Sharing outsider thinking: thinking (differently) with Deleuze in educational philosophy and curriculum inquiry

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This essay performs a number of our collaborative responses to thinking (differently) with Deleuze in educational philosophy and curriculum inquiry. Deleuze *and Guattari* have inspired each of us in distinctive ways. Single-authored products include a series of narrative experiments or 'rhizosemiotic play' in writing educational philosophy and theory, and a doctoral thesis enacting processes of 'rhizo-imaginary' 'picturing' towards immanent and emergent curriculum theorising. We have also collaborated in producing some co-authored works, which has motivated us to persevere with exploring further potentials for thinking~writing together. By exploring our genealogical and generative work with Deleuzean conceptual creations in mind we seek to move readers beyond Deleuzo-Guattarian select metaphors (e.g., nomadism, rhizome, lines of flight, smooth and striated spaces). However, we distance ourselves from the types of 'use' of Deleuze that merely appropriate metaphors that were never intended as metaphors. Rather, we prefer thinking with Deleuze to produce previously unthought questions, practices, and knowledge. We intend these performances to give a sense of not only the generativity that Deleuzo-Guattarian reading~thinking has opened to us, but also the affirmation such performances bestow for thinking (differently) in educational philosophy and curriculum inquiry.

Keywords: Deleuze; education; curriculum; thinking

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A bolt of lightning has struck, that will bear Deleuze's name. A new kind of thinking is possible, thinking is possible anew. Here it is in Deleuze's texts, leaping dancing before us among us … one day, perhaps, the century will be seen as Deleuzian. (Foucault 1977, 65)

Maybe … Foucault meant: I wasn't better than the others, but, more naïve, producing a kind of *art brut*, so to speak; not the most profound but the most innocent (the one who felt the least guilt about "doing philosophy"). (Deleuze 1995, 89)

Our gambit

In a Deleuzo-Guattarian spirit of collaboration, we perform an assemblage of empathetic responses to thinking (differently) with Deleuze in educational philosophy and curriculum inquiry. In recent years Deleuze and Guattari have inspired each of us in distinctive ways. One of us (Gough 2004, 2006, 2007a) has produced a series of narrative experiments that foregrounds the generativity of 'rhizosemiotic play' (catalysed by intertextual readings of selected fictions) in writing educational philosophy and theory, and the other (Sellers 2008) has produced a doctoral thesis through processes of 'rhizo-imaginary' 'picturing' towards immanent and emergent curriculum theorising. We have also collaborated in ways that have been sufficiently rewarding to motivate us to persevere with exploring further potentials for

thinking~writing[1] together. Some of these collaborations have resulted in coauthored works (Gough et al. 2003; Gough and Sellers 2004; Sellers and Gough 2008), 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.

In this essay we inter-picture-and-text-ually extemporise our genealogical and generative work with Deleuzean conceptual creations (accompanied by what we call 'exhibits') with a view to moving readers beyond merely using select metaphors presented by Deleuze and Guattari (e.g., nomadism, rhizome, lines of flight, smooth and striated spaces). We deliberately distance ourselves from those who 'use' Deleuze by appropriating metaphors that were never intended as metaphors, preferring to work towards generating discourses~ practices that challenge such a deployment of complexity-reducing Deleuzean figurations. Rather, we will demonstrate how thinking with Deleuze produces previously unthought questions, practices, and knowledges that, we propose, are resonant with those of *art brut*[2], the term Deleuze uses to characterise what he calls his kind of philosophy: 'more naïve…not the most profound but the most innocent…' (Deleuze, 1995, 89).

For reasons that will become obvious, parts of this essay are written in the first person singular, and we will signal in subheadings which one of us is 'I' in these sections. For example, Warren (Sellers, 2008) discusses how his thinking about 'imaginary' becomes a way to deconstruct common usages of figuration and metaphor in association with Deleuze and Guattari. This thinking produced his expression 'rhizo-imaginary', which we now see as image characterising affect and a generative way of putting words to a picturing methodology. Noel (Gough 2007a, 2007b, in press) produced 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'[3] storylines of educational inquiry, and to deconstruct educational questions, problems and issues in areas such as cyborg pedagogy, science and environmental education, and the internationalisation 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 – since we severally recognise each other we are less a crowd.

Our poststructuralist dispositions impel us to resist the demarcation of theory from practice and therefore we explore ways in which qualitative inquiries work as generative assemblages of *both* epistemological-methodological questions *and* methodological practices and enactments. Thus our journeyings through curriculum theorising – re-viewing and re-newing its ongoing reconceptualisation – have involved deep engagement with epistemological and theoretical understandings and questions. Emergent in this engagement are performances of thinking differently, which perturb deterministic behavioural predispositions that suit 'another era' (Deleuze and Parnet 1987, 3-4). Examples of enacting 'thinking differently' include: interactive and intertextual and picturing performances on art

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[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*. Complicit in this sense is not so much 'wrongful' as not 'rightfully'.

[2] *Art brut* is a movement associated with Jean Dubuffet and others, also referred to as 'outsider art', that references the art of non-professionals working outside accepted aesthetic conventions, often art made by psychiatric patients, prisoners, and children.

[3] Following Donna Haraway (1994, 63), I (Gough) emphasise 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.'

and science (Gough et al. 2003); hypertextual picturing of writing/reading for reviewing (Sellers 2003); demonstrating continuities with/in/among Deleuzean thinking; 'thought experiments' in the natural sciences, and comparable imaginative practices in the arts, humanities, and social sciences (Gough 2008); and a reading~picturing on unfolding folding (this essay).

We intend these performances to give readers a sense of not only the generativity that Deleuzo-Guattarian reading~thinking has opened to us, but also the affirmation that such performances bestow for thinking (differently) in educational philosophy and curriculum inquiry, or, as our title puts it: sharing outsider thinking.

27 February 2010: sensing Omega Point

One of us is reading Don DeLillo's (2010) new short novel *Point Omega* and writes to the other:

> The 'Omega Point' of the title (as Wikipedia puts it) '[is] the possible idea [from Teilhard de Chardin] that human consciousness is reaching a point of exhaustion and that what comes next may be either a paroxysm or something enormously sublime and unenvisionable,'

The editors/reviewers of an earlier version of this essay asked us to consider 'a missed opportunity to stretch the work across a meta-discourse fold.' DeLillo's 'point' offers such an opportunity. We like the way that DeLillo inverts de Chardin's term to dis-locate (as it were) a site for the concept. A couple of thoughts come together here: one is DeLillo's affirmation of the novel, and especially the short novel, in the technology- and media-driven 21st century; another is point~omega~point as an imaginary for a meta-discourse fold. Warren frequently talks/writes about a sea-change in education, and in one recent conversation he quoted some lines from Shakespeare (1610) that helped us to imagine such a change as a fold across time (at least in the English language):

> Nothing of him that doth fade
> But doth suffer a sea-change
> Into something rich and strange.

