

EPISTEMOLOGICAL PLURALISM

Ethical and pedagogical challenges in higher education

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Abstract

This paper offers a brief analysis of aspects related to the significance and the complexities of introducing “different” epistemologies in higher education teaching and learning. We start by introducing the metaphors of abyssal thinking, epistemic blindness and ecologies of knowledge in the work of Boaventura de Souza Santos. In the second part of the paper we use Santos’ metaphors to engage with the tensions of translating aboriginal epistemologies into non-aboriginal languages, categories and technologies. In the third part, we offer a situated illustration of an attempt to introduce epistemological pluralism in addressing central concepts in teaching in higher education. In our conclusion we emphasize that political, ontological and metaphysical questions need to be considered very carefully in the process of introducing different epistemologies into higher education.

Epistemological dominance

The idea of epistemological dominance is a central object of critique in various fields, including indigenous studies, postcolonial, decolonial, world systems and critical race

theories. Theorists, sociologists and educators articulate this critique using different terms and metaphors. First Nations scholar Marie Battiste, for example, defines epistemological dominance as “culturalism”. She describes culturalism as an academic and pedagogical

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posture, inherited from colonialism and based on the assumption that mainstream (that is, “Western”, “colonial”, “Eurocentric”) culture and knowledges are the global and universal norm from which indigenous, local knowledges and cultures deviate (Battiste, 2004). A culturalist perspective, according to Battiste, homogenizes both Western and indigenous knowledges and defines indigenous cultures as deficient and lacking. In the same way, Native American scholar Vine Deloria (1995) uses the concept of “white lies” to represent epistemological dominance as the foundation of colonialism and ideas of cultural supremacy that justify the construction of wealth founded on the genocide of indigenous people in the Americas and around the world.

As this paper focuses on teaching in higher education, we chose to engage with the metaphor of abyssal thinking of Portuguese sociologist Boaventura de Souza Santos to articulate concepts related to epistemological dominance and the possibilities of solidarity and epistemological pluralism. Santos approaches the issue of epistemic dominance with a focus on the epistemic blindness (to other epistemologies) created as a result of domination, which is an issue we believe is central to teaching both indigenous and non-indigenous students in higher education institutions.

Santos refers to the key legacy of epistemological dominance as “abyssal thinking”. He defines this as a system of visible and invisible distinctions established through a logic that defines social reality as either on “this side of the abyssal line” or on “the other side of the abyssal line”. He explains:

The division is such that “the other side of the line” vanishes as reality becomes nonexistent, and is indeed produced as non-existent. Nonexistent means not existing in any relevant or comprehensible way of being. Whatever is produced as nonexistent is radically excluded because it lies beyond the realm of what the accepted conception of inclusion considers

to be its other. What most fundamentally characterizes abyssal thinking is thus the impossibility of the co-presence of the two sides of the line. To the extent that it prevails, this side of the line only prevails by exhausting the field of relevant reality. Beyond it, there is only nonexistence, invisibility, non-dialectical absence. (Santos, 2007, p. 2)

He associates “this side of the line” (that is, metropolitan societies) with the paradigm of regulation or emancipation, and the “other side” (that is, shifting colonial territories) with appropriation and violence (committed by “this side of the line”). He states that the modern abyssal line is not fixed, but that its position at any one time is heavily controlled and policed. He also acknowledges that displacements of the line have affected the distinction between the metropolitan and the colonial in recent times; in many spaces “turning the colonial into an internal dimension of the metropolitan” (2007, p. 9).

Modern abyssal thinking thrives in the making and radicalization of distinctions (that is, hierarchical binaries) that make the abyssal line in which they are grounded invisible. One example is the distinction between scientific truth and falsehood, which is projected as universal. This universality, according to Santos (2007), is premised on the invisibility of ways of knowing that do not fit parameters of acceptability established by modern knowledge, law and science in their abyssal mode of operation. The result is, as seen from this side of the line, that on the other side of the line “there is no real knowledge; there are beliefs, opinions, intuitive or subjective understandings, which, at the most, may become objects or raw materials for scientific enquiry” (p. 2). As a result, a vast array of cognitive experiences is wasted. Santos refers to this trashing of epistemologies as “epistemicide” (2007, p. 16).

