances, things as they appear, *are the same things* that can also be conceived as things in themselves" (McDowell, 2009a, p.64, emphasis added). McDowell explains Kant's distinction in the following way:

"When we speak as philosophers, we do not start to speak of a new range of objects, genuinely real as the objects of the manifest image were not. We speak of the same objects, under a special mode of consideration in which we abstract from the way in which the objects figure in our world view." (2009a, p.42, footnote)

He argues that what Kant is insisting on when he speaks of the distinction, is:

"an identity of things as they appear in our knowledge and "those same things as things in themselves"; not "those same things *as they are* in themselves". (This latter wording pervades ...). Things in themselves are the very things that figure in our knowledge, but considered in

abstraction from how they figure in our knowledge. That is not to say: considered as possessing, unknowingly to us, other properties than those they appear as possessing in our knowledge of them.” (Ibid)¹⁴⁴

A dualism is presupposed, and as a result the ordinary world (and objectivity and constraint) disappears from explanation, and an internal mind is read as taking charge of actively ordering, organising, etc.

With knowledge conceived as in the head and unconstrained by the world, constructivists often describe children as constructing their own realities and meaning as well as their own knowledge. David Elkind, for instance, writes of Kant’s influence on Piaget’s work:

“[T]he categories change with age. This idea adds a developmental dimension to the Kantian version of the construction of knowledge. As their mental operations develop, children are required to reconstruct the realities they constructed at the previous developmental level. In effect, a child creates and re-creates reality out of his or her experiences with the environment. The reality of the young child – his or her knowledge of the world – is thus different from the reality of the older child and adult”. (1989, p.115)

The idea of children creating different realities and their own knowledge, and sometimes truth, is not uncommon in constructivist theories¹⁴⁵. Again my argument is not against constructivist theories but against appealing to Kant in support of the sort of relativist theories that the above examples illustrate. For a radical relativism follows from this way of thinking about knowledge, a worry expressed by many in education, including Ian Hacking (1999), Mary

¹⁴⁴ McDowell is referring to a reading of Kant by Sellars who, he maintains, “reads Kant as a scientific realist manqué; in Sellars’s view, had Kant only been sophisticated about the possibilities for scientific concept-formation, he would have cast the objects of the scientific image in the role of things in themselves. But for Kant, objects as they appear in the scientific image would be just another case of objects as they appear, with a transcendental background for that conception just as necessary here as anywhere. Sellars’s attempt to be responsive to Kantian transcendental concerns goes astray in his idea that an appeal to science could do the transcendental job; here Sellars’s scientism is seriously damaging.” McDowell (ibid).

¹⁴⁵ See, for instance, James Wertsch (1997), and André Kukla (2000).

Warnock (2006), Derek Meyer (2008), and Michael Young (2008)¹⁴⁶. Citing Kant in support of relativist positions is mistaken; the one shared world that we jointly intuit and jointly come to know disappears from these pictures of children creating and recreating their own realities. These are also suggestive of acts by ‘infinite’ minds (a subjective idealism that brings objects into existence) rather than finite ones with judgements standing as being right or wrong according to the way things are (Kern 2017).

The association of Kant with such relativist positions is widespread. Philosopher Boghossian also sees such ‘anti-objectivist’ theories as stemming from Kant; after quoting two relativist constructivists, he argues that:

“The views apparently on offer here hark back to the discredited ‘transcendental idealism’ of Immanuel Kant. On Kant’s picture (or at least on one influential way of reading it), there is a world that exists independently of human minds, so we do not have to go so far as to say that we created the world. But in and of itself this world is structureless: it is not broken up into things, kinds of things, or facts. We impose structure on the world by thinking of it in a certain way, by having one set of beliefs about it rather than another.” (2001, p.4)

Boghossian reads Kant as saying that mind imposes structure on the world - like the majority of educationalists who draw on Kant and refer to the typical ‘Kantian’ picture.

Kant insists, however, that he does not intend his work to be read in this subjectivist way. He is careful to distinguish his idea that knowledge of the world is mind-dependent from the very different idea that the existence of reality itself is mind-dependent. Significantly, he differentiates his version of

¹⁴⁶ Not only in theory, Young writes of some serious practical problems. He points to big gaps in children’s knowledge in South Africa resulting from a rejection of what was seen as dominant ‘formal’ knowledge and practices (‘imperial’ ones) and replaced by local knowledge and practices; but without adequate formal knowledge of the world, he argues, “it is unclear how either teachers or students would know where they were going or what they were trying to teach or learn” (2008, p.189).

idealism and rejects “the usual type of idealism which doubts or denies the existence of outer things themselves” (B519 footnote). Under his *Refutation of Idealism*, Kant writes: “Idealism – meaning thereby material idealism – is the theory which declares the existence of objects in space outside us either to be merely doubtful and indemonstrable or to be false and impossible” (B274). The former, he says, is the ‘problematic’ idealism of Descartes, and the latter the ‘dogmatic’ idealism of Berkeley. Kant continues:

“Idealism assumed that the only immediate experience is inner experience, and that from it we can only *infer* outer things – and this, moreover, only in an untrustworthy manner, ... the cause of the representations, which we ascribe, perhaps falsely, to outer things, may lie in ourselves.” (Kant, B276)

This reflects the view of von Glasersfeld, according to whom we cannot even imagine what the structure of the real world might be like (1990), and of Elkind above (1989). Kant continues by refuting such a view, which does not allow us “any properly demonstrable distinction between truth and dreams” (B519). To stress this, Kant re-affirms his refutation again in the preface to the second edition of his first *Critique*:

“it still remains a scandal to philosophy and to human reason in general that the existence of things outside us (from which we derive the whole material of knowledge, even for our inner sense) must be accepted merely on *faith*, and that if anyone thinks good to doubt their existence, we are unable to counter his doubts by any satisfactory proof.” (Bxl, footnote)

Rejecting this idea, Kant holds that thought *is only possible* through its relation with existing things; as Rödl argues, “thought is nothing at all unless it refers back to the sensory and temporal reality of human life” (2012, p.1).

McDowell also affirms this point, “I do not picture objects as speaking to us in the world’s own language. Objects speak to us ... only because we have learned a human language”, but this does not imply that “objects can only be projections of our thinking” (2009a, p.43). He writes:

“Objects come into view for us in actualizations of conceptual capacities in *sensory consciousness*, and Kant perfectly naturally connects sensibility with receptivity. If we hold firm to that, we can see that the presence of conceptual capacities in the picture does not imply idealism” [in the psychological idealist sense]. (ibid)

I argue that the role of world (in intuition, receptivity, sensibility) and mind’s dependence on it remains obscured in constructivist interpretations in education, resulting in a disappearing world and objectivity with it, and this mischaracterises Kant’s view in a significant way.

What are also lost in such constructivist interpretations are the social and practical aspects of Kant’s epistemology. Learning to master deictic reference involves some complex social activity, always embedded in context. Talking of Kant’s deep insight about deictic *Anschauung*, Stekeler draws attention to these social and inter-subjective dimensions:

“The comprehensive form of *Anschauung* is a form *our practical attitude* with respect to objects *in our perceptual field*. It presupposes that you and I and he, i.e. *we together*, can refer to the *same object* from our different positions of perspectives – if we take these differences of perspectives properly into account. This ‘proper account’ defines the forms and norms of *one common spatial order*. This order is *space*.” (2010b, p.7)

As argued in Part One, the concept of intuition is a rich notion, socially grounding joint reference to things and their features in actual experience. This reveals an engaged mind - situated and connected with things it perceives – and not a picture of a detached or abstract mind, or one imposing meaning from across a perceptual (or epistemological or ontological) divide. The sociality as well as objectivity and worldly grounding involved in Kant’s view of knowledge is lost in the ‘standard’ picture of Kant in education, and, as Stekeler warns, “Kant’s whole analysis is misread if we do not keep this in mind” (ibid, p.5).

To conclude: while sympathetic with the desire to challenge empiricist mind-independent views of knowledge, I agree with McDowell that it is not enough to simply reject empiricism without understanding the philosophical (metaphysical) sources of the problem with this traditional epistemology. In making explicit the conceptual dualism between mind and world in this ‘scientific’ way of thinking about knowledge, we can also see it at work in constructivist characterisations of Kant. Von Glasersfeld takes over the traditional empiricist problem of how to relate knowledge with reality when knowledge is ‘in the heads of persons’. I have been attempting to reveal “the sources of the deformations to which the vocabulary” has been prone (McDowell, 2000, p.121), and introduce different understandings of Kant’s concepts and distinctions in order to challenge dualist interpretations of his view, and demonstrate that mind for Kant is embodied and (constantly) engaged with the world in on-going experience.

Kant’s conception of mind as a capacity for knowledge from a first-person stance can be seen as in rational relation with the meaningful world; this contrasts with characterisations of an inner mind making sense of the chaos of experience and constructing meaning (and knowledge and realities) and imposing this onto the (unknowable) world. It also contrasts with Piaget’s genetic epistemology, with his more ‘mechanically’ naturalist picture¹⁴⁷. While the interpretations explored in this chapter were friendly appropriations of Kant, most references to Kant in contemporary educational theory are critical, and it is these that are considered in the next chapter.

¹⁴⁷ I do not take the theorists discussed to be representative of all constructivist theories, rather I engage with their work because and insofar as they use Kant in support of their theories.

Chapter 7: Kant as a Constructivist: the 'Layer-Cake' Conception of Human Mindedness

It has been argued that conceptions of mind and world and understandings of central epistemological concepts from empiricist epistemology act as deep-seated presuppositions that extend beyond this paradigm; they were reflected in the views of Richard Rorty and Ernst von Glasersfeld, both of whom explicitly reject empiricism. It is held that these presuppositions have influenced dualist interpretations of Kant in educational theory, obscuring valuable aspects, leading to criticism of his view as intellectualist and to (mis)appropriation by others in defence of some relativist theories. Alternative understandings of Kant's terms have been presented from contemporary exegesis that show how, with difference conceptions, mind can be understood as in a 'rational' relation with the world, with no conceptual dualism.

It is argued that constructivist interpretations of Kant in education tend to over-emphasise the active role of mind, and lose objectivity. His Copernican insight that objects conform to our knowledge is interpreted as mind classifying and organising the chaos of experience (Jardine, 2006), and imposing meaning onto reality (von Glasersfeld, 1984, 1990). With a world void of meaning, an inner mind is seen to do all the work - actively constructing meaning and knowledge out of experience, as raw data, and imposing this onto the world; it has been argued that such interpretations misrepresent Kant's epistemology. The objective as well as passive nature of perception and experience in Kant's view has been emphasised to show his subject as embedded in the social activities that make up our (already up and running) humanised world.

This chapter continues to challenge constructivist interpretations of Kant that over-play the activity of mind, and strengthens the argument that the world-dependency of thought and mind is not recognised, losing objectivity and 'rational' constraint by the world. To illustrate this, the 'layer-cake'

conception of cognition is compared with Kant's 'transformative' conception (Conant, 2017), to show different pictures of 'experience' – different conceptions of our contact with the world. This helps expand on Kant's rich conception of subjectivity as grounded in experience and incorporating objectivity. Attention is drawn to the embodied nature of mind, always situated in a particular location, as it is unreflectingly drawn into play in response to the normative demands of ordinary on-going activity. Most contemporary references to Kant in education are critical; in this chapter I consider some of the criticisms made by educationalist Wolff-Michael Roth.

Roth is influential in mathematics and science education (2005; 2006; 2009; 2013; 2017) and, as with the other educational theorists in Part Two, I consider his work only insofar as he refers to Kant, in order to allow elucidation of different readings. Roth critiques Cartesian dualism and recently draws on Vygotsky, and Spinoza's influence on him, to argue "there are not two substances, body and thought (mind), biology and culture, or nature and nurture, but only one substance that manifests itself in different, mutually exclusive ways" (2017, pp.vii). This is in tune with the non-dualist reading of Kant being presented. We might think Roth appreciates the German tradition, for he continues: "Because Vygotsky realized that there are some problems in Spinoza's work, he envisioned reading Spinoza through a Marxian lens generally and through the lens of *The German Ideology* specifically" (ibid, p.viii). However, Roth reads Kant in a very different way, setting up his own position in *opposition* to Kant, and putting forward some fierce criticisms.

Roth portrays Kant as the "founder" of "ultimate intellectualism" - in a contrast with his own "non-intellectualist" and "non-intentional" view (2011a, p.6). Roth holds that intellectualist theories like Kant's emerged:

"during the Greek antiquity, and characterizes a form of thought generally known as metaphysics (idealism). Thus, thought is thought as

something above and beyond the physical, that is, ultimately, above and beyond real, living/lived life". (ibid, p.4)

Roth is right to want to emphasise the embodied and practical nature of knowing, particularly against reductive ideas of knowledge as a commodity, but I argue that the scientific tendencies in education are not rooted in Kant's epistemology, whose practical subject can be read as always situated in 'real lived life'.

Roth reads Kant as providing "an epistemological subject that has no hold in and on this actual world that we inhabit" (ibid, p.23). With a constructivist interpretation, knowledge is portrayed as a species of mind only, which is detached from the world. Read through dualist presuppositions, a separate mind is seen to do all the work, thus over-intellectualising Kant's view. As previously argued, Kant *critiques* the kind of intellectualist view that Roth is charging him with, describing it as: "a completely isolated speculative science of reason, which soars far above the teachings of experience, and in which reason is indeed meant to be its own pupil" (Bxiv). In contrast Kant starts out with the anthropological question 'what is man?' - which is to ask 'who are we?' (Kern, 2017). Mind as a capacity for knowledge is what makes us distinctively human, but this can be read as an embodied mind, Kant's concepts of sensibility and receptivity show we are in touch with the world through our senses (perception, feelings, smells, etc.) which root us in the here and now of 'this actual world that we inhabit'.

In distinguishing Kant's "real" metaphysics from the isolated version that 'soars above experience', Robert Hanna writes:

"according to Kant, real metaphysics must be evidentially grounded on human experience. Or otherwise put, real metaphysics reverse-engineers its basic metaphysical (including ontological) theses and explanations in order to conform strictly to all and only what is *phenomenologically self-evident* in human experience." (2016, p.5)

For Kant thought is *not* something above and beyond real life, rather, with a first person perspective, his metaphysics is grounded in human experience. While much of his investigation is expressed in general terms his subject can be seen as situated in the particular, responding in a dynamic relation to what is happening. Rödl argues, “[h]uman thought is situational and thus temporal because human thought and intuition form an essential unity” (2012, p.79). Richard Velkley argues that reason for Kant starts from an “earthly” standpoint and never loses sight of itself as its own end (1994, footnote, p.213). And Béatrice Longuesse writes “[t]he human standpoint’ expounded in his first *Critique* is that standpoint on the world which, according to Kant, is proper to human beings” (2005, p.3). The human, first person, standpoint that these Kantian scholars talk of is obscured in dualist characterisations, such as a subject with ‘no hold in and on this actual world that we inhabit’.

While his criticisms are harsh, Roth’s interpretation fits with what has become the typical picture of Kant in educational thought. With mind read as detached, it is constantly over-emphasised. For instance Roth writes: “Kant has prepared this constructivist approach to the question of learning by placing an enormous emphasis on the mind to bring about the mental structures” when connecting with sense-based intuition (2011a, p.45), and continues:

“The unity of the mind and the manifold of sensual experiences are of different order.... The mind has to make this connection. And it is for this reason that Kant requires the faculty of *synthesis*: it is precisely because Kant has produced a difference between mental concept and sense-based intuition that he requires a powerful mind to hold it all together (Rorty 1979). The mind takes the entire charge of the integration.” (Ibid)

This is similar to Jardine (2006), who sees synthesis as an active act. ‘Mental concept and sense-based intuition’ are seen through a dualist lens as two distinct realms that have to be actively ‘integrated’ by synthesis. This is a two-worlds reading that interprets Kant’s conception of the capacities as two self-standing capacities instead of two aspects of one single ‘capacity for

knowledge'. Engstrom describes the dualist reading that sees the senses and understanding as distinct, "each able on its own to produce representations, which must somehow interact" in order "to secure the fit, requisite for cognition, between concept and intuition. This reading cannot be squared, however, with what Kant actually says about theoretical cognition and the way understanding and sensibility cooperate in it" (2006, p.2). Kern similarly argues against such 'two-world' readings, "according to which knowledge is the product of two capacities whose exercises can be conceived to be logically independent of one another. Although this is a widespread reading of Kant, it fails to do justice to what Kant actually achieves", because "such a reading of Kant fails to appreciate the fundamental thought at which Kant arrives by the end of the Deduction" (2017, p.256)¹⁴⁸. As discussed in the previous chapter, the *unity* of the capacities and the *objective* nature of thought are overlooked in dualist characterisations. So too is the *passive* nature of experience, which is to say that mind is passively brought into play *in* experience; it does not have to actively make sense *of* it (except when confused, or referring to it discursively).

