Cartographies of Becoming in Education

A Deleuze-Guattari Perspective

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Cartographies of becoming in education: A Deleuze-Guattari Perspective proposes a non-hierarchical approach that maps teaching and learning with the power of affect and what a body can do/become in different educational contexts. Teaching and learning is an encounter with the unknown and happen as specific responses to particular problems encountered with/in life.

In this edited volume, international scholars map out potential ruptures in teaching and learning in order to conceptualize education differently. One way is through the multidisciplinary lens of MLT (Multiple Literacies Theory) in which reading is intensive and immanent. The authors deploy different aspects of MLT while creating and experimenting with ethology, teaching, learning, curriculum, teacher education and technology in relation to visual arts, music, mathematics, theatre, workplace literacy, second language education, and architecture. With the forces of globalization, digital media and economic re-structuring reconfiguring the social, political and economic landscape, societies require innovative ways of thinking about education. Cartographies of becoming in education: A Deleuze-Guattari Perspective is a response to problems posed by such forces.

The problematic surrounding Deleuze-Guattari and education continues to grow. Diana Masny’s scholarship in this area is well known and appreciated through her many essays and books that develop MLT (Multiple Literacies Theory). Cartographies of Becoming in Education: A Deleuze-Guattari Perspective continues her effort to broaden the notion of education and show its intersections with MLT. The series of essays do this by forming a number of ‘entries,’ five to be precise: politicizing education, affect and education, literacies and becoming, teacher-becomings, and deterritorializing boundaries. Each ‘entry’ explores the way an MLT inflected orientation enables us to further grasp the creative inventiveness of the Deleuze-Guattarian tool kit that can be applied to areas of music education, ethnography, art, drama, literacy, mathematics, landscape ecology, ethology and teacher education. It is a vivid illustration of the cartography that maps the rhizomatic movements that are taking place by international scholars who are deterritorializing education as a discipline of modernity. I highly recommend this collection of essays to those of us who are continually asking how might education be rethought through the unthought. It opens up new territories.

– Jan Jagodzinski, University of Alberta, Author of Psychoanalyzing Cinema.

Andrea Eckersley. Study (18a) 2012. Oil on linen, 45 x 35 cm. Photo by Warren Fithie.
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Edited by

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This book began as a project initiated two years ago by the Multiple Literacies Research Unit at the Faculty of Education, University of Ottawa. The unit was established in 2005. This book is dedicated to all those who participated in creating the unit, beginning with Dean Marie-Josée Berger who supported its creation and to its founding members, my colleagues, Claire Maltais, Anne-Marie Dionne and Nancy Vézina. They were soon followed by Awad Ibrahim, Doug Fleming, Francis Bangou, and David R. Cole, a core international Australian partner in the unit as well as associate partners, colleagues from the Faculty of Education, Richard Barwell, Nicholas Ng-a-Fook, and Maurice Taylor. The unit also wishes to acknowledge the Canadian and international members that have collaborated with the unit to promote research on multiple literacies. The unit website provides detailed information.

Moreover and as importantly are the many undergraduate and graduate students who are mentored through the various funded research projects at the unit. They also volunteer to do various chores at the unit such as updating the website, and participating at our annual tea events. The research unit also sponsors a Deleuze-MLT study group. It has been on-going since 2007. The materials for the study group have been documented on the unit website. Therefore, I would like to acknowledge the immense contribution of Monica Waterhouse for her continuous support. In addition, there is Brenna Quigley, Shannon Sweeney and Maria Bastien, students who have been with the unit during their graduate program. I wish to express my gratitude to all the children, high school and adult students, parents, teachers, school board administrators and ministry/department officials for their willingness to collaborate in this rhizomatic endeavor: MLT. Finally, I want to thank the Faculty of Education at the University of Ottawa for their financial contribution towards the publication of this edited volume.

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Permission to show this painting on the front cover of the book has been granted by the artist Andrea Eckersley.
ENTRY

“The rhizome pertains to a map that must be produced, constructed, a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight” (Deleuze & Guattari, 1987, p. 21).
1. CARTOGRAPHIES OF BECOMING IN EDUCATION

Theory and Practice

INTRODUCTION

Cartographies relate to mappings and mappings relate to the rhizome. Cartographies are captured through the rhizome, “movements in diverse directions instead of a single path, multiplying its own lines and establishing the plurality of unpredictable connections in the open-ended smooth space of its growth” (Semetsky, 2008, p. xv). This book has no beginning, no end. It enters in the middle of a project on a plane of immanence and a continuous interplay of concept creation and rhizomic mapping. What Deleuze and Guattari contributed, not only to philosophy but also to life and living, is concept creation. A rhizomatic map with its relationality to geophilosophy highlights segmentary lines that leak and emit lines of flight, in other words, concept creation through territorialization, deterritorialization and reterritorialization. Contributions to cartographies come together in this innovative volume to explore transversality in education.

