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FROM TRANSCENDENCE TO IMMANENCE: TEACHER BECOMING IN A DELEUZIAN PERSPECTIVE

By

Kaustuv Roy

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ABSTRACT

FROM TRANSCENDENCE TO IMMANENCE: TEACHER BECOMING IN A DELEUZIAN PERSPECTIVE

By

Kaustuv Roy

This dissertation has two components—an empirical and a conceptual one. The empirical part is a case study of the pedagogical and relational problems of differential spaces faced by beginning teachers in an urban innovative high school. I argue that most mainstream teacher education programs have not been very successful in preparing teachers for the highly differentiated atmosphere of the urban school where many of the assumptions of liberal mainstream schooling cannot be taken for granted. One result is that beginning teachers face stress, burnout, and leave the profession in large numbers. The conceptual part of the study, in search of praxis that would allow teachers to realize the productive power of difference and abandon identitarian ways, moves to the theoretical perspective of Gilles Deleuze whose key philosophical contribution has been the theorization of difference. The study brings the theoretical power of Deleuzian pragmatics to bear on the experience of schooling in order to realize the pedagogical possibilities of irregular spaces; it offers a conceptual mode for new becomings through a semiotic experimentation, and an analysis of affect in micro-spaces that can open up new possibilities for curriculum and teacher becoming.

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Chapter 1

Introduction

One wonders, finally, whether Man is anything more than a set of boundaries, a limit on existence...

Robert Harley in Introduction to Spinoza Practical Philosophy

This study attempts to bring together theory and practice, that is, to examine the usefulness of certain theoretical notions in the field of educational practice. Although its starting point is a case study, the work is not wholly or even largely empirical. It attempts to do what Pierre Bourdieu (1990) has called "fieldwork in philosophy." That is to say, it is an effort to employ empirical work in directly engaging theoretical and philosophical issues. In other words, it makes philosophy go to work for us amid the turmoil of the everyday and attunes us to a different kind of observation or angle of vision that renders visible what was not previously apparent.

Further, in discussing the different possible approaches within the domain of qualitative research, Harry Wolcott (1994) has observed that a descriptive account can serve as a starting point for a theoretical effort of interpretation. By refocusing on interpretation, such an effort might attempt to develop the theoretical framework itself, offering thereby a fresh angle to a problem of practice. This is important, for new solutions

sometimes require an altered theoretical space for their emergence. To give an example, problems which have remained unsolved for long periods of time, say, in algebra, sometimes have yielded solutions when restated in terms of geometry or topology. Likewise, a problem in clinical psychology is suddenly illuminated by looking at it from the perspective of communication theory (Bateson 1991). The present work makes an attempt along these lines in order to develop theory as praxis, as a way of looking that changes the terrain, the very terms in which we see the problem and our own approach to it.

In broad terms, the problem, the details of which are laid out in Chapter 2, relates to teacher induction and becoming in an urban situation. The urban or "inner city" conditions of schooling are rather complex by most accounts, with student populations who often have very different needs that are not accounted for by modernist mainstream policies and views of education (Giroux 2000). The environment I discuss demanded a different response from teachers in terms of what counted as learning and how it was to be approached. And yet, the beginning teachers I observed, continued to be bounded by the conventional parameters in their curricular responses to the situation, although the school itself, structurally, was open to innovation. Ill-equipped to see difference in terms of its pedagogical potential, these beginning teachers struggled to cope in a highly differentiated atmosphere. The result was that they experienced considerable difficulties, friction and stress. The

teacher education programs some of these neophytes had been through had not helped them to see the curricular possibilities of irregular spaces, nor were the usual professional development programs, aimed more at the normative compulsions of mainstream schools, of much use here.

As I studied the school, a basic conceptual shift seemed necessary that would prepare beginning teachers to embrace the constructive possibilities of positive difference. For, as I saw it, the learning spaces and pedagogical possibilities often were where the teachers were not. But it appeared to me that it was more than a matter of pedagogy; that it was not a mere question of adding one more pedagogic dimension to the teachers' repertoire, but it connected to the very images teachers held of themselves and their roles that reified the boundaries and limited possibilities of action.

Although the problem relates to a specific case, Wolcott (1994) observes that "complex specificness" while heightening circumstantiality may reveal implications and relevance to a broader context (p.98). It was clear that the problem I was looking at had implications beyond the particularity of the case study, and could be generalized to many of the problems of urban education and of divergent spaces.

I saw my task as, first to theorize the character of the spaces I was observing in the school, and the pedagogical possibilities that these held.

And second, to formulate certain conceptual tools for ways of looking,

thinking, and experimenting so that through the operationalization or enactment of this new mode, the grip of the existing boundaries and categories that are the result of settled dispositions could be loosened, as well as the means worked out for realizing the pedagogical possibilities of irregular spaces. And since settled dispositions could not be unsettled without an examination of the notion of identity, it was important to look at certain affective investments of teachers. To do this I chose to look at stress as an important, everyday phenomenon among teachers, and the way it affected pedagogical relationships.

As the study proceeded, it also became clear to me that the problem I was looking at was not merely one of teacher becoming and induction but could be seen as part of a larger problem of teacher survival itself, in the context of increasing complexity of urban education, and the challenge posed by a student body who could by no means be seen or treated as a homogeneous group, and whose needs were so diverse that the very assumptions of schooling, like a uniform curriculum, set timings, and the classroom as the primary site of learning, were put to question. It appeared to me that the order of complexity the teachers faced was not to be overcome merely through exposure and "adjustment," or a matter of picking up certain "skills" on the job, but something that required an epistemological shift or a fundamental change in the way we think about learning. For, often, the tensions that arose both in teachers and in the learning situation were

the result of attempting to contain diversity within techno-managerial spaces they were familiar with, that is, within the horizons of possibility delineated by the teachers' own habits of thought (Liston & Zeichner 1996) and the training that they had received. Not only did this subvert the context, and result in important pedagogical opportunities being missed, but teachers admitted to feeling stressed and expressed fears of early burnout through friction the situation produced in them.

What was necessary therefore, was a new conceptual space in which the problem could be considered afresh. My problem, as I began to formulate it, was to construct a conceptual frame that when entered into, or a praxis that when enacted, new teachers would be better able to insert themselves in differential spaces without referring or reducing them to identitarian ways of thinking. To put it differently, the problem was to dehabituate us from frozen ways of thinking about the educational encounter itself, such as through recognition, and representation, and instead to theorize about the encounter from the perspective of a creative power of difference that would be helpful for teachers wanting to meet the demands of the urban situation. The inadequacy of traditional methods that emphasized uniformity and manageriality (Blake, et al. 1998) in the urban environment was borne out in this case by the conversations I had with the founding teachers who had opted out of the district curriculum to formulate their own under the innovative program, and in whose assessment the mainstream approach did not serve urban youth well. In such a context, my appraisal was that teachers needed as much conceptual and theoretical support as material ones in order to survive and flourish in those challenging conditions.

Rationale for the Study

The rationale for the empirical study lies both in the importance of the educational problem addressed, and the analytical effort of creating a framework for looking at the problem from a new angle. First, the problem of teacher induction and retention is a serious issue not just in innovative environs but in school systems throughout the US. Eileen and Stephen Weiss (1999) observe:

Over two million new K-12 teachers will be employed in the U.S. over the next decade...more than one-third of these new teachers will be hired in low wealth *urban and rural school districts*. This large population of new teachers will be challenged to educate diverse learners in an increasingly complex [situation]...

Unfortunately, first-year teachers are frequently left in a "sink or swim" position with little support from colleagues and few opportunities for professional development. Well-organized induction programs are the exception rather than the rule, and haphazard induction experiences have been associated with higher levels of attrition as well as lower levels of teacher effectiveness.

Current estimates are that more than 20% of public school

teachers leave their positions within three years. (p.4) (Italics mine)

This means that out of the total estimated number of fresh inductees

mentioned above, more than four hundred thousand will leave their jobs
in the initial years. This, by all accounts, is an alarming rate of attrition.

Further, among those who choose to remain in the profession, large numbers—in some districts up to 40%--leave the urban settings to teach in suburban school districts (Weiss 1999). This problem of 'flight' among teachers is attributable in part to teachers' lack of experience and understanding of the social and economic context of the students. But school districts, reading the problem in terms of control and classroom management issues, have attempted to solve the problem of both teacher flight and low student achievement by referring 'problem' students to alternative schools or programs or by referring them to special education (Sanders 2000).

However, this system of winnowing and sifting of students does little to resolve the critical questions of how to help teachers teach in urban settings and how best to provide a quality education for the students in such settings. Instead, this approach simply results in the undesirable formation of school tiers according to student skill levels, student compliance, and teacher coping abilities. And that is merely to deflect the issue to an alternative site, not to deal with it.

The answer, as I see it, lies not in categorizing students and putting them away in special education sites, but in finding ways to help

teachers teach different students differently by reconsidering existing assumptions of what constitutes teaching and learning. It was apparent to me that this was not an issue of systemic reform that could be fixed by making large scale structural changes, but rather, a question of basic perceptions about education, and the boundaries and categories employed in constructing school.

Of course, not all of the problem of teacher flight or attrition can be attributed to problems of inadequate induction processes, but studies (National Commission on Teaching and America's Future, 1996) show that it plays a significant role in the loss of teachers. Reports also show that better induction programs keep teachers from leaving. This makes teacher induction a vital area of concern and study. Its importance is also heightened by the fact that "it is a boundary spanning field, connecting teacher education, teaching conditions in the schools, and field based professional development" (Olebe 2001, p.71). There are often interesting problems at the edges and interfaces of these adjoining fields because the interfacing is not always smooth, and the edges often do not mesh. These result in odd boundary conditions that have generative possibilities.

Eileen and Stephen Weiss (1999) also note that, despite the positive impact of induction programs on retention rates, there has been little sustained commitment in recent years to permanently institute teacher induction programs as part of a formal entry process into the

field. New teachers have been left to figure things out once they got into the classroom. An inadvertent consequence of this has been the tendency by teachers to reproduce the existing patterns in a desperate bid for survival. In *Practice Makes Practice*, Britzman (1988) shows how young teachers coming in with a set of ideals and ideas often do not either have the space to exercise them or know how to bring together theory and practice. My own experience as a teacher educator and conversations with novice teachers has shown the difficulty they often have in relating what they learn in their program to actual classroom practice. This tension is all the more heightened in the urban classroom, where the old formulas of classroom management, a uniform curriculum, and standardized assessments fail to work as they fail to respond to the socioeconomically complex and often racially marginalized lives of urban adolescents.