To return to Roth's criticism above: "the unity of the mind and the manifold of sensual experiences", he says, "are of different order". However I hold that these should be understood as the *same* order; that is, intuited content has the *same* conceptual unity as in judgements because they are provided by the same function. Kant writes:

"The same function which gives unity to the various representations in a judgment also gives unity to the mere synthesis of various representations in an intuition; and this unity in its most general expression, we entitle the pure concept of the understanding." (B104-5)

McDowell often quotes Kant on this, and argues "[t]hat is why it is right to say the content unified in intuitions is of the same kind as the content unified in judgments: that is, conceptual content" (2009a, p.264). Also, "[t]he right point

¹⁴⁸ Kern adds that this "is one of the crucial points of McDowell's *Mind and World* as well as of his criticism of Sellars's reading of Kant" (ibid).

is just that the unity of intuitions is the same as the unity of possible judgments” (ibid, p.72, footnote). Rödl argues more forcefully that intuitions *necessarily* exhibit the forms of unity described by concepts (2007, pp.179-180), and Henrich argues that Kant reveals “the indissoluble mutual correlation between the unity of self-consciousness and the unity of the world” (2003, p.22). The (one and only) unity of self-consciousness (our worldview, the unity of the knowledge we have learnt) functions as presuppositions through which we understand (and act in) the world - through which we apprehend objects as the objects they are¹⁴⁹. This compares with interpretation of two different orders that a powerful mind has to hold together and actively integrate.

Dualist assumptions are deeply ingrained (empiricism creeps in through the window) and are implicit in the typical ‘Kantian’ picture in education. I agree with Standish in that metaphysics is in a serious sense a practical matter (2007), for pictures of mind (and our contact with the world - conceptions of cognition) affect conceptions of learning and teaching and the many issues around these. On the dualist picture that I argue is wrongly assigned to Kant, cognition is understood as a two-step process. ‘Sense experience’ (as raw data) is delivered to a mind that takes charge of the integration, organising and making sense of it. Mind goes to work on what is given. Conant, in his paper entitled ‘Why Kant Is Not a Kantian’, claims that “Kant is not a proponent of (what often goes by the name of) Kantianism”; on the contrary, he is its first great critic” (2016, p.76). I agree with Conant; it is the ‘Kantian’ picture that is widespread in education, but this two-step process of cognitive functioning is not Kant’s conception. Conant calls it ‘the layer-cake conception of human mindedness’. To “understand human cognitive functioning in this way is to picture it as a layer cake: the bottom level of the cake is the layer of our merely animal capacities for interacting

¹⁴⁹ James Conant writes of Kant’s ‘unity of the understanding’, that it “exhibits the structural feature which became so important to Hegel: any determination of it is one in which the unity of the whole remains prior to the unity of the parts” (2016, p.114).

with the world” (sensory perception, raw data given through the senses), and the “layer that sits on top of that is the upper layer of human cognitive functioning (mind that goes to work on what is given by the senses) (2016, p.77). What is crucial to this deep-seated assumption, Conant continues, is the idea:

“that the internal character of the manifold constituting the bottom layer remains unaffected by the introduction of the upper layer. Just as in a layer cake with a lower layer of chocolate and an upper layer of vanilla: the fact that there is a layer of vanilla sitting on top of the chocolate does not affect the internal character of what it is to be chocolate.” (ibid, p.77)

In contrast to this layer-cake conception, which is a compound picture, Conant calls Kant’s conception the ‘transformative conception of human mindedness’, for on this conception rational capacities *transform* human sensibility. Sensibility is different in *form* to that of non-rational animals. That is, “something’s being given to the sensory consciousness” of human beings, as rational animals, “requires that *that* capacity for sensory affection is radically different *in its internal character*” (ibid, p.79, emphasis added). Sensibility is transformed through and through, making for a rational relation with the world, as our accumulated (*a priori*) knowledge is exercised *in* experience. This reinforces the key argument of this thesis, for it differentiates dualist and non-dualist interpretations. A proper understanding of the capacities reveals no dualism, and cognition is immediate rather than a two-step process.

A layer-cake conception, or two-world interpretation, affects how we understand ‘experience’ and learning from it. As discussed, for Kant experience comes already conceptually formed, already meaningful. But a dualist interpretation results in Roth’s assertion that: “Kant discards any possibility that a concept of an object, such as a cube, could arise from experience” (2011b, p.37). To reiterate Kant: “There can be no doubt that all our knowledge begins with experience ... we have no knowledge antecedent

to experience, and with experience all our knowledge begins” (B1)¹⁵⁰. Stekeler writes that experience, “as Kant uses the word is already conceptually formed” and “must always already be seen as taking part in complex and joint practice” (2010a, p.19). He warns about interpretations of ‘experience’:

“It is fairly crucial to realize the difference between Kant’s word ‘*Erfahrung*’ and the common use of “experience” with its empiricist connotations of merely subjective and ‘immediate’ perceptual knowledge. Kant’s *Erfahrung* is already conceptually articulated, objective (or object related) Knowledge”. (Stekeler, 2010c)

Experience, and we can envisage a learning context here, provides joint perceptual access, joint attention, to objects in the already meaningful - already conceptually articulated – world. Children learn through experience (through intuiting with another) about an aspect of the (one shared) world, and how to refer to it in more fine-tuned ways, thus acquiring and developing the relevant conceptual capacities. Another way to put this is, as ‘discursive’ beings with a capacity for concepts (as Kant characterises our human intellect (B93), children develop a worldview (concepts and knowledge of the world) through participating with others in the linguistic and shared social practices of their culture. This picture contrasts with that of individual minds actively making sense of the chaos of experience (Jardine 2006), taking charge of the integration (Roth, 2011a), imposing meaning onto a structureless world (von Glasersfeld, 1990) - or generally constructing knowledge and realities out of experience.

With a ‘layer-cake’ conception of cognition (mind as the top layer ‘ordering’ the data given by the senses, as the bottom layer), constructivist interpretations also obscure another of Kant’s distinctions: that between empirical and intellectual concepts. Kant writes “the distinction of concepts as

¹⁵⁰ Also as previously argued, Kant is concerned with the idea that only *empirical* knowledge arises from experience and that spontaneity is also a source of knowledge.

sensible” (empirical concepts such as table, tree, giraffe) “and intellectual” (for example value, meaning, cause) “is certainly legitimate. For no object can be determined for the latter concepts” (B311). Kant differentiates between empirical concepts and intellectual concepts because they have different functions. Rödl explains:

“An empirical concept essentially figures in thoughts that articulate receptive knowledge, while a concept of reflection is primarily deployed in the articulation of spontaneous knowledge. Empirical concepts spring from experience, concepts of reflection spring from spontaneity.” (2007, p.162)

Roth’s complaint that Kant “discards any possibility that a concept of an object, such as a cube, could arise from experience” (2011b, p.37) is unwarranted - empirical ‘sensible’ concepts do arise from experience. What is typical of such constructivist interpretations is that all concepts are seen as concepts of reflection, from spontaneity, because mind is conceived as ordering and structuring experience, and projecting meaning onto it. And as argued, this loses objectivity and the idea of the world as a standard or norm for correctness of beliefs. “Kant asserts that thought depends on intuition. We must receive the object about which we think, if we are to think something as opposed to nothing” (Rödl, 2005, p.91). The intuition or world-dependency of thought and mind is not appreciated in such constructivist interpretations. As previously argued, there is too little emphasis on *what* is being perceived and too much emphasis on *its being* perceived - obscuring the objectivity (and sophistication) of Kant’s view.

At the same time, the distinction between empirical and intellectual concepts distinguishes Kant’s view from empiricist epistemology, which focuses only on concepts as arising from experience. Rödl argues that concepts of reflection (such as knowledge, subjectivity, judgement) are best investigated not by empirical inquiry but by reflection on what we know from spontaneity. He criticises “the empirical dogma that a concept that does not spring from sense experience does not describe a material reality and is not

used to express factual knowledge” (2007, p.163). Subjectivity is regarded as suspicious or unreliable because spontaneity is not recognised as a source of knowledge.

With criticisms of intellectualism, Roth believes that Kant “reduced all knowing to the mind” (2011b, p.49) and has “nothing to say about the relation of the body and thought” (ibid, p.53). I have argued that we understand Kant’s conception of mind as embodied and in touch with the world we know. As Rödl argues, Kant “recovers the internal connection between thought and sensory perception” (2012, p.2). Again, experience should not be conceived in terms of empiricist sense data on which mind then goes to work. “What is given through the senses” on this *empiricist* picture, Rödl argues, “is, as such, formless, a matter external to thought upon which thought may impose its form. This is the position of empiricism ... which everywhere impedes analytic philosophy” (2012, p.11). This is also the ‘layer-cake’ conception of human mindedness inherent in constructivist interpretations, in which (an inner) mind is seen to impose its form on a formless matter external to it. Mind is seen to do all the work, making for an intellectualist picture that is wrongly attributed to Kant.

In order to counter charges of intellectualism and a detached mind, I emphasise below the objectivity within Kant’s first person view. This is significant for understanding his overall philosophy, and its value to education. As argued, Kant takes a first person standpoint, with a rational capacity at the centre of his view of knowledge; his (Copernican) insight means we cannot escape subjectivity - we cannot get outside this human standpoint. With dualist presuppositions, however, this subjective stance would appear unreliable because ‘subjective’ is understood as relativist and individualist, something in the head and separate from the world. But as I have been attempting to establish, Kant conceives of subjectivity very differently. It is through first person thought (as argued in Part One) that we conceive of reality, and through which objectivity emerges. Subjectivity and

objectivity develop together. That is, that our capacities develop as we learn about the world, and learn to make judgements about it through the knowledge we have acquired. As we gain more knowledge of the world, mind as a capacity for knowledge becomes more fine-tuned; mind and world grow together. However, in constructivist interpretations the world 'disappears' from explanation. There is inadequate appreciation of Kant's concepts of receptivity and sensibility - the 'transformative' conception of cognition and experience; but if we take these into proper consideration, the world as a standard of correctness - the objectivity of knowledge - becomes clearer.

Human knowledge, writes Kern, belongs to intellects that are "as Kant puts it, 'discursive' in character", for only "a discursive intellect can perform acts that one can rightly say are guided by the world as the standard of their truth – i.e., acts of judgment. Creatures that lack the capacity for making judgments about the world lack the capacity to relate to the world as the standard of truth of their acts" (2017, p.22). The world as a standard of truth is missing in constructivist interpretations. This refers to McDowell's argument against Rorty's social agreement view of knowledge discussed in Part One. The claim 'cold fusion has not occurred' is justified, he argues, not by our peers agreeing it, but by whether or not it has occurred: a judgement is a "stance that is *correctly* or *incorrectly* adopted according to whether or not things are indeed thus and so" (1996, p.xii). The objectivity - the world as a standard of truth - relates to the idea of a judgement, and the normativity of judgments. Kern writes:

"if we follow Kant, judgments are precisely those acts of the intellect whose defining feature it is that they can be true or false. Kant arrives at the notion of judgment by first characterizing judgment as a spontaneous act – an act arising from a capacity of "spontaneity." The capacity in question is spontaneous in the sense that it "brings forth representations from itself". For, Kant explains, its exercises consist in

the subject's combining representations into a "unity" in accordance with a certain "logical form" [concepts]. B75" (Kern, 2017, p17)¹⁵¹

A judgment is "an act of endorsing a certain connection of representations as true" because it can also be false (ibid, p.19)¹⁵². This accounts for the normative character of judgments, as they can be correct or incorrect, true or false.

Constructivist characterisations of Kant in education capture the spontaneity of mind but do not acknowledge that the world plays a role as a 'standard' that determines the correctness or truth of judgments - rather the world disappears. Rorty insists that the world not be seen as an alien authority; for von Glasersfeld reality is like a black box, and on constructivist interpretations the world is unknowable or does not have pre-existing meaning. To repeat, the argument here is that objectivity depends on *what* is being thought or perceived, not only on *its being* thought or perceived. Intuition - what is given - is missing, and only spontaneity recognised; the world and objectivity disappear in a one-sided account of mind doing all the work. We need to understand intuition and spontaneity not as opposed, but as two aspects of a subject's capacity for knowledge; similarly, we need to understand objectivity not as opposed to subjectivity, but emerging through an altogether richer conception of subjectivity.

Reality is conceived from a subjective, first person stance, but ideal properties *objectively exist* as characteristics of things. Judgements and empirical beliefs "have objective content", Kern explains, "in the sense that their truth is dependent on how things are in the world" (2017, p.53), that is the humanised ('idealised') world. And any grounds "do not result from the

¹⁵¹ When Kern writes that the subject combines representations into a unity, she does not mean that this is a conscious or active act, it is something entirely passive. See below.

¹⁵² Kern adds: "[w]hen we believe that p, we are thereby taking a stance on the question whether p is true – and we are doing so by endorsing the truth of p" (ibid, p.23).

subject's decision about the truth of their conceptual content but instead depend on how things stand in the world" (ibid, p.55). Importantly, Kern argues that while judgement is seen as a decision to endorse a particular unity, this is often misunderstood. For it can be interpreted:

“as though it meant to claim that judgment is at our command, that it is within the sphere of our will... we are by no means saying that one can judge and believe whatever one wants. Quite the contrary. We are instead saying that judgments and beliefs are acts that intrinsically fall within the space of truth and falsity, because they consist in an answer to the question of truth. The concept of decision here is meant to explain what we mean when we say that judging is “answering” or “taking a stance on” the question of truth.” (2017, p.21, footnote)

The ‘answering’ to the question of truth is missing in typical interpretations of Kant in education, for they do not appreciate his concepts of sensibility or receptivity, which make for the ‘transformative’ picture of our contact with the world. Language of children constructing their own meaning and knowledge (and sometimes realities) obscures the world as a prior embodiment of mindedness that provides (shared) content and to which our thought and judgements are ‘answerable’.

Again, in contrast to the ‘layer-cake’ conception, Kant’s ‘transformative’ conception of mindedness means our contact with the world (perception, experience) calls into play our *a priori* knowledge, making for a rational relation. Sensibility is not empiricism’s sense data (that mind then makes sense of), rather, to repeat Rödl, the “power of thought transforms human sensibility” (2012, p.70). Sensibility and receptivity passively exercise the conceptual capacities a subject has (so far) learnt, the truth of which are dependent on the world, making them normative. Kern argues that:

“In order for a subject to have beliefs whose truth she understands to be dependent on the world... she must have grounds that, in Kantian parlance, are characterized by “receptivity”... mental acts that spring from a faculty to, as Kant puts it, “receive representations” from the objects that are represented” (ibid, p.55).

Sensibility is receptive, through “a receptive nexus between” subject and content (ibid); our empirical beliefs about the world are both receptive and normative at the same time.

The language of children constructing their own knowledge and meaning suggests a particular inner and individual conception of subjectivity, and belies the idea of the world as a constraint. But as Stekeler also insists, “[w]e cannot produce intuition as such and at will” (2010b, p.25). Mind is world or intuition-dependent, and is thereby shaped or conditioned by what it receives and what it represents. In other words, rational freedom notwithstanding, there is constraint on thought by objects (from the already meaningful world) provided in experience. Sensibility, receptivity and intuition all root us in the here and now of experience, revealing the continual embeddedness of the subject in practice, and the contextual nature of thought. According to Rödl:

“It is straightforward that intuition-dependent thought is fundamentally situational. In the simplest case, in which I directly relate to intuition, I think something as opposed to nothing in virtue of perceiving what I think. A thought that I think in this way is situational. For, if it is essential for thinking what I think that I perceive what I think, then it is essential that I think it when I do. For what I perceive depends on the time: at one time, I perceive this, at another time, that.” (2012, p.63).