Deleuze and Guattari were concerned about how the social sciences as well as natural sciences explored problems in terms of closed hierarchical systems, which they refer to as a tree or an arborescent system (tracings). They were interested in open, rhizomatic systems/maps. They could not and would not underestimate the power of arborescent systems/tracings. How to live with the latter? This was their response: “The important point is that the root-tree and canal-rhizome are not two opposed models: the first operates as a transcendent model and tracing, even if it engenders its own escapes; the second operates as an immanent process that overturns the model and outlines a map . . .” (Deleuze & Guattari, 1987, p. 2). Tracing and maps are not a dualism; rather, the relationship of the tracing and the map refers to “paradoxical forces at work together in an assemblage” (Deleuze & Guattari, 1987, p. 12). There exist tree or root structures in rhizomes; conversely, a tree branch or root division may begin to burgeon into a rhizome (Deleuze & Guattari, 1987, p. 15).

The contributors to this book have put the tracing on the map. They come from Australia, Canada, New Zealand, Portugal, and the United States. In structure, this book is a rhizome and contains many entryways. One entry deals with Politicizing Education with contributions from David Lines, Jason Wallin and David Cole. Another entry highlights Affect and Education with
conclusions from Inna Semetsky and Mia Perry. The next entry, Literacies and Becoming, contains contributions from Elizabeth de Freitas and a collaborative text from Maria Lourdes Dionisio, Rui Vieira de Castro and Ana Sofia Arqueiro. What follows is an entry on Teacher-Becoming with contributions from Francis Bangou and Taylor Webb. Finally, an entry, deterritorializing boundaries, by Graham Livesay, and Cameron Duff follows. In keeping with multiple literacies theory (MLT) and its overall conceptualization of multiple literacies (Masny 2010), Knight provides readers with art installations interspersed throughout the book. A postscript by Diana Masny on multiplicities and transcendental empiricism in research is included. Moreover each entry way provides a quote from Deleuze, and Deleuze and Guattari that emits a line of flight, a creative response by the different contributors. While each contribution is set within a quote related, for instance, to affect, most authors in the book would include affect. Since the concept of affect is virtual, it actualizes differently in each chapter.

This collection is transdisciplinary comprised of chapters from diverse fields: education (math, literacies, curriculum studies), teaching, film studies, performance studies (dance, music, visual arts), architecture and health sciences. Each domain has educative value and therefore this book moves away from a restrictive field of education. In other words, education flows through all fields. Therefore this collection of original essays takes up the challenge of deterritorialization by mapping becoming through rhizomic cartographies. Rhizome and becoming cannot be controlled; instead they create unpredictable lines of flight. How might this be taken up?

In education, theory and praxis are intertwined. However, Deleuze (2004) calls for a theory and praxis to be lived in a different way:

For us, the relationships between theory and praxis are more fragmentary and partial. In the first place, theory is always local... The rule of application is never one of resemblance. In the second place, as soon as a theory takes hold in its own domain, it encounters obstacles, walls, collisions, and these impediments create a need for a different theory to be relayed by the theory to be relayed by another kind of discourse...Praxis is a network of relays from one theoretical point to another, and theory relates one praxis to another. A theory cannot be developed without a wall, and praxis is needed to break through. (p. 206)

Praxis is a system of relays in an assemblage, in a multiplicity of bits and pieces both theoretical and practical. For us, the intellectual and the theorist have ceased to be a subject, a consciousness, that represents or that is representative...who speaks? Who acts? It’s always a multiplicity, even in the person who speaks or acts. We are all grupuscules. There is no more representation. There is only action, the action of theory, the action of praxis, in the relations of relays and networks (p.207).