Whenever Warren talks about our collaborations (with other academics and/or graduate students) there usually comes a 'point' where his interlocutor seeks to know the 'point' of our work together, which brings about a discursive move[2], that is, a *move squared*, in the sense that there is a need to articulate 'discursive move' so as to understand emergence of discursive move(s). Simon Shui-Man Kwan (2005) puts it well in the title of his article: 'From indigenization to contextualization: a change in discursive practice rather than a shift in paradigm'. His article refers to the insight that a paradigm shift draws attention to distinctions between two positions, whereas a discursive move emerges from a desire to bring different thinking to a tradition of thought. In Deleuzian terms the former *striates*, the latter *smoothes*. We have also experienced this recently in our institution's committees and working parties where we waste time engaged in cross talk – situations in which our colleagues are so busy working on what their *point* is and what to say next (striating) that they never get to listen to what else is being said (smoothing). Any attempt to change such behaviour needs to coterminously recognize the former and adapt to the latter, rather than switch from one to another: thus the call to turn from paradigm shift to discourse move.

Such change experiences fullest complexity, which resists reduction, especially as this is most often attempted from a traditional position. Instead, 'nothing…fade[s]' [and becomes]

something 'rich and strange'. Like de Chardin's Omega Point (also know as 'singularity') and DeLillo's *Point Omega*, we are attempting a discourse move in this essay that alludes to hidden folds, and which may reveal momentous changes that could be either a paroxysm or something enormously sublime and unenvisionable.

If our essay should need a 'meta-discourse fold' – and we are neither sure that it does, nor even that such an ordinate fold might be found – then we would nestle our minor exchanges into a *petit* narrative about Omega Ω ω, not only because of its resonant physical and metaphysical characteristics but also because on 27 February 2010 the Earth's spatial paroxysm sublimely altered its relation to time.

Lost for words: Warren moving to rhizo-imaginary picturing

I want to share two co-implicated lines of flight here: one concerns thinking, the other picturing, and they are co-implicated through what I call *rhizo-imaginary*. Rhizo-imaginary is my signalling of a move to discourse that is beyond present language, or a situation wherein I am lost for words. This is a state that is somewhere between being 'tongue-tied' and 'stuttering', where mind is knowing, but words are not working. It is a state often resolved by turning to pictures and/or sounds, especially abstractions. For many years I was embarrassed when this situation arose; I now take notice of it and work towards revealing it, sometimes with overt silence (I suddenly cease talking), sometimes with discussion (I attempt to explain what I am feeling). What I have come to understand of this state is that it is not deficit – it is generative. It is not a lack on my part but a realization of emergent new thinking.

The thrust of this essay, which concerns ~~authentic~~[4] deployment of Deleuzo-Guattarian workings in educational philosophy, attempts to discuss how we have engaged in our deployment and why we consider it ~~authentic~~. In so doing we seek not only to affirm using Deleuze and Guattari for our purposes but to also demonstrate how this is generatively affective for our work.

Queer(y)ing thinking

My first collaborative publication with Noel was a contribution to an essay on environmental matters, which emerged through an email conversation between us (see exhibit 1). Although my thinking about rhizo-imaginary was yet to emerge, rhizomatics abound in this exchange and the assemblage forming around it. For example, when Noel's email arrived it sprouted several lines of flight towards *Decadent subjects* (Bernheimer 2002), which I was reading at the time. Bernheimer had made me aware of resonances in Beardsley's pictures with biology and complexity. Bernheimer's project was a cultural deconstruction of *fin de siècle* in Beardsley's *Salome* pictures, but I stated mine as shown in exhibit 2. To picture this I presented Beardsley's picture titled *The climax* (left), from which I selected two detail images to compare with pictures of a Mandelbrot set (see Gleick 1987) and spirochetes (Christie Lyons drawing in Margulis and Guerrero 1991, 63). I do not propose any scientific connections between the pictures but I suggest that there are allusive resonances that picturing opens up for meaning. I concluded by saying 'The naturally sciential exists *within* picturing being just as well as writing words *about* it' (Gough et al. 57). From this insight I began to draw more ideas about picturing and continued to think reality outside of representation.

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[4]   We place ~~authentic~~ *sous rature* to indicate its use in a sense that draws on aspects of 'genuine' and 'honest' but without determining or fixing those in any way whatsoever. We compare it to an agreement sealed with a handshake and eye contact. Both parties know and understand their agreement.

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(1/9/2002) Noel to Warren
…
Changing the subject, I'm attaching what you might like to treat as an invitation to
have a little fun... you can also treat it as an offer you CAN refuse.... By way of
background I should explain that we are responding to a call for papers for Volume 8
(2003) of the Canadian Journal of Environmental Education, the theme of which will be
"Exploring New Genres of Research in Environmental Education". Annette and I have been
waiting for some of our LBGT colleagues to tackle this topic but they haven't so....

We'll be writing to some of the queer theorists we know (Bill Pinar, Marla Morris,
Mary Doll etc) asking if they'd like to contribute a vignette for consideration for
inclusion in our paper... maybe just a vision of what they'd like to "see" in the Camp
Wilde of their imagining...  we'll ask some of our straight colleagues too, especially
those who are interested in setting silences to speak....  so if you have any bright
ideas (even a sketch...) we'd be pleased if you'd share them... all contributions
will, of course, be acknowledged...

Best, Noel

[attachment]
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Tales from Camp Wilde: queer(y)ing environmental education research

Paper proposal for a special issue of Canadian Journal of Environmental Education on the theme of 'Exploring New Genres of Research in Environmental Education'

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(3/9/2002) Warren to Noel
-
And, I'm thinking about something Beardsley to tickle the fancy for the
Wilde Camp.

(3/9/2002) Noel to Warren
-
Great! I loved Beardsley's stuff long before I even realised he was
gay.... ditto Wilde really...

(17/9/2002) Warren to Noel
-
Here's an attempt at a response to your invitation.

[attachment]
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THE CLIMAX: SALOME AND GAIA

If a picturer were to be associated with Camp Wilde, I would propose Aubrey Beardsley. His images are some of the most flagrantly decadent examples of the irony issuing from the *fin de siècle* that melded organic forms into fashioned *objets d'art nouveau*.