Thought depends on being given an object through the senses at a particular time and place and this makes it, in Rödl’s terms, situational, and provides the objectivity. Mind as a capacity for knowledge is not detached from the real world and lived life, as Roth portrays Kant, rather the world comes into view - and life is lived - through, and only through, subjectivity. This is Kant’s Copernican insight.

To reiterate, constructivist interpretations of Kant tend to over-play the active nature of mind, portraying it as actively making meaning and constructing knowledge out of the raw data of experience. Attention can be drawn to the unconscious nature of much of our experience by distinguishing

between perception and knowledge. Perception is conceptually informed but *receptive*, unlike a knowledge claim that is discursive or active. Stekeler points out that “Kant distinguishes *Anschauung* from *Verstand* by the very feature that *the first is receptive, the second productive or spontaneous*” (2008, p.10). Intellectualist interpretations of Kant run these together and over-play the active nature of mind, such as making sense of experience or constructing knowledge. For Kant this is different; the receptive and unconscious nature of perception and sensibility means that most of the time we unreflectingly ‘go with the flow’. In McDowell’s terms, we are inhabitants of the space of reasons; we move within an already meaningful world with its normative demands, and in most of our on-going engagement we *unconsciously* respond to these normative demands. To repeat Bakhurst (from Part One): “[t]he ideal represents the entire edifice of the institutions of social life, born of social activity and “fixed in the substance of reality,” where it confronts each individual member of human society as the *total structure of normative demands on his or her activity*” (1991, p.188). That is to say, in ordinary experience our knowledge of the world is *passively* drawn into play in our responses to it, this is not a case of a detached and all-powerful mind constantly and actively making sense of it; I argue that charges of intellectualism stem from misunderstandings of Kant’s terms.

McDowell has similarly faced accusations of intellectualism, for instance by Hubert Dreyfus who argues that our situated and embodied engagement with the world is *non-conceptual*. But, following Kant, McDowell insists that our rational capacities are operative in *all* our activities, including perceptual experience and skilful embodied comportment, whether or not we are aware of exercising them¹⁵³. The objection to what is (mis)read as Kant’s intellectualism is a phenomenological one, which Kern articulates as follows:

“we can sensibly distinguish far more colors than we can express through our repertoire of color concepts. The fineness of grain of these

¹⁵³ For useful reading on this debate between McDowell and Dreyfus see Koichiro Misawa (2013); Erik Rietveld (2010), and J.K.Shear (2013).

color differentiations, which our sensory experience enable us to make, cannot be captured by our color concepts.” (2017, p.188)

This leads to a view of sensory experience as non-conceptual¹⁵⁴. However, Kern responds to this objection:

“As McDowell, among others, has argued, we can easily do justice to the fine-grained character of our sensory experience of colors if we disentangle the idea that our sensory experience of color has conceptual content from the idea that “we must have ready, in advance of the course our colour experience actually takes, as many colour concepts as there are shades of colour that we can sensibly discriminate.”” (Kern, 2017, p.189).

In *Mind and World*, drawing on the work of Gareth Evans (1982), McDowell talks of recognitional capacities that in experience “can be made explicit with the help of a concept” such as a ‘shade of colour’ (1996, p.57). That is, “if we have the concept of a shade, our conceptual powers are fully adequate to capture our colour experience in all its determinate detail” (ibid, p.58). He explains:

“A capacity to embrace a shade within one’s thinking (as *that* shade, we can say in favourable circumstances) is initiated by the figuring of an instance of the shade in one’s experience. There is no saying which capacity it is in abstraction from the activating experience itself. That is how these capacities permit the fine-grained sensuous detail that figures in the actual course of visual life to be taken up into the conceptual content of visual experience.” (1996, p.59).

A subject’s conceptual repertoire will always be partial, with many concepts vague and unclear, but all we need is the concept ‘a shade’ of colour to say ‘that shade’ to refer to something jointly intuited. We do not need as many colour concepts as there are shades of colour to recognise the fineness of grain of sensible experience. And, as McDowell insists, in most of our perceptual experience our conceptual capacities are *passively* called into play. He writes: “capacities belong to spontaneity in that they *can* be used in

¹⁵⁴ Tim Crane, for instance, argues for the non-conceptual content of experience (1992).

responsible cognitive activity, paradigmatically judging. But in experience they come into operation outside our control” (2006, p.218). The idea that conceptual use is ‘led by us in the bright light of reason’ is a false assumption, he argues; intuition provides the content we *can* think, or judge or know, even if we do not. “One can make use of contents being given in an intuition to acquire a new discursive capacity, but with much of the content of an ordinary intuition, one never does that”; rather they are drawn into play in “unreflective perceptual awareness” and embodied coping (McDowell, 2009, p.265).

An example of a subject immersed in on-going activity helps exemplify the unreflective yet conceptual nature of experience. McDowell talks of a signpost. “Consider someone following a marked trail,” he says, “who at a crossing of paths goes to the right in response to a signpost pointing that way” (2009a, p.129). A scientific naturalist description of a signpost would be in physical terms, stripped of its ideal properties, and therefore motivationally or normatively inert (and any action would be described in sub-personal terms). A constructivist interpretation, like empiricism, might describe mind as going to work on what is given in sense data - a motivationally inert signpost with mind making sense or interpreting it. However McDowell writes: “it is disastrous to conclude that what points the way, to someone to whom a signpost does point the way, is such a thing - a board on a post - under an interpretation. On the contrary, what points the way is a sign-post, something that is what it is by virtue of its involvement in the relevant practice” (2009b, p.105). We “fall into a bind” he continues “if we abstract sign-posts (for instance) from their place in the lives of those who use them. For someone who is party to the relevant practice, a sign-post is something that points the way. And that is what a sign-post as such is” (ibid). Our knowledge (of a signpost) is manifested in our unreflective responses and actions in experience.

Another way to put this is that the meaningful world prompts normative responses. It can move us to act in a particular way, however vague our

knowledge of a signpost might be it is operative in our response. What makes going to the right a *rational* response to the signpost and not a random action is, as McDowell argues, because the signpost points to the right; without knowing what a signpost is - without being party to the practice - turning right or left would be arbitrary or accidental. Our conceptual capacities are passively exercised in experience and are manifested in our responses and actions. We act in the light of our knowledge. On this view, concepts and knowledge are not always consciously or actively constructed but are often passively acquired. (Even in a school setting with attention focussed on what is being explicitly taught, children learn all sorts of other things, including how to behave in different situations - an assembly, lunch break, an exam, different classes, etc., and recognitional capacities are operative in behaviour and action that reveal understanding of these). Experience is not a case of mind actively making sense of it; rather in everyday experience, as McDowell argues, “a subject is passively saddled with conceptual contents, drawing into operation capacities seamlessly integrated into a conceptual repertoire that she employs in the continuing activity of adjusting her world-view” (1996, p.31). While these are mostly unconscious, any aspect of experience *can* be made the object of discussion or judgement if drawn attention to, or explicitly referred to. Again, the *passive* nature of perception and experience in which we unreflectingly go with the flow contrasts with the *active* nature of mind in discursive acts, reasoning and reflecting, etc. This distinction is not apparent in constructivist interpretations, which over-emphasise the activity of mind and lead to accusations of intellectualism, such as that by Roth.

While I appreciate Roth’s concern to emphasise the practical and ‘being in the world’ aspect of learning and education, I maintain that Kant’s resources incorporate this. On his ‘transformative’ conception of mindedness, sensibility is transformed by our rational capacities, making experience and perception (our contact with the world) rational. Even in unreflective coping in the world, the knowledge we have learnt is passively exercised and manifested in our

responses to it. Kant's richer conception of subjectivity incorporates objectivity within it; this compares with the widely presupposed picture of an 'unreliable' and inner subjectivity that is separate from and stands opposed to objectivity. In Kant's picture, sensibility provides the materiality, the worldly and sensory *content* of thought, and the already conceptually articulated world is what we feel, smell, taste, etc. in our on-going bodily experience. As Rödl says, "a substance and its form enter thought together" through a unity that situates us in the world as embodied perceivers (2012, p.205). Mind and world, like subjectivity and objectivity, develop together through the on-going experience of a subject of thought.

In summary, Roth's interpretation of Kant presupposes a disenchanted world and the layer-cake conception of mindedness, which again loses objectivity and the embeddedness of Kant's subject in the world it 'rationally' responds to. Read differently, from a first person standpoint, it is possible to see Kant's subject as "a conscious being that actively orients in the (social, material) world it perceives" (Roth, 2013, p.399), which is what Roth tells us he is after in his non-cognitive *phronesis* view that emphasises the 'living/lived life'. The next chapter continues to challenge typical interpretations of Kant and discusses another of his distinctions – the general and particular – to further illustrate the embodied and embedded nature of his conceptions of mind and knowledge.

Chapter 8: Kant versus Kantianism, and the General and Particular

It has been held that deep-seated assumptions about mind and world rooted in empiricist epistemology have shaped dualist interpretations of Kant in educational theory, obscuring important areas of his view and leading to much criticism. Non-dualist interpretations have been introduced to challenge charges of intellectualism and a detached mind, with attention drawn to Kant's first person standpoint and the embeddedness of the subject in the here and now of experience. The *passive* nature of perception and experience has also been highlighted to emphasise the unconscious but nevertheless conceptual nature of a subject's engagement with the world, including her immersion in the on-going flow of everyday activity.

Typically read as a constructivist by educational scholars, Kant's Copernican insight that objects conform to our knowledge is normally portrayed as mind organising and making sense of the 'brute sense data' it receives, and as imposing meaning or rules onto the world. It has been argued that such 'layer-cake' assumptions about mind and cognition mischaracterise Kant's view, for they over-emphasise the *activity* of mind (constructing, ordering, etc.) and lose objectivity. With different understandings of Kant's key terms, we can conceive of our senses as being 'transformed' by our rational capacities, which are *passively* exercised in perception and experience, not only actively exercised in conscious acts like reasoning. This means what we already know is reflected in our unreflective responses to things, which contrasts with an active mind 'imposing' meaning on them.

This chapter continues to challenge the dualisms that are often pointed out to be at the heart of Kant's philosophy by his critics in education. This will allow further disentanglement of Kant from what is the typical 'Kantian' picture. Some more interpretative issues are considered, with a discussion, following Rödl's work, of the general and particular. This is to further illustrate

the *unity* of the intellect and sensibility, mind and world, and thus strengthen the argument against criticisms of a detached mind, while bringing more of Kant's capacity conception of knowledge into view.

Unlike the more sustained criticisms of Kant by Roth (and David Carr whose interpretation is discussed in the next chapter), many contemporary references to Kant in educational theory are cursory, often fleeting disparagements, with no engagement with his philosophy. This makes it difficult to respond to such theorists in a meaningful way. But what is striking is the frequent mention of dualisms and a detached mind imposing rules or meaning. It is perfectly understandable that many educationalists do not have the time to engage more deeply with philosophical texts from mainstream philosophers, and the quantity and complexity of Kant's work makes this completely intelligible; a consequence however is that the dualist picture has become the norm - the standard 'Kantian' picture - easy to draw on and refer to. Everyone has a vague idea of Kant, as having a propositional view of knowledge, a detached and disembodied conception of mind, imposing meaning or a fixed set of rules and principles irrespective of the context. Each reference to this picture reinforces and advances this idea of 'Kantianism'. In continuing to challenge this picture, I identify below some familiar criticisms that I use as a springboard for further discussion of the Kant who is not a 'Kantian'.

Wilfred Carr, like Rorty and postmodernists, reads Kant not as a constructivist but as a foundationalist. He points to:

"Immanuel Kant's attempt to provide the philosophical foundations for universal principles of rational justification that are independent of particular historical, social or cultural circumstances and that are grounded in the capacity of enlightened human reason to achieve objectivity and truth." (2006, p.143)

Carr has long argued for the "need to give up the abstract Enlightenment idea of an ahistorical reason common to all people" (1995, p.126), and rejects the

idea of a “disembodied rational autonomous subject” associated with Kant (ibid, p.124). I argue that reason for Kant is common to all people only insofar as it is a human capacity, but the determinate shape of any individual’s capacity *depends on* the ‘particular historical, social and cultural circumstances’ of her life and is not independent of this.

Daniel Royer also sees Kant as a foundationalist: “[c]ertainly much of Kant’s foundationalist epistemology has been refuted or corrected in the last century” (2006, p.61). As previously stated, Kant ‘revolutionalised’ thinking at the time about what it is to have a mind with his Copernican conception of reason (this contrasted with the inherited views that we are determined by biology and evolution, or by God as a divine will). Thus Kant’s novel conception of reason as self-determining or *sui generis* figures prominently during the Enlightenment period. But this does not mean that reason should be seen as disembodied and ahistorical; his ideas are often too quickly associated with traditional empiricism and rejected as foundationalist.

A dualism between mind and world is widely portrayed. Roland Reichenbach, for instance, writes: “[p]ostmodernists often refer to the aesthetic mode of judgement ... but, of course, they wouldn’t accept Kant’s strict dualism of an empirical world and a world of reason” (1999, p.241). Jan Derry writes of “[t]he dualist separation of mind and world, central to Kant’s investigation of the possibility of reason and knowledge”, and also of his “stark separation of receptivity and spontaneity” (2013, p.112). And according to Sally Sedgwick, “the empirical self is not only split off from its noumenal counterpart, but also clearly subordinated to it” (1997, p.80). Such dualist and ‘two-self’ characterisations reinforce the ‘Kantian’ picture of Kant, and obscure his reasons for using conceptual distinctions, losing the finer grained aspects of his view and altering its significance.

Wilfred Carr similarly refers to the dualism “implicit in Kant’s idea of a transcendental, noumenal ‘self’ stipulating absolute standards to which the

earth-bound, phenomenal self should conform” (1995, p.38). Such disparagements are common. John White also writes: “Kant’s rationale for his view depends on his “two-world” view of man as consisting of a noumenal self and a phenomenal self”, and, “[d]etached from desire, the concept of reason in both Kant [and Peters] becomes obscure, the transcendental arguments of Ethics and Education leaving the reader as unenlightened as Kant’s delineation of the noumenal self” (2005, p.34).

These characterisations reinforce the standard picture, but as argued dualist readings misrepresent the key terms that Kant uses, affecting how his overall view is interpreted. To repeat Conant in his paper entitled ‘Why Kant Is Not a Kantian’, “Kant is not a proponent of (what often goes by the name of) “Kantianism”; on the contrary, he is its first great critic” (2017, p.76). Conant warns against dualist interpretations of sensibility and understanding (and other distinctions such as form and matter) that are each understood as distinct realms. Conant points to other interpretative issues; “we are apt to misunderstand Kant” he argues, “if we take ourselves already to understand what terms such as “critique” and “deduction” are supposed to mean independently of our being able to make sense of why his text comes in the very particular shape – with all its initially puzzling twists and turns – that it does” (ibid.) Understanding it “requires getting fully into view that the structure of a work of critique must be dialectical from the start” (ibid, p.96).

To further bring into view the Kant who is not a Kantian, I start with his distinction between noumenal and phenomenal. As discussed in Part One, this distinction refers to different ways of knowing something. As a ‘thing in itself’ we can *know ourselves* as self-conscious thinking beings (how we are feeling or what we are intending to do), and we can also *know ourselves* through appearance (by looking at our bodies or in the mirror). But when it comes to *inanimate objects* in the world, we cannot know them in themselves, only as they appear to us. Kant’s distinction is “to point to the different epistemic or semantic relationships we establish (at the meta-level

of philosophical reflection) with the single ontological set of empirical objects” (Muchnik, 2008, p.2). Kant does not intend this distinction to be read as two distinct selves or two separate realms; “[t]he division of objects into phenomena and noumena, and the world into a world of the senses and a world of the understanding” is, he argues, “quite inadmissible” (B311).