This quote from Deleuze becomes a connection to MLT. In several publications (Masny 2006, 2011, 2012), I have explicated the link of MLT, theory and
practice. MLT generates a toolbox highlighting that a theory has to work and it has to be seen to work. MLT has become an avenue in which the concept of reading has been flipped on its head by deterritorializing reading in accordance with an open ahierarchical system that flows regardless. Each lived process with MLT is a singular event but at the same time expresses multiplicities within. In this book, different authors have made connections to their field and MLT. MLT happens. It is both theory and practice: “... If there is no one to use it, starting with the theorist himself, who as soon as he uses it ceases to be a theorist, then a theory is worthless, or its time has not yet arrived. You don’t go back to a theory, you make new ones, you have others to make…. A theory won’t be totalized, it multiplies” (Deleuze, 2004, p.208).

POLITICS AND EDUCATION

The chapter by David Lines entitled *Deleuze and music education* is devoted to music and how music teaching and learning could be conceived and practiced in light of rapid changing contexts of urban and digital music life and learning. Deleuze and Guattari (1987) challenged concepts about music education by describing music to be rhizomic. According to Lines, the present system of music learning is modular and insular in that each music subdomain area tends to ignore the broader conditions of its own practice and obscures the transdisciplinary connections that may be present. The problem is in the overall conception: predetermination and perspective of music learning. Today’s educated musician is primarily seen as a technician who renders skillfully technical craftsmanship within the confines of genre-specific music pieces. Moreover, rules guiding the formation and production of the music piece has suppressed more fluid forms of music production: improvisation. Such concerns in music education become intensified in “neoliberal educational frameworks that serve to atomise curricula and reduce pedagogies to methodical and linear presentations of new material” (p. 27).

These rigid lines within the rhizome emit lines of flight to become alternative pathways to received ways of thinking. What is important here are the directions of new flight rather than predetermined pathways. The Deleuzian music educator looks forward to the emergent and moving flight paths that come out of music learning experiences: the music event *in situ*. The mapping of a rhizomic music event establishes and documents what vectors of connection constitute the event, that is, the historical vectors that have preceded its formation and the present connections that form its current constitution.

A Deleuzian concept of music also takes into account “intensities”. Intensity is virtual and helps explicate moments of force when one force overcomes another force due to its level of intensity. The chapter explores intensities through sound and sound study, an educational force that opens up prospects of transdisciplinarity and affect. Sound study in cinema and digital internet for example have much to offer education as a whole. Within the context of
Masny

Contemporary music culture and neoliberal educational policy and practice, Deleuze’s concepts challenge music teacher thinking and action. The rhizome provokes preconceptions of music education and stimulates new thinking about how it can be thought about and practiced. Cartographies become a response to explore difference with a degree of affirmation and openness that is not always apparent in neoliberal sites of education.

The chapter by Jason Wallin entitled *Get out from behind the lectern: Counter cartographies of the transversal institution* focuses on material experimentations with transversality to propose a new way of “thinking life” with educational institutions. Wallin creates a relationship between “transversal thinkers” who are concerned with the idea that the institution must be remade: Guattari, Oury, Neil, Celestin. While at LaBorde Guattari mobilized a new tool for the material transformation of institutional life: virtual ecology of institutional life. The transversal institution is not simply about decolonizing and deterritorializing the institution. Guattari (1972, 2000, 2009) wanted that the institution undergo a liberatory revolution. The chapter begins with a tool for rethinking the material organization of the school: linking transversality with conceptualizing curriculum theory. Transversality pertains to the ways in which institutional “group-subjects” might be liberated from under repressive or stultifying forms of institutional organization. Group-subjects have a revolutionary potential according to Guattari. They almost-always pertains to the organization, regulation and management of multiplicities. As Aoki (2005) writes, pedagogy pertains more to the formation and conceptualization of assemblages as it does the orthodox scene of student-teacher transference. Wallin provides an account of concepts Guattari created at LaBorde, one being the molar image of institutional life with its “institutional sedimentation of vertical power relations” another being institutional blinkers (p. 37). Guattari advocated transversal unblinking of institutional group-subjects and the concomitant displacement of authority in the therapeutic relationship. Aoki (2005) raised concerns that the ecology of institutional life is already foreclosed by a series of blinkers that constrict disciplinary thought within highly coded territories of knowledge and production. Transversality functions as a tool for desedimenting the territory of curriculum and instruction (Aoki, 2005). Moreover, Aoki advocates a multiplicity of curriculums “as many as there are teachers and students”.

