

AN ENCOUNTER WITH AN ENCOUNTER:  
TRUTH, EVIDENCE AND REALITY IN CROSS-BORDER MOMENTS

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*The Universe in a Single Atom: The Convergence of Science and Spirituality*

By the Dalai Lama / Harmony / 2005

The *New York Times* (NYT) Magazine recently published an article titled ‘The Last Dalai Lama?’ focusing largely on the vagaries of the Tibet-China relationship and whether another Dalai Lama would be identified after the passing of Tenzin Gyatso, age 80.<sup>1</sup> Looking at His Holiness, the Dalai Lama, through the intersection of geopolitics, religion, and entertainment, foregrounding the former, and positioning him as one of the early icons of globalization (based on his part in an Apple advertisement), the article stays largely within the parameters placed on reasoning via statehood, or what Kenway (2012) in education and others in related disciplines refer to more specifically as methodological nationalism:

Methodological nationalism is the naturalization of the nation-state by the social sciences. Scholars who share this intellectual orientation assume that countries are the natural units for comparative studies, equate society with the nation-state, and conflate national interests with the purposes of social science. Methodological nationalism reflects and reinforces the identification that many scholars maintain with their own nation-states (Wimmer & Schiller, 2003, p. 576).

The unspoken terms of debates reported in the NYT Magazine article include the presumptions integral to the three variations or waves of methodological nationalism that Wimmer and Schiller identify: 1) ignoring the importance of modern nationalism for the very formation of social sciences, often combined with 2) the naturalization of the boundaries of the modern nation-state as the unit of

analysis and 3) territorial limitation which confines the study of social processes to the politics and geographic boundaries of a particular nation-state (Wimmer & Schiller, 2003, pp. 577-78). The NYT Magazine article's high profile location provides an opportunity for reapproaching what I refer to here as perceived cross-border moments—moments whose arising points to a series of deeper philosophico-practical concerns germane to curriculum studies.

For instance, recognition of such entangled waves and presumptions offers opportunities for rethinking how borders are claimed to be as such and which ones become selected for special focus, which invoked as causal or correlative, and which ignored and naturalized. The analysis that follows raises the possibility of thinking through issues associated with perceived 'cross-border moments' including but not restricted to those driven by belief in and attachment to nationalism, (re)nationalization, language, religion, speciesism and more. Rather than focusing on the usual social science couplet of national/postnational and human/posthuman debates, this paper outlines how the Dalai Lama has explained the conceptualization of truth, evidence, and reality in Buddhist epistemologies and ontologies (categories that he separates out) to 'western' audiences. Here, border-thinking is understood as a subset of such conceptualizations, not the founding or driving force for observation or insight. Such an approach links this to opportunities (rather than implications) for reconsidering key assumptions and debates within the apparent borders of Anglophone educational and curriculum research.

In what follows, the claim to borders of any kind (including around terms such as Anglophone) is treated as part of the problem re-viewed, simultaneously mobilized and suspended. Border-claiming is not a practice that can be easily 'gotten away from' without reinvoking the very 'thing' discussed, for when is *away* judged to be away and from what? Does that not already imply a border of some kind? The 'problem,' if it is posed as such in western social sciences, is not the 'fact' of borders, of the having or not having of borders per se, but rather the ways in which claims to some borders become so dominant and naturalized as to prevent reflection upon 'the political' by attributing to it a restricted and essentialized foundation (Leonard, 2005).

At the crux of foundationalism in much mainstream thinking around border studies and border-speak is an older reality-essence relationship. The old problems of conceptions of reality being tied to assumptions about discrete essences and of the possibility of reentry or continuation of the same assumption in new guise are easily

imbricated in each other. It is an imbrication that has been theorized in multiple directions already. Examples of such theorization include the sensing of aporia, or, an incitement toward emptiness (Dalai Lama, 2005; Derrida, 1993). In his account of *Aporias*, Derrida (1993) identifies at least three main kinds of border-making, including those related to the territorial (e.g. nations), to fields (such as different disciplines) and to conceptual splits (such as up/down, yes/no, etc.). Aporia arise as sticking points, when it is considered necessary or important to step across a border yet it also seems impossible to do so. Aporia in the specific Derridean sense not only provoke ethical reflection, but do so in the absence of formulaic responses. Derrida discusses the sensing of aporia as *difficulty* of the pass, to step and to not step (*pas* in the French), sticking points where one tries to step across and yet cannot step across at the same time. He argues that this sensing opens the possibility for something other than 'technical justice' (where technical justice just follows the formula and checks the boxes) and invites ethical responsibility (where everything has to be rethought, reconsidered, and reapproached not as given). In 'other' cases (note the border) such a sensing, logic and/or forms of reflection are merely approaches, stages, steps or realizations toward emptiness, where perceived markers between 'things,' including ideas, words and concepts, can no longer operate and not because they have an 'Other' that defines such emptiness (Dalai Lama, 2005). In this flow, emptiness is not the opposite of fullness nor the sensing of the aporetic, but the impossibility within ultimate truth of separation into a this and that (yet to write, one apophatically names 'it' as though it is an it called emptiness) (Dalai Lama, 2005).

This paper takes as its springboard, then, one of the Dalai Lama's efforts within the last decade to communicate such complexities, generating what he calls an encounter between traditions posited as different—Buddhist epistemologies and ontologies (including the variety within) relative to western sciences (including the variety within).<sup>2</sup> The sections that follow in this paper are an encounter with the encounter of *The Universe in a Single Atom: The Convergence of Science and Spirituality* that positions this text as precisely the embodiment of the above awarenesses and the efforts to artfully navigate and negotiate them. *The Universe in a Single Atom* is a rich and lucid text with a broad intellectual range. I will examine only certain aspects of it that resonate with some of the debates in education today, including as noted above the conceptualization of truth, evidence and reality, which have long been subjected to debate in the curriculum studies field especially.

The three sections that follow consider the interrelations between claims to truth, evidence and reality, which thematically link to specific controversies within different disciplines that the Dalai Lama engages, including physics, consciousness studies, and biology and genetics. More recently, such themes have reappeared in the wider educational field amid a set of new-ish monikers that circulate, especially around matter-centric and/or quant-oriented dispositions, such as evidence-based education, the new materialism, critical realism, big data, big social science, etc.<sup>3</sup> The point of this encounter from a different direction is not to glean applications or implications for curriculum studies today or to 'introduce' cosmologies that are already millennia old, nor is it to promote or critique the Dalai Lama's scholarship or 'brand.' It is rather to consider some of the impossibilities and affordances that an encounter with the book's encounter of (what is labeled as) western science invites in relation to key questions in curriculum studies research.

