

Changing planes: lines of flight in transnational curriculum inquiry

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This chapter is performed as a conversation between its co-authors and, therefore, most parts of it are written in the first person singular; we will signal in subheadings and type font which one of us is 'I' in these sections.

In recent years Deleuze and Guattari have inspired each of us to perform educational philosophy and curriculum inquiry in distinctive but convergent ways. One of us (Noel Gough, 2004b, 2006b, 2007a) has produced a series of narrative experiments that foregrounds the generativity of 'rhizosemiotic play' (catalyzed by intertextual readings of selected fictions) in writing educational philosophy and theory, and the other (Warren Sellers, 2008) has produced a doctoral thesis through processes of 'rhizo-imaginary' 'picturing' towards immanent and emergent curriculum theorizing. We have also collaborated in ways that have been sufficiently rewarding to motivate us to persevere with exploring further potentials for thinking~writing¹ together. Some of these collaborations have resulted in coauthored works (Gough, et al., 2003; Sellers & Gough, 2008, 2010) but what we value in sharing our individual thinking~writing is not so much what brings us together but what sends us out-ontowards as we each see the ordinary extra-ordinarily.

For example, Warren (in Sellers, 2008) demonstrates how his thinking about 'imaginary' becomes a way to deconstruct common usages of figuration and metaphor in Deleuze and Guattari's writing. This thinking produced his expression 'rhizo-imaginary' as a generative way of putting words to a picturing methodology. Noel (in Gough, 2007a, 2007c, 2010) coined a complementary expression, 'rhizosemiotic play', which names his approach to imaginative inquiry enacted in the spirit of Deleuze's (1994) assertion that a philosophical work should be 'in part a kind of science fiction' (xx). These narrative experiments deploy fictional texts and other artworks to 'diffract'² storylines of educational inquiry, and to deconstruct educational questions, problems and issues in areas such as cyborg pedagogy, science and environmental education, and the internationalization of curriculum studies. Although Deleuze and Guattari's co-authored textual style inspired us, our lines of (inquiry and modalities of) flight differ from theirs – because we severally recognize each other we are less of a crowd.

¹ We use the ~ (tilde) to signal a conjoining of co-implicated notions in what we think of as complicity i.e. thinking that is complicit with writing and simultaneously *vice-versa*.

² Gough follows Donna Haraway (1994) in emphasizing that 'for me, the most interesting optical metaphor is not reflection and its variants in doctrines of representation. Critical theory is not finally about reflexivity, except as a means to defuse the bombs of the established disorder and its self-invisible subjects and categories. My favorite optical metaphor is diffraction – the noninnocent, complexly erotic practice of making a difference in the world, rather than displacing the same elsewhere' (p. 63).

Transnational curriculum inquiry: the story so far...

Noel

More than a decade ago, William Pinar, William Reynolds, Patrick Slattery, and Peter Taubman (1995) concluded their synoptic text, *Understanding Curriculum: An Introduction to the Study of Historical and Contemporary Curriculum Discourses*, with a chapter titled 'Postscript for the Next Generation' in which they foreshadowed a future for curriculum inquiry in terms of generating and sustaining 'complicated conversations':

Curriculum is an extraordinarily complicated conversation. Curriculum as institutionalized text is a formalized and abstract version of conversation, a term we usually use to refer to those open-ended, highly personal, and interest-driven events in which persons encounter each other. That curriculum has become so formalized and distant from the everyday sense of conversation is a profound indication of its institutionalization and bureaucratization. Instead of employing others' conversations to enrich our own, we 'instruct' students to participate in others' – i.e. textbook authors' – conversations, employing others' terms to others' ends. Such social alienation is an inevitable consequence of curriculum identified with the academic disciplines as they themselves have been institutionalized and bureaucratized over the past one hundred years. Over the past twenty years the American curriculum field³ has attempted to 'take back' curriculum from the bureaucrats, to make the curriculum field itself a conversation, and in so doing, work to understand curriculum (p. 848).

More recently Pinar (with the encouragement and support of many other colleagues worldwide, myself among them) has deliberately sought to make participation in the complicated conversations that constitute curriculum work more culturally inclusive by establishing the International Association for the Advancement of Curriculum Studies (IAACS) in 2000. Through its triennial conferences, online journal, *Transnational Curriculum Inquiry*,⁴ and associated publications (see, for example, Pinar, 2003; Trueit, Doll, Wang, & Pinar, 2003). IAACS provides a number of forums for such conversations, which now have additional layers of complication and complexity by virtue of being conducted transnationally, transculturally and, at least to some extent, translinguistically.

In this chapter we respond to a question that has been a persistent focus for inquiry among members of IAACS since its formation. Pinar (2005) formulates the question as follows: how do we provide opportunities for 'complicated conversation' and 'intellectual breakthrough' in the internationalization of curriculum studies? During the past decade and more, my experiences of research, consultancy, and teaching in various nations/regions – including Australia, China, Europe, Iran, New Zealand, and southern Africa⁵ – have served to deepen my conviction that the 'complicated conversation' to which Pinar et al. refer is not yet complicated enough in any of the disciplines within I work (principally curriculum studies, research methodology, environmental education, and science education). The international

³ Here Pinar et al. are not referring to *all* US curriculum scholars but to those who have identified themselves as 'reconceptualists' (Pinar, 1975) in the wake of Joseph Schwab's (1969, 1971, 1973) immensely influential series of papers on curriculum as a discipline of 'the practical'. Reconceptualist curriculum scholars shifted the emphasis of curriculum studies from theorizing curriculum *development* towards generating theoretical frames for *understanding* curriculum.

⁴ <http://ojs.library.ubc.ca/index.php/tci/>

⁵ The experiences to which I refer are both direct (such as teaching or conducting research in these nations/regions) and vicarious (such as supervising or examining research conducted by doctoral students in these nations/regions).

discourses of these disciplines are ‘complicated’, complex, and diverse only within Western registers of difference in approaches to disciplined inquiry, principally because they remain dominated by scholars who work in Eurocentric scholarly traditions.

Pinar (2005) explores the question of how to provide opportunities for complicated and generative conversation in the internationalization of curriculum studies through three concepts that structure Charles David Axelrod’s (1979) sociological study of intellectual breakthrough, namely, *thinking*, *individuality* and *community*, and is conducting a program of inquiry that uses these concepts to structure a planned sequence of transnational conversations (Pinar, 2010, 2011a, 2011b). In the remainder of this chapter, I explore Pinar’s question by performing a narrative experiment.

Warren

As collaborators, Noel and I have a shared interest in curriculum complications and complexities that for me was initially sharply focused through the synoptic lens of *Understanding Curriculum* (Pinar *et al.* 1995), a text that remains under-regarded for its unrivalled treatment of diverse views and voices that inhabit the space that is termed ‘curriculum’. This Latinate word is now so solidly fixed in the educational lexicon, as a construct, that its actual meaning is lost. David Hamilton (1990) first alerted me to its origin as an educational term, by explaining how Petrus Ramus (1515-1572),⁶ having experienced the contradictions and confusions of Scholasticism, the rise of Humanism and the invention of moveable type, logically systematized the Scholastic subjects into a rational arrangement that enabled more efficient and effective study. Following the Ramist scholar Walter Ong (1982), who writes of *The Technologizing of the Word*, I like to think of Ramus as the first educational designer, a role now gaining more attention as education becomes increasingly technologized. I have argued elsewhere (Sellers, 2008) that the premise for curriculum has changed little since Ramus brought it into play and, sadly, as a bureaucratic tool, its primary function remains one that mostly pre/pro-scribes the what and how of teaching. Although there have been countless attempts to re-construct/-conceptualise/-imagine/-view/-vive/-vitalize curriculum, these have, more often than not, foundered on the reefs of economic exigencies. This is what I mean when I refer to the loss of actual meaning; there have been so many (mis)interpretations of curriculum, only inconsistent and incoherent understandings are now available (see Kieran Egan, 1978, 2003) leading to what Pinar (2004) labels ‘[m]iseducation’ (p. 15). Ramus had a somewhat clearer and generative purpose in mind when he adopted the term *curriculum*. Furthermore, Ramus had a transnational context in mind too, albeit confined to Northern European scholars and those with a preference for Calvinism. Nowadays there are virtually no geographical confines, scholars of all nationalities travel physically (and virtually) around the planet to study. What marketers call ‘international’ education is actually transnational.