Guattari’s reconfiguration of LaBorde would include incorporating radical pedagogy conceptualised by Freinet who would employ transversality as a tool for promoting group-subject proximity to institutional life and remap the institution “by unblinking the desiring-production of the institutional group-subject” (p. 46). Herein, Wallin creates connections with MLT. Wallin concludes by suggesting that a transversal pedagogy implemented at Laborde orients thought away from “a treatment of ‘individuals’ in lieu of a schizoanalysis of what institutional assemblages are capable of producing” (p. 48).

In the chapter entitled *Deleuze and the subversion(s) of ‘the real’: Pragmatics in education*, David R. Cole asks what is the sense of real for Deleuze and how
the concept of the real helps us to understand education. These questions are taken up with data from Sudanese immigrant families in Australia, creating new lives on a new continent and as part of a different society. This study signals a Deleuzian inspired take on ethnography that is “unethnographic”. Moreover, the chapter pushes the study beyond applicative dualisms. The concept of the real takes on critical importance for within “the ‘field of the real’ lies the sometimes dormant forces and factors that determine the possibilities of the truth” (p. 53). In other words, there are “elements within what is happening to the Sudanese families that act as markers or portals to the real of the Sudanese, and these can be reformulated as empirical evidence for claims about how to aid with their education in Australia” (p. 53). The real in a way refers to a multi-layered construct that includes the thoughts of everything that has happened to them (including the imaginary) before they arrived in Australia. The “givenness of their lives is opened up and explored…with the aim of discovering an unknown point in empirical investigation, where the Sudanese-Australian real is emergent and the incipient learning may be understood in terms of multiple literacies and pragmatism in education” (p. 54).

AFFECT AND EDUCATION

Inna Semetsky explores the concept of bricolage created by Deleuze and Guattari (1983) and refers to a schizoanalytic and transgressive mode of production. Their concept became an alternative to the concept of the pathological schizophrenic in the context of a rational dualism. For Deleuze and Guattari a schizophrenic problematises the centrality of Cartesian subject by virtue of participating in the reality of what is produced. Anti-Cartesian subjectivity, a mode of intensity participating in schizoanalysis enables the integration of the unconscious or the unthought into rational thinking at the level of the body. This integrative method which both de- and re-territorializes one's subjectivity is cartography.

Semetsky highlights the importance of the fold to confront the dualism between thought and the unthought dimension exemplified in Cartesian substance dualism between body and mind. Learning, for Deleuze, is embedded in the experimentation on ourselves in practice whenever mind becomes extended to the level of the body. This is bodymind learning that encompasses multiple bodily affects at the level of the unthought and the unconscious. Semetsky contends that “multiple parameters of the unconscious implicit in experiential encounters create novel relations in our real experience, because as dynamic forces they are capable of affecting and effecting changes, thus contesting the very identity of subjects on the road to individuation” (p. 79).

The unthought inhabits the plane of immanence and informs our immediate practical actions. Body and mind form a “both-and” assemblage conducive to experimental and experiential, bodymind, learning. The chapter analyses in detail Deleuze’s example of swimming (in Difference and Repetition). It is in the real-life experiential singularity within an encounter with actual waves, in which the
virtual idea of swimming subsists, that we can experiment with this idea and comprehend its meaning through practical encounters, by means of creating a bodymind assemblage. The creative, transformative, and evaluative element embedded in Bodymind learning is necessarily characterized by new percepts and new affects in practical life. Subjectivity constitutes itself via the cartographic method of mapping a territory of problems and events. Subjectivity depends on our learning from unfolding experience.

Mia Perry addresses the bodymind assemblage through performance creation. Her chapter intersects Deleuze and Guattari’s social theory with nomadic thought characterized by the rhizome and MLT in order to think nomadically through an experience of collaboration and improvisation in classroom-based devised theatre creation. Devised theatre can be considered a postmodern or “postdramatic” genre of theatre generally based on subjectivities and circumstances of the artists/students involved, living textualities. Devised theatre refers to a plurality of processes of experimentation and sets of creative strategies. Perry takes up “the production and performance of devised theatre as an anomalous place of learning (Ellsworth, 2005) with unique affordances in terms of its pedagogical potential” (p. 94). The project deploys an embodied pedagogy and Deleuze and Guattari’s theory of nomadic thought. Accordingly, the focus is on the student and participant, body/mind/self in motion (Ellsworth, 2005) in the context of a non-representational perspective of analysis, understanding pedagogy to be lived and experienced by means of forces of affect, sensation and interrelation.