In legal terms, “this side of the line” determines what is legal and illegal based on state or international law, eliminating the possibilities

and experiences of social realms where such distinctions (that is, state, international, legal, illegal) would be unimaginable as forms of organization:

This radical denial of co-presence grounds the affirmation of the radical difference that, on this side of the line, separates true and false, legal and illegal. The other side of the line comprises a vast set of discarded experiences, made invisible both as agencies and as agents, and with no fixed territorial location. (Santos, 2007, p. 3)

This denial of co-presence translates into a hegemonic contact that “converts simultaneity with non-contemporaneity [making up] pasts to make room for a single homogeneous future” (p. 3). **The project of a homogeneous future justifies the violence and appropriation carried out in its name.** Thus, one part of humanity (considered sub-human), on the other side of the abyssal line, is sacrificed in order to affirm the universality of the part of humanity on this side of the line (Santos, 2007).

Santos argues that the struggle for global **social justice is inseparable from the struggle for global cognitive justice, and that both struggles require “post-abyssal thinking”** (p. 5). **This implies that political resistance must be “premised upon epistemological resistance”** (p. 10), which calls not for more alternatives but for **“alternative thinking about alternatives”** (p. 10). Such alternative way of thinking about alternatives, for Santos (2007), needs a sociology of emergences which involves “the symbolic amplification of signs, clues and latent tendencies that, however inchoate and fragmented, point to new constellations of meaning as regards both to the understanding and the transformation of the world” (Santos, 2007, p. 10). This recognition of epistemological diversity beyond scientific knowledge entails a renouncing of any general epistemology. However, Santos asserts that:

Throughout the world, not only are there very diverse forms of knowledge of matter, society, life and spirit, but also many and very diverse concepts of what counts as knowledge and the criteria that may be used to validate it. In the transitional period we are entering, in which abyssal versions of totality and unity of knowledge still resist, we probably need a residual general epistemological requirement to move along: *a general epistemology of the impossibility of a general epistemology* [emphasis added]. (Santos, 2007, p. 12)

He suggests that, from this side of the abyssal line, a recognition of cultural diversity *does not* necessarily translate into a recognition of epistemological diversity.

Santos (2007) advocates for an “ecology of knowledges” based on a recognition of the “plurality of heterogeneous knowledges (one of them being modern science) and on the sustained and dynamic interconnections between them without compromising their autonomy” (p. 11). **In Santos’ ecology of knowledges, knowledges and ignorances intersect: “as there is no unity of knowledge, there is no unity of ignorance either”** (p. 12). Given the interdependence of knowledges and ignorances, the ideal would be to create “inter-knowledges”, where learning other knowledges does not mean forgetting one’s own (Santos, 2007). Hence, the “ecology of knowledges” he proposes aims to enable epistemological consistency for “pluralistic, propositional thinking” (p. 12) where **scientific knowledge is not discredited, but used in counter hegemonic ways.**

Such use consists, on the one hand in exploring the internal plurality of science, that is, alternative scientific practices that have been made visible by feminist and postcolonial epistemologies and, on the other hand, in promoting the interaction and interdependence between scientific and non-scientific knowledges. (Santos, 2007, p. 13)

Within the ecology of knowledges, the limits and value of knowledges are attributed according to the notion of “knowledge-as-intervention-in-reality” and not “knowledge-as-a-representation-of-reality” (Santos, 2007, p. 13). Santos proposes that “the credibility of cognitive construction [be] measured by the type of intervention in the world that it affords or prevents” (p. 13). He suggests that the ecology of knowledges not only requires a break from the mono-epistemicism of this side of the abyssal line, but also a “radical co-presence”, or the “conflation of contemporaneity with simultaneity, which involves the abandonment of the notion of linear time” (p. 11) and “the cultivation of a spontaneity that refuses to ‘deduce the potential from the actual’” (p. 17).