Like Ramus half a millennium ago, today we are confronted with a similar situation where the what and how of education is running amok with confusion and contradiction as post-Humanism prevails and moveable type has evolved into Information and Communication Technology a new regime reigns. This time education is being brought into line through a legislative narrative: ‘the legislative in education can be seen in ...phrases such as ‘competency-based education’, ‘performance-based education’, and ‘assessment systems’ (Jim Neyland, 2010, p. 25). Whereas Ramus’ critical concern was primarily pedagogic with strong overtones of theological tensions, today’s critical educational concerns are ethical with strong overtones of economic tensions. Ramus addressed the situation he encountered with an arboreal metaphor and resolved it by systematizing the essential elements. Noel and I believe that metaphor and its systematizing resolution is neither relevant nor appropriate for the 21st century and there is a need to engage with another more generative representing imaginary, namely, *rhizome*.

⁶ In all likelihood Ramus’ ‘surname’ derived from his invented ‘method’ of branching scholastic subjects. Ramus being the Latin word for branch.

Narrative experiments: a methodological disposition

Noel

My response to Pinar's question (and the larger problematic of which it is a part) is shaped by my methodological disposition to perform educational inquiry by producing texts of the kind that Laurel Richardson (2001) calls 'writing-stories' and that I call 'narrative experiments' (Gough, 2004a). Richardson (2001) argues (persuasively in my view) that:

Writing is a method of discovery, a way of finding out about yourself and your world. When we view writing as a *method*, we experience 'language-in-use,' how we 'word the world' into existence ... And then we 'reword' the world, erase the computer screen, check the thesaurus, move a paragraph, again and again. This 'worded world' never accurately, precisely, completely captures the studied world, yet we persist in trying. Writing as a method of inquiry honors and encourages the trying, recognizing it as emblematic of the significance of language (p. 35; emphases in original).

Like Richardson (2001), 'I write because I want to find something out. I write in order to learn something that I did not know before I wrote it' (p. 35), and this essay can be understood as a narrative experiment performed by bringing concepts that circulate widely in the discourses of an increasingly internationalized curriculum field into intertextual play with Deleuze and Guattari's geophilosophy and Ursula Le Guin's fictions. I use the term 'essay' here both as a verb – to attempt, to try, to test – and as a noun. In theoretical inquiry an essay can serve similar purposes to an experiment in empirical research – a methodical way of investigating a question, problem or issue – although I find more appropriate analogies for my work in the experimental arts than in the experimental sciences.⁷ Both 'essay' and the related term 'assay' come to English speakers through the French *essayer* from the Latin *exigere*, to weigh. Thus, I write essays to test ideas, to 'weigh' them up, to give me (and eventually, I hope, my colleagues) a sense of their worth. The purpose of this particular narrative experiment is to imagine, rehearse, and perform (to the best of my ability) some possible 'rhizosemiotic' practices of transnational curriculum inquiry that might generate and sustain complicated conversations and the conditions under which they can occur.⁸ I deliberately refrain from attempting to 'define' my invented signifier, *rhizosemiotic*, because I share Deleuze's disinterest in asking what a sign, concept or text 'means' but, rather, asking how they *work* and what they *do* or *produce*. If my narrative experiment does the work I intend, readers will experience 'rhizosemiotic play' immanently, as emerging from this text.

Warren

My disposition to 'picturing' resonates with Noel's narrative experiments, but rather than taking lines of *textual* flight through rhizosemiotic space, my lines of flight are imagined more visually and, although they mostly take off from textual plateaus, they transpose words into images (see figure 1).

⁷ For example, in a 1950 interview, the abstract expressionist painter Jackson Pollock was asked: 'Then you don't actually have a preconceived image of a canvas in your mind?' He replied: 'Well, not exactly – no – because it hasn't been created, you see. Something new – it's quite different from working, say, from a still life where you set up objects and work directly from them' (quoted in Pinar, 1994, p. 7). Richardson (2001) makes a parallel point about writing as research: 'I was taught... as perhaps you were, too, not to write until I knew what I wanted to say, until my points were organized and outlined. No surprise, this static writing model coheres with mechanistic scientism, quantitative research, and entombed scholarship' (p. 35).

⁸ My narrative experiments have similar purposes to the 'thought experiments' conducted by quantum and relativity physicists in the early part of the twentieth century. Their purpose was not prediction (as is the goal of classical experimental science), but more defensible representations of present 'realities'.

Apart from that distinction my disposition works the same rhizosemiotic space in the same ways with similar emergent experiences as Noel's.



Figure 1: Envision, envisage, visualize (Sellers, 2002)

Deleuze and Guattari's geophilosophy

Noel

Deleuze and Guattari (1994) map the 'geography of reason' from pre-Socratic times to the present, a geophilosophy describing relations between particular spatial configurations and locations and the philosophical formations that arise in them. 'Philosophy', they say, 'is the discipline that involves creating concepts' (p. 5) through which knowledge can be generated. As Michael Peters (2004) points out, this is very different from the approaches taken by many analytic and linguistic philosophers who are more concerned with the *clarification* of concepts:

Against the conservatism, apoliticism and ahistoricism of analytic philosophy that has denied its own history until very recently, Deleuze and Guattari attempt [a] geography of philosophy – a history of geophilosophy – beginning with the Greeks. Rather than providing a history, they conceptualise philosophy in spatial terms as *geophilosophy*. Such a conception immediately complicates the question of philosophy: by tying it to a geography and a history, a kind of historical and spatial specificity, philosophy cannot escape its relationship to the City and the State. In its modern and postmodern forms it cannot escape its form under industrial and knowledge capitalism (p. 218).

Deleuze and Guattari (1987) created a new critical language for analyzing thinking as flows

or movements across space. Concepts such as *assemblage*, *detritorialisation*, *lines of flight*, *nomadology*, and *rhizome/rhizomatics* clearly refer to spatial relationships and to ways of conceiving ourselves and other objects moving in space. For example, Deleuze and Guattari (1987) distinguish the 'sedentary point of view' (p. 23) that characterizes much Western philosophy, history and science from a nomadic subjectivity that allows thought to move across conventional categories and move against 'settled' concepts and theories. They also distinguish 'rhizomatic' thinking from 'arborescent' conceptions of knowledge as hierarchically articulated branches of a central stem or trunk rooted in firm foundations. As Umberto Eco (1984) explains, 'the rhizome is so constructed that every path can be connected with every other one. It has no center, no periphery, no exit, because it is potentially infinite. The space of conjecture is a rhizome space' (p. 57; see Warren's figure 2).

Warren

Noel focuses attention here on the geophilosophical tendencies of Deleuze and Guattari's rhizome with regard for its differential affects on a bigger picture, whereas I am curious about a philosophy of becoming-minor as an ethical enaction. Although I am completely empathetic with the rhizome space, I wonder how becoming-bud becoming-flower deterritorializes the econo-ethico-politico space it inherits (see Fig. 2). Can becoming-flower (and in particular becoming-*iris*⁹) reveal otherwise hidden knowings? While the concept of rhizome affects knowledge of organization and arrangement, how does the bloom emerging from the rhizomes shooting affect experiences? How do light and color and shape and form affect other understandings? Although such attributes are characteristics of the determination of a compound unit, such as a plant species, they are only recently emerging as matters of philosophical discourse. Evan Thompson's use of color as a case study in explorations of spontaneous and reflective experience (in Varela, Thompson, & Rosch, 1993, pp.157-171), and his work on color vision, linking cognition and perception (Thompson, 1995), are examples.