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(19/9/2002) Noel to Warren
-
BRILLIANT!!! Thanks Warren... we'll keep you informed about its
progress (we are working to an early November timeline).
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Exhibit 1. Gough-Sellers email and attachment excerpts (personal communication, 2002)

to re-cognize the symbolic relationship between Salome's climactic gaze and Gaia's climatic concern. I suggest that [Beardsley's] imagery…is a complex graphic representation of both the consequences of collapsing consciousness around modern reductionist science and culture and potentialities for emergent notions of complexity suggested by James Lovelock's "Gaia" thesis'. (Gough et al., 2003, p. 55)
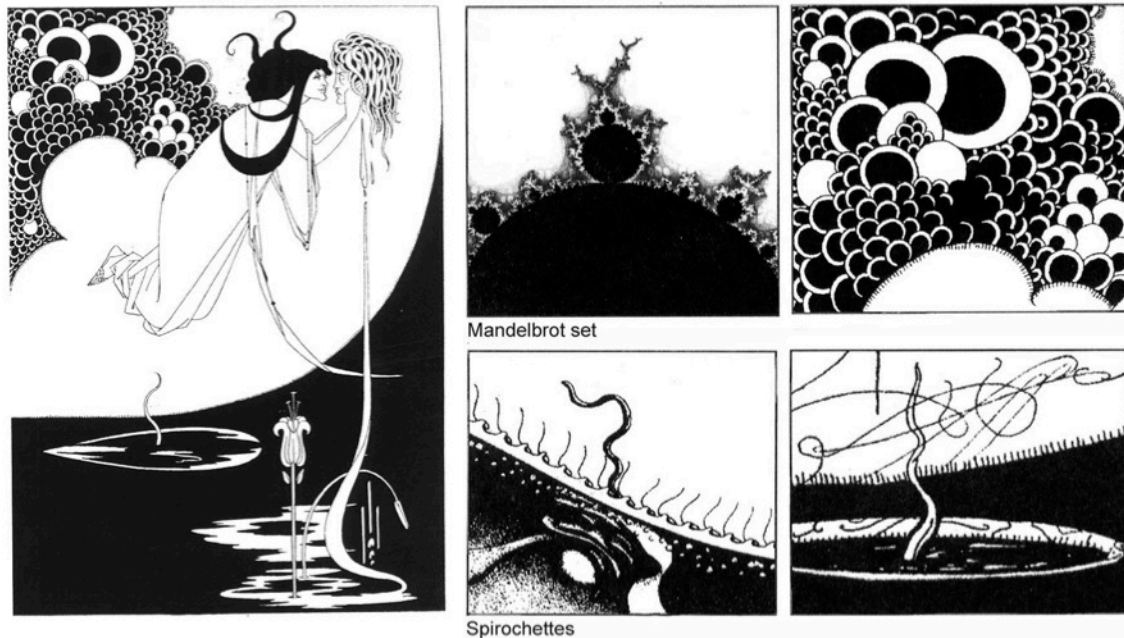

Mandelbrot set

Spirochettes

Exhibit 2. Text and picturing excerpts from Gough et al. (2003, 55)

Lines of spaceflight: Noel moving to educational inquiry as 'a kind of science fiction'

Deleuze's (1994) assertion that a philosophical work should be 'in part a kind of science fiction' (xx) affirmed directions in my thinking~writing that I had been exploring since the late 1980s. In 1989, an invitation to write an autobiographical vignette for a forthcoming book on educational inquiry and the arts (Willis and Schubert 1991) focussed my attention on the pleasurable and productive ways in which particular works of science fiction – or SF[5], to use a term I prefer – had informed and shaped my understandings of curriculum and teaching (Gough 1991). Subsequently, I began to explore the generativity of SF in advancing inquiries in areas such as science education (Gough 1993b), environmental education (Gough 1993a), experiential education (Gough 1993c), curriculum studies (Gough 1995) and research methodology (Gough 1994). Initially I performed these inquiries without any explicit

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[5]   Donna Haraway (1989) explains how a more embracing (and more ambiguous) term, 'SF', displaced 'science fiction':

   In the late 1960s science fiction anthologist and critic Judith Merril idiosyncratically began using the signifier SF to designate a complex emerging narrative field in which the boundaries between science fiction (conventionally, sf) and fantasy became highly permeable in confusing ways, commercially and linguistically. Her designation, SF, came to be widely adopted as critics, readers, writers, fans, and publishers struggled to comprehend an increasingly heterodox array of writing, reading, and marketing practices indicated by a proliferation of 'sf' phrases: speculative fiction, science fiction, science fantasy, speculative futures, speculative fabulation. (5)

engagement with Deleuze's work, although I was sufficiently aware of Deleuze and Guattari's (1987/1980) concept of rhizomatic inquiry to quote (in Gough 1994) Umberto Eco's (1984) assertion: 'The space of conjecture is a rhizome space' (57).

In retrospect, I can discern two co-implicated lines of flight in my work which were subsequently affected/accelerated by Deleuze and Guattari's (1987/1980) 'geophilosophy'. One of these followed the trajectory of Donna Haraway's work on gender, race, primates and cyborgs, beginning with 'A manifesto for cyborgs' (Haraway 1985). The other followed developments in post-WW2 SF, with particular reference to the psychological and surrealistic explorations of 'inner space' (Ballard 1996) exemplified by J.G. Ballard's (1985/1973) *Crash*, which in turn influenced a number of literary and cultural theorists, including Jean Baudrillard (Baudrillard 1991). Indeed, Istvan Csicsery-Ronay (1991a) nominates Ballard's Introduction to the French edition of *Crash* as 'the *de facto* founding manifesto of postmodernist SF' (306).

Theorising with SF

Haraway's 'A manifesto for cyborgs' (1985), in which she asserts that 'the boundary between science fiction and social reality is an optical illusion' (66), presents and performs a new language for a socially democratic, materialist, and feminist politics. She mobilises this language to extraordinary effect in *Primate Visions* (Haraway 1989), a critical history of the development and cultural effects of primatology. Her introduction to *Primate Visions* is subtitled 'the persistence of vision', and it is no coincidence that this is also the title of a short story by John Varley (1978). Haraway (1989, 384) writes:

> John Varley's science fiction short story, 'The Persistence of Vision,' is part of the inspiration for *Primate Visions*. In the story, Varley constructs a utopian community designed and built by the deaf-blind. He then explores these people's technologies and other mediations of communication and their relations to sighted children and visitors. The interrogation of the limits and violence of vision is part of the politics of learning to revision.

The inspiration of Varley's SF story explicitly foreshadows one of the ways in which Haraway (1989, 5) 'reads' primatology, that is, 'as science fiction, where possible worlds are constantly reinvented in the contest for very real, present worlds':

> I am interested in the narratives of scientific fact – those potent fictions of science – within a complex field indicated by the signifier SF.…
>
>   SF is a territory of contested cultural reproduction in high-technology worlds. Placing the narratives of scientific fact within the heterogeneous space of SF produces a transformed field. The transformed field sets up resonances among all of its regions and components. No region or component is 'reduced' to any other, but reading and writing practices respond to each other across a structured space. Speculative fiction has different tensions when its field also contains the inscription practices that constitute scientific fact. The sciences have complex histories in the constitution of imaginative worlds and of actual bodies in modern and postmodern 'first world' cultures.

