Materialising theory: does theory matter?

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‘Matter and meaning are not separate elements. They are inextricably fused together, and no event, no matter how energetic, can tear them asunder… Mattering is simultaneously a matter of substance and significance.’ (Barad 2007: 3)

Introduction
Over many years I have been unhappy about the discourse of theory and practice which seems to frame so much educational discourse and public discourse more generally. It has been deployed to many effects, most notably in the division of labour between universities and other educational institutions. It is a point of critique of educational research that it is over-theorised and full of jargon – technical language in other areas – and fails to engage with, inform or make a difference to educational practice. This is despite contrary evidence that much educational research is naively empiricist and interpretativist – if I am allowed to use such theoretically informed concepts – and thus quite close to the practices about which it writes or speaks.

And here we come to the nub of the discussion I want to pursue in this paper. For the discourse that privileges practice at the expense of theory is one that I will argue is tied into representationalist epistemologies, in which the word and the thing are clearly differentiated, a gap to be filled, with all the problems and philosophical traditions associated with that approach. In other words, what I want to suggest is that the edifice of epistemology and the questions of how well the world has been represented in theory both assumes and produces the very gap that it takes to be problematic.

By contrast, drawing upon the work emerging from Foucault but taken forward by writers such as Butler, Harraway, Hacking and Barad and the eclectic trajectories of actor-network theory, I want to argue for an alternative performative ontological position, which undermines and repositions the notions of theory and practice as material and materialising practices. I will suggest that this ontology needs to be contrasted with social constructivism, which has become very influential in educational research. It will be argued that social constructivism continues to maintain a distinction between the world and word and remains tied into a representationalist epistemology. Whereas within scientific realism representations are of the physical world, within social constructivism they tend to be reflections of culture and power (Barad 2007). The position put forward here challenges much existing educational research therefore and suggests that the theory question is not only about which
theories we mobilise and vice versa, but also which approach to theory mobilises us and vice versa. In the process of articulating this performative or interventionalist notion of theory based upon a materialist ontology, I will also provide a justification for why we might consider educational theory as laboratory work.

This might appear to be entailing a simple flipping of a binary between epistemology and ontology, but this would be mistaken. In representationalist views of epistemology there are always already implicit ontologies. Similarly, in performative ontologies there are always already implicit epistemologies. Thus it might be more accurate to say, following Barad (2007), that the position I wish to put forward is an ethico-onto-epistem-ological one. I am not therefore arguing that we should simply reject representationalist enactments. What we should do is examine how they come to be and the work they do and the dividing practices they promote in materialising particular worlds. It is not that representationalist enactments do not matter. It is the forms of mattering they perform which are of interest.

Thomas’ (2007) recent work has alerted us to the many meanings of theory in education, derived in particular from Greek philosophy. However, the notion that theory is separate from the realm of practice is a persistent one in professional domains such as education and often results in naïve empiricism and routinised behaviours, despite and sometimes because of attempts to develop more reflective, action research, evidence-informed, phronetic orientations to practice. In this paper I draw selectively from writings on materiality in a number of domains e.g. poststructuralism, anthropology and actor-network theory, to suggest that we can usefully reframe theory as a material and materialising practice. In layperson’s terms, the paper will expand on the old adage that there is nothing as practical as a good theory. Inevitably it is not as simple as this for, as will become clear, it is all theories that are practical in the sense of matter-ing, regardless of their value.

The boxing match of theory and practice
Across the educational landscape the discourses of theory and practice vie with each other. However, it is usually not so much a question of theory and practice, but of theory or practice with each being positioned as othering the other. Within this framing the conjoining associated with the ‘and’ is, in many senses a misnomer. The ‘and’ is an ‘or’ in ‘ands’ clothing. Theory is positioned as somehow concerned with the ethereal, the abstract, the decontextualised, and the general and, more specifically, theory exists solely in the realm of ideas. Practice is concrete, it is about what we do, and it is material. This dialogue is also reproduced in some of the discourses of research and practice, where research is located in the academy and practice is what goes on ‘out there’. Theory and research are therefore positioned in opposition to or isolation from the ‘real world’ of practice. Matter and meaning are separated from each other. Here theory is often positioned as getting in the way of getting on with things in the world of practice. One partial result of this has been the undermining of the notion of expertise and authority in educational research and the absurd notion that practitioner research somehow has an authentic value when contrasted to the more sophisticated theoretical explorations of certain expert researchers. In the world of education research, unlike that of surgery, it sometimes seems like the work of the novice is more prized than that of the expert.
Thus, in his well argued book, Thomas (2007: 3) can make the claim that theory ‘closes one’s eyes, or – perhaps less than this – in some way occludes one’s view of the environment around… educational theory has nearly always led educational practice into wild goose chases and cul-de-sacs’. I am sure this is the case in relation to some theories, but it is a question of whether the theory is a good theory or not and not simply that it is a theory. Thomas quotes Carr’s (2006) trenchant argument that the enterprise of educational theory should be brought to an end. It is also noticeable from the quotation above that Thomas is working within a representationalist practice of theory which is enacted through a range of oculist metaphors; vision is the root to knowledge.