Kant uses the concept noumena - things in themselves - as a *limiting* concept. He writes:

“The concept of a noumenon is thus a merely limiting concept, the function of which is to curb the pretensions of sensibility; and it is therefore only of negative employment.” (B311)

It is to show the limits of the senses, compared with the freedom of reason. We can ‘think’ anything, but to ‘know’ an empirical object, experience has to be added. Kant explains:

“To *think* an object and to *know* an object are thus by no means the same thing. Knowledge involves two factors: first the concept, through which an object in general is thought (the category); and secondly, the intuition, through which it is given. For if no intuition could be given corresponding to the concept, the concept would still indeed be a thought, so far as its form is concerned, but would be without any object, and no knowledge of anything would be possible by means of it.” (B146)

We can think an object, but intuition - experience, receptivity, sensibility - is needed for knowledge of it. Kant states that the understanding “cannot know these noumena through any of the categories [existing concepts], and that it must therefore think them only under the title of an unknown something” (B312). A noumenon is not one of two selves, but is a concept Kant uses to express the limitations of human sense perception.

Michael Friedman writes of this: “the idea of a noumenon or thing in itself is the idea of an object thought through pure understanding alone,

independently of sensibility” (2002, p.34, footnote 51). Friedman translates Kant (B309):

“the categories thus extend further than sensible intuition, for they think objects in general, without attending to the particular manner (of sensibility) in which they may be given. But they do not thereby determine a larger sphere of objects, since one cannot assume that such can be given without presupposing another mode of intuition than the sensible as possible – which we are in no way justified in doing.” (ibid)

This passage, Friedman says, “seems to me to count decisively against the “two-worlds” interpretation of Kant’s distinction” (ibid).

Kant’s use of ‘categories’, or ‘categorical’, also tends to be understood with a specific English interpretation as unequivocal or absolute, but for Kant categories are concepts, or *general* forms of knowledge: “concepts of an object in general” (B128)¹⁵⁵. The unity of an object “is no other than that which the category prescribes to the manifold of a given intuition in general” (B145). Categories are not given by objects; Rödl explains: “[o]ne does not receive the category *from the object*. In Kant’s apt words, the intellect supplies the category *from itself* (B1)” (2006, p.347). ‘From itself’ meaning the power of mind, but categories still have to be learnt, and are representations that are united according to a ‘rule’, a concept. The *general and the particular* form another aspect of Kant’s view that is obscured in educational interpretations but which is significant both for a non-dualist reading and for thinking about the nature of concepts, concept development, knowledge, and learning – all central to education. To unpack the idea of categories - of concepts of an object *in general* - it is necessary to say something about the categories extending further than sensible intuition, as in Friedman’s quote above.

¹⁵⁵ “I shall introduce a word of explanation in regard to the categories. They are concepts of an object in general, through which its intuition is regarded as determinate in respect of one of the logical functions of judgment” (Kant, B128).

What does it mean to say that the categories extend further than sensible intuition? It helps to compare this with traditional naturalist or empiricist epistemology: without the concept of spontaneity (as rational freedom) mind simply 'tracks reality' as it receives individual impressions or representations; it is limited to what it receives. Henrich argues that in empiricism, "no means exist of consciously transcending the limits of the given. Yet every action, including the action of criticism, moves within a context of meaning that is concrete and motivated by a given set of conditions, and on whose basis alone one can attain something surpassing them" (1993, p.112). As Kant puts it: "[e]xperience teaches us what is, but does not teach us that it could not be other than what it is" (B762). In other words, mind is dependent on what is given for content but not *limited* to it; it is intuition-dependent but can surpass what is given. McDowell writes about this:

"a knowledgeable judgment enabled by an intuition has content that goes beyond the content of the intuition. The intuition makes something perceptually present to the subject, and the subject recognizes that thing as an instance of a kind." (2009, p.266)

What goes beyond the content of sensible intuition is the meaning of an object 'in general'. Meaning is derived not only from objects in experience but also from a concept's place in relation to other concepts, in a complex and dynamic network of concepts. This involves understanding concepts as inter-related; in using a particular concept, other concepts are entailed by it, from their logical relations to each other, and this forms a dynamic system of concepts. In making judgements or knowledge claims, even in ordinary discursive activity, we are committing ourselves to more than what we actually see (or say) at that moment.

Using this Kantian insight in order to criticise empiricism, Rödl argues that empirical thought always goes beyond all sensory evidence, and provides an example:

“When I say “This is an apple” and only see the front of the apple, then what I say goes beyond what I see. It includes the back, which I do not see. Therefore it is possible that I walk around the ostensible apple and discover that there is no apple. Now, no sum of perceptions can exclude that later perceptions will show that despite appearances there is no apple. Like a general judgment, the judgment “There is an apple” goes beyond everything we will ever have perceived. From that, scepticism follows immediately. ... If all empirical evidence is compatible with no apple being there, and if, therefore, all empirical evidence leaves open whether there is one, then we do not improve – do not in the least improve – our epistemic standing by obtaining more evidence.” (Rödl, 2012, p.12)

In saying ‘this is an apple’ we are committing ourselves to more than what we can see, for the meaning of apple is related to other concepts in the system of concepts which delineate what an apple is. This *general* knowledge is presupposed in knowledge and perception of *particulars*, (our knowledge of apples is called into play in encountering one) and exemplifies Kant’s Copernican insight that objects conform to our knowledge.

And we act in the light of our knowledge. Our knowledge of an apple (once learnt) shapes how we pick one up and what to expect when we bite into one. (This was discussed in Part One with respect to a spoon; our knowledge of objects affects how we use them and what we usually do with them.) As a subject acquires a new concept, even partially, so she develops her conceptual capacities, her general knowledge. Learning a language plays a central role in this development. McDowell writes: “the very idea of a conceptual repertoire is the idea of a system of capacities” (2009a, p.36), and that “acquiring one’s first conceptual capacities is necessarily acquiring many conceptual capacities, interlinked in such a way that the totality amounts to a conceptual repertoire that exemplifies the necessary forms of the understanding” (2009, p.38, footnote 23). And a conceptual repertoire is what objects conform to in a subject’s experience. McDowell argues, “we could not recognize capacities operative in experience as conceptual at all were it not for the way they are integrated into a rationally organized network of capacities for active adjustment of one’s thinking to the deliverances of

experience. That is what a repertoire of empirical concepts is” (1996, p.29). General concepts (forms of knowledge) form a system, which constitutes their meaning from the inferential linkages between them.

Like McDowell, Robert Brandom draws on German Idealism for his influential work on ‘inferentialism’. Jan Derry draws on Brandom’s ‘inferentialism’ to bring the idea of a system of concepts to educational theory and practice (2011; 2013b; 2014; 2017). She criticises Cartesian epistemology, which has “led to a neglect of the question of knowledge and of the full extent of what is involved in bringing a learner into a knowledge domain” (2009, p.150). Meaning does not arise from relating a word directly to the object that word represents, she argues, as in traditional ‘representationalism’, but by its relations with other concepts in a dynamic network of concepts. These - concepts and their related meanings - are not learnt individually, but gradually, through initiation into everyday social practices. Derry illustrates this as follows:

“Take the example of a child using the word ‘dog’ in a domestic context where it is applied to the four-legged friend she shares her home with. On a trip out of town she applies the same term for the four-legged creatures in the field i.e. sheep. Her conception of dog as a quadruped has not yet excluded other four-legged creatures of similar height and size. The child is beginning to develop its application of concepts but this is as yet insufficiently refined; she is not yet committed to excluding the concept sheep from the concept dog, as Brandom might put it. However, as her word use develops, the concept dog is refined and its application restricted.” (2014, p.86)

Derry also draws on Hegel to bring German Idealist thought into education (which can learn much from this tradition). Regarding Kant however, Derry portrays Hegel in *opposition* to Kant by appealing to the typical dualist ‘Kantian’ picture, particularly in her work on Vygotsky (2013). In recognition of this she notes, “this presumed Kantian framework should not be taken as a valid statement of Kant’s work. Like other great philosophers Kant is open to a variety of readings, some of which fail to capture the richness and depth of

his work” (ibid, p.71). It is the ‘presumed Kantian framework’, so widely held, that I am attempting to challenge, and argue that Kant is much closer to Hegel, who does not reject his framework but changes and advances aspects within it (Henrich, 2003). German idealism has much to offer education, as Derry’s work exemplifies, but the dualist ‘Kantian’ picture acts to obscure it. By distinguishing Kant from ‘Kantianism’ I am trying to reveal some of the value of this tradition, particularly in terms of how we think about the nature of knowledge and mind. Unpacking Kant’s insight that thought goes beyond sensory evidence – how our general knowledge as a system of concepts is called into play in perception of the particular – helps show the (indissoluble) unity of mind and world.

General concepts (categories) are what Kant also calls *a priori* (or pure) concepts. As noted previously, *a priori* in this context does not refer to statements that are tautologies or true in virtue of their logical relation, as they have come to mean in contemporary philosophy; rather, *a priori* (or pure) concepts are concepts, or knowledge, of objects *in general*. Kern writes that because *a priori* knowledge “is not knowledge of this or that particular object, but knowledge of something in general that characterizes any object of experiential knowledge, as such, it is a kind of *general* knowledge of objects of experience” (2017, p.255). McDowell similarly explains: “[i]n Kant’s terms, a category, a pure concept of the understanding, is a concept of an object in general” (2009, p.265). Much of the knowledge taught in schools is general knowledge (not knowledge of this particular electricity circuit, for instance, but knowledge of electricity in general). And a subject’s capacity for knowledge is constituted by such *a priori* (general) knowledge once it has been learnt. Rödl writes of *a priori*, or pure concepts:

“pure concepts spring from the understanding: they are concepts that I, as a subject of thought, always already carry with me. That does not mean that I represent all pure concepts clearly and distinctly. It means that in order thus to represent them I have to do nothing but *think*”. (2012, p.30)

Concepts held *a priori* (that, once learnt, a subject always already carries with her) function as presuppositions in determining particular objects in experience – the Copernican insight. “In Kant’s words, knowledge of the form [category or concept] is always encountered in the experience of the particular” (Rödl, 2012, p.204). This takes us back to Rorty’s point in Part One, we do not know a giraffe simply by seeing one, we first (*a priori*) need some idea of what a giraffe is in order to recognise or know one, to see it as a giraffe.

Stekeler also writes on this: *a priori* statements “function as presuppositions in our conceptual understanding of empirical claims. When I, for example, say that over there is a cat, you are entitled to suppose that it is a real cat and not a toy cat” (Stekeler, 2010c, p.19). Stekeler argues that without any *a priori* commitment to what is *normally* or generally the case, my assuming that what I perceive is a cat would be arbitrary and void of sense. Our general knowledge of cats is called into play in *perception*, not only in judgements and claims. If an object is determined “a priori, then the sensibility of a thinker is *always already* determined by the form of thought, and what is given in sensory intuition as such bears the unity expressed by the category” (Rödl, 2006, p.354). Again this is Kant’s Copernican lesson that we cannot escape subjectivity; however rudimentary or undeveloped our conceptual capacities are, they still function as presuppositions, for it is through our *a priori* concepts and knowledge that empirical objects are perceived and judged.

That objects conform to our (*a priori*) knowledge is perhaps more clearly evident in relation to action and things that are moving: perceptions are conjoined according to a concept. This involves space and time as forms of intuition. As discussed in Part One, time itself cannot be perceived (Kant, B219): time is not a *content* of thought but a *form*. Rödl articulates Kant’s insight: “I do not perceive that A is after B simply by first perceiving A and then perceiving B. A sequence of perceptions is not the perception of a

sequence” (2006, p.364). Rather, changes (of state) are united according to a concept, a general rule (general for the most part, that is, and not always the case). Kant talks of a ship moving downstream. “Kant explains that we would not perceive that things are simultaneous with, or succeed one another, if the representation of time did not underlie this perception” (Rödl, 2012, p.117). Rödl explains:

“Perceiving something happening, we perceive not only that a ship is first higher up and then lower down the stream; we see the ship “drifting down the stream”. What we perceive contains a state toward which the movement is progressing: the ship lower down the stream. This state is present in what we perceive, but not in such a way that the ship’s drifting down the stream entails that it will be lower down the stream. It may run into a sandbank. The state that is yet to come is present as the state that the ship will reach if what is happening here and now conforms to *what happens in general.*” (2012, p.184)

Rödl explains that perceptions of what is progressively happening depend on general or *a priori* concepts (the ‘rule’ that connects them), which say what happens in general. In other words, we use general knowledge to think that, being upstream at one time, the ship will be midstream later, and downstream after that, because we present these as serially - temporally and spatially - connected. And we can assert this by saying “the ship is drifting downstream”. General concepts “*explain* the temporal reality that exemplifies them” (Rödl, 2012, p.199) and “by which we recognize a substance as the same through changes of its states” (ibid, p.200). Rödl argues against empiricism: we do not arrive at concepts “by repeatedly perceiving this and that happening”; rather it is through concepts “that we perceive something happening” (ibid, p.201). This explication of the Copernican insight compares with characterisations of an inner mind making meaning from raw data and imposing it onto a structureless reality.

Like changes of time, changes of aspect are also united according to a ‘rule’ or concept. Stekeler also talks of a moving ship, one that appears to be moving upstream, but is actually moving downstream, but slower than an

observer walking in the same direction. We are only able to talk about this once we have acquired the relevant concepts that express such movement (involving our practical and spatial ability to change our own perspective relative to objects). The same Copernican idea is evident in actions too, which are understood and sometimes only make sense through reference to a concept or general knowledge (such as knowledge of a social practice). A helpful example comes from Michael Thompson, who quotes John Rawls:

“one can throw a ball, run, or swing a peculiarly shaped piece of wood. ...[But no] matter what a person did he could not be described as stealing a base or striking out or drawing a walk unless he could also be described as playing baseball, and for him to be doing this presupposes the rule-like practice which constitutes the game. The practice is prior to particular cases: unless there is the practice, the terms referring to actions specified by it lack sense.” (Rawls 1955, in Thompson, 2008, p.58)¹⁵⁶

It is necessary to have some knowledge of the practice in order to refer to particular actions; in this way general knowledge and *a priori* concepts are prior to particular determinations.

Kern utilises Rawls’s example to explain the constitutive nature of rational capacities, in that a capacity, like a practice, is logically prior to particular cases in which it is actualised (2012). The claim that the practice is prior to particular cases involves, she argues, three thoughts:

“first, the claim holds that certain concepts do not make any *sense* independently of a reference to the practice. From that it follows, second, that some actions can only exist as instances of a praxis, because it is only by reference to the practice that the concepts under which they fall obtain their content. And it follows, third, that there are certain concepts that can only *exist* if that very practice exists on which their meaning depends.” (ibid, p.235).

¹⁵⁶ Thompson uses this to argue that, like a practice, a ‘life-form’ (such as that of a human) is a teleological unity that provides a standard or measure of good and bad, etc.

This 'constitutive' character means that "acts which fall under a certain capacity cannot be explicated without reference to the capacity in question", and also that "a specific capacity cannot be explicated through acts prior to this capacity" (ibid). This is another way to express Kant's insight that objects (and actions) conform to our knowledge or, conversely, that general knowledge is prior to determining particular actions or objects. For as McDowell says, "[i]ntuiting does not do this carving out for one" (2009a, p.264). *A priori* concepts provide context-dependent understandings of particulars through something general.

In educational interpretations, *a priori* concepts tend to be understood as something innate, ahistorical and fixed for all time. See for instance Hamlyn (1970, p.253); also Hirst who criticises Kant's categories for being immune to change, "indeed a priori, in all rational thought in all times and places" (1974, p.93). Roth too interprets the insight that the category "exists" before perception and experience to mean that "[a]ny action, any word, any piece of art has been completed in imagination before it is expressed in the world" (2011a, p.5). The assumption being made is that if knowledge and concepts are required *a priori* then they must be innate and therefore fixed and unchanging – part of the 'Kantian' picture. But McDowell responds to such concerns:

"Kant surely would not suggest we master the forms of thought in advance of having any determinate empirical content to work with, and only subsequently derive content for empirical concepts from what is now, thanks to that supposedly prior mastery of the forms of thought, experience in the relevant sense." (2011, p.8)

For Kant, concepts are not innate but are learnt. Moreover, conceptual unity is *gradually* learnt, as children begin to learn what falls under a concept and what does not, what is entailed by the concept and what is not. Even early in life children continually refine concepts as they develop the competence to identify objects, predicate something of them and make judgements about things.