Conceptual Framework

I have theorized the above problem as it plays out in the specific instance of my case study as a question of new teachers carrying with them conventional ways of constructing boundary distinctions around learning, teaching, identity, and processes of communication that get in the way of encountering more fully the complex reality that they face in the urban setting. The result is conflict, stress, and other problems including burnout. My belief is that while boundaries help us construct a

reality out of the sensible, when reified they also cut us off from the subtleties of differential transformations that occur at the peripheries. So, in a sense, my attempt here is to find ways in which to connect teachers to the positivity of difference (Deleuze1994). Such a praxis would allow teachers to draw on the productivity of difference and thus to connect more fruitfully and creatively to the divergent spaces of the urban environment. Instead of being passively affected by conditions, I look for ways in which teachers can affect the situation in which they find themselves by breaching or rupturing the old boundaries that can lead to a release of new forces. For, the very breach or rupture is also a production of differentiation that expands our powers of acting and affecting, as we shall see.

It is my contention that the constructed role of the teacher and the learner within the modernist framework are too representationalist to meet the challenges that today's diverse settings pose for the teacher.

Decades of Taylorism and Tylerism have narrowed and reified the horizons within which thought is possible (Kliebard 1992). Citing Oliver and Gershman, Hartley (1997) observes,

[E]ducation is supposedly about leading us away from where we are, but its effects may be to lock us into technical rationality as the only mode of thinking. In short, education ignores 'ontological knowing'...one which can include 'feelings, vague sensibilities, and inarticulable thoughts'...Here speaks the language of the

unpredictable, of the imagination, of the passions...none of which are objectively reducible to discrete, analysable entities...(p.72)

It is this 'other' of education that has been suppressed in the attempt to scientize learning and make education serve the interests of the marketplace and of technocratic rationality that will be the focus of our investigations; that is, I attempt to find ways to allow these submerged sensibilities, and murmurs, and unformed multiplicities to surface by means of which we can explore new ways of thinking and feeling, and find ways of producing new and different effects in thought.

The theoretical lens through which I look at the problem of teacher induction and becoming is the social philosophy of Gilles Deleuze.

Deleuze conceives of philosophy as a pragmatic practice of actively creating new and different ways of affective thinking and being. Taking a Nietschean view that it is necessary "to learn to think differently—in order to attain even more: to feel differently" (Nietzsche 1982, p.103), Deleuze attempts, through what may be seen as a radical form of empiricism, to change the very image of thought that has dominated through the history of philosophy.

And the image of thought challenged by Deleuze is representationalism: "According to this image, experience can be reduced to the interiority of a self-constituting subjectivity" (Hayden 1998, p.5). That is to say, representationalism assumes that thought is a faithful interior representation of the "outside" within an autonomous subject. And

therefore, recognition becomes the chief tool of thought. This vastly affects pedagogy as it does other facets of life. From Plato to Descartes, and Kant to Hegel, we find different forms of representationalism and synthesis of the faculties occurring that affirms this view. One of Deleuze's key projects is to liberate thought from its representationalist image that, according to Deleuze, has subjugated thought itself and inhibited it from functioning more freely (Deleuze and Guattari 1987).

What precisely is the problem with representation? In Deleuze's (1994) words,

Representation fails to capture the affirmed world of difference. Representation has only a single centre, a unique and receding perspective, and in consequence a false depth. It mediates everything, but mobilises and moves nothing. (pp.55/56)

This model of thought subordinates the experience of difference to the notion of representation, seeking to validate experience from a single center, and therefore leaves us "unable to think difference in itself" (Hayden 1998, p.6). Immediately it is clear what it has to do with our problem. Representation captures the experience of difference and forces it to conform to the four criteria of representation namely, identity, resemblance, analogy and opposition (Deleuze 1994), thereby suppressing difference itself in the interests of producing identity or similarity. This is what I observed in the school where the new teachers were engaged in producing "similarity" in the learning space. To liberate

thought from the clutches of representation is to be able to think difference in itself and realize the productive power of difference. Then the curriculum expands in previously unthought ways.

I have mentioned earlier the urban school environment I was engaged in researching was a highly differentiated one in which the commonplaces of schooling had to be renegotiated again and again. The often unarticulated middle class assumptions of schooling like a stable home, a future orientation, the idea of continuity, and even average life expectancy could not be taken for granted. Students often talked of not living beyond thirty or thirty five because they had not seen too many survive that age in their immediate surroundings. This among other things changed their perspective on matters.

Given the pressure of these internal differences that distinguish it from mainstream reliance on uniformity and homogeneity (Kliebard 1992), my contention is that teachers who come to appreciate difference, not in order to fetishize or hypostatize it, but in order to realize its creative potential, are more likely to succeed in positively contributing to the urban learning situation. And as I hope to show, they will also have a better chance of survival under these complex conditions than those who think of learning in terms of successfully imbibing the mandates of an official curriculum in line with mainstream standards and parameters.

Turning to Deleuze, we find that he is the philosopher of difference par excellence, who has been referred to as "the difference engineer"

(Pearson 1997, p.2), and whose effort has been to theorize difference by moving away from representationalist ground:

The primacy of identity, however conceived, defines the world of representation. But modern thought is born of the failure of representation, of the loss of identities, and of the discovery that...all identities are only simulated, produced as an optical "effect" by the more profound game of difference and repetition. We propose to think difference in itself independently of the forms of representation which reduce it to the Same, and the relation of different to different...(Deleuze 1994, p. xix)

In the world of representation, "common sense" or the Kantian concordia facultatum contributes the form of the Same. That is at the heart of representation is the image of thought as subjective unity of the faculties that produces correspondence and recognition. Therefore thinking within this image of thought becomes limited by the notion of recognition. Hayden (1998) remarks,

The representationalist image of thought portrays thinking not as the creation of new values and new senses, but as the proper allocation and distribution of established values and the verification of its own image. (p.27).

We want teachers to move away from this image of thought and create "new values and new senses." But the modernist curriculum that dominates in schools would persuade teachers to think otherwise.

Hartley (1997) observes,

And yet, whilst postmodern culture is centrifugal, curriculum planners—despite the rhetoric of choice and diversity—withdraw to the centre, in a rearguard action, to re-group, not only themselves, but also the subjects of the curriculum, building in courses which will serve to integrate the fracturing self of the postmodern pupil. (p.73)

This attempt to integrate is a last ditch attempt to save representation, and cannot bring about new thinking in relations or provide solutions to the problem of difference.

What can Deleuze offer us here? Rejecting the representationalist image that what is encountered is experienced as recognition, Deleuze says, "Something in the world forces us to think. This something is an object not of recognition but of a fundamental *encounter*" (Deleuze 1994, p.139), and in whichever manner this something is grasped it can only be of the order of the sensible, and not of the order of recognition which presupposes the existence of categories of the possible. In rejecting recognition as the basis of thought, what Deleuze is contending is the application of the categories of the possible to real experience: "To apply the possible to the real as if it dictated what real experience can be is to posit a world of representation rather than to encounter the world of actual experiences" (Hayden 1998, p.29). Thus, for us to be in touch with

the arising of differential experiences in the senses, we have to renounce strong identification with categories. For Deleuze, what is encountered by the senses "is not a quality *but a sign*," that is, not something universal but differential (Deleuze 1994, p.140) (italics mine). And the sign perplexes us "as though the object of the encounter, the sign, were the bearer of a problem" (op.cit. p.140). In other words, each encounter that forces us to think posits a problem in the form of a sign that has to be experimented with and read. *Every* encounter is a fresh problematic.

Using these Deleuzian insights that it is the differential as the sign that arises in an encounter rather than universals of representation, and that, it is "the sensible multiplicities that are the conditions of actual experience" (Hayden 1998, p.35), I look at the learning encounters at the school and find it exhibiting such slippages and leakages so as to constantly exceed and escape the representationalist space of technocratic rationality within which traditional curriculum tries to contain it. I show how events, pedagogy, curriculum and relationships in the school are multiplicitous rather than inhabiting the linearity or uniformity of techno-rational space.

And since in this differential space what are encountered are signs rather than universals, I make the theoretical move of casting the problem of teacher becoming in semiotic terms, that is, as a problem of reading and experimenting with signs. I claim that new teachers are better served by being educated to see the learning encounter as a

system of signs they have to read and experiment with and not something they can take for granted or treat in terms of representation or recognition. Teachers have to *construct* the plane of action even as they encounter it out of the differential experiences that are always in excess of what thought as recognition can expect.

But this demands a very different awareness and a manner of looking that cannot be apprehended from the static image of thought as representation, that is, from within the old habits of thinking. In order to help teachers move away from the old terrain I offer possibilities for a praxis. I call it the "apprenticeship of the sign," and explain the process in detail in Chapter 4. Mined from the work of Deleuze, the apprenticeship has four components—the generative, the transformative, the diagrammatic, and the vacant—each a sensitization to the operation of signs through a performativity and experimentation, the effort being to open ourselves up to signs in a way that we see ourselves as part of the process of their arising, what Levi Strauss (1969) called being situated at the level of the signs themselves and Deleuze (1972) calls being immanent to the sign. This is a becoming of the teacher unto the sign, a perception-action that changes the very image of ourselves from transcendent subjects outside the signs we perceive, to an immanent one in which we are no longer transcendent subjects looking in but implicated in the signs as they arise. This perspective closely parallels what Maturana and Varela (1998) have called structural coupling. In

other words, the image of ourselves and reality is displaced from a universal and representational one onto a *differential* plane where we begin to enact and move with the productivity of difference. It is only in a fundamental displacement of this nature, I argue, that a new approach to the problem of difference is possible. This results in a change in the very image of thought by initiating what Deleuze and Guattari (1987) call "schisis" or "secret lines of disorientation" in ourselves making room for new possibilities.

"Thought is again possible," wrote Foucault (1977) celebrating Deleuze's work, "genital thought, intensive thought, affirmative thought, acategorical thought—each of these an unrecognizable face, a mask we have never seen before; differences we had no reason to expect..." (p.196). Indeed, in the company of Deleuze, new thought becomes possible, together with the invention of a new cartography wherein what was once regarded as a unified subject is redistributed semiotically over sign regimes—we find ourselves at the level of the sign, being constructs of signs themselves rather than something apriori— that allows us to discover the power of difference. We are asked to make small ruptures in our processes of thinking, start minor dissident flows, not grand "signifying breaks," for grand gestures start their own totalizing movement, and are easily captured. Instead, small ruptures allow flows that are not easily detected or captured by majoritarian discourses. These ruptures make connections across domains of signs through a

becoming that displaces anthropocentric and humanist obsessions allowing the emergence of hybrid multiplicities or matter-thought compositions that are always in the process of change, a becoming-other. For signs are hybrid entities, matter-thought conglomerates that have nothing inherently human about them. The framework of the present discussion therefore is located on a posthumanist plane that is not tainted by a logocentrism that denies difference.

Deleuze along with Guattari (1987) offer such a framework which they variously call nomadic or "schizoanalysis" (pp.17/18).

Schizoanalysis displaces us from the transcendent plane of the sovereign individual to one of composites and multiplicities in which instead of representation and resemblance we have differential constructions and becomings. The dynamic constructivism of Deleuze comes out of the possibility of releasing the traits and singularities trapped within our composites. I discuss this in Chapter 5 of the dissertation. The discovery of singularities or traits that have no name, label or directionality allows us to glimpse the fields of flux and indefinitude that compose us as well as the events around us, and according to Deleuze (1972), increases our affective capacities.