The ecology of knowledges is a destabilizing epistemology to the extent that it engages in a radical critique of the politics of the possible without yielding to an impossible politics. (Santos, 2007, p. 17)

This drive towards egalitarian simultaneity is based on an idea of incompleteness:

Since no single type of knowledge can account for all possible interventions in the world, all of them are incomplete in different ways [hence] each knowledge is both insufficient and inter-dependent on other knowledges. (Santos, 2007, p. 17)

Santos summarizes post-abyssal thinking as “learning from the [global] South through an epistemology of the [global] South” (p. 11). Such thinking should confront the mono-epistemicism of this side of the abyssal line with an ecology of knowledges.

It is in the nature of the ecology of knowledges to establish itself through constant questioning and incomplete answers. This is what makes it a prudent knowledge. The ecology of knowledges enables us to have a much broader

vision of what we do not know, as well as of what we do know, and also to be aware that what we do not know is our own ignorance, not a general ignorance. (Santos, 2007, p. 18)

In the next section we present our interpretations of the implications of Santos’ propositions in our contexts of work. We offer a brief analysis of the problems of translations across the abyss in an attempt to negotiate the possibility of ecologies of knowledge in academic contexts. We then present a situated example of engagement with epistemological pluralism applied to four concepts related to teaching in higher education.

Problematic epistemological translations

We conceptualize our focus on epistemology as a definitional terminology in this paper as a “strategic concession” (Kovach, 2009). In the spirit of Santos’ epistemic resistance, we recognize the difficulties and limitations of epistemological translations across the abyss. We acknowledge that the use of Western terminology (for example, the very notion of epistemology), categorizations (for example, epistemology, ontology, axiology, etc.) and technologies (such as alphabetic writing or digital script), to address issues related to indigenous ways of knowing is very problematic. Such mechanisms of production of meaning tend to privilege Cartesian thought, Cartesian subjectivity, and dialectical thinking (Buendia, 2003). They also tend to assume a transparent, neutral and objective relationship between a word and its referent, rather than symbolic or metaphorical relationships that can be inferred in indigenous philosophies of language (Garrouette, 1999). This indexed relationship between the word and its referent is the basis of the Western representation of its epistemological and ontological assumptions as unequivocal universal givens—and not as historically and

locally embedded collective “choices”. Thus this indexed relationship anchors the strength and sustainability of the universalization of Western thought (Adams, 2006) that imposes normative criteria and standards for evidence, validity, coherence and intelligibility in higher education (Buendia, 2003). As Santos and Buendia contend, such criteria and standards can be presented as neutral and natural only if their cultural roots in Western thought are made invisible.

This creates an awkward situation for the introduction of indigenous knowledges in academic contexts: scholars and educators working with indigenous ways of knowing are called to translate these into the dominant language, logic and technologies in ways that are intelligible and coherent (and, very often, acceptable or palatable) to readers and interpreters in the dominant culture. Those who engage in this translation in an attempt to work in counter-hegemonic ways and push the boundaries of what is acceptable in academia, often struggle with an interesting paradox with these readers and interpreters in the dominant culture. On the one hand, if translated indigenous ways of knowing are interpreted as too different from the dominant ways of knowing, they are perceived as making no sense and therefore having no value as they add nothing to “modern” discussions. On the other hand, if they are interpreted as being too similar to the dominant ways of knowing, they again are perceived as having no value as they cannot add new insight into Eurocentric knowledge systems. Furthermore, indigenous communities can perceive translations as a perversion, corruption or unfair appropriation of indigenous epistemologies. This adds to the complexity of the tricky space between communities that the indigenous translator inhabits (Smith, 1999).