Discussing judging helps distinguish Kant from ‘Kantianism’ and says something about acquiring and developing concepts. Judging is central to Kant’s capacity view of knowledge, and involves normativity and objectivity, for judgements take place against a background of the norms and practices of our inherited culture. Importantly, judging not only applies to actively making a judgment or claim about something, but to ordinary dialogue and discussion. In referring to something, we take ourselves to be *correctly* referring to it - as in Stekeler’s example of a cat above. “She who judges” or asserts something, Rödl similarly argues, does so “with the concept of correct judgment” (2017, p.5). We take ourselves to be correct, but we may be wrong. Robert Brandom also writes on this:

“Kant’s most basic idea, the axis around which all his thought turns, is that what distinguishes exercises of judgment and intentional agency from the performances of merely natural creatures is that judgments and actions are subject to distinctive kinds of *normative* assessment. Judgments and actions are things we are in a distinctive sense *responsible* for. They are a kind of *commitment* we undertake.” (2010, p.2)

Again, judging is not only actively coming to a decision about something; in everyday conversation too we are subject to normative assessment as we refer to things. Our actions as well as assertions manifest our general knowledge, which is subject to normative assessment. To repeat Kern, “we are by no means saying that one can judge and believe whatever one wants. Quite the contrary... judging is “answering” or “taking a stance on” the question of truth” (2017, p.21). And judgements and beliefs are objective because “their truth is dependent on how things are in the world” (Kern, *ibid*, p.53). As argued in the previous chapters, this objectivity is missing in interpretations of Kant in educational theory. Conant also argues that Kant is concerned with the question “[w]hat does it take to have thoughts that are vulnerable to how things are?” (2017, p.83). Judging and referring to things is

taking responsibility for what one endorses, which is answerable to how things are in the (already humanised) world for correctness.

Consider Derry's example of a young child who calls a sheep 'a dog'. By living with the dog she has learnt that a four legged animal, something alive, friendly, etc. is captured by the concept 'dog', and this is presupposed when spotting a similar sized animal. But her concept of a dog is not yet refined enough to distinguish it from that of a sheep. We can put this by saying that this youngster is making a judgement; her *a priori* knowledge is manifested in pointing out a sheep, but because her conceptual capacities as discriminating powers are still rudimentary, her assertion 'that's a dog' will be judged incorrect. Through joint intuition and correct reference by others, she will come to distinguish more finely and judge more successfully what falls under a particular concept and what does not. She will similarly learn, for instance, that swans and geese do not fall under the concept duck, but share with ducks the categories of swimming, feeding, living by water, etc. and fall under 'things alive'. Duck is a general concept that is widely used, but some might go on to distinguish between mallards, mandarins and merguses. As children's conceptual capacities become more fine-grained, they learn to be better judges.

To further disentangle Kant from the 'Kantian' picture I repeat that Kant's Copernican insight that objects conform to our knowledge should not be understood as (a detached) mind imposing meaning onto reality, or constructing knowledge, for this loses objectivity. The child's representation of a dog, or sheep or duck, is judged against how things are in the world, for judgement is always made against a normative background, with the world as a prior embodiment of mindedness. Again, objectivity depends on *what is* being perceived, not only on *its being* perceived. It is this objective aspect of Kant's view that is, as Stekeler says, regularly overlooked, and compares with constructivist interpretations of children actively constructing their own meaning and knowledge. It also contrasts with mind-independent views of

knowledge that do not account for the spontaneity of mind or the normativity of judgements.

Attention to the '*what is*' brings us back to the general and particular, to the nature of knowledge and what it is to 'know' something. An understanding of the general or whole (the interconnectedness of knowledge) prior to properly understanding particulars is relevant to educational questions about learning, teaching and assessment, particularly in the current culture in which knowledge is too often treated as a commodity or simply as facts. As Catherine McCrory argues, "*what* words are meant to symbolise matters just as much, if not more, than the symbols themselves" (2015, p.46). In teaching history McCrory asks "[h]ow does knowledge of facts relate to understanding the import of those facts in answering history's 'what', 'how', and 'why' shaped questions?" - a problem manifested, "for example, when exam candidates deliver a narrow recitation of substantive information that is *related* to, but not *responsive* to what is actually asked?" (ibid, p.37). She gives an example of what she thought the students had learnt, because she had given them the relevant information (different factors that culminated in Hitler becoming Chancellor) but their essays on the relative importance of these factors showed they knew the facts but did not 'know' how to relate them to the question, they lacked the inferential connections. "They interacted with the facts as if sorting coloured buttons into jars, with no conception that information was not simply there to be shuffled for content classification but rather to be interrogated for influence, interconnectivity and importance" (p.41). Kant similarly talks of someone who has learnt and can repeat facts and proofs but he "knows and judges only what has been given him. If we dispute a definition, he does not know whence to obtain another. He has formed his mind on another's, and the imitative faculty is not itself productive" - he "is merely a plaster-cast of a living man" (B864). McCrory discusses different pedagogical approaches to encourage thinking and reasoning - what is implicated and follows from what - for a better general understanding of the topic (ibid). Kant's capacity approach centres on

judgement, entailing autonomous thinking, and not merely learning easily teachable/assessable facts.

To further distinguish Kant from 'Kantianism' I finish by again re-emphasising the *unity* of the general and particular, the intellect and sensibility. General knowledge and general (empirical) concepts are acquired and developed through being encountered in experience. Particular knowledge and thought is context-dependent, which relies on intuition. Rödl talks of 'situational thoughts', which are context dependent thoughts, and are distinguished from 'general thoughts', which do not relate directly to intuition. "2 + 2 = 4" and "Water freezes at zero degrees Celsius" are general sentences that do not directly relate to intuition, whereas "it is raining" is situational (2012, p.65). "We think situational thoughts by means of the time at which we think them", he writes, but "as a *thought*, however, it is not tied to this time in such a way that it could not be thought at a different time" (ibid). For instance, saying "It is nice today" can be reasserted the next day with "It was nice yesterday" (ibid). Children learn deictic and tense reference at a young age. The important point here is that for Kant *general* forms of thought (what happens in general) are developed through perceiving what is happening in *particular* instances - and what is happening in particular instances depends on *general* concepts and knowledge, held *a priori*. Rödl writes:

"if we appreciate Kant's critique, we see how knowledge of general laws can, as it must, be based on experience. For we now recognize that experience is always already fraught with (perhaps implicit and inarticulate) general knowledge." (2007, p.180)

Knowledge of the particular is only possible through knowledge of the general because "it is only through general knowledge that sense perception gives rise to knowledge of particulars" (Rödl, 2012, p.13).

This makes Kant's world-dependent view of knowledge quite distinct from constructivist interpretations, which tend to overplay the activity of mind and lose objectivity as the shared *what* of what we know; mind does not make and impose meaning, but *encounters* it in (particular) experience. Kant's view is also far from that of empiricist epistemology. Rödl argues against the latter: "*empirical knowledge always already contains general knowledge, which therefore is not inferred inductively from the former*" (ibid). That is, acquiring knowledge is not a causal process from object via the senses to (a separate) mind, even though acquiring knowledge *is* based on experience. Rödl explains, "when Kant says that we can acquire specific generic [general] knowledge only with the help of experience, he does not want to resurrect the empiricist epistemology", rather:

"Generic thoughts require experience because they contain concepts that would be empty did they not also figure in temporal thoughts representing something given in intuition. Thoughts of the form *This N is/was doing A* and thoughts of the form *Ns do A* need each other. Temporal thoughts confirm and refute generic thoughts, not in spite of the fact, but *because* any temporal thought always already contains generic thought." (2012, p.203)

General knowledge and *a priori* concepts are not something innate, but acquired and developed in on-going experience and education through life. Schooling is an important part of this, initiating children into already established forms of general knowledge, and its interconnectivity.

The richness that can be found in the distinctions that Kant makes has been obscured by dualist interpretations that reinforce the 'Kantian' picture. This chapter has drawn attention to unity – of the capacities, of the general and particular, of mind and world. Readings by contemporary Kant theorists also stress unity. To repeat: Rödl argues "we perceive the temporal only as we apprehend the general in it, and we apprehend the general only as we see it at work in the temporal" (ibid, p.207). Henrich argues that the unity of self-consciousness and the unity of the world are indissoluble (1994).

McDowell insists that “thought and the world must be understood together. The form of thought is already just as such the form of the world. It is a form that is subjective and objective together” (2009a, p.143). Stekeler too argues, “our social conceptual distinctions and our (joint) perceptual access to the object are ‘grown together’, and embedded in our practices” (2010a, p.15). There is no dualism in these readings of Kant, and mind is not separate or detached from lived life.

This chapter has continued to challenge the conventional ‘Kantian’ picture regularly referred to by educationalists. Rather than one of two selves, it was argued that Kant’s concept of noumenon functions as a limiting concept; and while the senses are limited to what is given in receptivity, mind can go beyond what is given, unconsciously drawing on the general knowledge we have previously acquired. Mind depends on what is given in experience to acquire and refine concepts, through encounters with particulars; once learnt, this general knowledge can be actively reflected on but is also passively exercised in ordinary perception, as we act and react to things in experience. Exercises of this capacity are subject to how things are in the already meaning world for their correctness, and it has been argued that this is not recognised in the standard ‘Kantian’ picture in education. The next chapter will discuss the embedded and ‘situated’ nature of Kant’s subject, who is at the same time a moral agent.

Chapter 9: Situated and Sensitive Agents

It has been argued that the predominant 'Kantian' picture in education has been shaped by deep-seated assumptions about mind and world from empiricist epistemology and it is this picture that draws criticisms of dualisms, intellectualism and a disembodied mind. These criticisms have been challenged by introducing alternative and unfamiliar understandings of Kant's terms, from contemporary readings in mainstream philosophy, to portray a very different picture of Kant; this picture shows mind as embodied and his subject of knowledge embedded and engaged in the here and now of lived life.

As explained in the introduction, the reason why this thesis focuses on Kant's epistemology is that his thinking in his first *Critique* informs his thinking on ethical and practical knowledge - his second and third *Critiques*. In educational theory Kant's ethics have also been subject to criticisms of dualisms and a detached mind (imposing rules or 'maxims', often without sensitivity to context). I hold that dualist understandings of his terms are again at play in portrayals of his moral theory in education, and that on the reading that has been expounded through these chapters, Kant's ethics, like his epistemology, can be understood in a different way. An adequate engagement with Kant's ethics however would not only require a thesis of its own but would first require a non-dualist understanding of his epistemology, for as Henrich argues, "the fundamental theorems of the first *Critique* remain unchanged and serve continuously as premises in all of Kant's subsequent work" (1992, p.6). This is to hold that Kant's moral agent is also his knowing subject, with the same rational capacity, so how Kant's epistemology is understood will affect readings of his ethics.

This chapter further challenges the 'Kantian' picture in education by illustrating that Kant's moral theory has also been subject to dualist interpretation that reflects the 'layer-cake' conception of mindedness. It aims

to develop the non-dualist reading being presented and in particular to elaborate the self-determined, that is autonomous, nature of Kant's conception of mind, as this is central to his view of both practical and theoretical knowledge. While not discussing Kant's ethics directly, this chapter draws attention to some non-dualist readings that show his moral philosophy can be seen in a different light. After exemplifying typical criticisms in educational theory, a particular characterisation of Kant's moral theory is considered in order to illustrate the dualist presuppositions at play and counter these by further elaborating the non-dualist reading being presented.

Criticisms of Kant in educational theory often come from theorists who are advocating an alternative approach. Referring to Kant's ethics, for instance, Nel Noddings and Michael Slote criticise "the liberal-Kantian emphasis on the autonomous individual, individual rights and universal principles", and that recent virtue ethics cast doubt on "the Kantian assumption that the highest morality and human excellence require a conscious and conscientious attention and obedience to universal moral principles" (2003, p.342). Kant's ethics can be seen as much closer to virtue ethics than typically portrayed, but this has been obscured by dualist interpretations. Noddings and Slote further criticise Kant as follows:

"communitarians would want to question the moral powers and potential of individual cognition and reason; they hold, contrary to Kant, that it is only in relation to community values, traditions, and good habits acquired in their context that we can become morally virtuous. Since communities obviously differ in their traditions and values, the communitarian typically holds, therefore, that there can be no universal enlightened morality grounded in an appeal to forms of reason or rationality that are the same for everyone everywhere." (ibid.)

This reinforces the 'Kantian' picture of an inner and 'individual' reason, which is seen to be the same for everyone everywhere. I argue that such characterisations fail to recognise Kant's moral agent, like his epistemological agent, as someone born into a particular community, who will learn its

particular norms, traditions and moral values largely through language; they will become moral agents as they develop their capacity for knowledge and judgement. 'Good habits' are developed from *within* their community, which is what communitarians hold. The personal judgement and human standpoint of Kant's subject is central to his rich account of what it is to be a self-conscious agent, whether the judgements made are moral or theoretical.

Peter Fitzsimons, who writes on moral education, similarly disapproves of Kant's unattainable realm of universal reason, and he reads this reason as actively imposing order on the world:

"Kant's moral reasoning had relied upon a structure of concepts and categories by means of which an active reason imposes order on the world. Kantian principles of practical reason were not natural objects capable of discovery, so much as the creation of individual reason and desire". (2007, p.561)

Again we see typical constructivist interpretation of an active and individual reason imposing order on the world. Fitzsimons further argues that Kant's ethics is:

"a self-contained 'system' that can't be explained by empirical means, with its 'truth' dependent on an individual and private evaluation, and its ultimate driver in an unknowable realm. And such inaccessible incomprehensibility begets both the notion of 'duty' and the 'categorical imperative' that governs all moral thought and action." (2007, p.564)

This dualist interpretation of an unknowable realm 'driving truth' and an individual and private mind evaluating it reflects the 'layer-cake' picture of mind and the reification of reason often encountered in constructivist characterisations¹⁵⁷.

¹⁵⁷ As noted in Part One, while mental concepts such as 'reason' and 'mind' can come apart in different ways, I have tended to use 'mind' as a shorthand for capturing such mental concepts as reason, consciousness, thought, etc. for ease of discussion.

John White similarly reinforces the dualist ‘Kantian’ picture when portraying ‘reason’ in Kant’s ethics as being divorced from emotions and “detached from desire” (2005, p.34). This compares with Kantian scholar Allen Wood, for example, who argues:

“The idea that Kantian ethics “divides the heart from the head” is based largely on a traditional misreading of about two pages early in the Groundwork (G4:397-399). This passage is usually totally misunderstood, and the misunderstanding conditions the grotesquely distorted image of Kant’s ethics most people (except those who have seriously studied Kant) carry around in their heads.” (2016)¹⁵⁸.

As mentioned previously, the main concern of educationalists is education in some form, and time constraints make engagement with major philosophers somewhat prohibitive. But the lack of philosophical undertaking has left the typical ‘Kantian’ picture of Kant in place, and this is what is being challenged here. Contemporary readings by mainstream philosophers present very different pictures; they show that Kant’s ethical agent, like his epistemological agent, can be read as always embedded in a particular context, with its particular set of conditions that cannot be separated from thought about what to do in that instance.

In order to continue to bring the unfamiliar Kant into clearer view, I look at David Carr’s characterisation. While many references to Kant are fleeting or cursory, David Carr engages a little more deeply, allowing for a proper discussion. Carr’s work is influential in ethics and character education, and for importantly drawing attention to the ethical dimensions of teaching and professionalism (2000; 2003; 2007; 2012; 2015). Over the years he has written on Kant as a comparison to his own well thought-out Aristotelian theory and, again, I comment not on this but on his interpretation of Kant. Carr has some strong criticisms of Kant, including Cartesianism and a

¹⁵⁸ Wood tells us that his own work “on Kant has been largely an attempt to provide a more accurate picture of what Kantian ethics really is, freeing it from many misunderstandings due to its 19th Century reception and its invidious depiction by consequentialist critics” (2016).

detached mind imposing maxims, and goes so far as to take Kant's view "to be a potentially dangerous line of thought about the moral upbringing, training and education of children" (2012, p.17). I argue that Carr reads Kant through the conceptual dualism identified in Part One, and thus reinforces the typical 'Kantian' picture widely held. Again this obscures much of the value of Kant's philosophy, which is much closer to Aristotle's than is normally supposed, and to what Carr is proposing in his own view.