Such a conceptual schema where difference is not a threat to an organizing principle but of key productive potential was vital to the task of arriving at a theory/praxis for a pluralistic enterprise. My effort was to open up the conventional boundaries drawn around educational

commonplaces in order to create conceptual spaces where teachers can develop a new relationship with their work through experimentation, and realize that difference is not outside of us but that we are ourselves internally differentiated, always already collectives. The study then unfolds as a praxiological analysis that offers a way of looking at the learning encounter that helps teachers to emerge onto a new terrain of complexity and realize in the process the power of their own becoming and multiplicities.

One of my central claims therefore is that students would be better served if schools functioned with a Deleuzian cartography, a way of perceiving the learning encounter, and the mapping of affect and becoming that leads to new possibilities. As to the relevance and necessity of engaging the elaborate theoretical machinery of Deleuze in considering the problem of teacher becoming I contend three things:

First, we have to recognize that the problem that I was encountering had much broader implications than the immediate context itself. The particular situation only served to highlight what is rather common in schools and other social institutions—the helplessness to appreciate and encounter difference without attempting to subject it to the identitarian pressures of dominant epistemologies (McCarthy and Dimitriadis 2000a), that is, to the pressures of representation and recognition. Therefore the issue deserved a deeper consideration and a level of theorizing that

befitted its scope since part of the task I have undertaken is to go beyond the case study and develop an analytical framework.

Second, and equally important is that the existing approaches and frameworks have not resolved the problem that I address here, and instead, there is only increasing pressure on institutions to find ways of "managing" difference. On this issue, teacher education programs have not done much more than include diversity as an added element to the existing discourse, an approach thoroughly, and rightly in my opinion, criticized by theorists such as McCarthy who observe that difference has been co-opted into the discourse of power "that attempts to manage the extraordinary tensions and contradictions...that have invaded social institutions, including the university and the school" (McCarthy and Dimitriadis 2000b, p.70). The thrust has been to "petrify" difference and absorb it into the mainstream instead of allowing it a more profound consideration that it deserves.

And finally, Deleuze has discussed the *productive* power of difference in ontological terms, something not found in psychoanalytic theory, social psychology, or the existing discourses on diversity and difference.

Thus, the importance and justification for this study lies in its attempt to move thought toward a new way of operating in the curriculum field through the formation of a posthumanist plane of action, and to attempt to free thinking from the domination of reified

categories through the production of difference. Its project is to contribute to what James McDonald and William Pinar have called a "reconceptualization" of the field of curriculum theory. Pinar (1994) states that the reconceptualization

begins in fundamental critique of the field as it is. The order of critique distinguishes it from most reform efforts, efforts which accept the deep structure of educational and social life, and focus upon "improving it." The Reconceptualization aspires to critique which insists upon the transformation of extant structures. It must function to dissolve frozen structures. Thus implicit in such an analysis of contemporary educational practices is their transformation. (p.66)

Although in his recent address to the AAACS body, Pinar (2002) referred to the contemporary scenario as "post-reconceptualist," (p.3), I continue to use the term without the prefix to indicate the continuing work of permanent critique. Part of the work of reconceptualization involves looking at theory as experimental tools of thought in order to open up ideas about practice. Such labor attempts to transform the field of curriculum "into a theoretically potent, conceptually autonomous field which inquires systematically into the multi-dimensional reality that is education and schooling in ways that aspire to transform both" (Pinar 1994; p.71). And this infusing of the field with theory must be done, as Pinar has pointed out, in a manner that is sensitive and responsible to

our present. I think Deleuzian pragmatism can be appropriated and then reconstituted through educational experience to form an important conceptual matrix for advancing thinking in curriculum.

Positioning the Work

Relating the framework of the present study to some chosen bodies of literature will be helpful at this point in the explication of this work. I will locate the Deleuzian position using rudiments of five perspectives: aspects of Marxist and Critical theory, some feminist positions, psychoanalytic theory, poststructural perspectives, and Luhmannian systems theory.

Deleuze and Marxist positions

Although both *Anti-Oedipus* (Deleuze and Guattari 1983) and *A*Thousand Plateaus (Deleuze and Guattari 1987) are trenchant critiques of capitalism and all other forms of institutionalized domination and oppression that forces our multiplicities into false totalities, Deleuze's approach to relations of production and power is different than those of the traditional left. First, I will run a single thread that is an intertext to many Marxist analyses in order to highlight this difference—by making a brief allusion to the theory of surplus-value which is basic to most Marxist positions, I will attempt to raise a distinction. Deleuze and Guattari (1987) observe:

In these new [late Capitalist] conditions, it remains true that all labor involves surplus labor; but surplus labor no longer requires labor. Rather, it is as though human alienation through surplus labor were replaced by a generalized "machinic enslavement," such that one may furnish surplus-value without doing any work (children, the retired, the unemployed, television-viewers, etc.). Not only does the user as such tend to become an employee, but capitalism operates less on a quantity of labor than on a complex qualitative process bringing into play modes of transportation, urban models, the media, the entertainment industries, ways of perceiving and feeling—every semiotic system. (p.492) (italics mine)

The surprising insight that uncouples surplus-value from labor, and shows it to be the result of complex qualitative processes that enslave through consumption rather than exploit through relations of production is also at the same time a warrant for entering a different plane of analysis where consumption, or the desire to be *passively* affected by other bodies, in a Deleuzian-Spinozist sense, can be resisted. Deleuze's work on Spinoza shows us possibilities of transforming passive affects into active ones, that is, a plane where we learn to be producers rather than only consumers. This is a very important point from the point of view of teachers and creates new points of pedagogical resistance against the consumerist culture that reduces life and learning to the banal.

Therefore my position is that although Critical theorists and neo-Marxists have criticized conspicuous consumption and capitalism's culture industries, they have not fully grasped the fact that this has, paraphrasing Deleuze's (& Guattari 1987) words, created a global space in which human destiny itself is recast. In other words, I feel that Marxist positions fall short of giving us the tools necessary to escape subjugation on this emergent plane that requires new ways of becoming.

Second, critical theorists "tend to employ a dialectical framework of analysis, and therefore, the analyses tend to explain relations in terms of opposing forces" (Fendler 1999, p.184). Arguments are cast within such traditional oppositions such as oppressor/oppressed, empowered/subordinate. Deleuze's analysis instead follows nonbinary modes of differentiation like "singularities" (Massumi 1992), and change is seen in terms of becomings or formation of new multiplicities. The trajectory of becomings of any composite cannot be known in advance and is a question of careful ethical experimentation. Also, Deleuze suggests that each constituted subject includes totalizing tendencies or micro lines of domination that need to be worked upon, and therefore there are no easy oppositions or platforms available. Careful selections have to be made from our multiplicities that have both de- as well as re-territorializing elements.

Instead of the broad class struggle of the Marxists, or the broader race, class, and gender struggles of neo-Marxists, Deleuze's political

project and confrontation with power is mostly at the minoritarian level, concerned with the conditions of capture and escape of the "molecular" or singular moments of life by the "molar" or forces of homogenization; it looks at the conditions of possibility of specific struggles and resistances of different groups like sexual minorities and other marginal social movements which Marxism treats as epiphenomenal to the historical antagonism between classes. Instead of the class contradictions of capitalism, Deleuze and Guattari enter the micro-political dimension to look at the kaleidoscopic formations of desire and its becomings, and its potential in the struggle against hegemony. An awareness of the molecular within the molar, that is, the singularities within our constituted experience creates the possibilities of a "civil disobedience," to borrow a phrase from Rajchman (2000), that can direct our "badly analyzed composites" toward a constant unbecoming, and therefore toward new social formations.

the molecular politics of multiplicities, yet it is also a threat at the same time: "There are so many dangers, and each line [of becoming] poses its own. The danger[s] of rigid segmentation or a break appears everywhere...The prudence required to guide this line, the precautions needed to soften, suspend, divert or undermine it, all point to a long process of labor directed not only against the State, but against itself as well" (Deleuze and Guattari 1983a, pp.95/96). Thus, unlike Marxism,

which discounts individual struggle, Deleuze warns that we not only must struggle against the state but against ourselves as well. Further, Deleuze and Guattari caution us of "micro-fascisms that exist in a social field without necessarily being centralized in a particular state apparatus" (p.97). In other words, all struggles themselves contain the potential of becoming new hegemonies. All this points to a level of complexity in Deleuzian ethics and dynamics of struggle and a differential politics of thought not usually found in Marxist analyses.

Finally, Deleuze detects a kind of violence that remains outside the state apparatus not conceived of by Marxist analysis. Rajchman (2000) notes that it appears as

a violence of forces that no state can control or rationalize in advance, and which comes to the fore in cities or is worked out through city rather than state-forms...Indeed one might say that in Deleuze, a city-state tension tends to replace the great state-society distinction that Foucault came to see as the chief limitation of modern political thought. (p.103)

This uncontained elemental is a force of "deterritorialization" that eludes capture and regularization by the State. It is a violence that always hovers at the fringes of order and upsets the calculations of power.

Called the "philosopher of the city" by Rajchman (1998, p.3), Deleuze's subtle theorization of the "city" as an abstract diagram with a quality of violence that is not fully captured by the State machinery makes it a

powerful analytical lens to look at urban situations, and therefore aligns itself to my enterprise of looking into an urban institution surrounded by typical inner city problems.

Feminisms and Deleuze

I will begin addressing some feminist positions with a quote from Elizabeth Grosz, an anti-essentialist feminist writer whose work on Deleuze is widely cited. Grosz (1994) observes that Deleuze and Guattari's

notion of the body as a discontinuous, non-totalizable series of processes, organs, flows, energies, incorporeal events, speeds and durations, may be of great value to feminists attempting to reconceive bodies outside the binary oppositions [of] mind/body, nature/culture, subject/object and interior/exterior oppositions.

They provide an altogether different way of understanding the body in its connections with other bodies...(pp.164/165)

Grosz sees Deleuzian conceptions of the body and his Spinozist refusal to subordinate the body to the mind as a possible way of undermining the phallogocentric positioning of the female body. Deleuze (1992) has argued that the body always exceeds the consciousness we have of it, and therefore we do not know what the body is. In Grosz' work there is a sense that Deleuze's writing contains resources that can help feminists map bodily practices that evade the masculinist notions of the self.