The project unfolded with a group of grade 9 drama students in a public secondary school in Western Canada. Over a year with the class, the qualitative methods in fieldwork consisted of improvisational and systematic elements with a strong awareness of roles (researcher, facilitator, teacher, and director) and multiplicities in the data generation. Perry worked with the drama teacher to develop a program of devised theater. The program consisted of the development of creation tools; spectatorship and performance creation and production. As individuals assemble in relation to others, to ideas, and to experiences, forces emerge that give rise to new action, thought, feeling, and movement. These processes can be described in terms of rhizomatic lines, deterritorialization and reterritorialization. The rhizome allows forces of sensation, interrelation, and affect to emerge at the foreground of the analytical lens. This chapter includes a description and exploration of a structured improvisation process and surrounding discussions. Perry concludes with two issues: the role of body and that of consensus and dissensus in education. The author calls for a non-representational perspective on learning that demands an engagement with the body in conjunction with the mind and self (subjectivities). The experience of the mind/body/self in the process of character development and performance is one of hybridity, synchronicity, and change. The body becomes an effective tool in engaging embodied pedagogies as well as in research and in analysing learning and creative experiences. In the conclusion two issues come forth: the first the
interrelation of the body/mind. The second issue relates to consensus and collaboration. Education thrives on and promotes consensus. “The culture of consensus in education emerges as a striation in classroom space” (p. 105). Consensus becomes the great leveler and “unifies the creative space, quickly creating segmentation around that which is agreed upon” (p. 106). What does consensus produce?

With MLT, reading is a move away from the exclusivity of the printed material. Materiality expresses in different ways. In the series contributed by Linda Knight entitled, Ca/r/tographies of Desire: Knitting as theorizing on productive forces in education, reading, reading the world and self happens through art and art-based education research. Knight’s work is interspersed throughout the book with each entry beginning with the title Knitted Images. Knight provides an account of the complex relationships between different ways of knowing to work through and push MLT (Masny, 2008). Her art, a/r/tography (Irwin & Springgay, 2008), is a process for theorizing and interrogating networks of activity emitted from teaching, researching, creating and focuses on ways of doing. In this book, the readers will be able to read various visual art pieces that reveal themselves through the entire book. There will be knotted cardigans and baby trousseaus: forms of skin-making, that is, a covering and close mapping, a cartography of the body frame. They envelop and when they are taken off are pregnant with becoming, with the movements they flowed through, undertook with the body within them. They are brimming with forces, shiftings, and manipulations. A series of knitted skins: bodies without organs (Deleuze & Guattari, 1987) are recent works that form physical manifestations in the exploration of deleuzguattarian concepts. These are literally bodies without organs but offer residence to the field of “immanence of desire” (Deleuze & Guattari, 1987, p.170). Deleuze and Guattari (1987) discuss the extreme desirings of masochists, drug users, schizophrenics and lovers. The knotted body shell resonates with “intensive principles of organs, with their positive indefinite articles, within a collectivity or multiplicity, inside an assemblage” (p. 182). Knitting takes on embodied practice ad becomes research, investigation, and theorization.

The knitting of the wool, the looping, crossing, hooking connects to the project rationale and engages in rhizomatic ca/r/tographing of the body without organs. Knitting brings forth thinking about teacher desires, potentiality, and of socio-historical feminine associations of wrapping, enveloping, and nurturing the young. The production of knitted body shells enables a corporeal theorizing on the teacher, and the desirings and constituted forces (such as curriculum, student, classroom, controller, pedagogue) that act as motivations and assemblages of influence. (Linda Knight, personal communication)
The entry on *Literacies and Becoming* is mapping a cartography of reading, reading the world and self when MLT intersects with Deleuze and Guattari. Here once more, literacy in the broader scope exceeds what is traditionally considered reading. In the chapter, *Literacies in the workplace: Social conditions, practices, and meanings*, Maria de Lourdes Dionisio, Rui Vieira de Castro and Ana Sofia Arqueiro focus on adult literacy. The discipline of adult literacy continues to exist because one might argue is related to the dualism promoted through literacy/illiteracy. In Portugal, several ongoing adult education programs are echoing, and producing “adult literacy crisis”. The “deficit” of reading and writing skills among adults is often considered a fact that school-like language programs can surmount. It is not unusual that private corporations develop their own educational programs for raising the literacy levels of their workers. In this text, the authors discuss some data from a research project developed at two factories located in the north of Portugal. The project generated evidence about the multiple and often conflicting literacies in which people engage, and invest (Masny, 2010), in their working lives, as well as about the social distribution of different literacies. It also highlighted the purposefulness of the uses of texts by people and the challenges people face when encountering new literacies that aim at structuring social and labor relationships.