As far as Kant's view of knowledge is concerned, "Kant's epistemology" Carr writes "is a necessary reference point for all subsequent philosophical attempts to understand knowledge and concept acquisition" (2003, p.105). However, he sees Kant negatively as the "key philosophical influence on cognitivist attempts to explain learning in terms of the active construction and imposition of principles or rules on experience" (ibid, p.90). Carr writes:

"Kant's epistemology maintained that if the subjective experiences of agents were to be sources of genuine knowledge, such knowledge claims would need to correspond to an objective reality lying beyond experience which he called the *noumenon* or thing-in-itself." (Carr, 2003, p.187)

Objective reality is read as 'thing in itself', and as lying beyond experience, something to which our knowledge claims need to correspond for genuine knowledge. As previously argued, for Kant our knowledge claims are not answerable to anything beyond experience but to experience itself. Carr also argues that

"it is because Kant fails to question the empiricist idea that all perception is of the *appearances* of things – their observable properties of size, shape, colour, odour, texture, and so on – that he feels compelled to say that something 'behind' appearance is needed to secure the complete objectivity of accurate perceptions." (ibid, p104)

To repeat what has already been emphasised, if we understand things themselves and the way they appear as the *same* objects (a distinction for

purposes of philosophical explanation), the picture changes. The compulsion that Carr attributes to Kant dissolves if we understand appearances not as something mental and cut off from the world we know, but rather as the very world we know, and appearances *themselves* as securing the objectivity of perception; there is not something 'behind' perceptions providing it. As Stekeler argues, Kant's distinction between "*mundus sensibilis and the mundus intelligibilis*" is "a conceptual distinction" and not "a claim that there is a hinterwelt of 'things in itself'" (2010d p.20). Observable properties of size, shape, colour, etc. are what we directly perceive from a first person standpoint through a sensory nexus with objects themselves.

Carr identifies the Cartesian problem as responsible for the instrumentalist culture in education. He writes, "it is the Cartesian idea of a person as an inner, private and dissociated psychological entity" that haunted the heirs of Descartes. Carr is right to identify this problem, but he wrongly believes this of Kant:

"Indeed, a particularly virulent form of Cartesianism seems deeply implicated in Kant's idea of the moral agent as a non-empirical subject of an other-worldly moral law... For Kant the real person is not the empirical self of familiar everyday association, but rather the metaphysical *noumenal* self of transcendent practical rationality." (2003, p.6)

To repeat what is now a familiar point: if we discard empiricist assumptions about an internal mind separate from an external world and think of an embodied mind (rationally) related with the world, then it is possible to read Kant's moral agent as 'the real person' of 'familiar everyday association', without any form of Cartesianism. Kant's argument is that a subject is not only an empirical subject but also a self-conscious one, and knows herself to be this not through experience (through the senses) but through spontaneity. Rödl writes about the concept of a 'thinking subject':

“Kant says the representation of a thinking subject cannot arise from experience, but only through self-consciousness. He does not mean that the representation of a thinking subject does not involve experience, but rather that experience alone is not the source of the representation of a thinking subject. When I abstract everything I know from spontaneity, I shall not find a thinking subject in anything given to me by the senses. So Kant not only says that a self-conscious subject can be known through self-consciousness; he says, a self-conscious subject can be known *only* in this way.” (2007, p.181)

Kant’s moral agent is a thinking subject, an intentional agent, who materially exists as a self-conscious thinking being. Stekeler says that “Kant wants to express the conceptual truism that we cannot ‘see’ forms of actions” or free will, spirit, mind or thought, because “their mode of existence is different” (2010d, p.20)¹⁵⁹. Kant’s real person is both empirically material and self-conscious.

Carr acknowledges that Kant’s *epistemology* is less radically constructivist, as it involves rational principle *and* sensory input; but I argue that Kant’s ethics should not be read as stand-alone texts, at odds with his epistemology, but located within it, as part of a systematic whole. This means that concepts used in ethical thinking and in deciding what to do, involve *empirical* concepts. According to Henrich:

“We certainly cannot claim that the world of objects and the world seen from the moral viewpoint are totally separate. For moral action has as its domain the very situations and circumstances we regard as part of the physical world.” (1992, p.4)

It is incorrect to sever Kant’s ethics, the forms through which we think ethically, from the forms of thought involved in ordinary empirical cognition.

¹⁵⁹ Stekeler writes: “In fact, it is just a sign of some lack of logical and philosophical education if empirical scientists [like Singer] ‘disprove’ the reality of any such ‘thing’ as free will or mind or ‘the I’ by the fact that they did not find them in the brain”, for their mode of existence is different (ibid).

For Carr, Kant's moral and practical philosophy is rationalistic, disembodied and instrumental, and Kant's moral judgements are "a matter of active imposition of meaning-constitutive rules and principles on the brute data of sensory perception" (2003, p.100). We again see the 'layer-cake' interpretation of our contact with the world; Kant's 'sensory perception' is read as empiricist 'brute data', with reason actively imposing meaning *on* this data. But if, as we should, conceive 'sensory perception' as *already conceptually informed*, then we can say that mind is immediately involved *in* perception, not going to work *on* it, in a two step process.

With a layer-cake interpretation, Carr has a reading of Kant "according to which the forms of the understanding are taken to be exogenous to the inner character of that which is given to us in sensibility" (Conant, 2016, p.88). And this perceived dualism leads Carr to argue of Kant's ethics:

"to the extent that moral judgements constitute a type of prescription that is utterly dissociated from the normal workaday motives, wants or inclinations of agents, they are entirely innocent of empirical content or any necessary connection with sensible experience. For Kant, then, morality requires to be understood in terms of the rational *imposition* of rules or principles or pure practical reason on the rough and tumble of human practical experience." (2003, p.94)

Carr reads Kant's moral judgements as "entirely innocent of empirical content" and with no "connection with sensible experience". This misrepresents Kant's moral judgements. Rather, a judgement, whether moral or empirical, is dependent on sensible experience for *content*, for a subject must have concrete (empirical) content of the context to be able to make judgements about what to do. Sensible experience is what provides her with understanding of her particular context, and her accrued knowledge of the world is exercised in her reflection about what to do and in the judgements she makes. A non-dualist understanding of the capacities (their indissoluble unity) and of sensibility (as involving rationality) shows that the rough and tumble of practical experience *is* the content of thought and judgements.

Furthermore, a subject's moral motives and inclinations will have been formed and developed precisely through the 'rough and tumble of human practical experience'. I argue that the attention Carr rightly draws to practical and contextual matters in thinking about moral education and the ethics of teaching are there in Kant's view, once it is understood through a non-dualist lens.

Carr further argues that an Aristotelian approach to knowledge and ethics, unlike a Kantian one, includes personal judgement, and a sensibility and insight to what is required in particular situations. Again I argue that Kant can be read in this way too. Kant draws on a 'cognitive' tradition from Aristotle that sees knowledge as a rational capacity, from a first person perspective. This capacity for personal judgement and knowledge at the heart of Kant's theory brings his view much closer to that of Carr's; obscured in educational portrayals, it is central to his rich account of what it is to be a situated and sensitive moral agent.

When it comes to the categorical imperative, Carr interprets this as something like an unconditional command, or obedience to law, which forms part of the typical 'Kantian' picture. He writes that for Kant,

"the unconditional good will that drives moral conduct has its source not in any natural human desires or feelings, but in a rationally detached ("noumenal") grasp of the ethically self-justifying principles of the categorical imperative". (2007, p.392)

The categorical imperative is understood as a set of principles to be imposed, from a 'good will' that is 'rationally detached'. I argue that again this reflects a presupposed dualism and the layer-cake conception of mind (that sees the top layer as doing all the work, unaffected by the bottom layer). And again I hold that for Kant, even the most abstract moral deliberations work with determinate content acquired through sense-experience. Elsewhere Carr writes of the categorical imperative as "a matter of the purely 'cognitive' or

intellectual inference of valid moral conclusions from true premises”, and a ‘disconnection’ between inner thought and outer reality (2003, p.82). Again we see ‘inner thought’ as a free-floating realm, disconnected with ‘outer reality’. But as argued, non-dualist understandings of the capacities shows thought to be connected with, not disconnected from, reality. Kant’s transcendental logic is a critique of what he calls ‘general logic’ precisely because he does *not* disregard sensory content or consider thoughts only in relation to other thoughts, but is concerned with the relation of mind *with objects* (B79-82; B352)¹⁶⁰.

While a discussion of Kant’s categorical imperative lies outside the scope of this chapter, it is pointed out that different interpretations are possible. James Scott Johnston takes issue with typical interpretations in education:

“the Categorical Imperative is not a simple rule deployed from on high to judge the rightness or wrongness of our moral acts. I believe it is this misreading of the Groundwork – Kant’s prefatory text to a metaphysics of morals – that is central to the ignorance, even contempt, of Kant in education scholarship. Kant wrote the Groundwork as a prologue to a fuller account of the metaphysics of morals, not as a stand-alone guide to constructing moral judgments. The view of moral judging as a detached, isolated, spectator making moral decisions in a supposed vacuum by calling on a commandment (the Categorical Imperative) is the single greatest reason for education passing over Kant.” (2013, pp.4-5)

This is similar to Wood’s (2016, above quoted) criticism of the ‘distorted picture’ of Kant that abounds. Johnston critiques ‘ossified’ readings, those that privilege:

“an autonomous rule-maker that brings all moral decisions to the final arbiter of the Categorical Imperative, with no accounting of the rich

¹⁶⁰ Kant’s transcendental idealism has been widely misinterpreted in education, for it is something quite distinct from the English word: Kant writes that “*transcendental* and *transcendent* are not interchangeable terms”, *transcendent* refers to principles “which profess to pass beyond” the limits of experience, whereas Kant is concerned with *immanent* principles which operate “entirely within the limits” of experience (B352).

contexts and situations in which our ethical lives unfold and operate. In fact, Kant emerges as sensitive to contexts in moral decision-making; he is concerned with humanity and peoples (not simply individuals) and is well aware that reason has its limits in matters of human conduct.” (2013, p.4)

Johnston portrays Kant’s moral philosophy in a very different light, as do mainstream philosophers such as Wood, Korsgaard, Velleman, Engstrom, Allison and O’Neil¹⁶¹.

Looking at Kant’s conception of mind as *autonomous* reveals both its practical aspects and returns us to its *unity* with the (humanised) world. Engstrom argues that “the one great impediment to understanding how knowledge can be practical is the assumption that reason, the cognitive capacity itself, is receptive in nature and hence passive in operation”, for this makes reason “determined from without, by conditions external to its own conscious activity” (2009, p.14)¹⁶². This, he continues, “is part and parcel of an exclusively empiricist conception of cognition, and so long as it is in place, it will seem natural, as it did to Hume, to say that “reason is perfectly inert,” that only something separate from it can ever move us to act” (ibid)¹⁶³. Engstrom explains that Kant does not depart from the Aristotelian conception of practical reason as a capacity for knowledge of the good. However, where Kant does differ is in reconceiving ‘the good’, which was previously seen as something *external* to reason, and apprehended *by* reason. Engstrom writes:

“Kant breaks sharply with the received view that reason’s function in the practical sphere is to guide us in action on the basis of its antecedent apprehension of a final end that has an independent footing in nature. Kant rejects this picture, claiming that practical reason’s most basic imperatives, those of morality, are categorical rather than hypothetical in

¹⁶¹ For an in-depth discussion of the categorical imperative, for instance, see Engstrom’s *The Form of Practical Knowledge* (2009).

¹⁶² As previously noted, ‘mind’ and ‘reason’ are mostly used interchangeably in this thesis for the purpose of ease of discussion, mind being the more general term.

¹⁶³ This refers back to the comparison with Hume’s conception of reason in Chapter Two.

form. Human reason must accordingly be conceived as autonomous, as the sole source of its principle of action.” (2009, p.ix)

Mind’s autonomous nature (its self-determining power) means that it alone is the source - the ‘causality’ - of our actions, in that we are not merely pushed around by external forces (determined from without), rather the power of thought *itself* can move us to action.

This relates to previous discussion concerning Kant’s distinction between ‘cause’ as heteronomous - one thing acting on another from outside (a mechanical cause, as in the laws of nature understood scientifically) - and as autonomous (self-determining). As Rödl says:

“[t]hought or action in the light of reasons has a cause in virtue of, and only in virtue of, its conceiving that cause as its cause. Thus thought and action resting on reasons are not determined by a cause outside them... to act in the light of reasons is to be autonomous”. (2016, p.85)

As autonomous beings, we are both subject to the mechanical laws of nature (such as how our physical body works) and also to the ‘causality’ of freedom, the power of thought to move us to act. The ‘will’ for Kant is the capacity for knowledge of the good, but as Engstrom argues, ‘the good’ (practical knowledge) here is not *independent* of our knowledge of it; rather the existence of ‘the good’ *is* our knowledge of it. The imperative to act morally is not a conscious “intellectual inference of valid moral conclusions from true premises (Carr, 2003, p.82), or an active reason imposing principles (Fitzsimons, 2007); rather *understanding* a particular situation can itself prompt our action. The recognition of what is to be done provides the requisite impulse. That is, the already humanised world makes certain normative demands on us, and it is *understanding* these (what to do) that prompts our actions¹⁶⁴. This shows Kant’s agent as situated and sensitive to (in touch with) her context.

¹⁶⁴ This was illustrated with McDowell’s example of a signpost earlier.

The unity of thought and reality, mind and world, has been emphasised - Kant's 'transformative' and not 'layer-cake' conception of our contact with the world. This is further illustrated by thinking about how knowledge can be practical. Practical knowledge, like general knowledge, is similarly exercised in a particular context, but there is a difference; the object (what to do) does not (yet) exist, but is brought into existence by our actions. That is to say, the object known *practically* (what to do) is not an already or independently existing object but is brought into existence through our activity. Engstrom talks of the "existential relation in which practical knowledge stands to what it knows" (2013, p.145). He maintains that

"the conceptual connection between the capacity to recognize a certain action to be something it would be good to do and the capacity to be moved by that recognition to do it (or perhaps to help another to do it) reflects the efficacy of practical knowledge, whereby it works to bring its object into existence or to maintain it in existence". (2009, p.14)

This relates to ideality and the already humanised world prompting normative responses. Engstrom's example, while already mentioned, is worth quoting again:

"Usefulness, for example, which is a type of goodness, exists through our knowledge of it. An artisan's tool has a specific mode of usefulness, a specific function, present in it as its essential form, and the technical-practical concept, or knowledge, of this form not only governs the tool's initial production but also maintains the form in existence through the care and the skill with which the artisan uses the tool and keeps it in good repair." (2009, p.13)

Knowledge of the *form* (concept of the tool, its categorial unity) *itself* governs action (production, care, skill). As with an artisan's tool, knowledge of, say, a knife will affect how we pick it up, the way we hold it and use it, which 'maintains the form in existence'. In a rational relation with objects, our knowledge of them is exercised in the way we respond to and use them. In a similar manner, general knowledge of, say, a seminar, library or a party will affect how we act in these contexts; the important point is that there is not a

separate act of reasoning, an imposition of rules, or inference to conclusions from premises before we act, rather our knowledge shapes our unreflective actions as we go.

Kern similarly argues that the 'causality' is not external on Kant's self-determining conception of mind as a capacity for knowledge; rather the capacity is the 'cause' of actions that manifest the capacity in question. She explains, "when Kant describes a teleological causal connection as a cause "whose efficacy is determined through concepts", what he has in mind, in this context, is a rational subject capable of intentional action" (ibid, p.242). This is the case whether the knowledge of a subject is theoretical, practical or ethical. What is significant here is that the "obligation derives from the dictate of the agents own mind" as Christine Korsgaard also describes it (1996, p.31).

This chapter has continued to challenge the typical 'Kantian' picture of Kant found in educational theory. It has emphasised the *autonomous* nature of mind, arguing that for Kant the power of thought alone can move us to act; the recognition of what is to be done provides the impulse to do it. Again stressed has been the *unity* of mind and (the meaningful) world, as thought and reality are connected through a 'rational' relation. From a first person standpoint, Kant's agent is situated within a set of already up and running conventions (including ethical ones), and her judgements and decisions will be formulated against the backdrop of such social norms. The final chapter turns to contrasting readings of Kant.