There are others (Shukin 2000, Irigaray 1985) however, who warn against hasty adoption of Deleuze's texts in feminist thought. While they agree with Grosz about its potential for escaping Platonic thinking, at the same time, they also feel that Deleuze's works mythicize and fetishize the feminine without paying attention to the actual conditions of embodied women. Shukin (2000) writes on an apprehensive note,

Throughout *A Thousand Plateaus*, Deleuze and Guattari indirectly summon up philosophical and social texts with foreboding investments...Deleuze believes, perhaps, that his own iconoclasm is enough to redirect the force of these allusions to subliminally power his own purposes...I would suggest, however, that while Deleuze does manage to siphon enormous affective energy off intertexts that are evoked without being raised, an inexorable weight of allusions pressures his thinking into old molds – particularly when it comes to sexual difference. (pp.152/153)

The allusions to the limitless possibilities of geography in Deleuze's writings evokes in some feminist minds "colonial anticipations" and male adventurism. The frequent references to woman-becomings as a "path to original potency" summons up existing "exploitative discourses of animalisation and sexualisation" of the feminine in the popular media (Shukin 2000, p.153). In other words, while Deleuze points to new possibilities for women, in his writings, gender remains latent and

women "a sort of threshold or medium" for possibilities rather than "embroiled" actualities (op.cit. p.154).

To Shukin's question above as to whether Deleuze and Guattari can "control" the involuntary allusions to exploitative intertexts in their work, one must respond that Deleuze and Guattari's strategy seems to be to take the potency and the potential released by evocative and powerful intertextual material so far forward as to subvert their own processes, that is to a point where they cannot recover their original ground in the reader. Massumi (1992) observes,

The feminine gender stereotype involves greater indeterminacy ("fickle") and movement ("flighty") and has been burdened by the patriarchal tradition with a disproportionate load of paradox (virgin/whore, mother/lover). Since supermolecularity involves a capacity to superpose states that are "normally" mutually exclusive, Deleuze and Guattari hold that the feminine cliché offers a better departure point than masculinity for a rebecoming-supermolecular of the personified individual...Becoming-woman involves carrying the indeterminacy, movement, and paradox of the female stereotype past the point where it is recuperable by the socius as it presently functions. (p.87)

Therefore, bodies of either sex are urged toward a becoming-woman which takes us beyond the limit of recuperability of gendered individuality.

Along a different trajectory, feminists like Alice Jardine (1985) have objected to the tendency in Deleuze's writings to ignore macropolitical and macrohistorical struggles in favor of minoritarian ones. Jardine also objects to the dispersal of identity in Deleuze's work, and the active encouragement to *become* other, that is, to be indiscernible or faceless. To this it is possible to argue that for Deleuze and Guattari, macropolitical struggles that are waged in terms of well recognized patterns of signification cannot get to the micropolitics of desire at the level where many of the struggles are actually located. Deleuze's effort is to create a geography of intensities that is free of all ideal significations and Platonic taint which have enslaved thought and maintained territories of exploitation.

In Platonism and all patriarchal systems Deleuze and feminists have a common enemy. In order to appreciate the significance of Deleuzian resistance we have to understand that struggles against domination and against patriarchal systems are carried out not only in groups and collectivities, they occur also within the micro-multiplicities of subjects in uncontrolled, secret and subterranean ways. Thus there are "nonrepresentative struggles, struggles without leaders, without hierarchical organizations, without a clear-cut program or blue-print for social change, without definitive goals and ends" (Grosz 1994, p.193). That is to say, while overt struggles with recognizable ends, leaders, symbols, and means are important, faceless struggles that have no

particular definition must and do occur alongside, every moment. It is mostly to this kind of struggle to escape patriarchy that Deleuze and Guattari address themselves:

It is of course, indispensable for women to conduct a molar politics, with a view to winning back their own organism, their own history, their own subjectivity...But it is dangerous to confine oneself to such a subject which does not function without drying up...It is thus necessary to conceive of a molecular women's politics that slips into molar confrontations...(Deleuze and Guattari 1987, p.276).

Molar or majoritarian political projects tend to dry up without corresponding struggles at molecular or minoritarian levels. It is a misunderstanding to think that Deleuze is privileging the individual struggle over the collective. For Deleuze, the so-called "individual" is always already a collective, a multiplicity, and therefore molecular confrontations must not be understood as individualistic and solitary escapades but new movements of desire unhindered by modernist images of the self. Foucault (1983) has noted that the question raised by Deleuze is: "How can and must desire deploy its forces within the political domain and grow more intense in the process of overturning the established order?" (p.xii). These struggles without faciality need different tools and conceptions like schizoanalysis which can de-Oedipalize our subjectivities and release affective energies for new forms of resistance.

Deleuze and Psychoanalysis

Like some feminists Deleuze (1995) attacks what he sees as a totalization of desire in Freudian psychoanalysis. Deleuze rejects the basic Freudian position of the unconscious as the Oedipal theater: "We attack psychoanalysis on the following points which relate to its practice as well as its theory: its cult of Oedipus, the way it reduces everything to the libido and domestic investments..." (p.20). For Deleuze, the libido is invested in the social field in ways that cannot be conceived within the reductionist space of the Oedipal structure. In Foucault's (1983) words, Deleuze and Guattari combat "the poor technicians of desire...who would subjugate the multiplicity of desire to the twofold law of structure and lack" (p.xiii). In Western metaphysics, from Plato to Lacan, desire has been seen as a lack—a lack in being that strives to be filled through the impossible attainment of an object. Deleuze rejects this position.

Following Spinoza and Nietzsche, Deleuze turns desire around and understands it as *primary*, *positive and productive*. Instead of aligning desire with fantasy and illusion, as psychoanalysis does, Deleuze sees desire as what *produces* the real, creating connections, relations and alignments. For Deleuze, desire is a relation of effectuation, not of satisfaction, it is the primary producer of reality and all relations within it, and I venture to add that this dramatic inversion of Platonism must have positive theoretical consequences for feminist positions since

women have traditionally been framed as the repositories of that lack within male epistemologies. In Foucault's (1983) words, Deleuze and Guattari attempt to free us from the "old categories of the Negative" (p.xiii).

To free ourselves from the reductive psychoanalytic and Oedipal yoke is to take a step toward freeing the multiplicity of desire from bondage to totalities. But the problem of desire remains, and since we can no longer leave desire in the hands of the experts and professionals, who are seen by Deleuze and Guattari as agents of the state, we have to analyze and actively engage in ethical experimentation in order to make new "connections"; through a proliferation of connectivities there is a chance that we might escape Oedipalization (Introduction to Deleuze and Guattari 1983 b, p.xxiii). This urge toward a freeing of ourselves from the various agencies of the establishment and the turning toward an ethical experimentation with our collectivities is an important move from the point of view of inventing new pedagogical practice, and therefore for the purposes of my project.

Deleuze and the "Poststructuralists."

I will begin by comparing Deleuze to Foucault, two thinkers of our era who often appear very close in their utterances and political commitments. Although treated as poststructuralists, Deleuze as well as Foucault can be distinguished from other writers of that genre. In *Truth*

and Power, Foucault (1984) observes, "I believe one's point of reference should not be to the great model of language (langue), but to that of war and battle. The history which bears and determines us has the form of a war rather than that of a language: relations of power, not relations of meaning" (p.56). With this Deleuze would agree wholeheartedly. In fact in Deleuze and Guattari's (1986) monograph titled Nomadology: The War Machine, as well as scattered throughout their other works, are references to this different point of reference, of a machinery of war that is key to understanding social formations and the clash of forces.

But a different distinction between Foucault and Deleuze may be useful here, not in order to oppose them, for there is a great deal of resonance between the ideas of the two, but to bring out the subtle differences so that they can better complement each other. While Foucault talks of power, Deleuze talks of force. Both Foucault's 'power' and Deleuze's 'force' are, constitutive and productive. But "Force is not to be confused with power," says Brian Massumi, one of the most insightful readers of Deleuze, "Power is the domestication of force. Force arrives from outside to break constraints and open new vistas" (Foreword in Deleuze and Guattari 1987, p.xiii). One way to understand Deleuze's notion of force is to consider the discursive and the nondiscursive and what brings them together in social action. Massumi (1992) gives the example of a set of instructions for woodworking which gets translated to certain actions on the wood although

the interrelation of relations between the wood and the tool bears no resemblance to that between concepts, which bears no relation to that between phonemes or letters. (p.17)

The implication here is that there is an abyss between the discursive and the nondiscursive or the visible and the articulable that is bridged by force or what Deleuze has also called the abstract diagram. Without force, that is always already present, the worker, the instructions for woodworking, the tools, and the wood could not come together. Force then also acts like insight, that makes the connections. Further, according to Massumi (1992), what makes any action repeatable, multiplies it, is a regularizing network of forces. "And since the action of this reproductive network of forces is qualitatively different from that of the productive network of forces from which the event arose" in the first place, we must make a distinction. We give the reproductive network anther name: "power," in order to distinguish it from force (p.19). Therefore while power is the relations of regularization, force is the instance and the bridging moment between the discursive and the nondiscursive.

Second, in *The History of Sexuality*, Foucault writes:

It is over life, throughout its unfolding, that power establishes its domination; death is power's limit, the moment that escapes it; death becomes the most secret aspect of existence, the most "private." (Foucault 1984, p.261)

The notion of power then, in Foucault, is seen to be closely aligned with the unfolding of the human condition. Death is "power's limit," that is, in death there lies the possibility of a final escape from power or repetition. Power is thus constitutive mainly of social existence and relations.

It is precisely this human, organicist aspect that is absent in Deleuze's notion of power or force. For Deleuze, the "immanent life that is pure power" is "impersonal and nonorganic...that goes beyond any lived experience" (Deleuze 1997, p.xiv). It is, instead, "an ontological concept" in which virtual qualities become actualized in determinate space-times. Deleuze's reading moves the concept of force toward the impersonal, toward an "outside." Although this might seem somewhat essentialist, Deleuze is clear that force is always contingent and ever becoming without an *arche* or a telos, to borrow a famous phrase from Derrida (1970).

In Cinema 1: The Movement-Image, Deleuze (1985) shows how Vertov attempts to attain, through cinematic means, a vision released from human coordinates, a pre-human perception in a "any-space-whatever" (p.40). Similarly, Deleuze (1997) speaks appreciatively of Cézanne's ideas wherein form or even matter give way to forces, densities, and intensities: the tectonic folds in a mountain, the forces of germination in an apple, to what Cézanne referred to as the "dawn of ourselves" or "iridescent chaos" from which the stubborn geometries of our world later emerge (p.xxxv). Here, death is not "power's limit,"

instead, death itself is a reordering of connections, of making momentarily visible the ordinarily invisible.

Finally, while Foucault talks of "limit experiences" that generate new forms of subjectivity, Deleuze's intervention takes a metaphysical turn in which "concepts" are created and "ontological speculation prepares the terrain for a constitutive practice" (Hardt 1993 p.105). So, while Foucault's pragmatics operates through a negation, "through a refusal" of the kind of subjectivity that "has been imposed on us for centuries" (Foucault 1984, p.22), Deleuzian pragmatics operates through an ontological construction and experimentation with concept formation. I see the two as bearing in on the same project but from two different planes, with different coordinate systems, and with important differences in methods and tools. For Deleuze "when words and things are opened up by the environment without ever coinciding, there is a liberation of forces which come from the outside" (Deleuze 1988c, p.87). It is this emphasis on "force" as also something operating on a space of the "Outside" that distinguishes Deleuze's force from Foucault's power. At the same time, it brings Deleuze closer to systems theorists who make an organism/environment distinction as we shall see later.