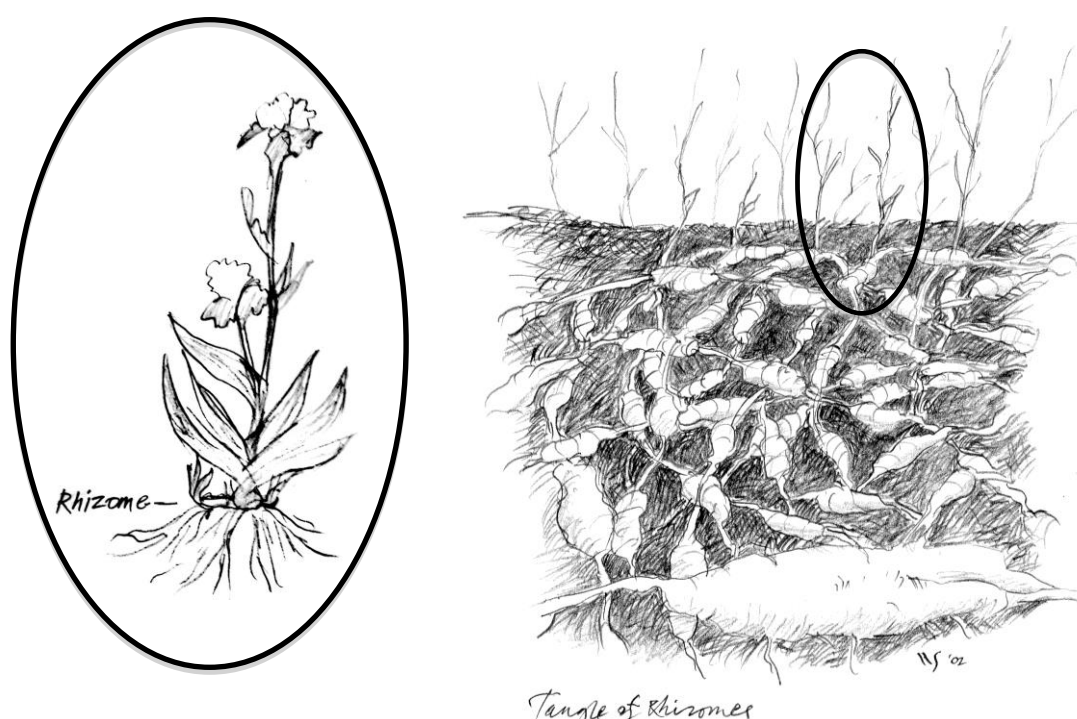


Figure 2: [Left] Flowering Iris (©Sellers 2013)¹⁰; [Right] A tangle of rhizomes (Sellers, 2002)

⁹ Drawing on the etymology of *iris*, which names the Greek goddess of the rainbow and the concept of multi-coloured thus expressing diversity and multiplicity.

¹⁰ Illustrations credited to Sellers (2013) were prepared for this chapter.

Noel

In a world of accelerating globalization and increasingly complex information, communication, and knowledge technologies, the semiotic space of curriculum inquiry is also becoming a ‘rhizome space’ that is more hospitable to nomadic than to sedentary thought. Rhizome is to a tree as the Internet is to a letter – networking that echoes the hyperconnectivity of the Internet. The structural reality of a tree and a letter is relatively simple: a trunk connecting two points through or over a mapped surface. But rhizomes and the Internet¹¹ are infinitely complex and continuously changing. Imagining knowledge production in a rhizosemiotic space is particularly generative in postcolonialist educational inquiry because, as Patricia O’Riley (2003) explains: ‘Rhizomes affirm what is excluded from western thought and reintroduce reality as dynamic, heterogeneous, and nondichotomous; they implicate rather than replicate; they propagate, displace, join, circle back, fold’ (p. 27).¹²

Concepts, planes, and difference

Noel

Returning to the question of how we provide opportunities for complicated conversation and intellectual breakthrough in the internationalization of curriculum inquiry, I suggest that Deleuze and Guattari’s geophilosophy is particularly helpful in thinking about the unavoidable concept of *difference* (within and between nations/regions/cultures) and the opportunities and dilemmas for curriculum scholars that difference produces. For example, Pinar (2005) alludes to the productivity of difference in describing one of the anticipated phases of his research on intellectual breakthrough in the internationalization of curriculum studies:

One potential function of ‘internationalization’ – being called by a foreigner to reflect upon one’s own nationally and/or regionally-distinctive field, including one’s own situatedness within it – is the dislocation of the native scholar-participant from his or her embeddedness in his or her local or domestic field. This opportunity for dislocation is occasioned by the call to study one’s locality in conversation with foreigners in a foreign setting. Such dislocation functions to interpellate the individual scholar as a ‘stranger,’ certainly to foreigners and, to a lesser and relative extent, to one’s fellow citizens (pp. 13-14).

Here the concept of difference is marked by other concepts such as ‘native’ and ‘foreigner’, and I will now demonstrate how Deleuze and Guattari’s approach differs from that of analytical philosophers by focusing more sharply on the concept of ‘foreigner’. For Deleuze and Guattari (1994), the philosopher’s task is not to construe the concept of ‘foreigner’ as an object of ‘contemplation, reflection and communication’ (p. 5) but, rather, to ask how the concept of ‘foreigner’ is (or can be) created. However, before I outline my interpretation of Deleuze and Guattari’s response to this question, I suggest that their philosophy of concept creation might be more intelligible if we can first imagine some possible circumstances in which the concept of ‘foreigner’ is *not* (and perhaps *cannot* be) created.

¹¹ See, for example, the Burch/Cheswick map of the Internet as at 28 June 1999 at <http://cheswick.com/ches/map/gallery/isp-ss.gif> accessed 18 June 2013.

¹² See Gough (2004b, 2006a, 2006b) for further examples of applying Deleuze and Guattari’s geophilosophy to questions, problems and issues concerning (for example) ‘posthuman’ pedagogies, science education research (with particular reference to societies in transition), and quality imperialism in higher education.

Ursula Le Guin (2000) imagines such circumstances in *The Telling*, a novel in her series of so-called ‘Hainish’ stories. The common background for this series supposes that, at least half a million years ago, intelligent humanoids from the planet Hain spread across the galaxy and settled on nearly a hundred habitable worlds, including Terra (Earth), that were then left alone for many millennia. Le Guin’s stories imagine that communication and travel between the worlds has resumed and that a loose interplanetary federation, the Ekumen, coordinates the exchange of goods and knowledge among the myriad of diverse cultures, religions, philosophies, sciences and forms of governance that have evolved separately on the various planets. Representatives of the Ekumen travel to each planet when it is rediscovered and invite peoples of Hainish descent to participate in the federation, if they wish.

In *The Telling*, Suttu is a Terran Observer for the Ekumen, a language and literature specialist who travels to the planet Aka to continue studies initiated by the first Observers to make contact with the Akan people some seventy years earlier. Aka is a world with only one continent, so all of its peoples live on just one landmass. In the following passage, Suttu meditates on the significance of this difference from Terra – and its implications for the politics of identity – and, related to this, her conviction that traditional Akan spirituality is not a ‘religion’:

religion as an institution demanding belief and claiming authority, religion as a community shaped by a knowledge of foreign deities or competing institutions, had never existed on Aka. Until, perhaps, the present time.

Aka’s habitable lands were a single huge continent with an immensely long archipelago off its eastern coast ... Undivided by oceans, the Akans were physically all of one type with slight local variations. All the Observers had remarked on this, all had pointed out the ethnic homogeneity ... but none of them had quite realised that among Akans *there were no foreigners*. There had never been any foreigners, until the ships from the Ekumen landed.

It was a simple fact, but one remarkably difficult for the Terran mind to comprehend. No aliens. No others, in the deadly sense of otherness that existed on Terra, the implacable division between tribes, the arbitrary and impassable borders, the ethnic hatreds cherished over centuries and millennia. ‘The people’ here meant not *my* people, but people – everybody, humanity. ‘Barbarian’ didn’t mean an incomprehensible outlander, but an uneducated person. On Aka, all competition was familial. All wars were civil wars (pp. 98-9; emphasis in original).