In one of my relatively recent narrative experiments (Gough 2006), I performed a variation on Haraway's approach by reading a narrative of 'scientific fact' – namely, a potted biography of Isaac Newton taken from a school science textbook – within the heterogeneous space created by the production, interpretation, reception and critique of Salvadore Dali's (c. 1980) sculpture, *Homage to Newton*. However, I departed from Haraway by imagining the

'transformed field' I produced as a Deleuzean nomadic space rather than a 'structured space', and it could also be imagined as a rhizome space. Indeed, in a later publication, Haraway (1994) gestures towards a rhizomatic configuration of this space by likening agency within it to the activity of making string figures in a game of 'cat's cradle'.

The results of adopting such a strategy are particularly apparent in the final chapter of *Primate Visions,* which alternates between 'reading primatology as science fiction' and 'reading science fiction as primatology'. Haraway begins this chapter by using Isaac Asimov's (1964/1952) novel, *The Second Foundation,* to recapitulate the themes of *Primate Visions*. She then reviews the work of several women SF writers in the light of her reconstructed narratives of primatology. Haraway (1989, 370) reasons that:

> Mixing, juxtaposing, and reversing reading conventions appropriate to each genre can yield fruitful ways of understanding the production of origin narratives in a society that privileges science and technology in its constructions of what may count as nature and for regulating the traffic between what it divides as nature and culture.

Primate Visions testifies to the potential effectiveness of SF in thinking differently about contemporary orthodoxies – in this case, the social, textual and material history of primatology.

Theorising in paraspace

If I followed Michel Foucault (1970/1966), I might be tempted to speak of 'theorising in heterotopia', because I often suspect that I am working in an 'impossible' discursive space characterised by 'the disorder in which fragments of a large number of possible orders glitter separately… without law or geometry' (p. xviii). But I prefer to represent the space in which I perform educational inquiry as a Ballardian 'inner space', and in particular the 'zone' that Brian McHale (1992, 250-1), Scott Bukatman (1993, 163-82) and a number of other literary scholars identify as a pervasive trope in postmodernist fiction, a site in which multiple worlds are projected and ontological shifts are enabled by fragmenting, reassembling, and/or imploding familiar spaces. Many readers of my generation will recall the portentous words that opened each episode of a well-known 1960s television series:

> You are traveling to another dimension,
> a dimension not only of sight and sound
> but of mind –
> a journey into a wondrous land
> whose boundaries are that of imagination.
> Your next stop: *The Twilight Zone*.

There are many other examples. In the space age mythology of William Burroughs's (1964, 1966/1961, 1967/1962) apocalyptic Nova trilogy, the 'Interzone' is the region in which anything is permitted and everything coexists. The reconfigured Germany of Thomas Pynchon's (1973) novel, *Gravity's Rainbow,* is called 'the Zone,' as is a part of Canada mysteriously transformed by alien visitation in Arkady & Boris Strugatsky's (1978) *Roadside Picnic* (filmed by Andrei Tarkovsky as *Stalker* in 1979). 'Zones' are also the names that Doris Lessing (1980) gives to the parallel dimensions of the cosmos she creates in her 'Canopus in

Argus: Archives' series, explicitly introduced in the second novel of the sequence, *The Marriages Between Zones Three, Four and Five*.[6]

Although the name might be absent, spaces that serve similar functions to these zones often appear in postmodernist fiction. These include the burgeoning evocations of cyberspace, such as the virtual 'Metaverse' of Neal Stephenson's (1992) *Snow Crash* and, more particularly, the near-future megalopolises in which the technologies of human-machine interfaces are domesticated, such as the gigantic urban 'Sprawl' of BAMA (Boston-Atlanta Metropolitan Axis) in William Gibson's (1984) *Neuromancer*, and the similarly immense but even more densely inhabited 'Glop' of Marge Piercy's (1992) *He, She and It*. The imaginary town that provides the title of Ursula Le Guin's (1996) short story, 'Ether, OR', serves as an ontologically ambiguous zone in which the ordinary is almost imperceptibly fused with the fabulous, as its middle-American inhabitants adapt to its shifting configurations and relocations ('People come through here say how can you stand living in a town that doesn't stay in the same place all the time, but have they been to Los Angeles? It's anywhere you want to say it is'; 103). McHale (1987) notes that authors typically fashion such zones by 'introducing an alien space *within* a familiar space, or *between* two adjacent areas of space where no such "between" exists' (author's emphasis), and that even if the zone contains allusions to historical terrestrial spaces (Canada, occupied Germany, Oregon), it 'in fact is located nowhere but it the written text itself' (45-6). The 'reality' of the zone, as Ballard (1984/1964) writes of Burroughs's novels, 'is not some pallid reflection of a hypothetical external scene, its details and local color stitched into the narrative, but the self-created verbal reality of the next sentence and paragraph, like a track-laying train free to move about in all directions on a single set of rails' (106).

Thus, the idea of theorising in paraspace signifies that educational inquiry, for me, is a textual practice shared with the many SF writers who, in Samuel Delany's (1988) words, 'posit a normal world – a recognizable future – and then an alternate space, sometimes largely mental, but always materially manifested, that sits beside the real world… conflicts that begin in ordinary space are resolved in this linguistically intensified paraspace' (31). Ballard's (1985/1973) *Crash* is one of the most intensely realized examples of the rhetorical heightening that can be achieved through such paraspatial textual strategies. Baudrillard (1991) describes *Crash* as the 'first great novel of the universe of simulation, the world that we will be dealing with from now on' (319), and advances his own theorizing as a similarly evocative exercise:

> I am no longer in a state to 'reflect' on something, I can only push hypotheses to their limits, snatch them from their critical zones of reference, take them beyond a point of no return. I also take theory into the hyper-space of simulation – in which it loses all objective validity, but perhaps it gains in coherence, that is, in a real affinity with the system that surrounds us. (Baudrillard 1987, 36-7)

Baudrillard practices what Csicsery-Ronay (1991b) calls 'the science fiction of theory' by inviting us to assume that 'the system that surrounds us' *is* (has 'real affinity with') a paraspatial zone. In this respect he implicitly accepts Ballard's (1985/1974, 8) hypothesis that 'we live in a world ruled by fictions of every kind' and that, therefore, 'the most prudent and

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[6] References to 'the zone' as a psychological space in which one's performance seems supernormal are also common in the literature of sport and physical adventure. For example, *In the Zone: Transcendent Experience in Sports* (Murphy and White 1995), documents numerous 'moments of illumination, out-of-body experiences, altered perceptions of time and space, exceptional feats of strength and endurance, [and] states of ecstasy' (1) that have been reported by athletes and adventurers when they are enjoying a 'peak performance' (ix). The 'zones' of sport and SF coincide in the 1989 movie *Field of Dreams*.

effective method of dealing with the world around us is to assume that it is a complete fiction… We live inside an enormous novel'.