From the point of view of the case study, the establishment of a posthumanist ground using the notion of force is useful. For, in the construction of multiplicities or the "rhizome" as Deleuze also calls it, what is important is to get rid of anthropocentric obsessions and

humanist images before we can even begin to imagine ourselves as collectivities put together by an aleatory outside. So, although teacher becoming, that is our central issue here, may appear to be something personal, it is really a matter of getting away from personalist conceptions toward a more tectonic and geographical distribution of forces and intensities through which one can be a producer of affective power.

It might be useful also to make a distinction between Deleuze and another of his distinguished contemporaries —Jacques Derrida.

Referring to Derridean deconstruction, Deleuze (1997) writes:

As for the method of deconstruction of texts, I see clearly what it is, I admire it a lot, but it has nothing to do with my own method. I do not present myself as a commentator on texts. For me, a text is only a small cog in an extra-textual practice. It is not a question of commentating on the text by a method of deconstruction, or by a method of textual practice, or by other methods; it is a question of seeing what *use* it has in the extra-textual practice that prolongs the text. (pp.xv/xvi)

Thus, while for Derrida, there is "nothing outside of the text" or "there is no outside text," or "there is nothing that is not a text" as his famous line il n'ya pas de hors texte has been variously translated, for Deleuze it is the extra-textual practice that "prolongs the text" that is of primary concern. Using Luhmann's (1990) insight that the world emerges at the

same time as our description of it, the text can be said to emerge simultaneously with extra-textual practice. Looked at in this way, there is always an emergent "outside" of the text that remains cognitively unapproachable to it, except *a posteriori*. Thus, Rajchman (1998) notes that Deleuze "makes construction the secret of empiricism," and that "deconstruction is not a word in his idiom" (pp.2/3).

Also, close textual analysis that exposes inherent contradictions in the text is not Deleuze's style. Instead he appropriates selectively from the texts that serve his pragmatic purpose. That is, although Deleuze, in an apparently similar fashion to Derrida, seizes hold of the works of previous philosophers such as Spinoza, Nietzsche, and Bergson, unlike Derrida his work is not directed toward a deconstructive reading of those works. Instead, Deleuze is after ethical praxis, and describes himself as a "constructivist." Reading selectively, with Bergson, Deleuze develops an ontology; with Nietzsche, he sets that ontology in motion to constitute an ethics; and with Spinoza he takes a further step in this evolution, toward politics. His method is a process of accumulation and constitution.

Ontology inheres in ethics, which in turn inheres in politics.

Deleuze's relationship with an 'outside' also allows him to deal with the danger of an idealism, something that threatens much of the poststructural oeuvre. Critics like Taussig (1993) and Massumi (1995) have noted that one of the central ironies of postmodern theoretical discourse is that the social constructionist critique of transcendence (i.e.

reference to an independent reality) and the metaphysics of presence (i.e. inherent authorial meaning), that was meant to return meaning and interpretation to the social, historical, institutional and material processes of their production, has turned instead into its own form of idealism. By making human language the measure of all things, these critics allege, the poststructural oeuvre is threatened with linguistic idealism.

How does Deleuze's work meet this challenge? I will quote Boundas' introduction to Deleuze (1993) on this question:

Deleuze's thought cannot be contained within the problematics of the now fashionable textual allegory. The main thrust of his theoretical intervention is in the articulation of a theory of transformation and change or, as he likes to say, of a theory of pure becoming that, together with a language adequate to it, would be sufficiently strong to resist all identitarian pressures. It is this relentless effort to articulate a theory of transformation and change...that motivates Deleuze to replace Being with difference, and linear time with a difference-making repetition. (p.4)

This intervention in the form of transformation escapes the overdetermination by the linguistic sign by breaching the known in the process of becoming. The world arises at the same time as the cognitive being, and therefore is not available as a text in the instant of becoming. There is a relationship with the "outside" of thought that can be better understood from the systems perspective.

Deleuze and Systems Theory

Like Nietzsche (1967) who believed that the task of philosophy is to create possibilities and modes of existence, Deleuze and Guattari are incessant concept creators with which they forge new relations, bring into view new distinctions. Discussing the work of concept creation, Deleuze and Guattari (1994) make the observation that no concept is ever complete, for that would be tantamount to invoking primordial chaos, that is, in which there is no distinction. Every concept is therefore limited and "irregular," and is "a matter of articulation, of cutting and cross-cutting" (pp.15/16). And further, they continue, "The concept is defined by its consistency, its endoconsistency and exoconsistency, but it has no reference; it is self-referential; it posits itself and its object at the same time as it is created" (p.22).

The idea that concepts are a matter of "cutting and cross-cutting," and that they are "self-referential" resonates strongly with certain key notions of systems theory and especially the work of Niklas Luhmann (1990). Luhmann writes that all observation is incomplete and generates paradox and blind spots:

The source of a distinction's guaranteeing of reality lies in its own operative unity. It is, however, precisely as this unity that the

distinction cannot be observed...Another way of expressing this is to say the operation emerges simultaneously with the world which as a result remains cognitively unapproachable to the operation.

(p.76)

The Deleuzian notion of concept can thus be seen as a close parallel to Luhmann's notion of distinction. Just as the viability of a Deleuzian concept is based on its consistency, the guarantor of the reality of an observation or distinction in Luhmann's case is its own "operative unity." In other words, both are self-referential.

The second important point of similarity is between Luhmann's notion of "world," or "environment" as he characterizes it elsewhere, and Deleuze's (1988c) idea of the "Outside." Their respective analyses lean on a similar distinction—system/environment and concept/outside, but these are never absolute dualities, for what is system in one context can appear as environment in another. For both, the environment and the outside are inexhaustible but with an important difference. In Deleuze's work, the inexhaustibility tends to appear as a positivity, that is, as a field of potentialities, whereas for Luhmann, the inexhaustibility arises out of the possibility of new observation or new distinctions.

Deleuze's work also has close points of correspondence with the work of the systems theorists Humberto Maturana and Francisco Varela.

Maturana and Varela's (1998) notion of "structural coupling" between

system and environment resonates with the notion of becoming in Deleuze:

In an organism...[the] realms of interaction open the way to *new* phenomena by allowing new dimensions of structural coupling.

(p.176) [italics in original]

For Maturana and Varela the world is not a given, but is brought forth continually through the very act of living or structural coupling. Their term for self-referentiality is autopoiesis, or self-generation that brings forth a world, and in the very process of world creation a new cognitive being emerges every moment.

Further, Varela (1992) talks of microidentities and microworlds that are the result of continual transition of the living organism from one state of readiness-for-action to the next. There are no stable entities, only dynamic states. Deleuze too rejects the notion of the stable subject, and instead talks of haecceities and singularities. Both Maturana and Varela's positions are used at several crucial junctures in this work to clarify the Deleuzian position.

The notion of self-referentiality could be important and useful in pedagogical relations and in the kind of teacher education I am going to propose in a later chapter. Self-referentiality could work in two ways: by steering us away from the representationalist frame that keeps us bonded to the old identitarian ways it can show us the incompleteness of any observation, and therefore bring out the differential element always

present in every idea, concept, or distinction. This can open our minds to the notion of difference as an inalienable presence in every repetition.

And second, the notion of "bringing forth a world" points us toward a deep ethical responsibility, and the need to bring forth new concepts in our work as teachers in order that we may challenge the existing order by harnessing new forces or distinctions, and not continue to be enslaved by old ones and the worn-out spaces they occupy. Further, the inexhaustibility of an outside or the open link with the environment is also an indicator that reality or the system is not a given, and we can collectively change it.

Analysis and Interpretation

Here I will present a brief overview of the general interpretive framework that I will employ to analyze the case data that follows. My purpose throughout is to work out a praxiological analysis that will open the door to a different kind of practice and teacher thinking. To this end, I will bring to bear on the case study the extensive theoretical oeuvre of Deleuze and parts of systems theory. Wolcott (1994) says,

Sometimes intentionally, sometimes not, interpretation works its way to center stage, the descriptive account serving only as introduction or example for a major effort at interpretation. More than simply linking up with theory or leaning on it for an interpretive framework, the objective here is to develop that

framework. (p.43)

The development of a conceptual framework for helping teachers change the way they deal with highly differentiated situations is the major goal. Using the case study as an example from which I draw some categories for grouping the significant problems that I witnessed, I use that experiential platform as a jumping off point for a theoretical discussion in an attempt to illumine some of those categories using a Deleuzian perspective. I claim that certain naturalized assumptions among teachers about the nature of boundaries that define curriculum, teacher identity and the notion of the student contribute to the frustration that teachers feel, as these boundaries rather than the experienced realities define the possible, thus restricting the scope of possible responses. Research has shown that the 'objective reality' of the formal organization called school is largely a result of the continual affirmation of rules, dispositions and habits of thought through the everyday decision-making practices of teachers and administrators (Cicourel1963). In other words, it is through the boundaries and categories affirmed daily that school is experienced in a certain way. The result is a structure of beliefs and categories that emerge reified as solid and stable in our signification systems. Using Deleuze, I try to find ways of rethinking and experimenting that will allow us to move beyond those confining spaces.

In the case study, we see evidence in new teachers of the implicit assumption that the learning situation is bounded by the walls of the

classroom and the fixed reference points of school subjects. The uncertainty that we witness among new staff when learning spills over in uncontrollable ways into the streets, placements and beyond, and does not visibly proceed in a linear fashion within a physical location, subject area, or measurable markers exemplifies the problem of boundaries and categories. My use of Deleuze is to force those boundaries open so that the productive power of difference can enhance our affective capacities. Students learn things that are valuable to them at off-campus locations (placements) which are regarded as being outside school, and in between sites, in conversations between themselves, and in gestures and modes of being that are often not measurable. Teachers are often unsure how to connect to the different ways of knowing and how to capitalize on the individual rich experience of the field and their backgrounds that the students bring in with them because the teachers perceive traditional and fixed boundaries around what can be considered school. As a result, what the students take back with them into the field become limited because of the habits of thought the school building from its environs, and the curricular from the extra-curricular.

My belief is that a more complex understanding about the nature of boundaries in which we are imbricated and the lines of communication between sites will open the door to a fruitful set of relationships that is both more fluid and generative. It is for this purpose I introduce Deleuze, whose work on "deterritorialization" is an attempt at

reexamining boundaries and useful for us in looking at the possibilities of gaps and holes and in-between spaces where learning takes place in unusual and discontinuous ways. Deleuze is an "ethnographer" of the nomad; his philosophy tends to be brushed over with molecular elements of lived experience, and therefore valuable for the explication and theorizing of the case study. Through Deleuze and the questioning of "dominant significations" we reach a terrain of multiplicities, a "nomadic" topology whose cartography is based on flight from "rigidified territorialities" (Deleuze and Guattari 1987, pp.214-221) onto "molecular" or micro-elemental passages that involve a virtual space. Chapter 3 of the dissertation investigates these in-between spaces and leakages, the slippages and ruptures that become visible when we use a Deleuzian map.