We hardly need to be reminded of just how deadly our sense of otherness can be. In the aftermath of the attacks on the United States on September 11, 2001, the breadth of antiterrorist legislation in nations such as Australia and the US – coupled in Australia with the federal government’s paranoid approach to ‘border protection’ and treatment of asylum seekers that amounts to institutionalized racism – has eroded the foundations of respect for human rights in these countries and worldwide. *The Telling* is testimony to the *possibility* of thinking what many humans think is unthinkable, such as imagining a world without ‘foreigners’. What would social, environmental, and educational policy look like if we too assumed that ‘the people’ meant ‘everybody, humanity’? Le Guin demonstrates that it is possible to think differently about identity and community, and related questions of inclusion and exclusion, without ever underestimating the remarkable difficulty of doing so, and the even greater difficulty of bringing new imaginaries into effect. In one of her short stories, aptly titled ‘She Unnames Them’(1987), she demonstrates how we might subvert the contemporary politics of naming nature by mocking and subverting the biblical assertion that ‘Man’ (via Adam) gave names to all animals. In this story Eve collaborates with the animals

to undo Adam's work: 'Most of them accepted namelessness with the perfect indifference with which they had so long accepted and ignored their names' (p. 195). Modern science maintains clear distinctions between subject and object and, thus, between humans and other beings, plant and animal, living and non-living, and so on. These distinctions are sustained by the deliberate act of *naming*, which divides the world into that which is named and everything else. Naming is not just a matter of labeling distinctions that are already thought to exist. Assigning a name to something constructs the illusion that what has been named is genuinely distinguishable from all else. In creating these distinctions, humans can all too easily lose sight of the seamlessness of that which is signified by their words and abstractions. So, in Le Guin's (1987) story, Eve says:

None were left now to unname, and yet how close I felt to them when I saw one of them swim or fly or trot or crawl across my way or over my skin, or stalk me in the night, or go along beside me for a while in the day. They seemed far closer than when their names had stood between myself and them like a clear barrier... (p. 196)

We could do with some creative unnamings in our work. We could start with some of the common names of animals and plants that signify their instrumental value to us rather than their kinship. There is a vast difference between naming a bird of the Bass Strait islands (between Tasmania and mainland Australia) an 'ocean going petrel' or a 'short-tailed shearwater' and naming it a 'mutton bird'. Only one of these names identifies a living thing in terms of its worth to us as dead meat. Names are not inherent in nature; they are an imposition of human minds. It is as if we wish to own the earth by naming it. Unnaming makes it harder to explain ourselves – we can't chatter away as we're so used to doing, hearing only our own words making up the world, taking for granted our names and what they signify.

Deleuze and Guattari (1994) show us how to do philosophy in ways that produce similar effects to Le Guin's storytelling arts, that is, to create a perspective through which the world takes on a new significance: 'The task of philosophy when it creates concepts... is always to extract an event from things and beings, always to give them a new event: space, time, matter, thought, the possible as events' (p. 33). For Deleuze and Guattari (1994), doing philosophy means creating concepts on planes of immanence: 'Philosophy is a constructivism, and constructivism has two qualitatively different aspects: the creation of concepts and the laying out of a plane' (pp. 35–36). Every concept is a finite multiplicity. For example, our concept of 'foreigner' involves many other concepts, such as ethnic/racial difference and territorial divisibility. Neither singular nor universal concepts are possible because every concept has a 'history' and a 'becoming' – a history of its traversal of previous constellations of concepts, and a becoming as it joins with other concepts within similar or contiguous fields of problems.

As I interpret Deleuze and Guattari (1994), the proposition that every concept has a history and a becoming is not only a matter of concepts developing within various and changing social and historical contexts but also recognizes that concepts have *acontextual* and *atemporal* features. Every concept inaugurates the plane of immanence of the concept, which is 'neither a concept nor the concept of all concepts' (p. 37) but, rather, is a preconceptual field presupposed within the concept, 'not in the way that one concept may refer to others but in the way that concepts themselves refer to nonconceptual understanding' (p. 40). Deleuze and Guattari (1994) argue that the 'plane of immanence is not a concept that is or can be thought but rather *the image thought gives itself of what it means to think, to make use of thought, to find ones bearings in thought*' (p. 37; my emphasis). For example: 'in Descartes [the plane of immanence] is a matter of a subjective understanding implicitly presupposed by

the “I think” as first concept; in Plato it is the virtual image of an already-thought that doubles every actual concept’ (pp. 40-41).

Warren

Many of the passages in Noel’s text are like shimmering mirages rising from the page to suggest lines of flight towards other readings and their imaginaries. I envision images and envisage ways for seeing ‘other’ as *otherwise* and *otherness*, as fluid and shape-shifting, never as a fixed form. Le Guin’s stories explicate ‘being’ as both unalien and unnamed. Naming is an unnecessary artifice that determines and divides to evade *other-ing-ness*. These ideas resonate with my critical concerns about the legislative narrative pervading education and the imperative to realize otherness as complex and emergent rather than complicated and fixed. Otherness imagines such environments without need for deconstructive *différance*¹³.

Figure 3 shows the picturings that Noel’s text passages generate:

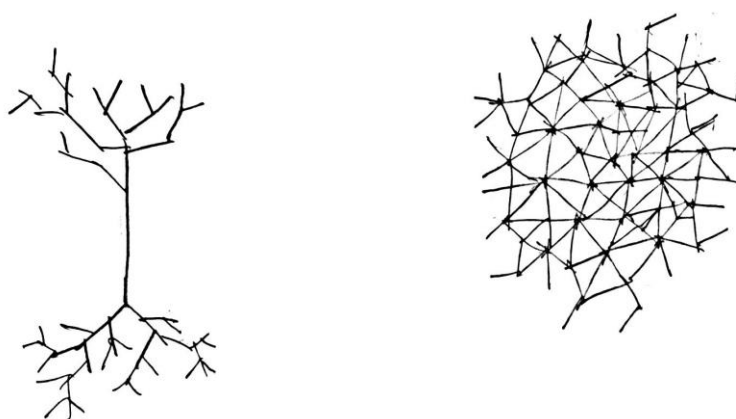


Figure 3: [Left] ‘Closed’ arboreal system; [Right] ‘Open’ rhizomatic system (©Sellers 2013).

Otherness in figure 3 left depicts the arboreal other as closed, discrete and contained, but rhizomatic, in figure 3 right, is open and interconnected and expansive. Although the arboreal system can comprise manifold iterations each is self-contained. A rhizomatic system expands openly and widely with varying intensities of interconnections throughout the network

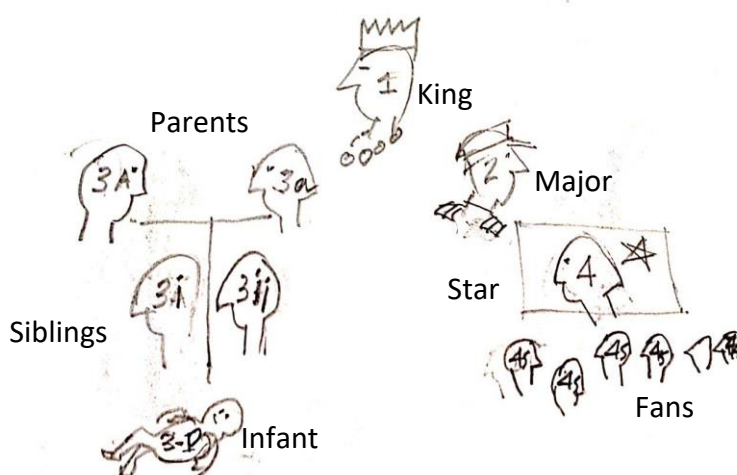


Figure 4: Taxonomies of order (©Sellers 2013).

¹³ Jacques Derrida (1981, pp. 39-40) uses *différance* to signify a structuring principle that suggests definition rests not on the entity itself but in its positive and negative references to other texts—meaning changes over time and the attribution is deferred indefinitely

Otherwise eschews naming, which enforces taxonomy – the classification of unit and rank. In figure 4 each name marks a position of relationship to another, which is ranked hierarchically.