In a number of publications dating from the late 1990s to 2003, I deployed what I now think of as assemblages of Haraway's, Ballard's and Baudrillard's approaches to demonstrate that prudent and effective methods for inquiry in curriculum studies (Gough 1998), science education (Gough 2001) and global change environments (Gough 2003) could be generated by assuming that the worlds in which we perform and represent these inquiries are fictions, that is, paraspatial, heterotopian zones; if we imagine that we live inside an enormous SF novel (or movie, or computer game, or…), then we can take educational inquiry into a hyperspace of simulation in which we push propositions and suppositions beyond their limits.

Deleuze and Guattari's (1987/1980) new critical language for analysing thinking as flows or movements across space complemented my existing dispositions to 'thinking differently'. Concepts such as *assemblage, deterritorialisation, lines of flight, nomadology,* and *rhizome/rhizomatics* provided further ways to imagine spatial relationships and to conceive ourselves and other objects moving in space. For example, I found Deleuze and Guattari's (1987, 23) distinction between the 'sedentary point of view' that characterizes much Western philosophy, history and science, and a 'nomadic subjectivity' that allows thought to move across conventional categories and move against 'settled' concepts and theories, to be a clear incitement to 'push propositions and suppositions beyond their limits'. These concepts invite us to see the ordinary extra-ordinarily and to see-think-write-picture differently.

Warren envisioning curriculuming

My second foray with Noel followed an invitation from the editors of the *International Journal of Education and the Arts* to review his co-edited book, *Curriculum Visions* (Doll & Gough 2002). Taking the notion of picturing that emerged from my Camp Wilde experience, I began to play with ideas within the book as images, and brought those together into an assemblage that linked into a text about both the content and design of the book. Because I was writing for an online journal, I used hyperlinks to allow readers to open my pictures by clicking on a marked word (underlined) in the text. Some excerpts are shown in exhibits 3, 4 and 5).

Curriculum Visions is an unusual book. Curriculum texts usually address the ways, means and goals of education, and they often do so in a synoptic, or analytic, or didactic manner. Bill Doll and Noel Gough have enacted a visionary exploration of curriculum that travels well beyond the usual bounds of the field. As Gough, quoting one of his favourite storytellers, puts it 'I had been to Madidinou many times, of course, but this time the town looked altogether different, since I was on a journey *beyond it*' (Le Guin 1986, quoted in Doll & Gough, 2002, p. 18, italics added) …

Having sketched the editorial context for this work, I would now like to interweave my own perceptions. I am a picture thinker, and I take reading – words and pictures – to be a generative process that helps me to envision meaning from the many paths my learning takes me along. Therefore I see *Curriculum Visions* (*CV's*) more like a guidebook than a textbook. And, to explain how I interpret my reading journey, I need to show you my sketchbook that records some of my picturings of what I read.

One of my reflective <u>sketchnotes</u> reads, '*CV's* has touched me in ways that are similar to, and reflect the fractal-like feelings I experienced when I first read of Pinar's (1994) *Currere* 'method' and Grumet's (1988) *Bitter Milk* – sweet-sour, heady-brisk, sensuous-sensitive, shades-tones'.

Following this suggestion, I review *CV's* by interlinking the textual and pictorial responses of my personal reading experiences. If this concept is unclear, an example of my picturing of <u>vision and mind</u> may be helpful.

Exhibit 3. Text excerpt from Sellers (2003)

sketchnotes

Exhibit 4. Picture excerpt from Sellers (2003)

vision and mind

Exhibit 5. Picture excerpt from Sellers (2003)

As well as these sketchbook notes there were a number of coloured pencil sketches that introduced another, more abstract rendering of my readings (see exhibit 6).

Conversation

Exhibit 6. Picture excerpt from Sellers (2003).

The explanation in the vision and mind picture above attempts an elaboration that tries to show generative resonances in words and images that, in coming together, help to open out other, different readings for thinking. Doing this picturing~thinking is itself resonant with discoveries that can emerge in the process of unfolding folds.

Noel's narrative experiments and rhizosemiotic play

Like Laurel Richardson (2001), I now write 'because I want to find something out. I write in order to learn something that I did not know before I wrote it' (35), and increasingly I find it generative to bring objects of inquiry into intertextual play with Deleuze and Guattari's geophilosophy and 'fictions' in the broadest sense of the term.

   In order to demonstrate how I go about writing 'to find something out' I will focus on a process that I have deployed in three narrative experiments inspired by Deleuze and Guattari's (1987/1980) figuration of the rhizome – a process that I characterise as *rhizosemiotic play*. My 'reports' of these experiments are available elsewhere (Gough 2004, 2006, 2007a), and my intention here is simply to demonstrate some textual strategies that I use to perform such experiments, with particular reference to the generativity of intertextual readings of selected fictions in catalysing them.

RhizomANTics

I began 'RhizomANTically becoming-cyborg: performing posthuman pedagogies' (Gough 2004, 253) as shown in exhibit 7.

> Make a rhizome. But you don't know what you can make a rhizome with, you don't know which subterranean stem is going to make a rhizome, or enter a becoming, people your desert. So experiment.
> —Gilles Deleuze & Félix Guattari, *A Thousand Plateaus* (1987), p. 246

So I shall. This paper is a narrative experiment inspired by Deleuze and Guattari's (1987) figuration of the rhizome. It is a textual assemblage of popular and academic[1] representations of cyborgs that I hope might question, provoke and challenge some of the dominant discourses and assumptions of curriculum, teaching and learning.

Emboldened by Deleuze's penchant for inventing new terms for his figurations,[2] I have coined the term 'rhizomANTic' (sometimes 'rhizomantic') to name a methodological disposition that connects Deleuze's rhizomatics, ANT (actor-network theory), and Donna Haraway's (1997) 'invented category of semANTics, *diffractions*' (p. 16, my caps.).[3] Diffraction is 'an optical metaphor for the effort to make a difference in the world' (p. 16), which Haraway (1994) also represents by the activity of making a 'cat's cradle'—a metaphor that imagines the performance of sociotechnical relations as a less orderly and less functionalist activity than the word 'network' often conveys. As my reference to Haraway's work suggests, my engagement with ANT leans towards those aspects of the theory that John Law (1999) characterises as 'after-ANT'. In an annotated bibliography on Law's ANT Resource Home Page, he refers to Haraway's (1997) *Modest_Witness@Second_Millennium.FemaleMan©_Meets_OncoMouse™* as 'the best-known example of the different and partially related radical feminist technoscience alternative to actor-network theory. The "after-ANT" studies in this resource in many cases owe as much or more to Haraway as to ANT itself'.[4]

I also use the term rhizomantic because much of this essay is about ants.