A second matter of concern that came out of the case study, the question of communication or a matter of reading signs is treated in detail in Chapter 4. Signs arise when we encounter something, a difference or a distinction; the signs that arise in encounters lead us to draw boundaries that delimit them, contain them as this or that event according to majoritarian beliefs, predispositions, and habits of thought (Deleuze 1990a). The fourth chapter goes into the question of signs and the examination of sign regimes. The limitation placed around the sign, or rather, the process by which we recognize the discreteness of an event or sign often remain obscure to ourselves. In terms of the curriculum,

how we define a learning event often treads and retreads representationalist ground. It is therefore through an investigation of the sign (Deleuze 1972) that we discover our taken for granted ways of reading and recognizing signs.

Calling the fundamental educational event as an encounter—between teacher and student or student and curriculum and so on—which amounts to the generation of chains of signification, the fourth chapter explores what happens when one realizes that, to borrow Alfred Korzybski's famous words, the map is not the territory. That is to say, we try to get away from representationalist ground and onto a more open territory through a semiotic experimentation. Using Deleuzian praxis to move away from dominant regimes of signification, I examine the micropolitics of the sign in the construction of the educational encounter and simultaneously look at our own constitution by the sign.

Redescribed in semiotic terms, our identities begin to become less solid and boundaries open up for new curricular investigations, for identities are inextricably woven into the boundaries that we draw around curriculum (Pinar 1994, 1995, 1998).

And this connects to another important issue that came out of the case study, the problem of affect and stress, that is dealt with in Chapter 5. Linking up to Deleuze's work on Spinoza, I examine how signs can be read so as to release our powers of being rather than diminish our existential powers. It is toward a pragmatics of the sign and an ethical

semiotic experimentation to which I turn in order to theorize about the problem of teacher thinking that leads to stress. That is to say, I shift the problem of affect from the domain of private experience to a different terrain, to a problem of signification and the images in thought that are the result of dominant significations. By this I hope to show that a certain manner of relation to signs and the concomitant image that we have of ourselves is helpful in diminishing the problem of stress.

The key theme of this work therefore is the opening up of boundaries constructed through representationalist images in pedagogic encounters by developing conceptual tools for careful examination or deterritorialization of sign regimes, as well the release of affective powers by looking at the differential transforms and fluxes beneath our constituted selves. Deleuzian pragmatics allow us to envisage the production of new spaces for teacher perception and action, and to rethink educational commonplaces and thereby release us from the oppression of reified categories. This release brings with it a certain energy of freedom and a creative potential of difference that has the possibility of releasing new powers of being and acting.

Chapter 2

The Case Study

Arnie emerges out of an obscure door along North Street's scruffy, brick-lined buildings, and ambles down the cold windy street to the bus stop. A few dry leaves, remnants from the fall, swirl around him. He huddles in one corner of the shelter and fumbles in his pocket for the city bus pass. Arnie has just left his *placement* for the day and is heading back to The City School for his afternoon "in-house" science class. He has spent most of the morning at a Women, Infants, and Children (WIC) distribution center weighing and checking out the case histories of infants, and distributing vouchers that mothers can exchange for infant food. This is a part of his school internship called placement. Arnie does not get paid for the work at the WIC but gets school credit towards his graduation—something which seemed a very remote possibility six months ago.

Near the end of his junior year, Arnie had been expelled from one of Milwaukee's high schools. According to Arnie, his expulsion was the result of a series of difficulties, constant fights, ethnic tension, and gang activity that he got into during that year.

Thinking over it all during the summer, Arnie realized that he

simply had to get back to school, but he found that given his situation alternative schools were his only option. But he wanted no part of alternative schools. It was his father who first heard about The City School, and together they paid a visit to the school's lead teacher, Jim, to make enquiries. Jim was skeptical about Arnie's ability to work in the community without supervision but Arnie's persuasiveness won the day and he got his second chance. Talking about his experience Arnie says, "I learned more in the first nine weeks here than I did in all of high school."

(Journal Entry#8)

The City School is by no small measure a remarkable place, an evaluation that someone like Arnie would agree with wholeheartedly. The group of teachers who founded The City School did not form a charter, but applied to start a school within the District Public School system, under a scheme called the Innovative Schools Program, a program floated in order to invite new ideas for catering to difference, that is, for responding to different needs of urban adolescents.

At the time I began visiting the school it was entering its eighth year of existence. District reports on The City School showed high level of attendance (93%) and graduation (90%) rates in a district with a truancy rate of 40 percent and an equally high dropout rate. A Regional Educational Laboratory report (NCREL 1998) also stated that the innovative schools "outperformed their district peers on the whole,"

achieving "Board Standards on seven indicators, while the district as a whole achieved standards on two" (p.3). While the statistics were impressive, it is the actual feel of the place that made me want to get involved in what the school was doing for these young people and find out how it was doing what it was doing, the kind of people that took on this challenge and the demand the school placed on its teachers.

Preliminary visits showed that this school, which I will call The City School, had, since its inception, distinguished itself in many ways. Its beginning itself was remarkable. A group of teachers had decided to provide a very different atmosphere than the "faceless and hostile buildings [mainstream urban schools] where thousands are held" and where "students have to switch off certain parts of their humanity in order to survive." They wanted to create a place where "you did not need to look over your shoulder in order to feel safe" (cited from interviews with teachers). Not only did they want to build a different atmosphere but also offer a curriculum that was much more suited to the needs of urban youth whose lives were rather complex, many of whom had to support themselves and their families from an early age, had no regular homes, lived in unsafe neighborhoods, and among whom teenage pregnancy, drug problems and dropout rates were high. It is under these conditions that I began to look at how beginning teachers and teachers new to the innovative environment coped with the very different needs of urban youth.

For those of us for whom the public school is an article of faith, studying new approaches and creative solutions for the system becomes vital. For me, the public school is not just an educational place but an arena for the formation of the public itself. The big reason for looking into such a school, out of which evolved the question of teacher induction and retention, was my belief that one possible future of public education is in innovation of the kind I was witnessing.

The building in which The City School is located is not very different from Arnie's placement. It is at one end of downtown where the banks and prosperous businesses taper off and a rundown quality takes over. At the street level there are shops and eateries and the lift takes you up to the fifth floor where you step out directly into the lobby of the school. There is a security person at the desk, smiling and friendly. The ceiling is low and the walls are white and clean, with large sections covered by notice and display boards. The corridor makes sharply angled turns and opens into a series of classrooms on either side. Most of the classrooms are generous in size and have large windows. Seating is grouped around tables. As there is acute shortage of space, students use the public library, which is only a couple of blocks away, as their library resource. There are no science labs or other auxiliary facilities as far as I can see.

The pedagogical principle on which the school was built, one teacher explained to me, was that learning is not a special condition, that

a human being was naturally predisposed to learn: "Children learn all the time, you cannot stop them from learning." Only, one could be learning all the wrong things, all the destructive things if one didn't have the right opportunities. In other words, when we say a child refuses to learn, s/he is learning the art of resistance or something else. This, she pointed out, made nonsense of the bell curve and the myth that some children don't learn. Which brought upon the teachers the enormous responsibility of finding out how each child under their care did learn. And so individualized instruction played a large part in the design of the curriculum here.

The City School's curriculum was organized by fusing two broad curricular strategies. One was the city-as-school model that originated in the New School for Social Sciences; it involved bringing in the issues of urban life into the school as much as possible and taking the school beyond the physical walls back into the city. The idea was that the students must not be trapped within walls of the classroom for too long and pursue their learning into the life around them that included educational field visits.

The second model brought into the picture was the idea of service learning, that is, learning through experience whose roots can be traced all the way back to Dewey. Service Learning is structured around placements that put students in the community in a work-learning experience. Placements are located in enterprises ranging from law

offices, to elementary schools to community health centers. The teacher, also called the resource coordinator here, supervising the student in the placement, writes a curriculum for each placement that reflects the type of work in which the student is engaged. So the teacher here is also a curriculum developer which is important to note. A Learning Experience Activity Packet (LEAP) is supplied to the student by the resource coordinator. The packet consists of a series of assignments or projects related to the placement. LEAPs are due at the end of every nine-week cycle.

Besides supervision by the resource coordinator, students are also mentored by personnel at the cooperating placements. These individuals help plan learning goals and activities and see that the agreement to provide the student with a meaningful learning experience is fulfilled. The cooperating resource records the students' attendance and assesses the student's growth and learning as part of an evaluation report. The students are not paid for this work but receive ¼ credit hour time toward their graduation for every 36 hours worked at a placement.

The students indicate that the placements are a big reason why the school has clicked for them. "Our placements depend on us a lot, expect a lot from us...and we have placements where we can usually learn new things," one student observed. Another said, "They know that I can do the job." The sense of reliance and responsibility seems to play a big part in the relationship between placements and the students. Supporting

this view, the school program coordinator says, "Having them [students] out in the community does a lot for their self-images a lot of the time.

Also, it's good for the community to know that these kids are okay" (Field notes 04/05/02 and Interview excerpt).

While placements are a key feature of the City School curriculum, the students also enroll in other core classes at the school which meets the state and district competency and proficiency standards. The options are not too many but the science, math and language courses are all there. As for the AP courses, the students take them online with support from the staff. Students also enroll in university courses and get college credit. Recently the students voted to learn Latin when an option was given for including an additional course! The real limitation is staffing.

Innovative schools typically tend to be small. This one is a high school with fewer than two hundred students of whom nearly seventy percent are African Americans, seven percent Hispanics, fifteen percent Whites and the rest Asians and Native Americans. Most of these students can be described as being "at-risk" (although even as I use that phrase, it is not clear as to who is at risk, society or the youth). A majority of them had dropped out of school at one time or another and had found their way to this place. The school has ten staff members in all, roughly balanced in racial composition.

Politically, the founding teachers did not want hierarchy. They rejected the usual separation between teaching and administration, and

felt that the two realms were inseparable. One of the older teachers explained that by creating artificially separated zones of responsibility "the work of the educator is fragmented." Therefore the City School, although a part of the public school system, became a teacher run school. For formal purposes, they had to have one of the teachers function as the nominal head but the responsibility circulated among them, and the functional head continued to teach at the same time.

A four-tier structure exists for governing The City School. The School Advisory Board represents broad and diverse community interests. It meets quarterly and provides a direct link between the community and the program. Board input guides and informs the overarching goals of the school and brings in reflections of changes in the urban community. Next, the Board of Directors, composed of school faculty, parents, and resource site representatives oversee operations of the school. The group meets monthly and through its site-based management orientation, monitors the schools activities and provides support where necessary. Third, day-to-day decision-making occurs at weekly staff meetings. Decision-making takes place through consensus. And finally, a Student Council composed of student volunteers sees to the more student-centered, day-to-day interests of the school such as planning field trips and other activities.