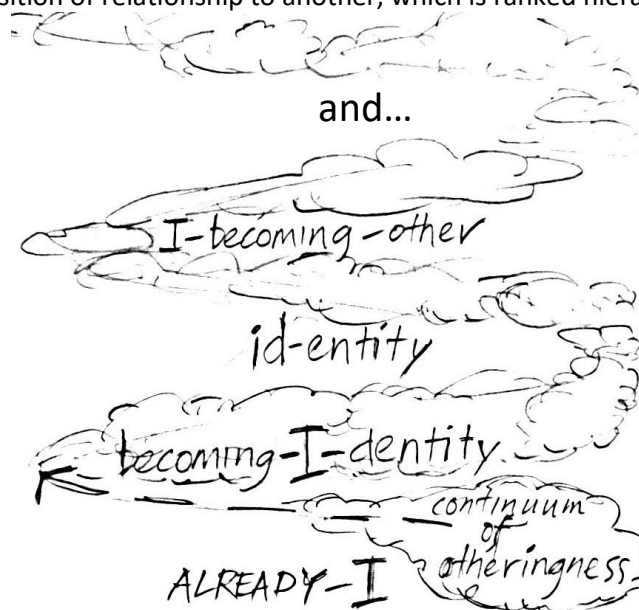


Figure 5: I-becoming... (©Sellers 2013).

Otherness and *otherwise* emerge from and merge with each other, opening out a discrete and bounded construct (I) to meanings without boundaries – often adopting an infinitive -ing-. Thus I-becomes within a continuum of *otheringness* that Deleuze and Guattari imagine as the ‘plane of immanence’. Figure 5 pictures the plane of immanence as a cloud-like continuum of *otheringness*, commencing with an already-I of the past-becoming-present (moving vertically) *and* reconsidering a becoming-I-identity *and* thinking of its Id-identity *and* conceptualizing I-becoming-other *and*...

In figure 6 I have pictured Descartes and Plato and Socrates’ encounters with the plane of immanence.



Figure 6: [Left] Descartes; [Right] Plato and Socrates.

The left picture in figure 6 pictures Descartes subjective ‘I’ presupposing ‘think’ to declare ‘I am’. The right picture shows Plato perceiving ‘already-thought’ and its (Socratic) doubling virtual ‘thought’ and its emergent ‘concept’.

Noel

The plane of immanence is inaugurated within the concept (that which is created) but it is clearly distinct from the concept (because it expresses the uncreated, that which ‘thought just

does'). The plane of immanence thus expresses the nonconceptual that is *both* internal to *and* 'outside' the concept. Deleuze and Guattari (1994) characterize this complex and paradoxical relationship as follows: 'concepts are events, but the plane is the horizon of events, the reservoir or reserve of purely conceptual events' (p. 36). By way of example, Iain MacKenzie (1996) suggests that:

'the present happens' because there is a 'past-becoming-future horizon' presupposed within it. Without a presupposed limitless expanse of time we could not talk of the present. In the same way, without the presupposed plane of immanence concepts would never 'happen'. Moreover, as the present would never change without the existence of an 'eternal horizon' presupposed within it, without the institution of the plane – that which thought 'just does' – concepts would never change. The fact that concepts institute this 'unthinkable' plane at their core engenders the movement of concepts; their history and becoming (p. 1236).

Warren

Noel's text above generates my further picturing below (figure 7), which elaborates on *past-becoming-future* and *plane of immanence* and *eternal event horizon* and *thinking* and *already-thoughts* and *emerging concept events* and...

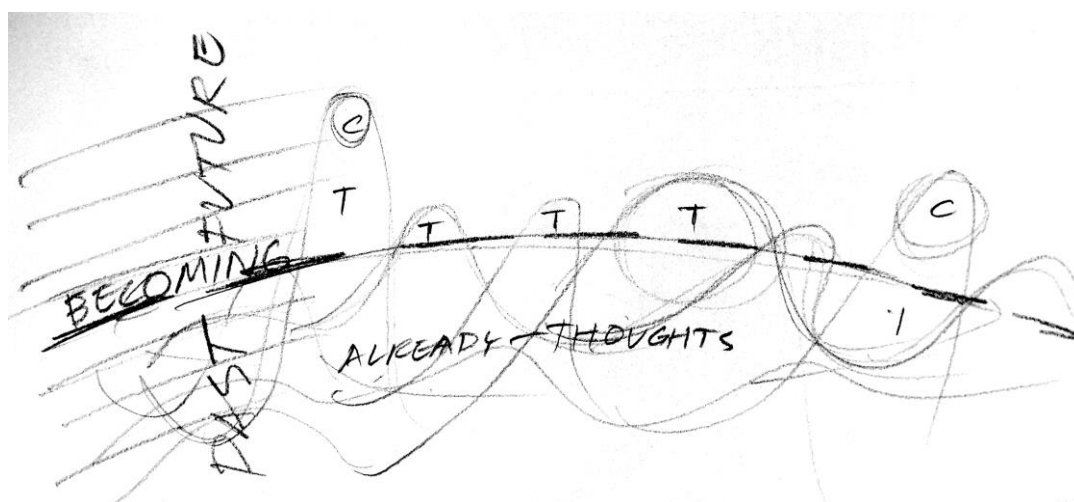


Figure 7: Visualizing a plane of immanence. (©Sellers 2013)

The *eternal event horizon* is indicated in figure 7 by the broken line 'becoming' which bisects 'past' and 'future'. This event-horizon field imagines a plane of immanence in and on which waves of past *already-thoughts*, *becoming-future thinking* (T) are emerging through the *plane of immanence* as *concept events* [C]. The *event horizon* on the *plane of immanence* recognizes *before-becoming* (past) *already-thoughts* as 'multiple waves rising and falling....The plane [of immanence] envelops infinite movements [T] that pass back and forth through it, but concepts [C] are the infinite speeds of finite movements that...pass only through their own components' (Deleuze & Guattari 1994, p 36). I see in this view an analogy with the sun and flares that escape to become 'concepts' of solar energy that variously affect the bodies of the solar system in ways that we are only beginning to perceive yet barely understand.

Noel

In a similar way to MacKenzie's assertion that 'the present happens' because there is a 'past-becoming-future horizon' presupposed within it, we can say that the concept of 'foreigner' happens for us because there is an 'us-becoming-other' horizon presupposed within it. Neither the concept nor the preconceptual field happened for the Akans until they created it to make sense of the existence of the Ekumen.

Deleuze and Guattari's geophilosophy enlarges the field of concepts and categories that we can deploy to account for difference, which in turn multiplies the possibilities for analyses, critiques, and interventions. Such a broadening of our repertoires of representation and action might be particularly useful when we encounter *remarkable* difference (difference that puzzles, provokes, surprises or shocks us) – as we almost certainly will as our transnational curriculum conversations become more widespread, inclusive, and complex. Alma Gottlieb (2002) provides one example of such remarkable difference in her ethnographic study of the Beng villagers in Africa's Ivory Coast. She focuses on the Beng belief that children are reincarnated souls from whom their parents must learn lessons of the afterlife. Mediated by local seers, Beng parents understand education to be a listening process through which they discover their child's hidden knowledge and capture the essence and destiny of his or her soul. Parents assume that their children are maximally multilingual at birth, because they knew all languages in the afterlife, but that they lose this multilingual capacity around the age of three. If we can say that the Beng people have a concept of 'language education', then (in our terms) it is a reactualization process of selecting the 'right' channels that will be useful for communicating with others in this new life; it is a process of forgetting many languages, not learning one.

How should we (the 'we' who belong to international organizations such as IAACS and who work transnationally in fields such as curriculum inquiry) respond to such a remarkable difference between concepts of education? Some might seek to 'explain' the difference in terms of social and historical contexts. Some will invoke cultural relativism. I must admit that my first response was to welcome the Beng as a resource for teaching in my curriculum studies courses, using their understanding of learning-as-forgetting as a defamiliarization strategy. Defamiliarization (often rendered as 'to make the familiar strange, and the strange familiar'¹⁴) assumes that the tactic of surprise may serve to diminish distortions and help us to recognize our own preconceptions, and it is a recurrent feature of artistic manifestos and of creative brainstorming sessions in many fields (that is, defamiliarization is potentially a tool for intellectual breakthrough).

But in the world I inhabit (as I understand it), these sorts of responses do nothing for Beng children. One of the apparent consequences of Beng parents' belief that children are reincarnated souls is that they pay scant attention to their children's material needs (the afterlife is not feared) and infant mortality rates are horrendous even by African norms – fewer than 20% of Beng children survive beyond the age of 5 years.