Therefore, if the need for an ecology of knowledges in academia is recognized, more attention needs to be paid to the translations that happen across the abyss described by Santos. This effort requires critical engagement

(rather than critical disengagement or uncritical engagement) in the appropriation and transformation of the mechanisms of production of meaning in academia. Special attention needs to be paid to how conceptualizations and technologies (such as writing or teaching in square rooms) will affect and transform representations and interpretations across contexts. Acute self-awareness and vigilance in relation to one’s intent is also necessary: in carrying a tribe’s knowledge up the plateau one may reinforce the abyss in relation to other knowledges. The most important question here is how to conceptualize knowledge in ways that make abyssal thinking and its resultant epistemic blindness impossible, and that enable the production of knowledge based on a principle of solidarity.

We argue that Santos’ proposition of a transitory or provisional “general epistemology of the impossibility of a general epistemology” offers a possible way forward that is congruent with key characteristics of some indigenous epistemologies. Different from absolute relativism that relies on conceptualizations of independent and self-sufficient systems of knowledge production, the paradoxical general epistemology proposed by Santos is based on a recognition of located ignorances that could enable a conceptualization of knowledge systems as dynamic, interdependent and insufficient. Therefore, the solidarity Santos proposes requires a recognition that the production of meaning (or knowledge construction) is contingent, situated and provisional. The epistemological pluralism required for an ecology of knowledges emphasizes the provisional, propositional, equivocal and tentative nature of knowledge production, which enables the possibility of the emergence of different forms of dialogue focusing on the value of dissensus. These forms of dialogue emphasize two types of comparison: a comparison of contextual and historical aspects that enable the emergence of each knowledge system; and a comparison of the potential effects and contributions of such knowledge systems in offering different

interpretations of contemporary issues. In the next section, we illustrate the application of these ideas in addressing the need to introduce controversy in higher education.

Towards an epistemological pluralism in higher education

In this section we illustrate epistemological pluralism based on the transitional “general epistemology of the impossibility of general epistemologies” proposed by Santos and applied in an higher education context. We present a synthesis of two different ways of interpreting the need to introduce controversy in higher education to improve students’ analyses, promote intellectual freedom and equip students to engage with complexity, diversity and uncertainty in higher education. The first lens is based on our interpretation of the need for controversial debates (based on dialectical thinking) as illustrated in the work of Graff (2009). The second lens is informed by our interpretations of aboriginal cosmologies as lecturers in indigenous studies. We use Santos’ metaphor of

abyssal lines to emphasize the epistemic violence of colonialism, unequal representation and power relations between the two lenses that tend to result from that and which persist in contemporary institutional contexts (Figure 1).

In our framework, the first lens is grounded on a premise of unequivocal and universal knowing. This premise is based on an understanding of an indexed association between language and reality, where language describes an external reality independent of language. This correlation leads to the privileging of universal reason (that is, learning that emanates from thinking), of dichotomous, autonomous and disembodied thinking (for example, separation of mind and body, humans and nature, etc.) and of aspirations for order, discipline and control of reality grounded on a notion of individual/human self-sufficiency. The second lens is grounded on a premise of equivocal knowing, which is based on an understanding of an association between language and reality, where language is conceptualized as a tool for the construction of metaphors (or stories) for an elusive reality that cannot be apprehended by literal descriptions or a particular kind of