Refining the Question

The history of innovations shows that such innovations as I am talking about often tend to have a limited life; after an initial period during which there is a burst of enthusiasm there is a tendency to get reabsorbed into the undifferentiated middle one way or another. This tends to happen frequently when the founders retire or the original group fragments and new group members join; the power of the original vision begins to dilute and fade and the school falls back into the undifferentiated mass from which it had distinguished itself.

The City School, is precisely at this critical juncture now. My concern is that in the process of falling back into the sea like a spent rocket the considerable positive gains made and insights achieved are lost to the educational community. It is important that the hunger for change and reform must actively take into account the considerable good work that has evolved in such places without attempting to use it as a cookie-cutter model nor pushing it aside as one-of-a-kind experiment; instead the educational community should develop an active relationship with such innovative moves. The City School is struggling to find out how to resist that gravitational pull of the undifferentiated mass: "The vultures are always circling overhead, waiting to rub us out...And internal resistance, that's key to our survival," MS, a lead teacher observed. (Interview with MS#1)

Now, one of the major sources from which such a centripetal tendency toward the 'Same' and the elimination of difference comes is from the direction of fresh induction of teachers. MS tells me,

Soon there will be only myself and two others left of the original group. Unless the incoming teachers learn how to run this place, do the placements and things the school will slide...maybe close down. All the innovative places I know are having trouble with their new hires. Most of them simply don't understand how these places work. (Interview with MS #1)

There are powerful reasons for this. First, teachers bring with them their conventional expectations of what a teacher's job entails (Labaree 2000). Second teacher education programs rarely take into account innovative school programs and their very different needs. Also, new teachers often do not have much of an appreciation of the original imperatives and the struggles the school has had to face nor do they fully comprehend the vision of the founders. The problem has been to incorporate their energies without subordinating them to a fixed vision, as well as to maintain that critical line of flight without severely compromising the very purpose of the innovation.

As the reader will observe, I have narrowed down the problem to a specific region: that of teacher induction without severe compromise; a question of bringing the two, novice teacher and school, together without disabling either. The implications of this goes much beyond the current

context, for, not only can innovation be important as a way of introducing much-needed change, the lessons learnt from such experimental sites can point to what is wanting in regular set-ups in mainstream schools.

Talking to Teachers

In the data, we frequently find concern on the part of older staff regarding how to integrate new staff. Interestingly, in the early meetings we attended, the talk was about how the new teachers will "fit in" to the existing set up. In subsequent references to this issue, the question became "how do we integrate new staff?" More recently, the question has further evolved into "how can we work together." This last has also come about with the realization on the part of the school staff as a group that they will have to be responsible for their own staff development in ways that they had previously not considered.

The problem then is this: new teachers trained in average teacher education programs and/or having taught in mainstream schools faced a new challenge in an urban innovative high school, demands were made on them that often upset all 'normal' expectations associated with what people have come to know as doing school. Discussing new hires, MS comments

They usually tend to be managerial...in one of the other schools they are having trouble with one of their new hires. He believes in confrontation, suspending kids...you know...We are beginning to get some of that too, but that is not what we are all about."

To my question as to why he thought they tend to be managerial, MS responded,

Places like this are hard. The kids range from overeffusiveness [laughs] to total indifference. Their backgrounds are very complicated and our educational assumptions and ideas of what they need are simplistic...To come to terms with all that is a first step...But the first impulse is to control and the kids react to that... (Interview with MS #1)

I ask MS whether he thinks teacher education programs can help new teachers confront these tendencies and issues in any systematic manner. MS seems doubtful: "It's a very different tack we are talking about...what could be done other than somehow find the "right" people?" he muses.

Next I speak to LS, one of the new teachers. Speaking about her difficulties at The City School, she says:

I have never done scheduling for students or the writing of curriculum. In the schools I have worked in, the students get their schedules from wherever... I am having to learn very different things. Also, students can actually choose and write up their schedules but I had to learn how to keep track of them all. I have never seen a placement before or worked at going out and creating a new placement or internship. That is a whole new skill I have to

learn. And each student's learning program has to be written up around the Placement. I feel a little overwhelmed at this point, but I'm sure I will love doing it but it is all very new. (Interview-LS#1) Another teacher, AD, a teacher from West Africa and with a background of having taught IB programs in Science in one of the city's well known schools – one that boasted of all its students going on to college, came to the school because he was looking for "a challenge."

I wanted a change and I knew some teachers here – and they said – come on over and try this place if you want a change – you are sure going to get it. And they were right. This is very different. The onus is on the students to learn. The student is empowered to take charge of how much they want to learn. But for new teachers like me, it is also a change. We are not always sure – what are the Learning Experience Activity packets? How do we actually do attendance in this place? How to develop resources? There are many new adjustments to be made. Student class size is another issue – there are small classes – how to teach multilevel students? (Interview with AD #1).

"The problem is," GM, an older teacher says to me, "these are not separate skills that some of us possess. They are part of a certain approach to students...it comes out of that." What kind of approach, I press him. "Well, some of us would fight for them to get educated...and they know that. We do what is necessary. All this is taxing, I admit, but

the school is innovative only so long as each one of us innovates" (Fieldnotes 04/05/02). GM seems to imply that what it takes to educate these kids is not so much a list of skills as it is a matter of attitude and perception.

I ask KC, a teacher new to The City School, who has 'substituted' a lot in the district, how working here compared with the other places.

"This place is small," KC says, "and you work much closer with the kids. Like mentoring, for example, which is big here." What kind of additional effort does it involve to work here, I ask. "I don't know that it is some additional thing, but there's lots of things taken for granted which you find out little by little." For example? I persist. "Well, teachers are expected to keep track of each student...that rarely happens in large places. If the kids goof off in the placements, they close the door on us. The community comes to know...there is always this pressure, of things outside your control" (Interview with KC #1).

The fears of burnout are always present among staff. Some have taken retirement at an unusually early age. Touching upon this issue, NC, an older teacher says, "I saw two people fall apart." Are the challenges here greater than, say, at a regular school, I ask. "Not necessarily," she responds, "but if you get close to the kids, there is an enormous burden...too many things going on in their lives. There is a frustration sometimes in not doing enough." How do new teachers cope

with this? "Some leave," NC responds, "but for those who stay, things begin to change after a while" (Fieldnotes 04/07/02).

A significant strand in what I was observing thus far appeared to me to be: that the ways in which new teachers, whether new to the profession or to the innovative environment, came together with the school seemed to throw up some unique problems of practice for the entrants, and that there were significant gaps in the visible and invisible ways in which the functional whole of the school worked and the ways in which often new people were initially prepared to function as teachers. In other words, there was an interesting hiatus between the two orders of perception—those of the coterie of older teachers who were founders and recent entrants—that gave rise to tensions within the school as well as to frustration for the newcomers. It was a good moment to begin making sense of what I was seeing.

A Note on Method

Michael Agar has written: "In ethnography... you learn something, then you try to make sense out of it, then you go back and see if the interpretation makes sense in light of new experience, then you refine your interpretation, and so on. The process is dialectic, not linear" (cited in Wolcott 1994, p.11). In the spirit of this I began to look for enduring patterns and relationships in the data, for ways of grouping the chunks of experiences that I had recorded. According to Wolcott (1994), analysis

begins when you start to identify critical components in the data. It is when the data begins to get transformed into a story worth telling. There are various approaches to this process of turning raw data into "cooked" data. In attempting to make sense of the field, I have used a four-tier system of analysis found in ethnographic research namely: 1. Item level of analysis; 2. Pattern level of analysis; 3. Structural level of analysis; and 4: Complex and multi-level analysis (LeCompte & Schensul 1999). First, 'items' are those events, behaviors, statements or activities that stand out because they occur often, or are rare and influential, or because they are conspicuously absent. Second, when related items are organized, higher-order patterns or "cultural domains" begin to emerge. Following the creation of cultural domains, a structural analysis involves linking or finding consistent relationships among these patterns or domains. And finally, a complex level of analysis yields the larger picture or a viable model by testing hypotheses against data (LeCompte & Schensul 1998). Although on paper this looks formidably linear, the actual operation has been recursive, guided partly by intuition, and gestalt driven.

Analysis

From a certain meditation then on the data, that is, from the interviews and observations, various themes have emerged and I have grouped these under six analytical categories as follows: 1. The Problem of

Decentered Authority; 2. The Problem of Multiple Roles; 3. The Problem of Communicative Competence; 4. The problem of the Missing Middle; 5. The Problem of Creativity; and 6. The Problem of Affect. I will discuss each of these in turn below.

1. The Problem of Decentered Authority. The City School is a teacher run school, meaning it has no separate administrator. This was one of the founding principles, that there will be no hierarchical separation of teaching and administration. One of the senior teachers carries out the principal's role as a nominal head, but the role circulates and all decisions are taken jointly. Teachers coming from regular setups used to the clear dichotomies of teaching and administration often find a) the lack of central authority somewhat unnerving; b) there is no principal to whom you can send a difficult student or whose proxy one can use as a threat; c) that they are wanting in the skills of dialogue that is necessary to make the joint decision making process work.

Further, my data suggest that beginning teachers often come in with certain conventional metaphors that guide teacher behavior one of which is "classroom management"; in Deleuzian terms, this is capture and stratification that seeks sameness and identity. But innovative schools such as The City School attempt to operate on a different plane with regard to such issues. Instead of the compliance, control and confrontation paradigm, which springs from the traditional vision of adults as legislators and students as subjects, small schools such as this

one attempt to create an atmosphere of close interpersonal relationships that tend to obviate the need for harsh disciplinary measures. Occasional wayward behavior tends to be seen as a signal for help rather than an isolated problem. For new teachers, the move to get away from the "classroom discipline" mindset takes considerable work and revisioning of what it means to work with adolescents. It means discovering the pedagogical possibilities of irregular spaces and difference, and perceiving the need for breaking down categories. This is explored in the next chapter.

2. The Problem of Multiple Roles. Teachers play a multiple role at The City School. The teacher is not just an instructor but also a curriculum developer, a placement guide and a mentor. The fact that the students are out in the community part of the time changes the dynamics of the school requiring teachers to be more inventive about their roles as well as make connections between experience and school. Connections have also to be made between the different sites. There is an interesting "between-ness" in the roles that result. One of the most difficult parts some felt was the role of placement guide. This involved being partly responsible for the student's actions in the community.

Conventional categories, and boundaries around the teacher's role thus tend to break down at The City School, and the demand is for a level of flexibility for which newcomers are often unprepared. As the discussion in the subsequent chapters will reveal, a Deleuzian

conception of ourselves as multiplicities is very helpful here, as it tends to dislodge us from identitarian ways of thinking, and helps us to see the generative possibilities of what Deleuze calls a "becoming-other."