In western humanities and social sciences, the field of anthropology has already taken up some of these questions, as has linguistics. The unsettlement regarding such issues continues into present research methodologies, especially those labeled as qualitative. This includes questions such as: Is a researcher *really* crossing a border in the observation of 'different' cultures or narcissistically operating from within as though crossing a border?; If the latter, is what is recorded as 'field work' or qualitative data thereby more a projection of provincial and internal thoughts as part of the exoticization and attribution to a fabricated Other? The unsettlement and debate that such questions indicate do not inherently point to a negative. They operate rather as incitements to discourse within the quest for managing a certainty/uncertainty binary. Such perceived conundra have, in research and popular culture more broadly, provoked paradoxical 'emoscapes' at at least two levels<sup>4</sup>: 1) the emoscape that can drive behavior when attachment to 'things,' like identity categories, is left uninspected and when a *limitrophy* (Derrida, 2008), a thickening around the edges—or an *ego*—a clinging (Dalai Lama, 2005) eventuates and 2) the emoscape of appeal to a transcendence/immanence binary—either vaporistic transcendence or radical immanence are typically assumed as the only form that an 'out' from the aporetic, the logocentric, the relativistic, the nihilistic, or the essentialistic could take in academic work.<sup>5</sup>

In keeping with the JAAACS spirit of reflecting on scholarly production, this paper examines how *The Universe in a Single Atom* subtly offers many challenges to what have become labeled as ethical issues, including the ethics of classificatory regimes, conceptions of reality-essence, and the problem of borders and naming. What is

remarkable (but expected) within the NYT Magazine article is the relative lack of analysis of labeling and of marked differences in labels applied such as 'Tibetan Buddhist' or Confucian, Maoist, Marxist worldviews etc. The geopolitical appellations of nationhood, autonomous regions, politicians, religion, and economy predominate. In other words, it still reads as 'a man's world,' an emoscape of the first level, of identity on identity, a 'world' run by 'elite men,' for elite men, meeting at elite levels about how best to dominate (or save) pieces of 'ground' called 'nations-on-earth' that operate as the base upon which 'culture' and 'tradition' are then built and to which they are reduced. In other words, a strong place-knowledge-representation assumption remains active in the article, even when critiquing diaspora and colonization as part of how nations form (see Abraham, 1996).

The order of reasoning in journalism and elsewhere often cannot avoid geopolitical discourse, which falls within a particular understanding of linear timespace and a mechanical conception of reality drawn from largely 'European' models of a universe and nation-state (Baker, 2001) and from modern geographical practices of mapmaking (Winachakul, 1994). The narrative base of the NYT Magazine article belies the choices already made, the histories already operationalized, and the tactics already deemed analytic, yet not subjected to philosophical speculation. In contrast, the Dalai Lama's texts are more likely to consider the philosophical issues that are in play and have to be decided rather than automatically invoked as though resolved, and the text here studied is no exception. Calling the issues philosophical, though, rather than something else already bespeaks further problems. In *The Universe in a Single Atom*, the Dalai Lama puts the almost-pedagogical account in English of an adumbrated set of beliefs in a variety of schools of Buddhist epistemology and ontology into an encounter with an adumbrated set of beliefs in western sciences in order to eventually call for what he sees as a non-religious and non-scientific secularism based on humanitarian and universalistic principles, such as compassion.

The text is similarly remarkable for what it elides, however: there is relatively little in the text concerning China (where 'western science' has become enormously popular and also questioned), relatively little concerning reincarnation or the more 'fantastic' capacities that long histories of Buddhist meditation are renowned for making available or enhancing, and relatively little analysis of how the category 'western' was arrived at in the first place. The book title and the specific chapter titles reflect caution and rigor in word selection in other ways, however. The chapter titles are: Reflection; Encounter with Science; Emptiness, Relativity and Quantum Physics; the Big Bang and the Buddhist Beginningless Universe; Evolution, Karma

and the World of Sentience; the Question of Consciousness; Toward a Science of Consciousness; the Spectrum of Consciousness; Ethics and the New Genetics; and finally Science, Spirituality, and Humanity. Notably, spirituality, not religion in the book title; encounter, not comparison in the chapter title; the question of and toward a science of consciousness; not *the* science of consciousness a priori or automatically, etc. This care and particularity in word selection is part of the ‘impossible’ that the book and indeed this paper’s ‘encounter with the encounter’ must navigate and that links it to many of the valued sensitivities that curriculum studies research has already raised.

### **Cross-border Moments?**

In *New Curriculum History*, Dude Jankie (2009) maps how debates over the medium of instruction in Botswanan schools had to be continuously addressed in the immediate pre- and post-Independence period. A series of policy documents called White Papers were issued that directly confronted the selectivity function of the classroom. After the ejection of English colonial rule, the question remained regarding the language in which school subjects should be taught. If the stain and horror of English oppression was to be removed, should English be banned altogether? If not everyone in Botswana speaks or reads Bantu-family language or claims belonging specifically to Setswanan culture, if French would tie Botswana to more nations on the African continent than other languages, and if English was the immediate legacy from colonization and now tied to perception of opportunities in the ‘Global Economy,’ what language/s should teachers teach in? Should the frame of reference be distance from past colonization, or the majority language speakers of Botswana, or immediate regional ties to other nations on the African continent, or vague rhetoric about the Global Economy? Should the medium of instruction change depending on the age or grade of the student? And what would constitute evidence in such debates and decisions and who would get to say—only Botswanans or outside funding agencies like the IMF (International Monetary Fund) and World Bank driven by western capital? Etc.