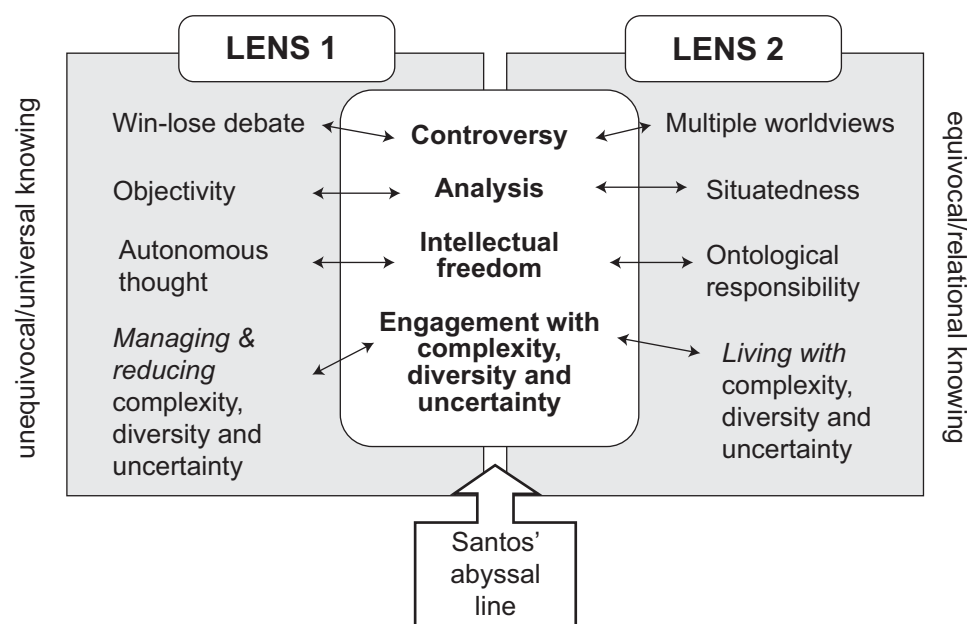


FIGURE 1: Comparison of two interpretations related to the introduction of different epistemologies in higher education

understanding. This correlation leads to the privileging of non-anthropocentric situated reasoning, of relationality and reciprocity and of interdependency grounded on a notion of mutual determination.

We propose that the notion of introducing controversy in higher education, if interpreted from the first lens of dialectical thinking (as suggested by Graff), would be conceptualized as a win-lose debate of opposing ideas based on criteria of legitimacy and validity grounded on predefined parameters of empirical evidence. Therefore, improving students' analyses would involve socializing them in an epistemology based on ideas of neutrality, universality and objectivity. Intellectual freedom in this view is based on the idea of autonomous thought related to universal reason and the Cartesian subject. Therefore, equipping students to engage with complexity, diversity and uncertainty could be translated into a cognitive exercise in established traditions of ordering chaos, managing complexity, reducing uncertainty and disciplining and domesticating diversity.

If these ideas are interpreted through the second lens, introducing controversy in higher education would first be an excavation exercise in the social-historical and political mechanisms of knowledge production. This would lead to the valorization and legitimation of suppressed or silenced knowledges, and hence the recognition of and exposure to "multiple realities". This exposure would require a relativization of Western rationality as the privileged form of knowing. This relativization, in turn, would tend to bring a temporary state of cognitive dissonance and destabilization. Raising levels of analysis would be translated into raising student's capacity to re-situate themselves in different knowledge systems (including the experience of language/stories as metaphor), as well as re-situating themselves in their bodies, emotions and spirits:

to the current moment and to what went before, to present and past . . . to the cycle of

seasons, the celestial movements, the weather, the land, the past of the land, the plants and animals, and to fellow human beings. (Bastien, 2004, p. 187)

Intellectual freedom, in this view, would not be associated with individualized thinking but with an ontological responsibility (Bastien, 2004) oriented towards service for the collective healing, renewal, reconnection and balance of "all relations". In the same way, engaging with complexity, diversity and uncertainty would be translated into equipping students to respond and adapt to a sacred realm (of both visible and invisible realities) that is both elusive and tangible and where multiplicity and uncertainty are natural givens.

Introducing the second lens (or third or fourth lenses) in institutions constructed and still heavily informed by the premises of the first lens and its projected mono-epistemicism (schools, colleges and universities, for example) is a huge and complex challenge that requires multiple strategies and interventions. Part of the challenge is to move beyond the type of dialectics that requires students to make a choice or to create a synthesis between the two lenses (and reproduce mono-epistemicism), towards equipping students to hold both (or more) perspectives in tension. We argue that, in order to create frameworks for "nurturing conversations" (Bastien, 2004), for the understanding and accommodation of difference in academic contexts, the mono-epistemic tendencies that can emerge in both lenses (depending on how they are presented) need to be transformed, and that this transformation requires an emphasis on the inherent heterogeneity of dynamic, contingent and interdependent systems of knowledge production.