This chapter by Elizabeth de Freitas entitled, *Mapping the materiality of mathematical discourse*, intersects the work of Deleuze, Deleuze and Guattari, and Massumi to focus on how content and expression are assembled in classroom “communication”. De Freitas presents the tension in mathematics that Deleuze and Guattari describe in terms of “royal” or “major” mathematics and alternative lineages of mathematics, “nomadic” or “minor”. In math education, royal mathematics continues to dominate and underpin contemporary approaches to mathematics curriculum. De Freitas provides a brief review of the tensions with Plato, the materialists, Desargues, Monge and Poncelet. The tensions between axiomatics and destabilizing nomadic mathematics persists. De Freitas sheds light on ways of deterritorializing the rigid/sedimented terrain of mathematics and re-territorializing it as nomadic flow by re-thinking the relationship between language and mathematics. Verbal communication on thinking out has become an important aspect of math education. There is the perspective that a math problem is resolved first in the mind and then an external expression is presented. However, in de Freitas’ words, the concept of thinking remains, often reducing the concept of thought to a form of inner speech. There are also socio-constructivists who maintain that solving and expressing an answer to a math problem is first and foremost a social activity (Vygotsky). However, de Freitas contends that in this perspective there is no “thinking as a radical asignifying creative act, nor for the indisciplines at work in language where the nomadic erupts and pursues a line of flight” (p. 117). In practice, mathematics remains the immaterial conceptual content that is given shape and
matter through language-use. Deleuze and Guattari argue against the concept of communication, offering instead the concept of expression (or expressivity) that better captures the materiality of language. This new approach in the study of mathematics classrooms is supported though the analysis of a short video of classroom interaction. DeFreitas argues that mathematical thinking can be reconceived as a highly material activity that is constantly re-assembling the nexus of expression and content. In this way, the chapter pursues what Bogue (2009) describes as one of the important strategies of MLT, that being its focus on the potential of “micro-level negotiations of group interactions” to disrupt institutional constraints (p. vii).

TEACHER-BECOMINGS

Francis Bangou and Taylor Webb describe a becoming and an actualization of teacher education that goes beyond what is to what could be. Francis Bangou’s chapter, Reading ICT, second language education and the self: An agencement, describes a research project with students becoming teachers and the impact of working with technology in a second language classroom. What happens in the process of becoming teacher in an agencement (assemblage) that includes an incorporeal transformation through teacher education and technology. With the increasing use of Information and Communication Technologies (ICT) in education, teacher education programs have provided learning environments where pre-service teachers learn how to teach with digital technology. The field of Second Language Education (SLED) is also adopting ICT in the teaching of second languages. ICT and digital technology have transformed the field. The chapter then maps out a research event: MLT, the study on pre-service teachers and ICT. Bangou initially worked with an earlier version of MLT to explore the notion of technological literacy through a year-long ethnographic study of two second language pre-service teachers who learned how to use ICT to teach Spanish. Since that time, Bangou goes on to describe how MLT and him as part of an assemblage have become other than through smooth spaces. Accordingly, this chapter is an agencement (Deleuze and Guattari, 1987) of the lines that have been crisscrossing between Deleuze and Guattari, MLT, ICT, (SLED), and the researcher over the last couple of years. In this chapter, MLT (Masny, 2008; Masny, 2011; Masny & Cole, 2009) is the lens with which to describe the experiences of three second language pre-service teachers who learned to integrate ICT into their practice. Moreover, the concept of agencement, central to this study, is presented. Then, the methodology will be described and the experiences of the three pre-service teachers will be presented through small stories. The Master of Education (M.Ed.) program where this research took place constituted a regime of agencements (Deleuze & Guattari as cited in Macgregor Wise, 2005) where becoming technologically literate happened through reading, reading the world, and self(ves). The analysis provided the impetus to push
further MLT, deterritorialize the teacher education program’s technological curriculum and create lines of flight.