The enormity, the complexity and the consequences of the decisions that confronted Botswanan policymakers, families and teachers who were pressured to navigate and negotiate in ‘geopolitical’ mode should not be underestimated. Nor are they necessarily exclusive to this circumstance, and nor can the dynamics be easily settled or resolved. From the outset of *The Universe in a Single Atom*, there are immediate problems, problematizations and paradoxes that cut to the heart of such conundra

that Jankie described in geopolitical terms, some of which are overtly flagged and others of which the Dalai Lama addresses indirectly through discussion of deeper differences in beliefs about Worlds. First, in geopolitical terms, there is the problem of language – the book is not written in Tibetan. Language is not given foundational status, however. It is treated as a thing, yet that thing does not constitute thought ‘itself.’ Language is treated *like* a convention, yet marked off from the term convention in the text, meaning the word language appears in a string in a sentence, separated by a comma from words such as convention and habit. Second, the problematization of representation, of western and Buddhist as discrete worldviews, no matter how varied ‘within,’ is admitted to the extent that touchstones of similarity are identified, only to be followed by an artful evacuation of the grounds upon which the initial ‘similarity’ was raised. What is ascribed to one descriptor such as Buddhist (or Botswanan in Jankie’s case) and what, as western, operates at the level of commonsensical designation yet is tied to questions in both cases regarding the messiness of analytical processes—the possibilities for multidirectional historical influence, interpenetration of subjective forces, ambiguity, hybridity, and mimicry (Bhabha, 1994), such that claims to ‘authentic differences’ or distinctiveness are being made retrospectively for specific contemporary purposes. For the Dalai Lama, ‘differences’ are of the order of conventional reality, discussed further below, and while they must be attended to in practical day-to-day living, they will not be the ‘stuff’ of solutions to large problems without compassion in operation. In other words, it is not difference-blindness that is encouraged, but compassion-perceptiveness that would help relieve suffering without having to turn the colonized into the colonizer in order to survive. Third, there is the paradoxical tension produced by the dance around second-order normativities: of trying not to subsume insights from deeply-debated commentarial and scholarly traditions within western categories, languages and conventions *and* at the same time appealing in the end to a very seemingly ‘western’ rhetoric of the need for a universalistic and humanistic solution in view of no better options being currently available.

Jankie’s frank tracing of the stark issues that confronted post-Independence Botswana, including the issue of how to narrate ‘history’ in the ‘present,’ illustrates its flashpoints via the debates over language of instruction in schools. In *The Universe in a Single Atom*, the delicate dance woven by the deliberate elisions, the cautious selection of words and the order of presentation in the text could be seen as its own null, hidden and overt curriculum, even though schooling is little mentioned in a systemic form. The delicacy of the dance could easily be lost and glossed, however,

by a rush to find similarities between traditions that are at best surface level touchstones. As alluded to above, such touchstones offer throughout the text entry into deeper conversations. The deeper conversations include those about the very idea of sameness/difference (whether among languages or some 'thing' else), about to what 'observations' are believed to be pegged (do they have to come through the five senses and be agreed upon?), and about how 'conceptions of reality' became the flashpoint (as opposed to other possibilities) amid practices of verification. This is a selective albeit potent entwinement that resonates with much of the rethinking done in curriculum studies scholarship—a rethinking that currently appears to have little 'in common' with 'nationally' funded mainstream educational research, like educational neuroscience and the rebiologization of the child. The tension between rethinking grounds for truth-production and invoking national borders as the major organizing principle of curriculum studies is, however, one that forms quite differently from the major categories through which *The Universe in a Single Atom* is structured, degathered, and narrated. The following sections unpack these rather convoluted processes in order to consider some of the stakes that are under discussion in educational research. This includes the stakes that are suggestive of apparent 'sticking points' that arise amid genuine efforts to affirm 'differences' and map the 'effects of power' while seeking resolution of seemingly intractable 'global' problems that would require, at a minimum, coordination of actions.

### **Entwining Truth, Evidence and Reality: From the Recruitment Heritages of Western Sciences to the Self-Abnegation of Buddhisms?**

The disconnect between curriculum studies scholarship and broader highly funded educational research around such trends as the rebiologization of the child is notable, as is the disconnect between both and the very opening of the Dalai Lama's text. These disconnects are not reducible to different purposes or imagined audiences. One of the opening 'feelings' that arises in *The Universe in a Single Atom* is the genuine possibility for the reasoned transformation or potential *loss* of a series of beliefs that had previously marked the distinctiveness claimed for a field or worldview. The book's opening, for instance, makes clear that should findings generated through western sciences overturn basic Buddhist principles, Buddhist understandings would have to change and yield. It is difficult to imagine a voluntary positioning of 'western sciences,' including social sciences, as open to being overturned by a perceived 'outsider' perspective, let alone one generated on a different 'geopolitical' continent from their initial sites of production. The monotheistic heritages and horizons of western sciences, which seem very closed off



from accepting many indigenous cosmologies and insights, for example, and the Christocentric and salvific signifiers in circulation in much Anglophone educational research, are generally not dedicated to such an openness. In addition, it seems obvious that many fields and disciplines are not eager to acknowledge their own eventual displacement if not annihilation. The different kind of 'feeling' and orientation to 'knowledge-production,' if it can be so coded, and to continued existence that accompanies the opening to the text is underscored also in the NYT Magazine article:

Increasingly, the Dalai Lama addresses himself to a nondenominational audience and seems perversely determined to undermine the authority of his own tradition. He has intimated that the next Dalai Lama could be female. He has asserted that certain Buddhist scriptures disproved by science should be abandoned. He has suggested — frequently, during the months that I saw him — that the institution of the Dalai Lama has outlived its purpose. Having embarked in the age of the selfie on a project of self-abnegation, he is now flirting with ever-more-radical ideas. One morning at his Dharamsala residence in May this year, he told me that he may one day travel to China, but not as the Dalai Lama ([http://www.nytimes.com/2015/12/06/magazine/the-last-dalai-lama.html?\\_r=0](http://www.nytimes.com/2015/12/06/magazine/the-last-dalai-lama.html?_r=0), Feb 24, 2016)).

The self-abnegation and undermining of 'one's own' authority is not necessarily the 'progress story' of science overtaking religion, however. Any encounter with an encounter that is presumed and encoded as 'religion-science' and cross-border on that basis is already suspect and vulnerable to a rather predictable postcolonial critique: not only could any writing in English about Buddhism, by Buddhists and non-Buddhists alike, be charged with inauthenticity, misappropriation, power plays, misunderstandings and warnings of logocentrism, but any appearance of insights in contexts beyond their initial sites of production becomes vulnerable to claims of swarming, superficial raids, and commercialization—from those appearing in mindfulness and contemplative turn studies in education to the claims made about brain-based learning. Yet, all such suspicion, critique, complaint or perceived analytical leverage turns on something else—the decisions that have already been made about what matters.

### Conceptualization of Truth

In *Philosophy, Behavior Disorder, and the School* Tait (2010) notes that while conditions such as diabetes form around a strong consensus of the visible and the real, with agreed upon biophysiological markers for identification, some school-based disability categories such as LD (learning disability) do not. There is no agreed upon marker as to how to identify learning disability within or across nations (not all nations use the label) or within or across bodies and there is no current common locus identified in brain scans. In the United States, LD was introduced formally in 1969, and quickly became the largest identified category of disablement in schools (Sleeter, 1987). Tait does not raise the question of visibility in order to doubt the struggles that students most definitely have in classroom settings. Rather, it is to give pause for thought about when 'visible' and 'biophysiological' evidence is accepted as sufficient proof and when it is not and to tease out the power dynamics involved in such silent unevenness.