Learning to navigate different epistemologies, and to choose and perform aspects of those in different contexts, can be a useful strategy for the emergence of better relationships and for addressing material and cultural inequalities. As an initial step, becoming (consciously) bi- or

multi-epistemic or operational in two or more ways of knowing, involves understanding different social and historical dynamic processes of knowledge construction, their limitations *and* the social–historical relations of power that permeate knowledge production. It also involves being able to reference, combine and apply the appropriate frame of reference to an appropriate context. This negotiation can be conceptualized as “border crossing” (Mignolo, 2002) in the interface between two or more knowledge systems.

A metaphor for this process from a Māori educational framework is that of the weaving of a fishing net (Cooper, Andreotti, MacFarlane, Skerett, Manning, & Emery, 2010). In this metaphor ontologies are fishing grounds, epistemologies are fishing nets and the fish is the appropriate knowledge that will serve as nourishment for one’s community. In order to weave an effective net one needs to have appropriate knowledge of the different fishing grounds, of different weaving patterns, floaters and weights, and of weather, currents and tides. As subsistence fishing is an exercise of service towards collective nourishment, the fisher also needs to know the kinds of fish that will meet the needs of one’s community and to be grounded and connected with all his or her relations. This metaphor highlights a need for epistemological pluralism based on an understanding of wisdom (Te ao Marama) as the combination and cross-fertilization of different fishing grounds (Royal, 2009), rather than the projection or universalization of one fishing ground representing the whole sea of possibilities (which is characteristic of the first lens). Royal refers to this process of knowledge weaving in different fishing grounds as “cross-disciplinary, cross-boundary thought, discussion and knowledge” (2009, p. 14). He frames this not only in terms of epistemologies (or domains of knowledge) but also in terms of the boundaries articulated by disciplines. However, he draws attention to the importance of the existence and awareness of boundaries in the exercise of border crossing.

Lens 1, as one dominant way of knowing in academic contexts, does not seem to be conducive of epistemological pluralism in the sense of the fishing net metaphor as it privileges individualized, de-contextualized and de-sacralized knowledge production and promotes subject–object relationships of study. On the other hand, the fishing net metaphor seems to parallel other aboriginal non-anthropocentric cosmologies that ground knowledge production on subject–subject relationships, such as Amazonian perspectivism, aboriginal dreamtime and the Native American medicine wheel. Royal argues that aboriginal knowledge:

is holistic knowledge in the sense that knowledge is interconnected and relational in the same way that all life is interconnected and relational. We dwell within the web or weave of life—in Māori we use *tātai* or genealogies for all creation as a metaphor for this aspect of existence—and so our knowledge reflects this reality. (2009, p. 14)

Cajete (2000) reflects on the medicine wheel as one possible metaphor of epistemological pluralism:

The four or more directions generally serve as allegories for sacred orientations to places in Indigenous traditions. Each has associated plants, animals and natural phenomena. And each of the plants and animals represent a perspective, a way of looking at something in the centre that humans are trying to know. The idea of moving around to look from a different perspective, from the north, the south, the east and the west, and from above, below or within, is contained in the creative process . . . Indigenous logic moves between relationships, revisiting, moving to where it is necessary to learn or to bring understandings together. This might be called the sacred dimension of Indigenous science. Western science has struggled mightily to remove the role of spirit from understanding the world. Indigenous science

works from the other side, continually infusing relationships with spirit through its discovery and rediscovery. (Cajete, 2000, pp. 210–11)