Taylor Webb’s chapter entitled, ‘Nial-a-pend-de-quacy-in’: Teacher-becomings and the micropolitics of self-semiotics, is unusual. It comes out of research of engagement in a micropolitics of self-semiotics within the smooth and striated spaces of curriculum policy. Webb argues that professionalization needs to account for teacher-becomings rather than, and only than, teacher-beings. Becoming in this context refers to investment in the teaching body: subject desirings and desiring subjects. Webb contends that teachers are constantly in the process of becoming – always in the middle – and that they cannot achieve a presumed state of identity because of the immanence of subject desirings. Subject desirings and desiring subjects are found throughout the work of teaching in curricula and policies. The author has selected examples from research to illustrate how teachers “read” subject desirings, and, subsequently, read desiring subjects. These examples connect with the concepts of multiplicity, rhizome, difference, assemblage, and rhizome. These concepts are central to becoming.

In one example, subject desirings produced a “multiplicity of (at least) three teacher-becomings: (a) teacher-in-dependence, (b) teacher-in-adequate, and (c) teacher-in-denial” (p. 166). In relation to the rhizome, teacher-becomings sought smooth spaces of creative autonomy, professionalization, and expert when teachers re-wrote the curriculum policy based on an alternative definitions of being effective and becoming professional. With regard to difference, the micropolitics of becoming attempted to control and suppress difference. Moreover, Webb proposes that the assemblage of nial-a-pend-de-quacy-in is a powerful way to understand teacher-becomings. Assemblage assists understanding teacher-becomings “as powerful combinations of the self expressing itself in particular ways and for particular reasons” (p. 174). The chapter concludes with a discussion on how MLT (Multiple Literacies Theory) assists teachers to “read” the desires circulating throughout their work and their selves (Masny, 2006; Masny and Cole, 2009; Masny, 2011).

**DETERRITORIALIZING BOUNDARIES**

The chapter by Graham Livesey, *Shifting boundaries in environments and organizations*, draws from Deleuze and Guattari’s concepts of smooth and striated space, the rhizome and assemblage theory. Readers will view boundaries that are immanent to and becoming with education. The concept of boundary provides potential avenues in mapping cartographies of becoming in education. Deleuze and Guattari’s concepts of smooth and striated space, the differences between nomadic and state (urban-agricultural) territorial systems, provide a basis for examining the operation of boundary systems, as does their concept of assemblage with its territorial function. The chapter examines (1) the boundary systems of human modified environments, and the (2) territorial and
organizational aspects of these systems, and, by implication, (3) the way environments have been constructed, and the way that organizations operate; this will culminate with the proposition that (4) a movement towards the boundaryless is desirable.

This chapter enters in the middle with differing ways to delimit the world according to differing modes of survival, in the structuring of human societies, in organizing land, and in the construction of shelter. There is a close functional and ecological relationship between the structure of human organizations and the structure of spatial territorial systems. This can involve the blurring of spatial and organizational boundaries, on a continuum from an effective ecological or organizational alignment to the hardening of boundaries, possibly even structural collapse. Boundaries refer to linear elements in a landscape or organizational system. As relationships between territories in the system change, so does the overall balance in the system. Flows of economic, social, political, and ecological factors are continuously being redirected.

Drawing from Deleuze and Guattari's assemblage theory and the discipline of landscape ecology, the functions of a boundary are a habitat, a zone that can support a variety of organisms; a filter that establishes how adjacent territories and organizations interact; a conduit that regulates the flows of materials, organisms, energy, information; a source that gives off things, a process of deterritorialization and reterritorialization as part of an assemblage and a sink that absorbs things. The chapter exits with a proposal for boundaryless conditions in order to work with complexity, ambiguity, continually changing circumstances, and new modes of functioning. This concept of the boundaryless organization is reminiscent of the organization of nomadic cultures and animal packs, as conceptualized by Deleuze and Guattari.