So much of such positions depend upon what is assumed. Thomas sees theory as a force for conservatism in education, a prison for thinking, arguing instead for greater creativity and ad hocery. Thus theory is argued to discourage diversity in thought – ‘education has come to be in thrall to theory’ (Thomas 2007: 30). While there are aspects of Thomas’ argument that are well made, in particular, that a diverse range of cognitive dispositions are often bunched together uncritically into something that is then called theory, there is a sense in which he himself has over-generalised his critique in order to make his argument. We might want to argue that good theory is precisely about creativity and experimentation. We might also argue that Thomas is collapsing theory into doctrine and that, while there are theories which can be deployed doctrinally by the upholders of the faith, not all theories are doctrinal.

The above observations do not do justice to the detail of Thomas’ argument, but his is a position which is symptomatic of what I see a certain anti-intellectual tendency in education based upon a representationalist view of the world. There is a tension here in the overall thrust of his argument and its detailed form. Drawing on classical Greek philosophy, he himself points to the multiple forms of thinking that might be positioned as theory – although of course theories had a particular meaning in ancient Greece. Yet he himself has lumped together the many forms and examples of theory to condemn theory itself to the rubbish bin of history.

And perhaps it is the reliance on the Greek philosophical heritage that is itself a problem here for it is often used – implicitly as well as explicitly - to frame our discourses about issues. Perhaps, to borrow Thomas’ argument, these particular framings are themselves a limit on how we enact things. Here though there are also openings (Stronach and MacLure 1997), the most significant of which in recent times has been the uptake of the Aristotelian notion of phronesis or practical knowing.

We can readily see how the discourses of theory and practice can result in a seesaw or tug of war (depending upon your rhetorical preferences). If theory is the problem, then practice becomes the answer and practical knowing should be given greater value. With that comes the valuing of practitioners’ knowing, which could be considered a non-necessary extension of the argument. We might value research practitioners’ knowing in and about research, but why should we uncritically value teacher practitioners’ knowing in about research. I would prefer to engage with their practical knowing about teaching.

This brings me to the point where I want to shift gear in this discussion and begin to locate the issues into wider debates with the sciences – natural and social. What I
want to suggest is that the type of debates that have been going on in education arise from positioning theory and practice within an epistemological binary of matter and meaning. I will outline this argument in the next section. I will then go on to suggest that theory and practice need to be re-positioned within a certain performative materialist ethico-epistemo-onto-logy within which theory can be seen as both mattering and materialising. In other words, we need to radically change the terms of the debate. Inscribing this argument here and now is a practising of theorising which I do not see as ad hoc – I have drafted this text a number of times – but I believe has certain creative and experimental potential.

Representing theory

Representationalism takes the notion of separation as foundational. It separates the world into the ontologically disjunct domains of words and things, leaving itself with the dilemma of their linkage such that knowledge is possible… representationalism is a prisoner of the problematic metaphysics it postulates. (Barad 2007: 137)

What I want to suggest is that much of the current discussions of theory and practice in education are entangled and enacted within a particular representationalist epistemology. I am using the notions of entanglement and enactment (Mol 2002) to try and maintain the dynamism that emerged from Foucault’s argument that power is both productive and constraining and that things do not happen without some constraints. This has been taken up and developed by diverse groups of researchers in multiple subject areas. I am particularly interested in how the argument has developed within what loosely is referred to as actor-network theory (Law 2004, Latour 2005, Fenwick and Edwards 2010, forthcoming) and parts of anthropology (Henare et al. 2007) and feminist writings (Barad 2007).