Deleuze and Guattari's geophilosophy cannot tell us precisely how we might resolve the dilemmas produced by this encounter with difference, but I argue that it offers a more ethically defensible approach to seeking such a resolution than conventional Western philosophies that repress difference in the name of what is 'right' (and righteous). For Deleuze and Guattari (1994): 'Philosophy does not consist in knowing and is not inspired by truth. Rather, it is categories like Interesting, Remarkable, or Important that determine its success or failure' (p. 82). Their philosophy is a creative and hopeful practice whose purpose

¹⁴ This phrase has been attributed to the German poet Novalis (1772-1801, aka Friedrich von Hardenberg). The concept of defamiliarization is found among other Romantic theorists such as Wordsworth and Coleridge and is also closely associated with Surrealism. Russian formalist Victor Shklovsky (1917/1965) introduced the concept of *ostraneniye* (literally 'making strange') to literary theory.

is not to be 'right' in an abstract or universal sense but to contribute to the quality of 'real' lives. Deleuze (1994) insists that concepts 'should intervene to resolve local situations' (p. xx), and consistently argues that (Western) philosophy has been aligned too closely with dominant interests in promoting identity and sameness and marginalizing difference:

The history of philosophy has always been the agent of power in philosophy, and even in thought. It has played the repressor's role... Philosophy is shot through with the project of becoming the official language of a Pure State. The exercise of thought thus conforms to the goals of the real State, to the dominant meanings and to the requirements of the established order (Gilles Deleuze & Claire Parnet, 1987, p. 13).

Thus, if philosophy is to succeed in doing important things (such as reducing infant mortality rates), it must also seek to do interesting and remarkable things by creating novelty and difference. If we think it is important *both* to save Beng children's lives *and* to conserve Beng cultural traditions, we need to invent ways in which our different knowledge traditions can coexist rather than displacing 'theirs' by 'ours'. Imagining that the Beng, too, create concepts on planes of immanence respects our differences and offers us an ethically defensible repertoire of dispositions and conceptual tools that we might be able to use in building a space created through the process that David Turnbull (2000) describes as 'negotiation between spaces, where contrasting rationalities can work together but without the notion of a single transcendent reality' (p. 228). Stanley Jeyaraja Tambiah (1990, p. 122) and Edward Soja (1996) name the space that Turnbull envisages as a 'third space', whereas Homi Bhabha (1994) calls it 'an interstitial space' (p. 312).¹⁵ In Deleuze's (1987) thought, the dynamics of becoming are such that any given multiplicity, such as the constellation of concepts that structure the Beng view of learning, 'changes in nature as it expands its connections' (p. 8). This gives me hope that a new multiplicity, created in the 'third space' in which Beng people negotiate with others, might include (say) a concept of children as reincarnated souls that is not incommensurate with caring for their health.

The idea of a presupposed plane of immanence generates many other new questions and possibilities for complicated conversations around concepts such as 'intellectual breakthrough' in the internationalization of curriculum studies, and the many other concepts that constitute its multiplicity, including those that Axelrod (1979) identifies: 'thinking', 'individuality' and 'community'. We can ask questions such as: what preconceptual fields are presupposed within the concept of intellectual breakthrough in different nations/cultures? What are the acontextual and atemporal features of intellectual breakthrough in different nations/cultures? What presupposed horizon of events permits concepts such as 'thinking', 'individuality' and 'community' to 'happen' when and where they do?

Jakub Zdebik (2003) offers a way to think metaphorically about the relationship between concepts and planes that might be useful for some purposes:

In order to describe the plane of immanence, Deleuze and Guattari must simultaneously describe the concept. The plane of immanence and the concept mutually define each other. It is as if the plane of immanence is an invisible mental landscape that can only be seen through the concepts occupying it. It is a place that becomes noticeable through the objects that occupy this space. It is like cities that appear to an airplane flying over dark continents when, after night has fallen, the lights come on.

¹⁵ For a more detailed exploration of the significance of Turnbull's research for transnational curriculum inquiry see Gough (2003).

From the height of this plane we can map out the geography of the plane of immanence, because geography [quoting Deleuze and Guattari (1994, p. 96)] 'is not merely physical and human but mental, like a landscape' (p. 142).

Warren

The text above resonates with a picturing I generated (Sellers, 2008, p. 231) from a reading of *What is Philosophy* (Deleuze and Guattari, 1994).

The picture on the left [in figure 8] sees the plane of immanence like a hyperbolic paraboloid – 'Concepts are events, but the plane is the horizon of events' (Deleuze and Guattari 1994, p. 36) – a plane that includes more than its conceptual boundaries contain. This suggested the picture on the right [in figure 8] – 'like a sieve stretched over the chaos' (p. 43). The reference to 'Erisophy' comes from a footnote about Eris 'the Greek divinity of discord, conflict, and strife, the complementary opposite of Philia' (p. 43). My note '(see also p. 38-39)' refers to the following text: 'It is this fractal nature that makes the planomenon an infinite that is always different from any surface or volume determinable as a concept...in the fractalization of this infinitely folded up infinity (variable curvature of the plane)' (pp. 38-39).

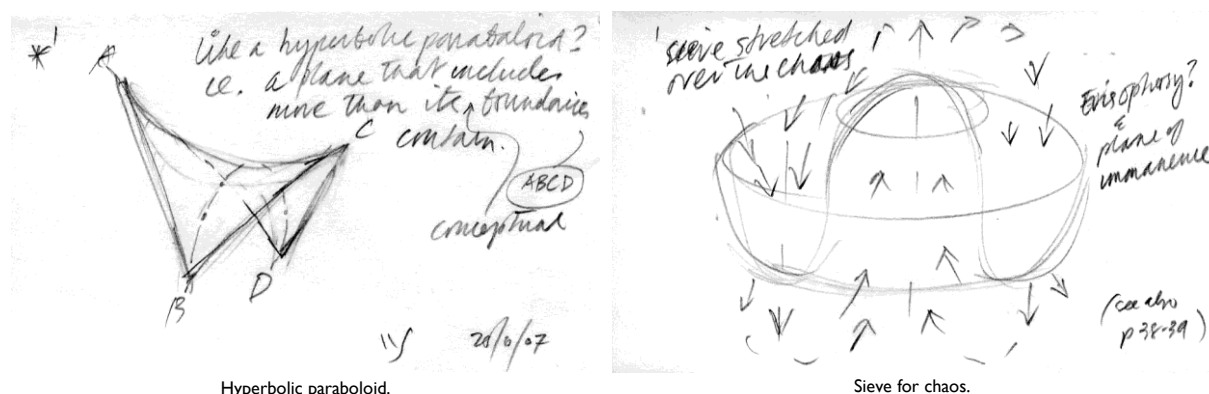


Figure 8: [Left] Like a hyperbolic paraboloid. [Right] Sieve stretched over the Chaos. (Sellers, 2008)

These picturings portray waves of 'already-thought' (Sellers, 2008, p. 231) and indicate their past-becoming-future conceptual potential on this moment's plane of emergence. Past already-thoughts are always-already present in mind, but only come into play when becoming-future thinking calls on them.

Noel

What other generative metaphors might help us to reveal the 'invisible mental landscapes' of curriculum studies and stories in various nations/regions? What 'invisible mental landscapes' do (or might) curriculum scholars who work transnationally share? These are significant questions because, as Deleuze and Guattari (1994) argue, modes of intellectual inquiry need to account for the planes of immanence upon which they operate. Following this line of argument, Ned Curthoys (2001) suggests that 'conceptual thinking needs to retain a multifarious "sense" of what it is doing, the kinds of problems it addresses and the cultural context it seeks to influence and is influenced by' (n.p.). Curthoys' perspective is particularly useful for my purposes because he deploys terms and tropes that resonate with IAACS's mission to support complicated scholarly conversations across national and regional borders:

The plane of immanence is the complex ongoing conversation, the dilemma, the received history of fraught questions that one intuitively recognises as a formative background for

one's own critical enunciations. In other words, the plane of immanence is the admission that thought is not simply a contemplative relation to a secure object of knowledge, nor a solution to a problem, but rather an affirmation of all that is problematic and historically negotiated. As an historically inflected thinking, the plane of immanence turns one's focus towards the cultural competency required for addressing a set of issues and the historically productive conditions of transformative thinking (n.p.).¹⁶

The preamble to the IAACS Constitution states: 'at this historical moment and for the foreseeable future, curriculum inquiry occurs within national borders, often informed by governmental policies and priorities, responsive to national situations. Curriculum study is, therefore, nationally distinctive'¹⁷. If we restate this assertion in Deleuze and Guattari's terms, we could say that curriculum inquiry presently operates on numerous nationally distinctive 'planes of immanence' (or, in Zdebik's terms, 'invisible mental landscapes'). If we also agree with the founders of the IAACS who 'do not dream of a worldwide field of curriculum studies mirroring the standardization and uniformity the larger phenomenon of globalization threatens'¹⁸, then it follows that the internationalization of curriculum studies should not create concepts that inaugurate a single transnational plane of immanence (or posit a single 'invisible mental landscape' in which transnational curriculum inquiry takes place) but, rather, will be a continuous process enacted by curriculum scholars worldwide who have the capacities and competencies to *change planes*. In this context, 'changing planes' refers both to movements between one plane of immanence and another, and/or to transformations of one's own plane.