Tait's point intersects at a specific level with key issues—and vagaries—over the nature of evidence between different western 'third-person' approaches. *The Universe in a Single Atom* contrasts these, too, as well as differences in how truth is conceptualized outside of discourses deemed scientific. For example, the text is careful to describe the disparity between a commonsense view of the world and the perspective suggested by Nagarjuna's philosophy of emptiness.

Nagarjuna invoked the notion of two truths, the 'conventional' and the 'ultimate,' relating respectively to the everyday world of experience and to things and events in their ultimate mode of being, that is, on the level of emptiness. On the conventional level, we can speak of a pluralistic world of things and events with distinct identities and causation. This is the realm where we can also expect the laws of cause and effect, and the laws of logic – such as principles of identity, contradiction, and the law of the excluded middle – to operate without violation. This world of empirical experience is not an illusion, nor is it unreal. It is real in that we experience it. A grain of barley does produce a barley sprout, which can eventually yield a barley crop. Taking a poison can cause one's death, and similarly taking a medication can cure an illness. However, from the perspective of ultimate truth, things and events do not possess discrete, independent

realities. Their ultimate ontological status is 'empty' in that nothing possesses any kind of essence or intrinsic being  
(Dalai Lama, 2005, p. 67)

With the term truth split between two levels, conventional and ultimate, it is ultimate truth that constitutes the higher 'point' above evidence and experience in terms of an explanatory device. The two levels of truth carry with them certain ontological assumptions tied to beliefs about emptiness and the nature of suffering which distinguish this from the kinds of introspection or phenomenology that have operated within western social science, philosophy, and curriculum studies. For Buddhist epistemologies generally, one can stay stuck in the commonsense level of belief in essences, such as of objects, form attachments to things, and then experience pleasure and pain. This is the order of things and the level at which much western phenomenology, auto/biography, introspection, and reflection remain in terms of 'first-person' perspectives. On the other hand, one can understand ultimate truth and its relation to the everyday world of things, find liberation from belief in essences (emptiness) and 'achieve' (which is a better verb choice here than 'experience' but still inadequate) Enlightenment. Key in such processes of attribution is that the word *assumes* is used in the text rather than *proved* or *proves*. For example, ontological claims are not seen as *proven* by an fMRI of the brain, as they are in educational neuroscience. Rather, it is admitted that ontological claims are an *assumption*, including that animals and not plants are considered sentient beings alongside humans, and it is assumed that afflictions occur in beings labeled as sentient:

Buddhism assumes the universality of mental afflictions in all sentient beings. The key afflictions are seen as expressions of attachment, anger, and delusion. In some species, such as human beings, the expression of these are more complex, while in certain species of animals their manifestations will be more rudimentary and more nakedly aggressive. The simpler they are, the more such processes are considered to be instinctual and less dependent upon conscious thinking. In contrast, the more complex expressions of emotion are seen as more susceptible to conditioning, including by language and concepts (Dalai Lama, 2005, p. 180).

Here, maps and borders proliferate. Hate, for example, is discussed as that which tends to fixate on a concrete target— one person or smell or sound. Compassion or

other 'wholesome states' in contrast are described as being more diffuse, so the focus is not confined to one person or one object. But what would be the *evidence* for such claims about the differential mapping and the borders placed between hate and compassion? And is this, in a sense, the wrong question?

### **Evidence: Meditation and Different Versions of the Empirical**

His Holiness notes that while in western science third-person perspective is the one that most matters, in Buddhist epistemologies both first- and third-person accounts operate as empirical: "The difference between science as it stands now and the Buddhist investigative tradition lies in the dominance of the third-person, objective method in science and the refinement and utilization of first-person, introspective methods in Buddhist contemplation"(Dalai Lama, 2005, p. 142). In third-person approaches particular observations become available: "It is possible to observe closely the physical correlates of our rich world of subjective experience – such as neural connections, biochemical changes, the locations in the brain associated with specific mental activities, and the temporal processes...by which the brain responds to external stimuli" (Dalai Lama, 2005, p. 142). It is not, however, possible at this point in time to account for the phenomenological experiences available through practices such as meditation, which he explains, have many forms and can generate a consensus afterwards, i.e., students who practice using a particular 'technique' confirm getting to a similar 'place' or having a similar 'experience.'

It is especially the wide array of practices referred to as meditation that makes the greatest difference in the versions of evidence accepted:

People often understand meditation to refer simply to an emptying of the mind, or a relaxation practice, but that is not what I mean here. The practice of *gom* does not imply any mysterious or mystical state or ecstasy open only to a few gifted individuals. Nor does it entail non-thinking or the absence of mental activity. The term *gom* refers both to means, or a process, and to a state that may arise as a result of the process. I am concerned here primarily with *gom* as a means, which implies a rigorous, focused, disciplined use of introspection and mindfulness to probe deeply into the nature of a chosen object. From a scientific point of view, this process can be compared with rigorous empirical observation (Dalai Lama, 2005, p. 142).

Rigorous third-person empirical observation can be a site of comparison but it cannot as such account for all that is observable. The passage goes on to note that such approaches as third-person can illuminate one side of the picture of consciousness.

But unlike the study of three-dimensional material objects in space, the study of consciousness, including the entire range of its phenomena and everything that falls under the rubric of subjective experience, has two components. One is what happens to the brain and to the behavior of the individual (what brain science and behavioral psychology are equipped to explore), but the other is the phenomenological experience of the cognitive, emotional, and psychological states themselves. It is for this latter element that the application of a first-person method is essential. To put it another way, although the experience of happiness may coincide with certain chemical reactions in the brain, such as an increase in serotonin, no amount of biochemical and neurobiological description of this brain change can explain what happiness is (Dalai Lama, 2005, pp. 144-45).

Calling for a combination of the two techniques that he describes as *single-pointedness* and *investigation*, the argument does not open onto a wild relativism. Rather, training in both directions is a key feature, but not an exclusive one—discipline does not mean only a few can do it. Nor is disciplined training only for the sake of claiming accuracy in and of itself. Rather, because of the soteriological imperative of Buddhism—that suffering can and should be avoided—the training has less to do with getting high grades, salaries and jobs and more to do with emptiness.