Therefore, we suggest that some aboriginal cosmologies can be conceptualized as inherently pluri- or multi-epistemic. We acknowledge, however, that given colonial and neo-colonial violences and the need to adopt strategic essentialism (Spivak, 1994) to “speak back” to hegemonic powers in ways that are intelligible to these powers, aboriginal cosmologies are often represented as fixed and mono-epistemic—and sometimes this representation shapes and changes the epistemology itself. When represented in political contexts, aboriginality tends to be grounded on ideas of reparation, land ownership/protection, genealogy, authenticity and the right to self-determination (defined in the terms of lens 1). This often brings material gains in negotiations with (neo)colonial powers and allows indigenous communities to foster their agendas, which may or may not involve or benefit those at the margins of the communities. Reparation (or recognition or redistribution or decolonization) agendas defined in these terms, however, remain within the logic of Cartesian subjects and nation states and, although they produce a critique of colonialism, the alternatives they enable are still bound by the abyss. These agendas are also generally enacted in contexts of scarcity that encourage competition for legitimacy and resources (through a quest for purity and authenticity) instead of solidarity. In promoting these agendas, the “strategic” dimension of essentialism is often forgotten. This in turn tends to reproduce the very cycle of oppression of colonialism the agendas themselves aim to displace, by creating a form of activism that constructs internal dissent as a pathology, projected back onto members of the community who dissent. This form of activism tends to breed insecurity, anger, mistrust, self-righteousness, siege-consciousness and parochialism, which in turn leads to more trauma and its effects—more

internalized oppression and more ethno-stress.

We were sceptical of the potential for strategic (or “real”) essentialism to create the kinds of relationships that could offer a constructive and sustainable contribution beyond the immediate needs of our contexts. In our work, therefore, we define aboriginality in ways that challenges the cognitive, epistemic and relational violence of colonialism (and the coercion and manipulation that go with that). Our definition highlights an equivocal epistemology grounded on a metaphysical conceptualization of an unknown interconnecting reality, which the mind is not able to apprehend and which is able to be represented only through metaphor; that is, stories of never-ending beginnings (Jackson, 2010). This definition emphasizes generosity, reciprocity, solidarity, relationality, interdependence, abundance, immanence and a respect for the gifts of internal and external difference. This respect guarantees a “space to speak from” (tūrangawaewae), where each can offer one’s (different) contribution and help each other learn (re-story metaphors) by offering perspectives from different angles.

In discussing the implications of the theories and frameworks presented in this paper to our work as curriculum designers in higher education, we have started to explore the medicine wheel, the Māori fish net and the notion of the soul wound (Duran, 2006) as possible pedagogical metaphors for pluri-epistemic pedagogies that offer strategies to address imbalances caused by historical trauma in aboriginal and non-aboriginal communities. We are interested in conceptualizing pedagogies that emphasize the value of difference (that is, the different teachings of the four directions, or the value of different weaving patterns for different fishing grounds), an awareness of metaphysical choices embedded in different worldviews, and that take account of cyclical time, of ceremony (as an epistemology), of complexity, contradiction, ambivalence and uncertainty, and of emotional, cognitive, physical and spiritual aspects of the educational process.

Conclusion

Our conclusion points to the need for more intellectual and pedagogical work in the area of epistemological pluralism, especially in relation to the introduction of aboriginal epistemologies in higher education contexts. With the intent to offer this paper as a starting point for dialogue we have chosen to finish with four questions with which we are currently wrestling. One: If aboriginal epistemologies are locally based but inherently heterogeneous, whose aboriginal epistemologies should we privilege in which context—and where are they emerging from (what is their context of production)? Two: If aboriginal knowledge production is equivocal and elusive, how can we introduce them into institutions shaped by unequivocal and universalizing epistemologies without institutionalizing and fixing these newly introduced epistemologies? Three: If the traditional way

of learning aboriginal knowledge is embodied and experiential (through ceremony and relationship with the sacred/spirit/land), what, if anything, can be usefully done within the four walls of classrooms or through online tuition? Four: If our intent is to protect aboriginal epistemologies in contexts where they are threatened or subjugated, how can we challenge this subjugation and produce “prudent propositional knowledges” (Santos, 2007) in ways that do not reproduce and recreate the abyssal divide in our own communities and in our relationships with those who disagree with us?

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