Notes

1. I use the terms 'popular' and 'academic' to register my perceptions of difference across sites of cultural production, not to inscribe a binary distinction.
2. Braidotti (2000) argues that 'the notion of "figurations"—in contrast to the representational function of "metaphors"—emerges as crucial to Deleuze's notion of a conceptually charged use of the imagination' (p. 170). Similarly, Haraway (1997) asserts that 'figurations are performative images that can be inhabited … condensed maps of contestable worlds … [and] bumps that make us swerve from literal-mindedness' (p. 11).
3. Drawing attention to the ANT in semantics is gratuitous, but if I don't someone else will.
4. http://www.comp.lancs.ac.uk/sociology/antres.html (19 April 2003).

Exhibit 7: Opening paragraphs of 'RhizomANTically becoming-cyborg: performing posthuman pedagogies' (Gough 2004).

Why ants? Ants came to my rescue when I was struggling to expand a hastily written abstract into a presentable conference paper. My abstract, titled 'Becoming-cyborg: performing posthuman pedagogies', did little more than point to the proliferation of cyborg bodies and identities in sites of educational practice and signal my intention to draw on theoretical frameworks provided by Deleuze and ANT (Actor Network Theory) to explore the pedagogical implications of this proliferation. I wrote (with unwarranted confidence) that my paper would 'demonstrate how a becoming-cyborg teacher might deploy popular and theoretical conceptions of cyborgs as heuristics in educational work', but I had very few ideas about how I might do this.

In searching recent literature on cyborgs and education I found 'A manifesto for cyborg pedagogy?' by Tim Angus, Ian Cook and James Evans (2001), an account of teaching a university course that they explicitly grounded in ANT. I was impressed by the authors' thoughtful theorising of cyborg pedagogy but I was curious as to how Deleuzean (con)figurations might 'add value' to their approach. That was when the ants appeared – from several directions simultaneously. In retrospect, I can only surmise that my frequent reading of the acronym 'ANT' brought them out of the recesses of my memory into the forefront of my consciousness.

I recalled the theoretical ants in Deleuze and Guattari's (1987, 22) recollections of writing *A Thousand Plateaus* – 'we watched lines leave one plateau and proceed to another like columns of tiny ants' – and in Patricia O'Riley's (2003, 27) description of rhizomes as being 'like crabgrass, ants, wolf packs, and children'. I recalled my son's fascination with the game SimAnt in the mid-1990s and the giant mutant ants from movies such as *Them!* (1951) and *Empire of the Ants* (1977). But the ants that clamoured more insistently for my attention were those that populated some of my favourite fictions, such as H.G. Wells' (1905) *The Empire of the Ants,* Bernard Werbers' (1991) *Les Fourmis* trilogy, Philip K. Dick's (1991/1969) short story, 'The electric ant', and Rudy Rucker's (1994) novel, *The Hacker and the Ants.*

The most generative fictional ant came from Jerry Prosser's (1992) graphic novel, *Cyberantics,* which purports to be an annotated version of an illustrated children's book written by an eccentric cyberneticist as a report of his achievements in building (and setting loose) a cybernetic ant. *Cyberantics* is an ingenious (and very amusing) *metafiction*, a story that, in Patricia Waugh's (1984, 2) words, 'draws attention to its status as an artefact in order to pose questions about the relationship between fiction and reality'. As a metafiction *Cyberantics* functions as a complex system generating multiple interpretations and displays the properties that contemporary science calls chaos and complexity. Thus, it explores and illustrates, in a form accessible to children and adults alike, an important correspondence between postmodern science and literature. As Peter Stoicheff (1991, 85) writes, 'metafiction and scientific chaos[7] are embraced by a larger revolution in contemporary thought that examines the similar roles of narrative, and of investigative procedure, in our 'reading' or knowledge of the world'. *Cyberantics* can therefore be understood as an alternative representation of a postmodern science education text. It embeds stories of modern science, a delightful children's story, and a satire suitable for children and adults, within a complex and complicating metafiction that inhabits a conceptual space shared by much postmodernist science and poststructuralist cultural theorising.

I realised that *Cyberantics* exemplifies what might be missing from Angus et al.'s (2001) manifesto for cyborg pedagogy: their work is *cyber* without the *antics*, that is, it lacks the art, paradox and humour that might motivate us to imagine and invent maps of networks that *experiment* with the real rather than provide mere tracings of it. A subsequent publication demonstrates that the authors of this manifesto also found my critique to be generative (Evans, Cook, and Griffiths 2008).

Without *Cyberantics* I doubt that I would have coined 'rhizomantic' or appreciated the interpretive possibilities of this neologism. As soon as I wrote 'rhizomantic' as 'rhizomANTic' I realized that it signified concisely my suspicion that ANT cannot wholly be accommodated by rhizomatics – it fits, but it sits a little awkwardly and uncomfortably. I was then able to demonstrate the extent of this fit by comparing Haraway's and actor-network theorists' approaches to writing cyborgs with each other and with the implications of Deleuze and Guattari's work.

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[7]   I would add *scientific complexity* to Stoicheff's formulation.

Fictions as catalysts of rhizosemiotic play

It is beyond the scope of this essay to describe the two other examples of rhizosemiotic play to which I refer above. Nevertheless, I want to emphasize that 'fictions' – in a broad sense – were again crucial. 'Shaking the tree, making a rhizome: towards a nomadic geophilosophy of science education' (Gough 2006) was inspired by Peter Gabriel and Youssou N'Dour's (1989) song, 'Shaking the tree', which celebrates the women's movement in Africa, and led me to imagine rhizomes 'shaking the tree' of modern Western science education by destabilizing arborescent conceptions of knowledge. Other fictions that animate this essay include Salvador Dali's witty sculpture, *Homage to Newton,* and *The Calcutta Chromosome: A Novel of Fevers, Delirium, and Discovery* by Amitav Ghosh (1997), an SF thriller that imagines a counter-history (and counter-science) of malaria. This essay too has evidently been generative for my peers (see, for example, Somerville 2008).

Similarly, 'Changing planes: rhizosemiotic play in transnational curriculum inquiry' (Gough 2007a), was inspired by Ursula Le Guin's (2004) collection of linked SF stories, *Changing Planes*. Le Guin's pun ('planes' refers both to airplanes and to planes of existence) helped me to 'play' with Deleuze and Guattari's argument that modes of intellectual inquiry need to account for the planes of immanence upon which they operate – the preconceptual fields presupposed by the concepts that inquiry creates. Curriculum inquiry currently operates on nationally distinctive planes of immanence, and I speculate that the internationalisation of curriculum studies might, therefore, require curriculum scholars to be able to *change planes* – to move between one plane of immanence and another and/or to transform their own planes.

Each of these essays takes seriously Deleuze's (1994, xx) assertion that a philosophical work should be 'in part a kind of science fiction'. However, as I hope I might have demonstrated here, taking Deleuze 'seriously' does not prevent a writer from having a little fun.