Chapter 10: Contrasting Readings of Kant

An argument has run through the chapters that some deeply held presuppositions about mind and world have shaped interpretations of Kant in education; these contribute to the widespread ‘Kantian’ picture that has drawn criticisms of dualisms and a ‘detached’ mind. It has been argued that such (dualist) educational interpretations obscure important aspects of Kant’s view, particularly its objectivity. A quite different reading has been developed by drawing on contemporary philosophers, which emphasises the unity of mind and world, and Kant’s subject as situated and sensitive to her context.

This final chapter is aimed at reinforcing the main thesis argument that Kant can be read as non-dualist if his terms are understood in a different way. Typical understandings of Kant’s terms continue to be contrasted with the different interpretation that has been developed in the thesis. The examples in this chapter are, however, not from educational theory but from mainstream philosophers; this is to draw attention to the difficulty of interpreting texts from a different tradition, and to expand on (and give authority to) alternative understandings that have been previously discussed. Again, attention is drawn to the *unity* in Kant’s philosophy.

We start with H.A. Prichard’s influential interpretation of Kant in 1909, for this stands as an early example of a dualist reading that exemplifies the empiricist assumptions about mind and world brought to interpreting Kant in Oxford at the start of the 20th century. In *Kant’s Theory of Knowledge*, Prichard criticises Kant intensely; his central argument is that on Kant’s view we cannot know things in themselves but only as they appear to us¹⁶⁵.

¹⁶⁵ Discussing Kant’s conception of space, Prichard says “Kant’s conclusion (and also, or course, his argument) presupposes the validity of the distinction between phenomena and things in themselves. If, then, this distinction should prove untenable in principle, Kant’s conclusion with regard to space must fail on general grounds” (1909, p.70). And he argues that it fails. But this is due to Prichard’s dualist presuppositions, which lead him to interpret things themselves as objective

Prichard writes of the “opposition between things as they are in themselves and things as they are as perceived” (1909, p.71): things in themselves is reworded as ‘things *as they are* in themselves’, distinct from ‘things *as they are* as perceived’, leading him to read a “distinction between two different realities” (1909, p.75). Again we see Kant’s *logical* distinction read as an ontological distinction; instead of two different ways of describing *one* object, the distinction is read as “two different realities”¹⁶⁶. Furthermore, in presupposing an appearance as “being necessarily something mental”, Prichard writes that it “cannot possibly be said to be extended”, and therefore “access to a non-mental reality is excluded” (1909, p.76). This is typical of constructivist interpretations in educational theory.

Similarly Prichard writes that Kant “by his distinction between the sensibility and the understanding, sets himself another problem ... [h]e has to determine what *a priori* judgements are related to the sensibility and to the understanding respectively” (ibid, p.34). And “For Kant, the conformity is not between something within and something without the mind, but between two realities within the mind” (ibid, p.15). That is, he reads a dualism of realities *within* the mind, within subjectivity. “If in perception we apprehended reality as it is, no difficulty would arise. But we do not” Prichard writes of Kant’s view (1909, p.77), and he concludes, “in the end the realities perceived are merely our perceptions” (ibid, p.139): ‘merely our’ perceptions implying a relativistic position. It is a small step to appropriations of Kant for subjectivist theories that portray mind as constructing realities and truth as well as meaning and knowledge. As has been argued, it is Kant’s view that in perception we apprehend reality as it is.

reality and phenomena as something mental – as encountered in educational interpretations.

¹⁶⁶ Prichard does acknowledge that Kant *begins* with “the distinction between things as they are in themselves and things as they appear to us” which relate “to one and the same reality regarded from two different points of view”, but he continues “[Kant] ends with the distinction between two different realities, thing-in-themselves, external to, in the sense of independent of, the mind, and phenomena or appearances within it” (p.75). It is the latter that Prichard assumes in his ongoing translation and criticisms of Kant’s *Critique*.

Another example illustrates the mind-independent assumptions about knowledge that Prichard brings to reading Kant. This is what he says of Kant's "impossible anti-thesis":

"To take Plato's example, suppose that we are looking at a straight stick, partially immersed in water. If we have not previously seen the stick, and are ignorant of the laws of refraction, we say that the stick is bent. If, however, we learn the effect of refraction, and observe the stick from several positions, we alter our assertion. We say that the stick is not really bent, but only looks or appears bent to us. But, if we reflect at all, we do not express our meaning by saying that the stick *is* bent to us as perceiving, though not in reality. The word 'is' essentially relates to what really is." (1909, p.72)

Using Plato's example of a stick partially immersed in water, so appearing bent, Prichard reduces to absurdity Kant's claim that we can know only appearances. This is because he misinterprets appearances as something, to use his words, "from the side of the perceiving subject as opposed to that of the object perceived" (ibid. p.73). However, the absurdity dissolves if, as we should, understand appearances as 'the object perceived', the very reality we know¹⁶⁷. "Correctness in judgements", McDowell argues, comes not from comparison with a mind-external reality, but "is a matter of their coming up to scratch by standards internal to the formed second nature that is practical *logos*" (1998b, p.193). As argued, in perception our general knowledge is (unconsciously) called into play: our knowledge of sticks (as straight and inflexible) and our knowledge of refraction (water can distort the appearance of things) means (if we know these things) we will judge that the stick is not really bent but looks that way in water.

The argument from illusion has been a concern for analytic theorists over many years and exemplifies the scepticism inherent in traditional empiricist

¹⁶⁷ As has been argued, the distinction between things themselves and appearance is a logical one for the purpose of philosophical discussion of the limits of the senses (as opposed to the freedom of the mind); they are different aspects of the same things and not two different realities.

epistemology. Kant's insights can be used to respond to both the sceptic and the argument from illusion¹⁶⁸. If, for example, we accept that in perception our general knowledge is exercised - as presuppositions through which we understand what we see. As McDowell argues, "we cannot suppose that intelligible order has completely emigrated from the world" (1998b, p.178), the "cognitive faculty needs to be in the picture not just to account for the unity with which certain content figures in an intuition, but also, in the guise of the productive imagination, to provide for part of the content itself" (2009a, p.262). As discussed, concepts extend further than sensible intuition (Friedman, 2002, p.34); and "a knowledgeable judgment enabled by an intuition has content that goes beyond the content of the intuition" (Rödl, 2009, p.266). To use Rödl's terms: "we perceive the temporal" (*this* stick looks bent in water) "only as we apprehend the general in it (sticks look bent in water) "and we apprehend the general" (sticks look bent in water) "only as we see it at work in the temporal" (2012, p.207). If however we have not learnt that water distorts the way things look, then we may well judge that the stick we see partially immersed in water is bent, until we learn otherwise. The confusion lies in mind-independent conceptions of knowledge. On Kant's view, to repeat Rödl: "Thoughts of the form *This N is/was doing A* and thoughts of the form *Ns do A* need each other. Temporal thoughts confirm and refute generic thoughts, not in spite of the fact, but *because* any temporal thought always already contains generic thought" (2012, p.203). This *unity* (of general and particular, thought and reality, mind and world) is missing in educational portrayals of Kant's view, as in Prichard's.

In Cambridge, it was Bertrand Russell and G.E. Moore who rejected Kant, for like Prichard they read Kant as holding that the objects of perception and knowledge are constituted by our mental activity. Again, interpreted through empiricist presuppositions Kant's view was taken to be a 'subjectivist' and relativist position. Fundamental to this rejection is the desire for mind-

¹⁶⁸ For a refutation of the argument from illusion see Rödl, 2007, pp.157-158; and for a Kantian response to the skeptic see Kern, 2014, pp.81-104.

independent knowledge; as Prichard argues, our desire is to know things “as they are, i.e. as they are independently of perception” (1909, p.77). It is this deep-seated desire that Rorty and McDowell are concerned to expel: the *possibility of mind-independent* perception and knowledge. But McDowell rightly recognises that unless the presuppositions that give rise to this very idea are not exposed or ‘exorcised’, they will continue to creep back into our thinking. However, the ingrained and implicit nature of empiricist presuppositions means it will take much philosophic work (and time) to dislodge them.

Rorty’s opposition to Kant and German idealism was noted in the Introduction, but such suspicion was not unusual. David Pacini was a student at Harvard University in the 1970s and he talks of the reception of German philosopher Dieter Henrich, who offered a course on the philosophy of Kant and his successors. Pacini writes:

“The analytic mindset of the [Harvard philosophy] department at that time harbored a skepticism, deriving in part from G.E. Moore and Bertrand Russell, toward the tradition Henrich was interpreting: their wariness deemed such thinking little more than a pastiche or metaphysical phantasmagoria”. (Pacini, 2003, p.x)

It was precisely this scepticism that Henrich had sought to address¹⁶⁹. Pacini continues:

“More focused opposition arose from those for whom even the mere hint of these topics caused more chill than Cambridge’s winters, and who were bemused that students would endure either of these elements merely to hear Henrich. So encumbered, Henrich’s hopes for dialogue were not substantially realized”. (Ibid.)

The students however were enthusiastic and, as Henrich worked mainly from memory, they made transcripts of his lectures. These were circulated and

¹⁶⁹ Henrich had wanted to convince skeptics “of the importance of conversation that might begin to bridge the divide between the so-called “Anglo-American” and “Continental” traditions of philosophy” (Pacini, 2003, p.x).

kept, and later put together for a book, *Between Kant and Hegel: Lectures on German Idealism* (2003) from which the above quotes are taken¹⁷⁰.

Peter Strawson's (1996) *Bounds of Sense: An essay on Kant's Critique of Pure Reason* was and continues to be an influential reading and critique of Kant. Strawson, like Rorty, while not an empiricist, understands Kant's terms through the typical assumptions about mind and world that make for a 'two-worlds' reading. Strawson acknowledges the power of Kant's philosophy and importance for contemporary philosophy. For instance, he rightly sees him as investigating consciousness and cognitive capacities in terms other than those of the natural sciences, and in this Strawson is sympathetic to Kant's inquiry:

"[Kant] knew very well that such an empirical inquiry was of a quite different kind from the investigation he proposed into the fundamental structure of ideas in terms of which alone we can make intelligible to ourselves the idea of experience of the world." (1966, p.2)

But Strawson goes on to reject much of Kant's philosophy, objecting mainly to what he refers to as Kant's transcendental subjectivism or idealism, "according to which the whole world of Nature is merely appearance" (ibid, p.6). Strawson writes:

"The doctrines of transcendental idealism, and the associated picture of the receiving and ordering apparatus of the mind producing Nature as we know it out of the unknowable reality of things as they are in themselves, are undoubtedly the chief obstacles to a sympathetic understanding of the *Critique*." (1966, p.6)

Strawson reads "things as they are in themselves" as the disenchanted reality we know¹⁷¹, and criticises the idea that mind can produce 'Nature' out

¹⁷⁰ Henrich's sustained effort to 'bridge the divide' has more recently (since McDowell and Brandom) resulted in theorists from both traditions working on joint projects, workshops, conferences, etc. There's now a flourishing literature in the analytic tradition on topics constitutive of the German tradition, such as subjectivity, self-consciousness and action, and the significance of these are increasingly being recognised by other analytic theorists.

of this. Again we see the ‘layer-cake’ interpretation with mind ‘receiving and ordering’ and ‘producing nature’. He also writes of “the forms imposed by our sensibility and our understanding” (ibid.). With such an influential reading it is not surprising that educationalists tend to portray Kant as a constructivist, with mind as actively ordering and imposing meaning. Interpreting mind as making Nature leads Strawson to argue that Kant is close to British empiricist Berkeley, whose subjectivist view doubts the existence of reality, which is not Kant’s view¹⁷².

Kant’s Copernican insight, that our *a priori* knowledge acts as presuppositions through which we experience the world, explains the difficulty in interpreting a text from a different tradition when the background philosophy can be so far apart. Kantian Robert Greenberg argues that “almost without exception” Anglophone commentators read Kant as being concerned with the conditions for possible experience, or the possibility of empirical knowledge; he contends, “this view of the *Critique* reflects a fundamental misunderstanding of the work” (2001, p.4). Greenberg explains that ‘two-world’ theorists:

“hold that Kant was ontologically committed to two distinct types of object – appearance and thing in itself – with no single type of object spanning the two types in some way – a way in which appearance and thing in itself can be considered as mere aspects of one and the same object.” (2008, p.xv)

We have seen many ‘two distinct realities’ readings in educational interpretations. Rüdiger Bubner also responds to dualist readings:

“Spontaneity is not some synthesizing or ordering power that stands opposed to an anonymous sphere of sense data, contingently impinging

¹⁷¹ Again, note the (re)wording: ‘things *as they are* in themselves’.

¹⁷² Kant’s careful distinction between his transcendental idealism about forms, and ‘material idealism’ about matter, has been emphasised in previous chapters. To repeat: “I have also, elsewhere, sometimes entitled it *formal* idealism, to distinguish it from *material* idealism, that is, from the usual type of idealism which doubts or denies the existence of outer things themselves” (B519, footnote).

on us from the outside and thereby providing the basis for all empirical knowledge.” (2002, p.209)

What McDowell is driving at in *Mind and World*, Bubner writes, is “the Kantian discovery of *spontaneity*, that specific achievement of subjectivity whose beginning and ground lies not outside but within itself” (ibid). And to repeat Engstrom, a proper understanding of the capacities not only “eliminates the appearance of dualism”, but also alleviates a concern about “an unacceptable subjectivism” (2006, p.2). These theorists all read Kant in a non-dualist way.

James Conant also comments on the Anglophone tendency towards dualist interpretation. “It is standard in Anglophone Kant commentary”, he argues, to speak “of a concept “imposing” a certain form of unity on a manifold”, and the choices of terminology (i.e., impose) “naturally encourage a certain picture of the relation between sensibility and understanding” (2016, p.88): a relation of opposition. Conant argues that this misconceives their relation, which is one of deep *unity*; one depends on its relation with the other to be the capacity it is (Conant, ibid, p.80). This unity has been emphasised through the chapters in order to challenge dualist interpretations. “Our *Erkenntnisvermoegen* is a unified capacity that is thus *in energeia* in each and every exercise of its ingredient capacities of perception, imagination, understanding, judgment, and reason” writes Conant (ibid, p.116).

Andrea Kern is similarly concerned to emphasise *unity*, and her response to Strawson’s reading helps further clarify the difference between interpretations. She argues that “receptivity and spontaneity do not characterize two distinct capacities, but are *two aspects of a single capacity*”, a capacity for knowledge (2006, p.157). Similarly she explains “the faculty of sensibility is not a different faculty from the understanding, but rather that sensibility and understanding are one faculty, which one can only pick apart for the purposes of analysis” (ibid, p.158). She explains the distinction:

“When Kant calls understanding and sensibility “faculties” or “capacities”, then he represents them as something general that *explains* the acts that actualize them. ... What these characterizations have in common is that they describe the relation of a capacity to its acts as one of *explanation*. ... The understanding explains acts of the understanding, sensibility explains acts of sensibility, etc.” (Kern, *ibid*, p.153)

Kern argues that Strawson “gets at the heart” of two-world readings, and quotes him:

“The doctrine of synthesis rests firmly on the distinction of faculties. What is given in sense alone, in mere receptivity, is one thing; what is made out of it by the understanding, the active faculty, ... is quite another”. (quoted in Kern, 2008, p.154).

Again we see the tendency to interpret two distinct capacities; cognition is seen as the result of *two steps* (the ‘layer-cake conception of cognition). Kern describes this:

“In the first step, an object actualizes the subject’s faculty of sensibility: the subject has a sensible representation, which does not yet belong to the unity of self-consciousness. In the second step, the subject produces a spontaneous representation by which it brings the given sensible representation inside the unity of self-consciousness.” (*ibid*)

This two-step layer-cake interpretation that is widespread in education has been challenged in this thesis, and it matters because conceptions of our contact with the world affects how we view cognition, the learning process, the nature of knowledge, all of which affect many areas of education. A non-dualist reading of Kant (and the contemporary literature around this) presents new ways of thinking about these, which are yet to be appreciated in educational thinking.