Simplifying a lot, what I am suggesting is that the emphasis on epistemology in our practices, and on a particular epistemological framing, transcends the differences between realists and social constructivists. It results from and in the dividing of matter from meaning and further divides the material into, for instance, the social, the natural, the technological, the cultural and the economic. These distinctions are then taken to be foundational and a priori. For Barad (2-7: 53) ‘representationalism is a practice of bracketing out the significance of practices, that is, representationalism marks a failure to take account of the practices through which representations are produced’. Barad is drawing upon the distinction between intervening/experimenting and representing/theorising made by Ian Hacking, but takes it in a certain direction. Here

To theorise is not to leave the material world behind and enter the domain of pure ideas where the lofty space of the mind makes objective reflection possible. Theorising, like experimenting, is a material practice… both theorists and experimentalists engage in the intertwined practices of theorising and experimenting... experimenting and theorising are dynamic practices that play a constitutive role in the production of objects and subjects and matter and meaning. (Barad 2007: 55-6, emphasis in original)

Barad is drawing upon quantum physics and feminist philosophy to make her point. Similar positions have also been developed in the discussion of material culture in anthropology. For instance

Discourse can have effects not because it ‘over-determines reality’, but because no ontological distinction between ‘discourse’ and ‘reality’ pertains in the first
place. In other words, concepts can bring about things because concepts and things are just one and the same. (Henare et al. 2007: 13)

Here ‘things’ should not be confused with a concept of ‘objects’ with properties. The latter is seen as very much tied to a representationalist epistemology. Here the world is made up of objects ‘out-there’ that we try to know ‘in-here’. These are the ‘matters of fact’ of which Latour (2004) is critical. By contrast, things are gathered and negotiated as ‘matters of concern’. Taking up this distinction we might therefore reframe Barad’s position in the quotation above as ‘the production of things and matter and meaning’. Here theory is a material practice insofar as it is co-constitutive of the things gathered, where theory and the thing are intra-related, that is, they do not exist in isolation from each other.

Theory matters
There is of course a play on words, both in the title of the paper and the title of this section. There is the notion that theory is important, but also that it can itself be repositioned as material and materialising. There are also matters that need to be discussed in and about theory. A search of the Oxford English Dictionary identifies, among others, uses of matter as ‘a thing, affair, concern’, ‘physical matter or substance’, ‘that which constitutes or forms the basis of thought, speech, or action’. Matter is therefore very versatile.

Matter is produced and productive, generated and generative. Matter is agentive, not a fixed essence or property of things. Mattering is differentiating, and which differences come to matter, matter in the iterative production of different differences. (Barad 2007: 147)

It also encompasses both the material, and that which is of concern. In exploring the question therefore ‘does theory matter?’ I am therefore asking both is it something we should be concerned with and also exploring the different material realisations made possible by theory in general and specific theories. This includes the realisation of things as objects with properties.

So, where does this leave us? Crudely, we might say that, within a Newtonian view of the world, theory acts to produce matters of fact through the representation of objects with properties. By contrast, in a quantum view of the world, theory gathers matters of concern through experimentation within the material. Here matters of fact might be considered a particular form of gathering, a particular matter-ing, as the practices through which they are gathered and assembled become part of the topography to be explored. Thus once again I am not using matters of fact and concern as a binary. Matters of fact might be said to be a particular way of enacting concern. Here, as Latour (2004: 232, emphasis in original) argues

Matters of fact are not all that is given in experience. Matters of fact are only very partial and, I would argue, very polemical, very political renderings of matters of concern and only a subset of what could be called states of affairs. Those matters of fact are based upon drawing distinctions and objectifying the other, while matters of concern might be thought of as entailing entangling with the other through, what Barad (2007), drawing on the work of Bohr and Foucault, particular apparatuses. Here the material is dependent upon the apparatus through which it is enacted, as for instance, in the way the matter can be both a particle and a wave.

Practices of knowing are specific material engagements that participate in (re)configuring the world. Which practices we enact matter – in both senses of the word. Making knowledge is not simply about making facts but about making
worlds, or rather it is about making specific worldly configurations – not in the
sense of making them ex nihilo, or out of language, beliefs, or ideas, but in the
sense of materially engaging as part of the world in giving it specific material
form. (Barad 2007: 91, emphasis in original)

In such an approach, we might follow Latour (2000: 115) in provocatively redefining
objectivity as that which ‘allows one entity to object to what is said about it’.
However, we might also see objectivity as the outcomes of the work done to purify
and naturalise matters of concern – the ga things - into matters of fact – objects with
properties.

Latour wants to make clear that matters of fact are the same thing as matters of
concern. Admittedly Latour is using this distinction between matters of fact and
concern for different purposes to that here, as he is exploring the role of the critic:

The critic is not the one who debunks but the one who assembles. The critic is
not the one who lifts the rugs from under the feet of naïve believers, but the one
who offers the participants arenas in which to gather. (Latour 2004: 246)

However, there is also something suggestive here for how we might reconceive or
multiply the role, purpose and practices of theory as enactments of gathering.