Discipline training is the key. A physicist needs to go through training which includes skills such as mathematics, the ability to use various instruments, the critical faculty to know whether an experiment is correctly designed and whether the results support the hypothesis, as well as the expertise to interpret the results of past experiments. These skills can be acquired and developed only over a long period. Someone who wishes to learn the skills of first-person method needs to devote a comparable amount of time and effort. It is important to stress here that, like the training of a physicist, the acquisition of mental skills is a matter of volition and focused effort; it is not a special mystical gift given to the few (Dalai Lama, 2005, p. 156).

The discipline training, for example entailed in obtaining a Geshe degree in some schools, may include practices such as drawing maps and borders between ‘things’ like emotions, and learning processes of differentiation that then become subjected to meditative practices. An example His Holiness gives here would be why *fear* is considered to fall within the neutral column and *attachments* are considered to fall with the negative column.

The Buddhist differentiation between unwholesome or afflictive and wholesome mental factors is based on the roles these factors play in relation to the acts they give rise to – in other words, one’s ethical well-being. For instance, attachment may feel enjoyable but is regarded as afflictive since it involves the kind of blind clinging, based on self-centeredness, which can motivate one to harmful action. Fear is neutral and indeed changeable in that it may spur one to wholesome or unwholesome behavior depending on the circumstances. The role of these emotions as motivating factors in human action is highly complex and has attracted wide-ranging attention in the Buddhist treatises. The original Tibetan term for affliction, *nyönmong*, and its Sanskrit equivalent, *klesha*, connote something that (?)afflicts from within. A key characteristic of these mental states is their effect in creating disturbance and a loss of self-control. When they arise, we tend to lose our freedom to act in accordance with our aspirations and become caught in a distorted mind-set. Given that they are ultimately rooted in a deeply self-centered way of relating to others and to the world at large, when those afflictions arise, our perspectives tend to become narrow (Dalai Lama, 2005, p. 178).

The narrowing referred to would pertain to self-as-individual as much as self-as-nation. Why, however, would it matter that one way of seeing World/s differs from another and that one is classed as narrow and distorted and another as broader or wholesome? The underlying assumption is the connection to suffering. For example, one might posit that in contemporary contexts there is a circulation of the discourse of scarcity amid a rhetoric of globalization in which the ‘differences’ that have been produced and that have come to matter in particular ways have generated tremendous suffering—acts now coded as genocide, murder, ethnic cleansing, stealing, uneven resource distribution and more would be examples of what ‘a deeply self-centered way of relating to others and to the world at large’ have

resulted in. There is, then, a lot at stake in that which has innocuously been referred to as 'ways of seeing' or 'cultural differences.'

What the field of physics can, and cannot, do with the idea of difference/sameness and its relation to suffering seems a subtle and important investigation in the text. The Dalai Lama notes, for instance, that there is still considerable debate regarding implications of the famous double-slit experiment that generated controversy over particle-wave theory in quantum physics: "Some, like Heisenberg, would argue that the observer's role is limited to the choice of measuring apparatus. Others, like Bohr, would accord greater importance to the observer's role as a constitutive element in the reality being observed" (Dalai Lama, 2005, p. 63). Contemporary interdisciplinary work such as Barad's (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, popular in critical educational research, also harkens back to the double-slit experiment, event and debate. While both texts note the disagreements among physicists, Barad's use of laboratory experiments as sites of verification remains unquestioned throughout. For the Dalai Lama, it's not the "Who cares?" question, however, but the 'So what?' question that has not been sufficiently answered amid the fascination as to whether light is seen as particle, wave, both, or neither. Here, the 'So what?' question points to deeper issues in the conceptualization of reality that he implies are yet to be fully teased out:

I must admit I am still not quite sure what the full conceptual and philosophical implications of this paradox of wave-particle duality might be. I have no problem in accepting the basic philosophical implication, that at the subatomic level the very notion of reality cannot be divorced from the system of measurements used by an observer, and cannot therefore be said to be completely objective. However, this paradox also seems to suggest that – unless one accords some kind of intelligence to electrons – at the subatomic level two of the most important principles of logic, the law of contradiction and the law of the excluded middle, appear to break down. In normal experience, we would expect that what is a wave cannot be a particle, yet at the quantum level, light appears to be a contradiction because it behaves as both. Similarly, in the double-slit experiment, it appears that some of the photons pass through both slits at the same time, thus breaking the law of the excluded middle, which expects them to pass through either one slit or the other (Dalai Lama, 2005, p. 62).

Beyond, the 'So what?' question is a question of the very viability of physics-based worldviews to which such debates are tied. In some strands of curriculum studies research, the refusal of popular binaries and the playfulness and experimentation with different forms of expression are renowned, especially those drawing on psychoanalytics, indigenous cosmologies, continental philosophy, pragmatism, posthumanism, and more. In contrast, other strands, especially the more Marxist-inspired literature, draw in unmarked ways on fairly typical but backgrounded physics-based views, especially Newtonian, which have become incredibly popular ways of explaining change or the lack thereof.<sup>6</sup> The contemporary emphasis placed on matter, practice, the concrete, and the everyday-ish, for example, elevates such descriptors not only to a level of automatic existence and discrete essences, but also allocates them a moral high ground, often invoking life/death as the thing at stake, yet not surprisingly, not for the typically white, middle class academic forwarding the point. Here, the non-elected and self-appointed 'champion of the people' lives a vastly different and more comfortable life than those supposedly represented by the rhetoric espoused as moral. What Marxist-inspired critiques of class inequality tend to trade on, then, is the elevated circumstance of the scholar amid the recirculation and maintenance of inequalities in other forms, such as ability/disability, which secures the higher income or 'better circumstance' (Davis, 1997). Playing up the 'matter' side of a physics-based presumed spirit/matter binary as inherently superior grounds for argument or narration still operates in and as dogma and still belies ego-attachments indicative of perpetual suffering. In a crucial summary of the implications of restricting evidence to third-person observation of objects that are assumed to have an unchallengeable materialist essence, the Dalai Lama notes: "At its root, the philosophical problem confronting physics in the wake of quantum mechanics is whether the very notion of reality – defined in terms of essentially real constituents of matter – is tenable" (Dalai Lama, 2005, p. 69).