Meanwhile the chapter by Cameron Duff, Learning to be included, proposes a pedagogy of signs and events grounded in an ethology that Deleuze derives from Spinoza in which affect plays a primordial role in how bodies relate to each other. Such an “affective pedagogy” should in turn, create a novel ethics of the sign whereby the becomings that Deleuze (1994) regards as central to all life may be accelerated or promoted through learning. Deleuze (1994) considers learning to be a rupture or shock in which a body, whether human, animal or vegetal, opens up to forces of difference and becoming. Learning occurs on a line of becoming as a body is transformed in the affects, percepts and concepts it may establish relations with. As Duff asserts, learning is less cognitive and more how bodies learn as their capacities for affecting and being affected are transformed by the array of entities they encounter. Learning is a process of becoming sensitive to signs and events; learning how to be affected by them, and to affect them. This chapter endeavours to “express a literacy of signs and events in the course of exploring the mechanisms by which bodies learn to territorialise place, amid the processes by which places territorialise bodies” (p. 177). A Deleuzian literacy of signs and events should help to establish an “ethico-ethology” of place capable of explaining the becomings that transform bodies and places alike. Through an
analysis of qualitative data among individuals recovering from a mental illness, Duff contends that recovery is a process, an open extended event, by which the recovering body becomes sensitive to an array of signs emitted in diverse internal, intermediary and external milieus. The always unfinished event of recovery links diverse human and nonhuman signs, bodies and events in the joint expression of an enhanced capacity to affect (and be affected by) other bodies and signs. One of the most important of these capacities in the context of a body’s recovery from mental illness is the capacity to affect place in the expression of belonging to, or feeling included in, the socius.

INTERMEZZO

This entry consists of a contribution by Linda Knight entitled Knitted Images: Cartographies.

POSTSCRIPT

In the postscript by Diana Masny, becoming thousand little sexes: this is not my father’s paradigm is an interesting title inspired from Deleuze and Guattari (1987) and the second half from an article by Patti Lather (Lather, 2004). The context for this contribution relates to experiences in publishing so-called empirical data working with Deleuze, Deleuze and Guattari and transcendental empiricism: rhizoanalysis. Throughout the years, evaluations received from peer-reviewed journals and edited volumes have created a rupture concerning how evaluations function and what they produce. This chapter is a deterritorialization, that is, an event mapping educational research with cartographies of becoming. This rhizomatic chapter has multiple entries. The first entry is multiple, Transcendental empiricism: immanence, palpation and representation. The next entry introduces the concept of the rhizome, a non-metaphor. The rhizome entry creates links to multiplicities; entry for the rhizome is composed of multiple lines/roots. In addition, the entry on multiplicities is designed to draw out the conventional dualism, deterritorialize the concept and reterritorialize on a plane of AND. And the next entry highlights the theory and praxis of MLT. Prior to deterritorializing the concept of methodology, a received view of methodology is briefly reviewed: objectives, research questions, theory, method (data collection), data analysis (interpretation of findings), and conclusion. In conventional reporting of a study, it is important to establish its significance/relevance. An important aspect of this article is that there are multiple approaches to rhizoanalysis. The rhizoanalysis is presented here is one involving creation and experimentation within the assemblage at this time. In addition, this chapter stands as an alternate way to do research, one that does not function in relation to “my father’s paradigm”. The next entry becomes an exit, an intermezzo that opens up educational research and exceeds anything lived, a becoming-research event. Throughout the chapter, readers will find reviewer inserts, that is,
paraphrases or indirect passages of reviewer comments that are part of the assemblage. While these reviews are authentic, they are not attributed to a particular person, journal or book. The reviewers are familiar with the work of Deleuze, Deleuze and Guattari.

What of the “thousand little sexes”? Deleuze and Guattari (1987) state: “…love itself is a war machine endowed with strange and somewhat terrifying powers. Sexuality is the production of a thousand sexes, which are so many uncontrollable becomings…” (p.277). Becomings conjugate with smooth space. This chapter and this volume map becomings in education, a deterritorialization of the father paradigm-dualism-OR. What is interesting, remarkable and important are untimely and uncontrollable thousand lines of flight emitted through the rhizome.

REFERENCES/BIBLIOGRAPHY


Lather, P. (2004). This IS your father’s paradigm: Government intrusion and the case of qualitative research in education. Qualitative Inquiry, 10(1), 15–34.


LINDA KNIGHT

2. KNITTED IMAGES

Corporeal Theorising

Feeling the wool and needles and constructing the knitting is very different to looking at knitting or thinking about knitting. Creating with the material slows everything down enough to enable significant connection with the process.

Knitting as a mode for researching involves corporeal activity/philosophy that foregrounds a physical rationality, and this offers critical investigation of knowledge conventions that hierarchize intellectual activity as something that seeks to justify or clarify via a cerebral mode of presenting reasonable and rational arguments.
ENTRY: POLITICIZING EDUCATION

“It is so difficult to say how someone learns: there is an innate or acquired practical familiarity with signs, which means that there is something amorous – but also something fatal – about all education.” (Deleuze, 1968/1994, p.23).