A pause in the middle of things: rhizosemiosis and rhythm

Deleuze and Guattari (1987, 25) explain that rhizomes 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'. I agree with Elizabeth St. Pierre (1997, 176) that

> 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.

Thus, I rarely have any desire to 'conclude' an essay but prefer instead simply to pause 'in the middle of things' and reflect briefly on my 'finding agency' (or recognizing agency's emergence) within the ambiguities of language and cultural practice represented and performed by thought experiments, narrative experiments, and rhizosemiotic play.

Some of the most inspiring examples of narrative experiments are those performed by great novelists, and their reflections on their own writing processes can be illuminating. For example, in recounting my 'rhizomANTic' experiment (see Gough 2008), I recalled a passage from Virginia Woolf's (1980, 247) letter to Vita Sackville-West in 1926:

> Style is a very simple matter: it is all *rhythm*. Once you get that, you can't use the wrong words. But on the other hand here I am sitting after half the morning, crammed with ideas and visions, and so on, and can't dislodge them, for lack of the right rhythm. Now this is very profound, what rhythm is, and goes far deeper than words. A sight, an emotion,

creates this wave in the mind, long before it makes words to fit it; and in writing (such is my present belief) one has to recapture this, and set this working (which has nothing apparently to do with words) and then, as it breaks and tumbles in the mind, it makes words to fit it. But no doubt I shall think differently next year.

At the time of writing I speculated that ants created a wave that broke and tumbled in my mind – and I made words to fit it – but no doubt I too shall think differently next year (or even sooner).

Warren's artful enquiries: What is philosophy? What is art brut/outsider? What is education?

Deleuze, speaking about Foucault's reference to his work says: 'Maybe … Foucault meant: I wasn't better than the others, but, more naïve, producing a kind of *art brut*, so to speak; not the most profound but the most innocent (the one who felt the least guilt about "doing philosophy")' (Deleuze 1995, 89). I take from this Deleuze's use of *art brut*~outsider art as a reference to a way of *doing philosophy* that is outside the 'norms' of conventional philosophy, a 'non-professional' practice having more in common with 'mental patients, prisoners, and children'. A self-portrait by Deleuze (1994) (see exhibit 8) expresses my take more eloquently than my words (that it is a self portrait is affirmed in my view by comparison with my digital drawing of Deleuze from a photograph, see exhibit 9).

Exhibit 8. From 'Sept dessin' (Deleuze 1994)   Exhibit 9. 'G. D.' (Sellers 2007)

I have a similar view of education – see my 'untitled' [self-ish-portrait] (exhibit 10) – having rarely been comfortable with school, neither then nor now. The few times I have felt at ease have been in situations of my own devising, albeit often stimulated by a teacher. Examples that spring to mind include:

- a 'book' comprising gum-backed pre-cut coloured paper shapes affixed to the pages and my first attempts at writing (printing) appended. I probably produced this work when I was 5 or 6 years old;

Exhibit 10. 'untitled' (Sellers 1999)

- a large landscape painting (over 2 metres by 1 metre) of an imagined rural industry scene, produced when I was 7 or 8;
- a class 'newspaper' co-produced with a colleague maybe a year later, using hand-lettering based on a matrix that had a prescient resemblance to electronically formed typefaces and, on reflection now, could have seemed remarkably like the forerunner of a blog;
- a series of larger than life paintings of characters from the movie *West Side Story* that, along with other decorative elements, transformed the school gymnasium into New York's west side for the Senior school ball when I was 17.

What makes these examples stand out for me are their curricular communication capabilities, showing my desire to express my enjoyment of understanding and to share the experiences. Another thought that comes from my school years is about an 'ideas-umbrella'. It concerned me that so many new and interesting ideas I encountered just drifted off into the world at large and I imagined having an umbrella that caught the ideas as they started to drift away – an umbrella that I could close and then shake all of the ideas into a container for further study and to share with others.

I am discussing here how I see curriculum(ing) – as a mainly self-embodied and motivated process that contrasts sharply with the mostly extrinsic strictly structured and highly organised knowledge delivery and qualification business that consumes a major slice of global governmental budgets. The argument I encounter whenever I raise my view is: how could this ever be organised? To which I respond: why should it be? The only justification for the present system is that it is what we know that we believe works (to a greater or lesser degree) depending on one's fortunes in where one is located geo-politically. In other words, the system as we know it relies on our worldview, our onto-epistemology. Yet we know there is so much about our worldview that is no longer as we knew it. If we know anything of value to us, it is that everything is always already in flux. But our understandings and capabilities

for recognising and adapting to flux are largely left in the hands a few so-called change management consultants.

   This is where we see thinking differently coming into play. Take just one example: Deleuze and Guattari's rhizome, which is presented as a way to disrupt the hegemony of the popular arboreal metaphor for knowledge organisation. In one swift move, from the singularity of the tree of knowledge to multiplicities of rhizomes for knowing, it is possible to imagine other organising ways that perturb a predominant worldview – ways that are not unlike those involved in decentring the Earth within the then known universe. It is worth remembering how difficult this was (see for example Kuhn 1957), and to reflect on the challenges rhizomatics similarly poses.

Warren's attempt at unfolding folding

   A fold is always folded within a fold… Unfolding is thus not the contrary of folding, but follows the fold up to the following fold. (Deleuze 1993, 6)

Folding holds a fascination in its capability for showing us and allowing us to play tricks with scale, proportion and dimension. We often fold everyday objects like tickets or purchase slips in unconscious ways that are not unlike doodling. For professional folders, such as bookbinders, origami artists or fashion designers, the art and skill of their craft is more often than not hidden within the intricacies of the compleat object, that is, in its full-fill-ment. In my reading of Deleuze on folds, I became intrigued by a small picture that sits at the top of one page (see exhibit 11).

Exhibit 11. Picture excerpt from Deleuze (1993, 20).