Here, it might be argued that the delineation of spirit/matter and first- and third-person perspective is a simplistic one and one that could be readily challenged from within the auspices of psychoanalytics, postcolonial studies, feminist research and postnatural ecophilosophies to mention a few. In such approaches, which already operate within curriculum studies, the problem of intersubjectivity is more likely to be mobilized and taken seriously rather than overridden. From reducing the basic point regarding essentially real constituents of matter to the purview of western science, it is an easy step to questioning its epistemic privilege and limits, something that has already occurred multiple times from 'within' western science. What is frequently not addressed, however, even in approaches such as psychoanalytic ones



and beyond, is where the authority for one narrative or discourse or approach comes from relative to other available ones and what it is that secures its publication, recognizability, worthiness, and more. In either avoiding or stepping deliberately to the side of an historic spirit/matter split that the Dalai Lama also problematizes, what remains 'left to honor' is the judgment regarding the viability of a narrative or an account. Should this judgment turn on believability, rigor, the reality-feeling, instrumentalism or simply some kind of limited consensus around 'matters of concern' and so forth? If 'matter' is not the basis, then is it simply 'what matters?' as defined and judged by a select few?

### **Nature of Reality: Can Change Change the Claim to Reality as Perpetual Change?**

*We must be willing to be revolted when science – or for that matter any human activity – crosses the line of human decency, and we must fight to retain the sensitivity that is otherwise easily eroded.*

- Dalai Lama (2005, p. 199)

The dangling chad that the previous questions represent will not be decided by a supreme court. At a recent AERA, I attended some educational neuroscience sessions. In one session, a young presenter showed images of a research site where school children were sitting at their desks with large black antenna-like strands coming out of a cap on their head and pointing upwards. They were wearing portable EEG (electroencephalogram) machines in the classroom, machines that had cost \$750 each. I must admit I felt a certain revulsion at the image, the way the money was being spent, and the conclusions that were drawn, none of which detracts from the sincerity and preparation of the researcher, but which says something about funding agencies. I wondered how long it would be in the name of brain-based everything before the probes would be on the inside, or how long it would be before teaching was defined as achieving a particular brain wave pattern or ensuring that a specific area of the brain lit up meaning the job was (empirically) done. I wondered even more whether such research ever told us anything pedagogically appropriate and useful, rather than nothing, and I wondered why educators often wished to have a higher status similar to 'hard science' rather than 'soft' social science. I thought about the OECD (2007) report titled *Understanding the Brain: The Birth of a Learning Science* where the acknowledgement that, one day, brain-based research may reveal at what age it is best to teach a second language, but that it will never solve the debate over what language that should be. I also thought about research funded by military interests and how what appeared in

educational journals as the 'latest trends in research' might potentially be the naïve tip and marketing tool of a very deep, serious, and game-changing iceberg.

There is a responsibility that I believe curriculum studies holds that separates it from much that would go by way of educational psychology and that such sessions underscored for me: not only via educational neuroscience, but also via more pressing inventions, such as Artificial Intelligence and subconscious programming, the terms of debate about the engineering of populations are changing rapidly and have already been somewhat colonized. Critiques of educational neuroscience are already pegged as coming from 'negative' or 'unhappy' places and debates over the need for caution and the rethinking of funding can be easily positioned as resistance to exciting and dynamic change promised by the world of neuroplasticity. Not all projects or research, including neuroscience ones in education, have the same goals, methods or implementation, however. The revulsion I felt in this case was not in response to the prospect of change or to neuroscience as an area of investigation, but to the lack of ethical discussion about whether neuroscience *ought* to be located in the field of education at all, rather than simply focusing on what kind would be, as well as the lack of robust discussion of histories, directions, funding, status, double-edged and hidden potentials, misuse, and gloss. The revulsion I felt was not from a for-against binary, then, but from a discernment that I trust regarding what humans are capable of when technology dazzles and too few questions are asked.

Perhaps the most frank and most direct prose of *The Universe in a Single Atom* arises in regard to a revulsion experience that the Dalai Lama describes around genetics. Here, he problematizes the consequences in far sharper terms than those he deploys for neuroscience in consciousness studies. The critique appears in the section on ethics, genetics and technology perhaps for good reason—this is positioned as a turning point for the conceptualization of reality-as-conventional-level-truth insofar as a redefinition of humanity is at stake. Humanity, while currently sharing sentience with animals according to Buddhist ontological hierarchies, also has the power to eradicate, via subtle transformations or more massive ones, including eradicating 'our' very sensitivity to revulsion and thus an immediate register of ethical transgressions.

I feel the time is ripe to engage with the ethical side of the genetic revolution in a manner that transcends the doctrinal standpoints of individual religions. We must rise to the ethical challenge as members of one human family, not as a Buddhist, a Jew, a Christian, a Hindu, a

Muslim. Nor is it adequate to address these ethical challenges from the perspective of purely secular, liberal political ideals, such as individual freedom, choice, and fairness. We need to examine the questions from the perspective of a global ethics that is grounded in the recognition of fundamental human values that transcend religion and science (Dalai Lama, 2005, p. 197).

Here, transcending religion and science does not result in a radical material immanence that operates through or within as in critical realism.<sup>7</sup>

It is not adequate to adopt the position that our responsibility as a society is simply to further scientific knowledge and enhance our technological power. Nor is it sufficient to argue that what we do with this knowledge and power should be left to the choices of individuals. If this argument means that society at large should not interfere with the course of research and the creation of new technologies based on such research, it would effectively rule out any significant regulation of scientific development. It is essential, indeed it is a responsibility, for us to be much more critically self-aware about what we are developing and why (Dalai Lama, 2005, pp. 197-98).

Why is it essential? Who cares if children are wearing EEGs? If the 'data' generated helps the ones who are positioned as struggling, isn't that a good thing? In the name of disability especially, much technology is rationalized and because 'end user'-based research is driven by specific instrumental purposes which are not typically to share what is gained or learned with others but rather to draw commercial advantage for a small group, the locus of the stakes when disability or struggling (much like 'suffering' in Buddhist soteriology) are invoked needs to be closely inspected. It is not just that often times there is a problematic inscription of 'disablement-as-disaster,' but even higher (yet related) stakes about the 'right' to exist altogether are involved:

Given that the stakes for the world are so high, the decisions about the course of research, what to do with our knowledge, and what technological possibilities should be developed cannot be left in the hands of scientists, business interests, or government officials. Clearly, as a society we need to draw some lines. But these deliberations cannot come solely from small committees, no matter how august or expert

they may be. We need a much higher level of public involvement, especially in the form of debate and discussion, whether through the media, public consultation, or the action of grassroots pressure groups (Dalai Lama, 2005, p. 198).