How then might we conceive these practices of gathering? Here, once again, I return
to Barad (2007). If theory is a practice of experimentation and intervention in the
matter-ing of the real, part of the material and not simply a representation of it, then
we, like Barad and others, might consider the material apparatuses of theory. This is
unfamiliar territory and there is always the possibility of recoupment back into
representationalist assumptions and theory as abstract ideas, particularly given the
abstract nature of this discourse. Where might this quantum leap take us?

The apparatus of theory

The enactment of theory as matter-ing, as experimentation and intervention, does not
necessarily sit comfortably with the hegemonic discourse we face in much
educational and other research. To dwell in the world where ‘theoretical concepts
are not ideational in character; they are specific physical arrangements’ (Barad 2007:
109, emphasis in original) seems counter-intuitive, already experimental. Yet it is
important in reconfiguring our entanglements of the world. It is also one reason for
reclaiming the notion of the laboratory for educational research and theory. A
laboratory is a space for experimentation and intervention.

The matter-ing of theory relies on specific apparatuses, specific entanglements and
experiments. The apparatuses are integral to the materialising of worlds. They ‘are
not mere observing instruments but boundary-drawing practices – specific material
(re)configurings of the world – which come to matter’ (Barad 2007: 140, emphasis in
original). Here Barad is drawing upon and attempting to extend the performative
epistemology of Judith Butler (1993). It is through the specific forms of boundary
making that the enactments of theory as apparatus materialise the world. ‘Apparatuses
are the practices of mattering through which intelligibility and materiality are
constituted (along with an excluded realm that doesn’t matter’ (Barad 2007: 170).
Things are gathered through the practices with which they co-emerge a view also
enacted in the work of Bowker and Star (1999). This form of work is a way of
dwelling materially in the world and not simply another way of representing views of
the world. Differences are not simply about matters of opinion and truth, but about ways of being.

Here also, the ontological status of things are not as observation independent objects, but what Barad (2007) refers to as a phenomenon, where the apparatus is part and productive of the phenomenon. This enacts the referent of objective knowledge as a phenomenon. If matter can be both wave and particle dependent upon the experimental apparatus, then the apparatus is integral to the particular form of materialising enacted. ‘Reality is composed not of things-in-themselves, or of things-behind-phenomena, but of things-as-phenomena’ (Barad 2007: 205). Thus in our accounts of research the importance it becomes important to give detail of our methods and theory, not to establish validity and to be able to trace the matter-ing that has taken place in the enactment of things-as-phenomena. Our accounts are of the world and not simply about it. To write about is to represent and engage in a particular form of boundary marking – between the world and the word.

Does this matter?
This paper is a matter-ing. It is an intervention, an experiment and maybe a disruption. It is itself an apparatus based upon a set of boundary markings and a phenomenon. A particular theoretical apparatus has been used to intervene in the discussion of theory and practice in education. I have gathered words on a page for this matter of concern.

So to return to the question that I began with; does theory matter? I have wandered through parts of quantum physics, science and technology studies, and anthropology to enact an answer to the question, one that poses further questions of course. And my answer is ‘yes’. Theory does matter, but not necessarily in the ways one might expect, nor for obvious reasons. ‘Instead of the observer’s eyes, the practitioner’s hands become the focus point of theorising’ (Mol 2002: 152).

It might be asked what the educational significance of this approach is, given I have drawn little from educational research, nor addressed specifically educational questions. One obvious one is that we need to consider the different apparatuses through which education and specific educational practices become phenomenon that matter. If we are critical of current educational practices, then we need to consider what the practices of critique might be, what gatherings are necessary. In terms of curriculum, we might consider what the displacing of representationalism might entail. Students in education learn much about the world through representation, but what is a curriculum of the world, of experimentation and intervention. In an era when there are major concerns about climate change, does learning through representation about matters of fact provide a basis for intervention in matters of concern?

Theory is matter-ing. We then need to consider what constitutes good theory for the forms of matter-ing that might be enacted. Theory can matter – in the many senses of the term – but only if we practice it in certain ways, through experimentation and intervention. The need for laboratory work and for the reclaiming of science to from a natural/social boundary-marking is clear. Such distinctions not only assume and enact the dividing of knowledge practices in certain ways; they also assume and entail the division of worlds.
Note
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References

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