Warren

Curriculum inquiry is exhibiting many of the circumstances that coincide with emergent change through a plane of immanence. Furthermore, it is this emergent change that generates 'transnational' as a concept-event to potentially affect even more generative concepts, in fractal-like fashion: 'The plane is like a desert that concepts populate without dividing up...the plane is all that holds them together' (Deleuze and Guattari, 1994, p. 36). What is needed most at this moment is a new population of concepts that cross-fertilize cultural differences in ways that resonate with the rhizomatous Iris: easily propagated; strong inter-linkages; environmentally resilient. Even in its stylized form (figure 9), the *Fleur-de-Lis* suggests already-thought becoming-blooming-concepts out-on-towards ways that resonate with my picturing in my figure 6 above.

Furthermore, 'transnational' need not be the word that eventually attaches to this conceptual move, but at present it serves as a focus for 'already-thoughts' that are in motion, or, as Noel has them, 'changing planes'.

¹⁶ Seeking the 'productive conditions of transformative thinking' clearly resonates with Pinar's (2005) question of how to provide opportunities for 'intellectual breakthrough' in the internationalization of curriculum studies

¹⁷ <http://iaacs.org/>

¹⁸ <http://iaacs.org/>

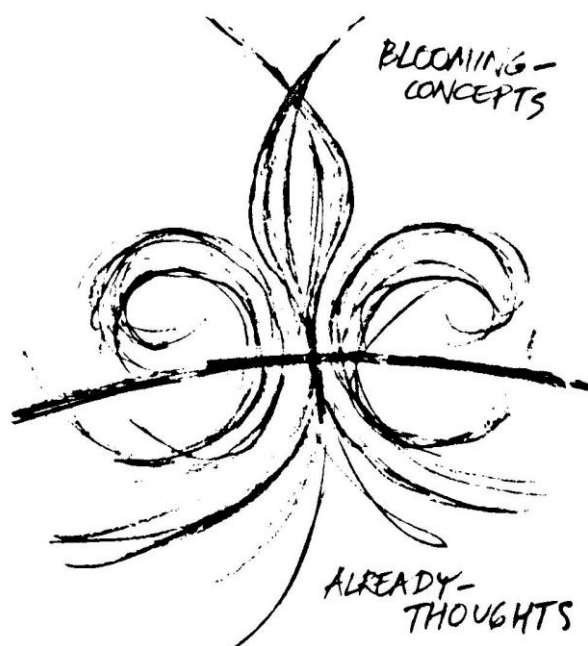


Figure 9: *Fleur de Lis* as already-thoughts becoming-blooming-concepts (Sellers, 2013)

Changing planes

Noel

Ursula Le Guin's (2004) collection of linked short stories, *Changing Planes*, offers a rhizomatic connection to Deleuze and Guattari's figuration of the plane of immanence as well as to Zdebik's (2003) ambiguous deployment of 'plane' in the passage quoted above. The premise of *Changing Planes* is outlined in the first story, 'Sita Dulip's Method':

the airport is not a prelude to travel, not a place of transition; it is a stop. A blockage. A constipation. The airport is where you can't go anywhere else. A nonplace in which time does not pass and there is no hope of any meaningful existence. A terminus: the end. The airport offers nothing to any human being except access to the interval between planes.

It was Sita Dulip of Cincinnati who first realised this, and so discovered the interplanar technique most of us now use (p. 2).

Sita Dulip realized that the tedious experience of waiting in airports for delayed and/or cancelled flights – 'a specific combination of tense misery, indigestion, and boredom' (p. 5) – facilitates 'interplanary travel': 'by a mere kind of twist and a slipping bend, easier to do than to describe, she could go anywhere – be anywhere – because she was *already between planes*' (p. 3; emphasis in original). Le Guin's pun words new worlds into existence as she tells stories of a traveler who transports herself to different 'planes', in the sense of levels or angles of imagination, and alternative worlds. After setting up the possibility and method of interplanary travel, the book becomes a travelogue of imaginary civilizations that exist on various planes (the dust jacket of the UK hardcover edition carries an appropriate subtitle: 'armchair travel for the mind'). Le Guin's particular gift as a storyteller is her capacity to invent plausible and detailed alternative societies and environments, and in *Changing Planes* she creates a succession of strange places, peoples, and customs that disrupt assumptions about what is standard, settled, and normal. For example, the inhabitants of Frin share their

dreams; the people of Asenu become almost entirely silent when they reach adulthood, which leads obsessive scholars from other planes to generate Talmudic exegeses of the rare words spoken by the Asenu they identify as mute ‘sages’; on Islac excessive and imprudent genetic engineering has generated a vast range of beings, some of whom are tragic travesties of naïve wish-fulfillment, such as talking dogs and chess-playing cats – ‘There are talking dogs all over the place, unbelievably boring they are, on and on and on about sex and shit and smells, and smells and shit and sex, and do you love me, do you love me, do you love me’ (p. 13) – but some of whom literally flower unexpectedly, like the woman who is four per cent maize.

One of the most intriguing stories in *Changing Planes* is ‘The Nna Mmoy Language’, in which people do not address each other by name but by ‘ever-varying phrases [for] a thousand social and emotional connections’ (p. 153). Although the Nna Mmoy themselves are pleasant, no interplanary visitors have yet succeeded in talking with them: ‘Though their monosyllabic language is melodious to the ear, the translatformat has so much trouble with it that it cannot be relied upon even for the simplest conversation’ (p. 144). This appears to be because ‘the meaning of each word is continuously modified by all the words that precede *or may follow* it in the sentence (if in fact the Nna Mmoy speak in sentences)’ (pp. 145-6).

And so, after receiving only a few syllables, the translatformat begins to generate a flurry of alternate meanings which proliferate rapidly into a thicket of syntactical and connotational possibilities that the machine overloads and shuts down (p. 146).

Written Nna Mmoy is a syllabary... Each syllable is a word, but a word with no fixed, specific meaning, only a range of possible significances determined by the syllables that come before, after, or near it. A word in Nna Mmoy has no denotation, but is a nucleus of potential connotations which may be activated, or created, by its context...

Texts written in Nna Mmoy are not linear, either horizontally or vertically, but radial, budding out in all directions... Literary texts carry this polydirectional complexity to such an extreme that they resemble mazes, roses, artichokes, sunflowers, fractal patterns (pp. 144-5).

These brief excerpts should be sufficient to demonstrate the rhizomatic connections between Le Guin’s story and Deleuze and Guattari’s philosophical writings.¹⁹ Indeed, Nna Mmoy speech and writing is manifestly rhizomatic. For example, any enunciation in Nna Mmoy is ‘open and connectable in all its dimensions; it is detachable, reversible, susceptible to constant modification’ (Deleuze & Guattari, 1987, p. 12). These enunciations do not aspire to achieving some sort of final, complete, or coherent status, but are constantly opening up new territories, spreading out, and ‘overturning the very codes that structure [them]... putting them to strange new uses’ (pp. 11, 15).