The kinds of debates this gestures toward for curriculum studies are not going to mimic those of the past which have largely revolved around identifying power and inequality among humans – the legacies of the 1960s. By pointing to a landscape in which entirely new kinds of ‘beings’ inhabit so-called ‘nations,’ the Dalai Lama’s sobering revulsion experience alerts one not in an alarmist but in an urgent way, to what is already coming down the pike, where the politics of knowledge will have to concede to the politics of wisdom for a broader balance and protection in which ‘humanity’ as we think we know it is but one player.

### **Conclusion: Encounters Beyond Borders and Comparison**

*The fact that, despite our living for more than half a century in the nuclear age, we have not yet annihilated ourselves is what gives me great hope.*

- Dalai Lama (2005, p. 199)

An encounter with the encounter here suggests some clear points for consideration that exceed methodological nationalism, that raise the question of the possibility, utility and limits of cross-border moments, and which cut to the core of multiple philosophico-practical flashpoints that relate to curriculum studies research. At least five nodal points for consideration have emerged from reconsidering border-thinking in relation to the ‘broader’ conceptualization of truth, evidence, and reality. This includes questions that pertain to: sameness/difference, the act of comparison, rescue mentalities, post-secularism, and universalism.

First, sameness/difference are difficult to discuss when the very formation of the ‘slash’ is under critique and contestation while one is having to trade on taken-for-granted ways of asserting similarities and differences to make the point. *The Universe in a Single Atom* provides one possible way of handling perceived borders, attempted crossings, moments of suspension and/or aporia and the ‘deconstruction’ of the very thing it is deploying in motion (Derrida & Caputo, 1997). Unlike more continental philosophical and pragmatist approaches popular within curriculum studies research, though, the approach to sameness/difference in this text does not end up in a celebratory proliferation nor tightly held identity politics boxes with sealed lids. In

the end, for Buddhist epistemologies, there is ultimately no God (non-theistic), no self, and no center—a distinct challenge for variants of curriculum theories if they remain wedded to the centered or decentered subject and the centering of subject matter as the *sin qua non* of the politics of knowledge.

Second, and related to the above, is the relatively new social scientific belief in *comparison* as a mode of knowledge-production (Schriewer, 2006). When hard-core comparisons, which involve stabilizing second-order norms as though incontestable and essentially verifiable matter, are sidestepped, where does the stepping land, or can it not? This text takes the tactic of surface level similarities (touchstones) as starting points, evacuating the very grounds upon which such similarities are first identified, not for the sake of demonstrating cleverness, but because in the final chapters the continuation of earth, nature, humans and other species are thought to be the highest possible stakes.

Third, this last point underscores the rescue mentality integral to soteriological discourse. Appeals to universalistic and humanistic criteria have rightly raised hackles in the past for at least two reasons: the rescuer or redeemer presumes a superiority and exudes an arrogance as the ideal being over the hapless in-need-of-rescue figure, and, because depiction of the ‘principles’ by which such uneven assessments have been forged have often been claimed as universal, God-given, scientific law and/or incontestable. Such ‘incontestable’ universal principles have been appealed to in order to enslave, to quash and kill beings labeled as ‘different’ within the assumption of One Right Way. Why, then, should someone else believe what another says is *humanistic* let alone *universal*? The power plays around such dynamics appear endless and the ‘ego’ insatiable. This flashpoint is probably the least deeply argued conundrum in the text and yet probably one of the most controversial and important to address directly. Putting into blunt binary opposition a kind of urgency related to ‘Figure out what we have in common and use that compassion-perceptiveness to keep nature in balance or else accept the destruction that follows’ could be seen as an encouragement equally bound for destruction. It is a potential minefield that reminds one of the weaknesses in the Tyler rationale. In Tyler’s *Basic Principles of Curriculum and Instruction* (1949) the most difficult part was left under-theorized—we presumably must ‘just figure out’ what he called ‘the philosophical screen’ that ‘communities’ and schools apply to selection of content and then we will all be good to go. Quite simply, how can the philosophical screen be constructed fairly? By whom and under what definition of fairness, balance, philosophy and screen? Why that and why them? When taking ‘collective

responsibility,' the naivete that people don't get murdered or harmed by other people who disagree with them in the process of 'taking responsibility' surely underscores the unevenness in the dangers and risks already in play. If meditation is the necessary flipside of contesting 'structures' that are presumed historic and systemic, would what happens between point A (the tending of the 'internal garden') and the hoped-for arrival at utopic point B (emptiness and en masse compassion-driven decision-making in a nice world/s) be left to chance, to might-is-right, or to naivete?

Fourth, while some contemporary popular culture movements can refer to the twenty-first century as a post-secular age, overall and despite the opening 'feeling' noted earlier, neither religion nor science appear elevated in this text as superior constructs, nor is secularism seen as possible as a distinct mode. Rather, the impression one gathers is that secularism can come out of what has historically been coded as religion and what has been historically coded as science. The exit route from religion-science is not a third space or an abyss but an inward-outward turn that would eventually undermine the distinction between in/out, between third- and first-person accounts and between religion/science. It behooves reconsideration, then, of a collective responsibility for understanding technology and allied issues in regard to suffering and what is at stake. Under this set of presumptions, technology is not necessarily an advance, and change is not necessarily bad, 'changing' the very terms of debates over how one would see or label something as a society and propose the nature of reality.

Fifth and finally, the issue regarding universalism—from what perspective—raised earlier continues to offer food for thought to curriculum research projects dedicated to nuance and sensitivity toward differences, however produced. I'd like to conclude, then, with probably the most frank and yet most unanswerable of quotes from the text which raises to the threshold of noticeability the hackles, the cringes, the corniness even, and quite possibly the hope:

Calls for faith in universal ethical principles, including: belief in basic goodness of human nature anchored in recognition of preciousness of life, an understanding of the need for balance in nature and the employment of this need as a gauge for direction of our thought and action, and above all, the need to ensure that we hold compassion as the key motivation for all our endeavors, and that it is combined with clear awareness of the wider perspective, including long-term

consequences....In other words, a necessary principle is a spirit of oneness of the entire human species. Some might object that this is unrealistic. But what other option do we have?

(Dalai Lama, 2005, p. 199)

In sum, what is left hanging in this last provocation resembles the problem that Agamben (2002) identifies in *State of Exception* when the to and fro between democracy and absolutism is understood to occur *within* democratic constitutions, not outside of them: what are the problems of appealing to universalism and what are the problems without it? Whether this is the same issue as perceived border-crossing and whether appeal to universalism such as compassion-perceptiveness pertains to the conceptualization of truth, evidence, and reality remains one of the most repetitive, provocative and yet basic encounters in and around curriculum studies in 'transcultural' perspective today.