As argued, for a non-dualist understanding, we need to think of sensibility not as empiricist brute sense data but as conceptually structured, with the same kind of content, or “logical form”, as judgements. Kern quotes Kant:

“The same function which gives unity to the various representations *in a judgment* also gives unity to the mere synthesis of various representations *in an intuition*” (B105)¹⁷³. “If we take this passage seriously”, Kern argues, “then receptive and spontaneous representations are not to be distinguished according to the kind of faculty from which they spring”; she explains:

“Receptive representations involve an actualization of the understanding. It is not that sensible intuitions are distinguished from judgments in that the former have non-conceptual content ... Rather, sensible intuitions and judgments are distinguished in that, in the case of sensible intuitions, the conceptual content is the result of the object’s *acting on* the subject, whereas, in the case of judgments, the conceptual content is the result of the *self-activity* of the subject.” (Kern, 2008, p.155)

This contrast illustrates the passive nature of receptivity compared to the self-activity involved in judgements, reflection, etc. As argued, educational interpretations of Kant as a constructivist do not make this distinction; the self-activity of the subject is assumed even in perception and experience - ordering, organising and making sense of experience and imposing meaning. These portrayals of mind exaggerate the activity of mind, changing the conception of our contact with reality – losing objectivity and the idea that judgement is ‘answerable’ to how things are.

Onora O’Neill also comments on dualist interpretations. With reference to the noumenal and the phenomenal distinction she argues that Kant “offers sustained arguments to show that we are dealing with two standpoints, that neither can be reduced to the other, that each is indispensable, that they are not inconsistent” (2000, p.75). She comments:

“Much recent work has indeed been predicated on unvindicated idealizations, which undermine its applicability to human life. Kant’s approach may be read in another sense, in which the finitude of human beings, of human rationality and the connectedness among human beings, is stressed rather than denied.” (ibid, p.80)

¹⁷³ McDowell too often draws attention to this quote by Kant for its significance.

The above theorists all argue against dualist interpretations of Kant's (logical not ontological) distinctions that he makes for the purpose of more fine-grained explications of his view.

In presenting a non-dualist reading of Kant, the difficulty of setting aside familiar understandings of concepts and accepting unfamiliar ones has been a continual theme. For this McDowell has been invaluable, for as he insists, “[t]here must be a standing willingness to refashion concepts and conceptions if that is what reflection recommends” (1996, p.12,13). His *Mind and World* was to show how, if we think differently about these, the perennial dualism problem of knowledge in the analytic tradition is ‘dissolved’, and he uses Kant’s philosophy to show this. But McDowell too, being in the analytic tradition, was influenced by two-world readings, particularly that of Strawson. This influence led McDowell to write in *Mind and World* that Kant spoils his picture with his transcendental story, and that we should look instead to Hegel to correct this aspect of Kant’s framework (1966, p.40-45). This portrayal of Kant by McDowell prompted objections by theorists from the German tradition. For instance Günter Zoller wrote a paper entitled ‘Of Empty Thoughts and Blind Intuitions: Kant’s Answer to McDowell’, in order “to demonstrate the limitations of a selective appropriation of Kant and the philosophical potential of a more comprehensive and thorough consideration of his work” (2010, p.1)¹⁷⁴. McDowell responded to such objections by rereading Kant’s first *Critique* in “a collaborative enterprise that I am privileged to be engaged in with my colleagues James Conant and John Haugeland” (2009a, p.4). Since *Mind and World* there has been increasingly fruitful engagement between theorists from the analytic and German traditions, with regular workshops, joint conferences, and a growing literature around Kant’s philosophy, which McDowell has been involved with.

¹⁷⁴ Dieter Henrich referred to McDowell’s characterisation of Kant as ‘platitudinous’ (McDowell, 2009a, p.4). Also Sebastian Rödl wrote ‘Eliminating Externality’ in response to McDowell’s ‘Hegel’s Idealism as a Radicalization of Kant’, in *International Yearbook of German Idealism* 5, 2007.

Since rereading Kant, McDowell has moved closer to understandings of Kant in the German tradition; he acknowledges this in later work, writing that he “corrects the picture I gave, meaning it to be Kantian, in *Mind and World*”:

“There I took it that “object”, in the Kantian idea that intuitions are of objects, just mean “objective somewhat”, including, for instance, states or affairs. I now think it means something much closer to what “object” means in the standard translations of Frege.” (2009a, p.37, footnote)¹⁷⁵

We can now see, McDowell continues, that when Kant implies that thought without intuitions would be empty, he means they must have *content*, a subject matter. This is Kant’s transcendental requirement; McDowell explains:

“The transcendental requirement is that it must be intelligible that conceptual activity has a *subject matter*. And Kant’s thought is that this is intelligible only because we can see how the very idea of a conceptual repertoire provides for conceptual states or episodes in which a subject matter for conceptual activity is sensibly present, plainly in view in actualizations of capacities that belong to the repertoire”. (2009a, p.37)

Intuition provides content, a subject matter that can be thought or referred to. Stekeler writes, “[i]t seems to me also that in his recent papers and books McDowell adopts a ‘Kantian’ position as I have defended it for quite some time, namely that a proper understanding of the notion of *Intuition* is of highly systematic importance for understanding the possibility of reference and of world-related content not only of judgments about things present to us but all things in the real world at large” (2010c, p.2). As has been argued, an understanding of intuition and ‘*world-related content*’ is lacking in typical portrayals of Kant in education; an understanding of intuited *content*, and shared reference to it, shows objectivity is firmly in the picture, within a first person stance.

¹⁷⁵ In this paper McDowell is differentiating his reading of Kant from that of Sellars; he writes “I think a fully Kantian vision of intentionality is inaccessible to Sellars, because of a deep structural feature of his philosophical outlook” (2009a, p.34.)

While acknowledging his initial (partial) mischaracterisation of Kant, McDowell rightly points out a misleading translation problem, even within some 'one-world' readings. This is regarding interpretation of Kant's appearances and things in themselves, which we have so often come across. McDowell writes:

"I here correct the two-worlds picture of Kant that I presupposed in *Mind and World*. But note that what Kant insists on, in passages like Bxxvii, is an identity of things as they appear in our knowledge and "those same things as things in themselves"; not "those same things as they are in themselves"; (This latter wording pervades, e.g., Henry E. Allison's non-two-worlds reading, in *Kant's Transcendental Idealism*). Things in themselves are the very things that figure in our knowledge, but considered in abstraction from how they figure in our knowledge. That is not to say: considered as possessing, unknowably to us, other properties than those they appear as possessing in our knowledge of them. With this latter construal of things in themselves, the non-two-worlds reading might as well be a two-worlds reading. The picture still involves two realms of fact, one knowable by us and one unknowable by us; it does not undermine the damage this does to say that the same objects figure in both." (2009a, p.42 footnote)

Small differences in translation can result in significant differences in interpretation.

As noted, McDowell and Brandom are part of a growing number of analytic theorists who are engaging with German Idealist philosophy, Hegel as much as Kant. Paul Redding notes that "[a]fter a century of non-communication, the emerging dialogue between analytic philosophy and German idealism promises a rich future" (2010b, p.202). In the tradition in which empiricism has long prevailed, German Idealist thought can be increasingly found and Kant's philosophy more appreciated: as Brandom says, Kant's status for contemporary philosophers is "what the sea was for Swinburne: the great, gray mother of us all" (2013, p.107). However, as discussed, strong opposition comes from scientific naturalism and mind-independent empiricism that continues in the analytic tradition. Hanna

believes the lack of recognition of Kant's philosophy is a step backwards for analytic philosophy; he calls it the "*Copernican Devolution: a retrograde evolution in philosophy that brings us back, full-circle, to naïve, pre-Kantian, pre-critical conceptions of mind, knowledge, and world*" (2016a, p.2). He continues:

"The Copernican Devolution is, in fact, a disastrously regressive turn in philosophy. More specifically, contemporary Analytic metaphysicians really and truly need to learn Kant's eighteenth-century lessons ... [f]or without these insights, they have been, are, and forever will be inevitably led into the very same "obscurity and contradictions" that beset classical metaphysics prior to Kant." (ibid, p.2-3)

I emphasise again that Kant's Copernican insight, that objects conform to our knowledge of them, does not mean that we lose objectivity or the world as a standard of truth. Kant can be read as quite antithetical to the dualist Kant widely found in education. Stekeler points out:

"There are widespread misreadings of Kant's philosophy, especially in Anglophone traditions, that stem from prevalent empiricist prejudices on one side, some underestimations of Kant's terminological distinctions on the other. A third problem results from the time-bound and idiosyncratic ways in which Kant tried to articulate the things he wanted to say. But instead of complaining about possible misleading connotations and perhaps still vague metaphors in Kant's writings – such complaint is rather an attitude of beginners – we should always give his texts the best interpretation *de re* possible." (2010b, p.5)

A *de re* interpretation, as opposed to a more literal *de dicto* interpretation, means different ways of articulating his arguments using, Stekeler says, not only reliable translations from German into English, but from Kant's language into our own. While the theorists I draw on use different terminology, they all present Kant in a non-dualist and positive light, quite distinct from the conventional picture of Kant that is widespread in education. I have drawn on them to give philosophical authority to the reading presented in this thesis.

Concluding Comments

Drawing on contemporary literature and Kantian exegesis in mainstream philosophy of mind and epistemology this thesis has attempted to challenge the conventional picture of Kant in education. It has argued that some deep-seated presuppositions from empiricist epistemology - about the relation between mind and world - have influenced dualist interpretations of Kant's terms, with his Copernican insight widely taken to be a constructivist or 'impositionist' position. His view has drawn many criticisms of dualisms and a conception of mind as 'detached' from real life, and also been appropriated to defend some radical constructivist and relativist theories of knowledge. A quite different and non-dualist reading of Kant's epistemology has been introduced insofar as showing his conception of mind - as a capacity for knowledge - can be read as embodied and connected with the world, and his subject situated in and sensitive to context.

Kant has been a major force in shaping modern philosophy, and his influence remains unrivalled. As Zoller writes, "Kant did original work in all of philosophy's main disciplines, from metaphysics and epistemology through philosophy of science, philosophy of history and aesthetics to ethics, philosophy of law and political philosophy", all united in one systematic view, that continues to inspire philosophical work today (2010, p.66). But it is his epistemology, his first *Critique* - where he grapples with, reflects on and thinks through the then dominant approaches to explaining knowledge - in which he forms his ideas that inform his subsequent works (Henrich 1992; Engstrom 2009). The Copernican thinking he arrives at, so different at the time, is what I see as so exciting to educational thought today. For understood non-dualistically it offers an alternative way to think about mind and cognition, and the nature of knowledge (responding to the 'paradigm wars'), and the flourishing literature on this by contemporary philosophers is also rich with educational implications.

But introducing an unconventional reading of Kant to education is an ambitious project. Perhaps more so for focusing on the core of his epistemology (the relation between mind and world, thought and objects), which entails renewed interpretation of his central terms, for this gives rise to an entirely different picture of his view rather than a small part of it. However I hold that it is his Copernican way of thinking about our contact with the world (developed by his idealist successors) that is central to the renewed engagement with Kant by analytic philosophers, and to the growing work in this area. This is the direction of current thinking in contemporary philosophy; the ideas are profound and stimulating, and this thesis attempts to express some of these ideas by introducing into education a renewed (partial) picture of Kant drawn from this thinking. The attempt may be ambitious, and one thesis on its own will not suffice, much more work is needed, but I see this as no reason to not attempt. It is why I rely quite heavily on quotes, to give an authority to the arguments that they not be seen idiosyncratic.

Offering such an unfamiliar reading of Kant is of course fraught with difficulties, for (as discussed) the terms used will naturally be interpreted through existing preconceptions and presuppositions. This was the major problem faced when starting the thesis. How to consider and discuss Kant's capacity view of knowledge with its Copernican insight when it is widely understood in a different way, and when the very language and concepts you use would be read in a way you did not intend? This equally applies to potential educational research on, say, Rödl's work on self-consciousness, or Kern's on a rational capacity, or Stekeler's on intuition, or Engstrom's on the Categorical Imperative, all directly relevant to education but which call for a certain level of familiarity with the terms they use for discussion to be fruitful. It became increasingly clear that any productive engagement with Kant's insights in educational theory would first require bringing into view different interpretations of his terms.

This thesis has thus been directed at just this, interpretation of Kant's terms - enough to show the *possibility* of a more valuable picture of Kant's conceptions of mind and knowledge. The focus of the thesis was dictated by persistent references to 'dualist philosophy', 'instrumentalist rationality' and a 'disembedded mind'. Narrowing the focus to those aspects of Kant's epistemology that showed his conception of mind as connected with the world, and thus non-dualist, allowed a thesis argument to challenge the conventional picture and also to articulate where the differences in interpretations lie - in conceptions of mind and world and their relation. This meant metaphysical investigation in some detail; only at this level could layers of presuppositions be made explicit, and conceptions in constructivist and mind-independent epistemology (that I see as influencing conventional interpretations) be identified and differentiated from conceptions that show Kant's view in a different light. While seemingly far from educational concerns, such conceptions underlie different theories of knowledge, and thus how we think about concepts, learning, research, the curriculum, pedagogy, etc¹⁷⁶. But even a somewhat narrow focus on Kant's conception of mind as connected with reality depends on understanding other aspects of his view (for one can only be explained in light of another), resulting in a wide range of areas discussed. Many of these deserve more attention and perhaps a thesis of their own (subjectivity, self-consciousness, autonomy, objectivity), but discussing any one in isolation would be inadequate (if indeed possible), for their meaning derives from understanding the others. As Rödl says, in this tradition "self-consciousness, freedom and reason are one" (2007, p.105). Again, different understandings of what these concepts capture would be necessary for research into any one, bringing us back to interpretative issues.

¹⁷⁶ Again, metaphysical exploration at this conceptual level is quite far from empiricism and constructivism at the level of practice in education. Discussion of practical implications for education would require more space than is possible, for while in some ways a non-dualist reading of Kant will not make a difference to the many good practices currently found in education, in other ways his non-dualist framework provides an entirely fresh way to rethink and re-examine many familiar educational concepts and concerns.

It has been argued that the relation between mind and world underlies different interpretations of Kant, and that presuppositions inherent in traditional empiricist epistemology need to be set aside in order to understand the relation in a different way. It is these deep-seated assumptions about mind and world that are likely to affect the reception of this thesis in education where they are widespread, and is why McDowell's work has been important to it. For while McDowell argues that the perennial dualism 'anxiety' in the analytic tradition is an illusion, he also writes that "[i]t matters that the illusion is capable of gripping us" (1996, p.xi), and is why much attention is given to 'loosening this grip' throughout the thesis. That is, I agree with McDowell that unless the presuppositions that give rise to a conceptual dualism are not exposed or 'exorcised', they will continue to creep back into our thinking. Kant's critical work exposes the source of the 'anxiety' and shows how to 'see our way clear' of it with his Copernican lesson. He draws attention to the self-conscious nature of thought and its relation with the world (the inescapability of subjectivity)¹⁷⁷. However as argued, it will take much philosophic work and time to dislodge these ingrained assumptions; I repeat Bakhurst's pessimism about changing the assumptions of a 'disenchanted' world:

"The fact is, however, that so deeply entrenched is the assumption, not just in theoretical but in everyday discourse, that diagnosing the philosophical misconceptions that encourage it does not suffice, as McDowell hopes, to 'restore us to a conception of thinking as the exercise of powers possessed, not mysteriously by some part of a thinking being ... but unmysteriously by a thinking being itself, an animal that lives its life in cognitive and practical relations to the world'." (1991, p.158)

¹⁷⁷ As Rödl explains, we can know *what* we perceive from the object of perception (from intuition), but know *that* we perceive it from self-consciousness (spontaneity); thought is both self-conscious and objective (2007, 2012, 2018).

Similarly, the attempt to introduce an unconventional reading of Kant to educational theory - which involves changing deeply entrenched assumptions - is challenging.

I realise that this thesis, as one thesis, is unable to make progress, and much more work is needed in many areas, particularly on the *unity* of the capacities. Also on subjectivity (a capacity for knowledge) and self-consciousness, to bring out the objective aspects of these that tend to be obscured. Under a different light many areas of education can be reconsidered, there are many possibilities, and research into any of these would contribute to educational thought in an exciting as well as important way.

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