Le Guin’s stories also connect to Deleuze’s (1994) assertion that ‘[a] book of philosophy should be... in part a kind of science fiction’ (p. xx) in the sense of writing ‘at the frontiers of our knowledge, at the border which separates our knowledge from our ignorance and transforms the one into the other’ (p. xxi). This is precisely what Le Guin achieves in ‘The Nna Mmoy Language’: she creates ‘a kind of science fiction’ that imagines a rhizomatic language – or, rather, a rhizosemiotic language-making process – that appears to be impossible to ‘translate’ and sets limits on the extent to which we can learn anything about, with or from the Nna Mmoy. I suggest that many transnational and transcultural conversations around curriculum present some similar difficulties of translation and interpretation to the attempts to communicate with the Nna Mmoy that Le Guin imagines. The narrator of ‘The

¹⁹ Another interpretation of ‘The Nna Mmoy Language’ is that it takes Jacques Derrida’s (1981) belief that language is so unstable that meaning is endlessly deferred to some sort of logical yet ludicrous extreme.

Nna Mmoy Language' quotes a friend who has spent more time in this plane than most who offers both further understandings of these difficulties as well as suggesting some tentative possibilities for their partial resolution:

We talk snake. A snake can go any direction but only one direction at a time, following its head.

They talk starfish. A starfish doesn't go anywhere much. It has no head. It keeps more choices handy, even if it doesn't use them (p. 148).

Learning Nna Mmoy is like learning to weave water.

I believe it's just as difficult for them to learn their language as it is for us. But then, they have enough time, so it doesn't matter. Their lives don't start here and run to there, like ours, like horses on a racecourse. They live in the middle of time, like a starfish in its own center...

What little I know of the language... I learned mostly from children. The children's words are more like our words, you can expect them to mean the same thing in different sentences. But the children keep learning; and when they begin to read and write, at ten or so, they begin to talk more like adults; and by the time they're adolescents I couldn't understand much of what they said – unless they talked baby talk to me. Which they often did. Learning to read and write is a lifelong occupation... it involves not only learning the characters but inventing new ones, and new combinations of them – beautiful new patterns of meaning (pp. 150-151).

Le Guin's expression, 'they live in the middle', offers a further connection to Deleuze and Guattari's (1987) rhizomes, which have no beginnings or ends but are always in the middle: beginnings and ends imply a linear movement, whereas working in the middle is about 'coming and going rather than starting and finishing' (p. 25). As Elizabeth St. Pierre (1997) writes:

we must learn to live in the middle of things, in the tension of conflict and confusion and possibility; and we must become adept at making do with the messiness of that condition and at finding agency within rather than assuming it in advance of the ambiguity of language and cultural practice (p. 176).

Elsewhere (Gough, 2006b), I demonstrate how rhizomatic textual assemblages that commence in the 'messiness' of cultural materials that are readily to hand in our everyday lives can be used to generate questions, provocations and challenges to dominant discourses and practices of contemporary science education. This assemblage (developed more extensively in Gough, 2007b) began when a number of initially separate threads of meaning – a research article in *Public Understanding of Science*, a *Time* magazine cover story titled 'Death by mosquito', and a one-page account of malaria in my son's high school biology textbook – coincided, coalesced, and eventually began to take shape as an object of inquiry. I was concerned (indeed offended) that neither *Time* nor the textbook provided readers with any alternatives to understanding malaria within the conceptual frameworks of Western laboratory science in which malaria is made to appear as a 'natural' entity in the world, rather than as (say) a political disease resulting from the dominance of the Third World by the colonial and mercantile interests of the West. As I read *Time* and the textbook, I also recalled reading *The Calcutta Chromosome: A Novel of Fevers, Delirium, and Discovery*, a mystery thriller in the SF sub-genre of alternative history by Amitav Ghosh (1997). Like most works of SF, Ghosh's novel offers a semiotic space that is not regulated by the dominant systems of signification and cultural practice of science education, and that therefore invites readers to

think beyond the sign regimes of Western laboratory science. Ghosh's novel became another filament in what I came to think of as a mosquito-led rhizome by offering a speculative counterscience of malaria that connects with (but does not replicate) the 'real' history of Western medicine's explorations of the disease. Whereas *Time* and the textbook occluded malaria's complex heterogeneity, Ghosh's novel dramatically foregrounds the ways in which outbreaks of malaria in particular places and times are manifestations of numerous complex interactions among parasites, mosquitoes, humans and various social, political (often military), administrative, economic, agricultural, ecological and technological processes. A further filament came from my experience of working in south Africa, where the need for science educators to move beyond the arborescent knowledge space of Western laboratory science is given further urgency by the increasing complexity of the linkages between traditional cultural practices (such as the production of herbal medicines by traditional gatherers and healers) and the activities of transnational corporations (such as large pharmaceutical companies).

Warren

Le Guin's (1984) playful 'report' in the fictitious *Journal of the Association of Therolinguistics*, discusses, 'a script written almost entirely in wings, neck, and air should prove the key to the poetry of short-necked, flipper-winged water-writers.' (p. 6).



Figure 10: Picturing 'The first tentative glossary of Penguin' (Le Guin, 1984, p. 14).
Digital painting (Sellers, 2003).

As my picturing (figure 10) of Ursula Le Guin's ironical 'report' on Penguin linguistics depicts, human learning, thinking, and knowing appear embedded in such an elite textual domain that knowing and learning otherwise, seems practically unthinkable. Therefore, to disrupt what I consider the

hegemony of the textual domain, I try to imagine language concepts otherwise—much as Le Guin (1984) has imagined:

that so late as the mid-twentieth century, most scientists, and many artists, did not believe that even Dolphin would ever be comprehensible to the human brain — or worth comprehending! Let another century pass, and we may seem equally laughable. ‘Do you realise,’ the phytolinguist will say to the aesthetic critic, ‘that they couldn’t even read Eggplant?’ (p. 19).

Words like these, help to make strange and disrupt thinking about the privileged system of words, in ways other than the conditioning of textual interpretation usually demands, towards more imaginative learning and thinking and knowing. My *picturing* is another way, alongside wording for complexifying a *currere*²⁰ – of learning and thinking and knowing.

A pause in the middle of things

Noel

I have no ‘conclusion’ to this essay but will simply pause (in the middle of things) to reflect briefly on what I have learned through its production.

First, although changing planes might be more difficult than I thought, I believe that Warren and I have made Deleuze and Guattari’s geophilosophy more intelligible to ourselves (and, we hope, to others) by bringing their concepts into inter-picture-and-text-ual play with worlds imagined by Ursula Le Guin and with concepts, problems and issues that circulate in the discourses of transnational curriculum inquiry.

Secondly, I believe that we might have made some small steps towards demystifying (again for ourselves, and perhaps for others) Deleuze and Guattari’s philosophy, which often is represented as being obscure and impenetrable. For example, Inna Semetsky (2003) writes: ‘The complexity of Deleuze’s intellectual practice is beyond imagination. The language of expression in Deleuze’s thought, as well as in Deleuze and Guattari’s collaborative works, is even more complex’ (p. 212). It is complex certainly, but I hope that we have demonstrated that it is most assuredly not ‘beyond imagination’. Indeed, imagination is precisely what we need to put Deleuze and Guattari’s geophilosophy into practice. Their goal is to overturn philosophy’s ‘traditional image of thought’ (Deleuze, 1994, p. 3) and to create concepts through which we can imagine new pathways for thought and action. As Todd May (2003) writes:

These concepts do not ask of us our epistemic consent; indeed they ask nothing of us. Rather, they are offerings, offerings of ways to think, and ultimately to act, in a world that oppresses us with its identities. If they work – and for Deleuze, the ultimate criterion for the success of a concept is that it works – it will not be because we believe in them but because they move us in the direction of possibilities that had before been beyond our ken (p. 151).

Lastly, to pause on a note of slight personal disappointment, in reading what *I* have written I am more aware than ever that, although I might be trying to think starfish, I still write snake.

Perhaps Warren’s picturings are a move towards inscribing starfish?

²⁰ Robert Graham’s (1992) review of *currere* and reconceptualism interprets ‘a method for giving voice to private experience within a public setting and [which] speaks to the developing structures of a student’s personality as it interacts with social and institutional forms and structures’ (pp. 35-36).

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