### References

- Abraham, I. (2006). The contradictory spaces of postcolonial techno-science. *Economic and Political Weekly*, *XLI*(3), 210-217.
- Agamben, G. (2003/2005). *State of exception* (K. Attell, Trans.). Chicago, IL: University of Chicago Press.
- Baker, B. (2012). *William James, sciences of mind, and anti-imperial discourse*. New York: Cambridge University Press.
- Baker, B. (2001). *In perpetual motion: Theories of power, educational history, and the child* (Vol. 14). New York: Peter Lang.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.
- Bhabha, H. K. (1994). *The location of culture*. New York: Routledge.
- Davis, L. (1997). Constructing normalcy: The bell curve, the novel, and the invention of the disabled body in the nineteenth century. In L. Davis (Ed.), *The disability studies reader* (pp. 9-28). New York: Routledge.
- Derrida, J. (1993). *Aporias* (T. Dutoit, Trans.). Stanford, CA: Stanford University Press.
- Derrida, J., & Caputo, J. D. (1997). *Deconstruction in a nutshell: A conversation with Jacques Derrida (Perspectives in continental philosophy)*. Bronx, NY: Fordham University Press.
- Derrida, J., & Mallet, M.-L. (2008). *The animal that therefore I am (Perspectives in continental philosophy)* (D. Wills, Trans.). Bronx, NY: Fordham University Press.
- Foucault, M. (1971/1994). *The order of things: An archaeology of the human sciences*. New York: Vintage Books.
- Hattam, R., & Baker, B. (2015). Technologies of self and the cultivation of virtue. *Journal of Philosophy of Education* *49*(2), 255-273. (Special Issue: Philosophy East/West: Exploring Intersections between Educational and Contemplative Practices).
- Jankie, D. (2009). When post-colonial critique meets curriculum history: The possibilities and limits of post-independence nation-building, curriculum reform, and the politics of language and literacy education In B. Baker (Ed.), *New Curriculum History* (pp. 241-272). Rotterdam: Sense Publishers.
- Kenway, J., & Fahey, J. (2011). Public pedagogies and global emoscapes. *Pedagogies: An International Journal*, *6*(2), 167-179. doi:10.1080/1554480X.2011.554626
- Koh, A. (2010). *Tactical globalization: Learning from the Singapore experiment*. Bern: Peter Lang.



- Lama, D. (2005). *The universe in a single atom: The convergence of science and spirituality*. New York, NY: Harmony.
- Leonard, P. (2005). *Nationality between poststructuralism and postcolonial theory: A new cosmopolitanism*. New York: Palgrave Macmillan.
- Magliola, R. (1984). *Derrida on the mend*. Indianapolis: Purdue Research Foundation.
- OECD/CERI. (2007). *Understanding the brain: The birth of a learning science*. Paris: OECD Publishing.
- Pankaj, M. (2015, December 1). The Last Dalai Lama? *The New York Times Magazine*. Retrieved from <http://www.nytimes.com/>
- Park, J. Y. (Ed.) (2006). *Buddhisms and deconstructions (Afterword by Robert Magliola)*. Oxford, UK: Rowan & Littlefield Publishers.
- Schriewer, J. (2006). Comparative social science: Characteristic problems and changing problem solutions. *Comparative Education*, 42(3), 299-336.
- Sleeter, C. (1987). Why is there learning disabilities? A critical analysis of the birth of the field in its social context. In T. Popkewitz (Ed.), *The formation of school subjects: The struggle for creating an American institution* (pp. 210-237). New York: Falmer Press.
- Tait, G. (2010). *Philosophy, behaviour disorders, and the school. Studies in Inclusive Education*. Rotterdam, The Netherlands: Sense Publishers.
- Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago, IL: University of Chicago Press.
- Wimmer, A., & Schiller, N. G. (2003). Methodological Nationalism, the Social Sciences, and the Study of Migration: An Essay in Historical Epistemology. *International Migration Review*, 37(3), 576-610. doi:10.1111/j.1747-7379.2003.tb00151.x
- Winichakul, T. (1994). *Siam mapped: A history of the geo-body of a nation*. Honolulu: University of Hawaii Press.

### Notes

<sup>1</sup> Retrieved from [http://www.nytimes.com/2015/12/06/magazine/the-last-dalai-lama.html?\\_r=0](http://www.nytimes.com/2015/12/06/magazine/the-last-dalai-lama.html?_r=0), Feb 24, 2016.

<sup>2</sup> This paper is not dedicated to the already robust dialogue between Buddhist 'epistemology' and 'Derridean' texts. Readers interested in pursuing introductions to this angle can consult Robert Magliola's single-authored *Derrida on the Mend* (1984), which seems to position Derrida as the frame through which to 'receive' Buddhisms, and Jin Y. Park's edited volume *Buddhisms and Deconstructions* (2006) which seems to position Buddhisms as the frame through which to receive Derrida.

<sup>3</sup> In *The Order of Things*, Foucault (1971/1994) historicizes the emergence of a modern episteme and its strategies for truth-production related to *taxinomia* (breaking things into matter-based groups) and *mathesis* (primarily, counting). I deploy the two descriptors, matter-centric and quant-oriented, as shorthand reference to the 21<sup>st</sup> century versions of coding practices that loosely inhabit approaches such as big data and the new materialism, both of which share the feature of measurement in asserting veridicality.

<sup>4</sup> Emoscape is a term typically deployed within affect theory, art criticism, and cultural studies. It refers here to the forging of restricted channels through which to "feel," "think," and "act" (Koh, 2010,) manufactured at the intersection of claims made about the *effects* of globalization and the *affect* of reducing perceived complexities and proliferations to simple and repetitive responses. For an example of this in education, see Kenway and Fahey's (2011) analysis.

<sup>5</sup> What counts as academic work is not universal. In *Buddhisms and Deconstructions*, Jin Y. Park notes the disconnect between writing for publication in which logic, reason and argumentation, even when critiquing reason's dominance, are the frames of reference and limit-points and scholar-meditator traditions in which practices of argumentation are never decoupled from meditative practices. For a discussion of the difference that this difference makes in education, see Hattam & Baker (2015).

<sup>6</sup> See Baker's (2001) historicization of physics-based approaches in inscriptions of child, teacher and curriculum in western canons.

<sup>7</sup> I have argued in Baker (2012) that part of the inspiration for such beliefs around radical immanence emerges in the theological debates between Catholicisms and Protestantisms, where the politics around a nature/supernature line erupted and especially in relation to God/man causality.