I found the text accompanying the picture, discussing relations of interpretation to perception, quite dense and I turned to the picture for help (see exhibit 12).
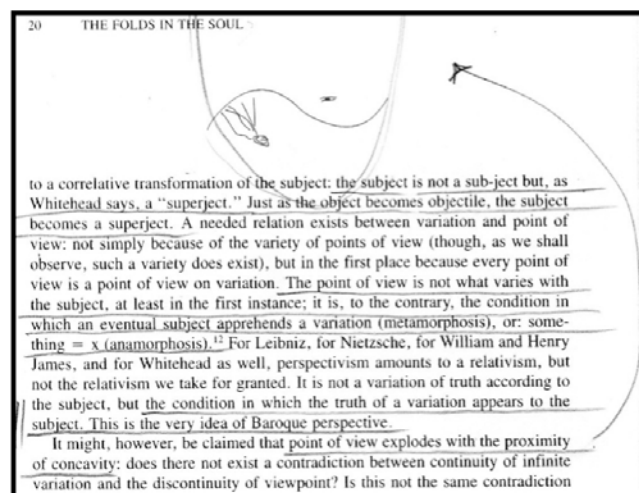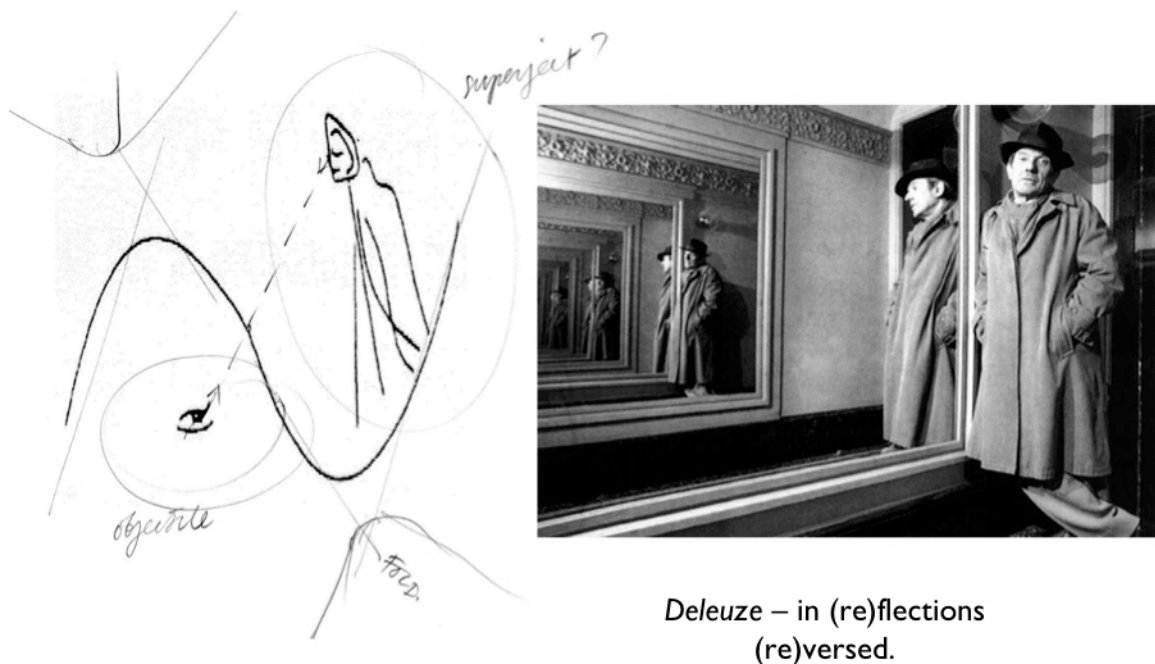

Exhibit 12. Excerpt from Deleuze (1993, 20) annotated by Sellers.

As I played with the picture it unfolded in the following way. First I inverted it, then I anamorphically 'squeezed' it (see exhibit 13).

Exhibit 13. Picture excerpts from Deleuze (1993, 20) manipulated and annotated by Sellers.

The word 'anamorphosis' is a clue here to reconceptualising the point of view, which needs to be non-Euclidean, that is, not just a shift in perspective but also a twist in space – shifting the subject (superject) and repositioning the object (objectile). As I continued to explore this strange drawing I continued to unfold further twists and resemblances that I show here (see exhibit 14).

Deleuze – in (re)flections (re)versed.

Exhibit 14. Picture from Deleuze (1993, 20) manipulated and annotated by Sellers (left) beside (right) resonant picture of Deleuze (Gérard Uféras N.D.)

Viewed anamorphically Deleuze's subject/object becomes superject~objectile and the relationship can be seen as a plurality of inflection: 'There are as many points of view – whose distance in each case is indivisible – as inflections in inflection, whose length increases' (Deleuze 1993, 20). Folding folds within folds, within folds… this in not a question of understanding what this means, but the pluralities of meanings it generates for understandings.

Thinking differently about writing together

> That Guattari did have a career outside of his collaborations with Deleuze does seem to need emphasizing because so far the secondary criticism on the work of Deleuze and Guattari has tended to overlook his contributions altogether or consign them to a merely secondary role. (Buchanan 2005)

> 'The two of us wrote *Anti-Oedipus* together.' (Deleuze and Guattari 1987)

Gary Genosko's (2009) timely contribution to the Deleuzo-Guattarian corpus helps us to appreciate not only that we are reading a plurality but also helps us towards a sense of why. Guattari's project was micropolitical. Although we perhaps associate him more with the psychoanalytic he was above all an activist. His schizoanalysis concerned ways in which the singular psyche's unconscious might be released to collaboratively treat impasses, blockades and alienations hampering lines of flight 'on the run from stultifying bureaucracies, looking out for new ways to introduce new machinic connections and breaks, regardless of their level of formation, and reach across the social field' (Gonensko 2009, 5). It is in this way that the outsider touches us innermost, by showing us that naivety and innocence presages an otherness ~otherwise generativity for growth.

We recognise writing together as an approach to immanent emergent meaning making: releasing rhizomes flush with matters of expression affecting the micropolitical through 'pragmatically intervening at the smallest levels in order to ensure that the dominant kinds of subjectivity produced by Integrated World Capitalism do not win out' (Gosenko 2009, 25).

If there is a message to leave here, it is that education is a collaborative act for recognising and furthering thinking differently. Thinking differently offers capabilities for recognizing and understanding that worlds of flux always already are operating in ways that are forever changing and that this is not problematic but generative. What needs to be understood is that change is not a problem, rather, we need to think differently about change. As the long and laboured so-called debate about climate change show us, climates are always already changing, only recently we have constructed this as a crisis. The crisis is not the climate change, it is our construction of it as a crisis for us. Emergent generations won't thank us for holding so hard and so selfishly to such redundant ways of thinking.

Now it is the reader's reading as much as the writers' writing that will stretch all our thinking into/across a meta-discourse fold. Any seemingly folding up may be merely a pausing, an ebbing in the flowing of the emerging thinking of readers~writers recursively reading~writing~thinking, as … In a Deleuzo-Guattarian spirit of co-authoring, we perform an assemblage of empathetic responses to thinking (differently) with Deleuze in educational philosophy and curriculum inquiry.

Mapping our thinking (reflections)

Warren   **Noel**

rhizo-imaginary picturing   rhizosemiotic play

educational philosophy
curriculum theorising

beyond metaphor/figuration

'deconstruct' common usages   narrative experiments that 'diffract'

picturing   SF

art brut/outsider
episto-metho-dological questions
thought experiments

Lost for words   Theorising in paraspace

how we work

thinking differently
about
writing together

Guattari & Deleuze
Micropolitics & collective communication

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