3. The Problem of Communicative Competence. The success of a place like The City School depends to a large extent on the ways each player finds or invents channels and bands of communication both within and without the school, that is, between student and teacher, teachers and parents, the school and the district or among teachers themselves. Apart from the fact that in a school that is jointly run by teachers, much hinges on the ways in which the players communicate with each other, the fact of being different and the effort to justify difference itself calls for a different kind of communicative competence.

Besides normal instruction, teachers also have to monitor the students at their work places, finding ways of individually assessing the work each student does at the placement through the LEAPs. Difficulties often crop up at the placements which have to be smoothed out. Liaising between multiple sites, the successful placement coordinator has to project continuously a forward looking agenda that keeps all parties positively engaged. Each of these require a degree of sophistication in communicative abilities that are not typical of teacher situations.

Even instruction tends to have a somewhat different emphasis. My data show that the teachers who are successful with students at The City School, that is, who are considered to have made a difference in some of

their lives, invariably are those who have taken a step beyond their didactic roles and taken a special interest in students' lives and in their ability to succeed.

Here again we have a boundary issue. Conventional teacher roles are heavily circumscribed. Teacher's work is rarely envisioned as liaison work between the community and the place of learning. Occasional rhetoric apart, the emphasis is on what happens within the four walls of the classroom. Not surprising then, that the data show the struggle new teachers have with the breakdown of the categories.

4. The Problem of the Missing Middle. In innovative schools typically class sizes tend to be small. Such is the case at The City School. Mainstream teachers often have a problem with small classes because they are trained to and used to teaching to the middle, to pegging their instruction to the imagined average. But there is no average in a small class, no middle. One is forced to reckon with the individual differences and levels of each student and teach multiple levels. No longer can the teacher treat the class as a mass. Each student's situation must be noted and pedagogical opportunities created based on differential demands rather than identitarian ones. The continuous jumping of levels within the class can be quite demanding for teachers who have never faced such situations. My observations show that even older teachers at times find it hard going.

Under such circumstances a radically different approach is necessary to subject matter by which the emphasis moves from the disconnect between different levels, topics and ideas to seeing/constructing/inventing the connections between them, and thereby also multiplying the pedagogical directions from which to tackle an issue.

5. The Problem of Creativity. The bottom line for innovative schools is an ever present demand for a degree of creative enterprise. Because it is small, unusual, surviving against enormous odds, The City School staff must continually improvise. They must take decisions which no one else can take for them. They are a square peg in a round hole; the district rules, from attendance to assessment to school hours do not fit them. Therefore at every turn there must be a creative response to overcome the difficulties of being an innovative place.

Further, especially in an urban situation, where material conditions are less than desirable and the level of resentment against the official curriculum high among students, the need is for new ways to reach students, and create new learning spaces and curriculum from the differential experiences of the students themselves. This demands from teachers a new kind of creative response whereby one begins to sense all around one, and in the educational encounter itself, material for investigation.

6. The Problem of Affect. Working closely with needy adolescents whose backgrounds are anything but trouble-free is challenging work.

Many of the students at The City School come from difficult backgrounds and some have turned around due to the individual efforts and care taken by staff. For new teachers the situation is stressful and sometimes affectively draining especially if it is accompanied by student disinterest and apathy. In the fairly extensive literature on teacher burnout, there is considerable evidence for believing that beginning teachers are particularly prone to leaving the profession due to burnout (Weisberg, J. & Sagie, A. 1999).

My data show a range of coping behaviors. One teacher tended to engage a few students in extended trivial conversations that led nowhere, another created a strict classroom atmosphere and acknowledged that he was "becoming just the teacher I never wanted to be" (Fieldnotes 04/08/02). Typically, mainstream literature talks of "coping strategies" to deal with emotional stress (Abel & Sewell 1999). But as Byrne (1999) points out, coping is not the same thing as teaching. When coping, we are in a survival mode whose focus is ourselves and therefore the pedagogical choices available tend to get restricted.

The Deleuzian praxis I construct makes available to teachers a way of thinking that gets past the illusion of the transcendent subject, that is, a pre-existing coherent identity that stands to get worn down in daily confrontation with students. Instead, we learn to rethink ourselves in terms of micro-intervals of interaction in each pedagogical encounter that poses a fresh problematic in terms of the signs that are generated in

each encounter. In such a praxis, signs, affects, and percepts come together to create rhizomes or multiplicities that by spilling outside the boundaries that thought has create through habit can generate large amounts of affective energy, and thus reverse the problem of stress.

To summarize then, the effort so far has been to formalize the data into a few analytical categories that capture some important and recurring themes and give a certain flavor of the findings. I will next try and interpret the findings by mapping these on a Deleuzian topography.

Chapter 3

Rhizome and the Image of Thought

If thought really yielded to the object, if its attention were on the object, not on its category, the objects would start talking under the lingering eye. Theodor Adorno, *Negative Dialectics*.

Practicing the Contingent: An Analysis

In his well known ethnographic account titled "Adequate schools and Inadequate education: The Life History of a Sneaky Kid," Harry Wolcott (1994) makes the important observation that adequate schools do not necessarily lead to an adequate education. Increasingly, there are youth who, while not averse to learning as the "sneaky kid" testifies, find schools to be impossibly circumscribed spaces, and as a consequence for them there is no alternative but to drift. Listening and observing at The City School I find ample confirmation of the above statement in the accounts I hear, not only from students who had dropped out from regular schools, but among staff as well.

In organizing itself along different lines, The City School, in some ways appears to have made an attempt to address some of these issues that Wolcott raises, in being more than just an "adequate" school, as well as in extending schooling in important ways to other areas of social experience. By making central to its focus issues of relationship and

connectedness, it makes a serious attempt at constructing conditions of possibility for urban youth to stay connected to education and continue to learn in non-conventional ways. Although there is some literature on service learning, these attempts at innovation remain under-theorized especially in the context of professional development of new teachers.

In this chapter I will provide an analysis of the case that we saw in the previous chapter; I will attempt to show two things: first, The City School curriculum as well as the social and learning environment associated with it display evidence of somewhat open, leaky, and indeterminate spaces that can better accommodate some "border" youth who cannot fit into mainstream schools. I will use Deleuzian concepts to theorize these "spaces of indefinitude" or differential formations. And second, I will suggest that the difficulties new teachers face on entering such an environment, where there is less reliance on the regular curriculum adopted by the district and an absence as well of traditional appeals to authority for structure and discipline, are the result of certain unexamined conceptual conventions and interiorized notions of what constitutes learning and the role of the teacher. Together these form the basis of my claim that teachers need to re-examine the very commonplaces and categories on which the experience called school is built. My point is that teachers brought up with the idea of primarily seeking order in the classroom, perceiving learning as coincident with what takes place within the boundaries of the classroom, and looking for certainty in the curricular process have to reckon with the fact that learning often takes place in non-localizable, in-between spaces and in ways that are uncertain and sometimes inarticulable. And besides, the things that seemed most important to these young adults, like a sense of belonging or deeper communication with adults, lay beyond the mostly circumscribed roles of teachers in regular settings.

My strategy here will be to point out the Deleuzian spaces and possibilities in the school, and at the same time show how new teachers often miss pedagogical opportunities by holding on to the mainstream or conventional positions on learning and curriculum. This is not to claim that public schooling is monolithic or homogeneous, but to point out that the overall emphasis that arranges education in a techno-bureaucratic space (Kliebard 1992) missed the boat, so to speak, where these urban youth were concerned. JS, a beginning teacher, tells me: "I come from a minority community. The public school system did nothing for me... I came close to dropping out" (Fieldnotes 04/12/02). The system forced JS to occupy spaces where he did not want to be and did not give credence to his own Lebenswelt and sensibilities. Giroux (2000) points out, "the dominant features of public schooling are characterized by a modernist project that has increasingly come to rely upon instrumental reason and the standardization of curricula" (p.177). This centered curriculum, Giroux further observes, that is devoted to the logocentric rule of reason and in which affects and emotions mostly find no place except to

pathologize youth, is a heavily "racially coded cultural legacy...that privileges the histories, experiences, and cultural capital of largely white, middle-class students" (p.178). In Deleuzian language, these are spaces governed by "strata," and captured by "molar" or majoritarian politics.

In a school that attempts to serve marginalized youth, teachers need, not merely a separate set of skills, but new lenses through which to rethink curriculum as a whole. It is therefore an important move to help teachers to re-equip themselves with theoretical tools and concepts with which to rethink what is going on and gain a fresh perspective on things, a perspective that helps to move away from the old habits of thought and abandon worn out spaces.

I introduce Deleuze in order to provide such a lens. Rajchman (1998) calls Deleuze the philosopher of the city, meaning one of urban spaces and environments, an allusion that I find strangely apt for constructing experiences at The City School and of its urban youth. Deleuze is also an artist of unfinished geometries, of "what might yet happen" and ceaselessly constructs in order to free the idea of "aesthesis" from regulated spaces or previously staked out ground. In other words, Deleuze is an architect of broken, fractured spaces in the fissures of which he constructs new openings for thought and action. In this work, I use Deleuzian concepts and cartography, chief among them the notion of the rhizome explained later on, in order to construct a theoretical lens for understanding the phenomena in the school. I do not

claim that the school is already functioning with a Deleuzian perspective; rather that the existing conditions would be better served if such a perspective were to be deliberately employed, especially in communicating to the new teachers the alternative possibilities of the school.

For, Deleuze attempts what may be called a perspectival reversal of Platonism in order to form new sense of space and identity from the irregularities of thought: it is not in regularized spaces, but from the irregularities that new thought is born. Therefore, the added value of seeing the processes through Deleuzian lens is that it will allow teachers to see in a positive light the very slippages, affects, and other "unruly" curricular experiences that tend to embarrass technocratic rationality, and look at these as new possibilities for curriculum development.

Besides, these are also openings for teachers for reconstituting teacher identities. No longer is the self of the teacher a given but something to be composed in conjunction with traits that emerge from alterity.

As we have seen in Chapter 2, the fluidity and multiple demand for respond-ability, and the constant slipping in and out of different functional and perceptive areas is disturbing and unsettling for those who have been used to the security of more circumscribed roles. One new teacher, I'll call her LS, finds the conditions difficult to cope with.

[I: Interviewer, LS: Teacher]

I: Is this place a big change from where you did your student

teaching?

LS: Oh it sure is. For new teachers like me, it is a big change.

I: Can you describe some of that for me?

LS: I am not always sure of my ground here—what are the Learning Experience Activity Packets for example? In my previous school we knew what to do. Here no one tells you.

I: Can you say more about that?

LS: I am left alone to plan or construct the curriculum as far as the LEAPS are concerned. Although they don't normally require first year teachers to do that. Also, how do we develop the [off campus] resource centers? There are so many new adjustments to be made.

I: It seems to me that you are referring to more than just a list of things or skills. You seem to be suggesting that there's something else operating here. Is that the case?

LS: Well, it is a sort of culture. I mean, in the regular schools you did things the way...there were lots of guidelines and the expectations were clear. Here it is like it comes out of the culture of the place. Things are not as explicit.

I: Does that make it seem disorderly?

LS: No, but I am not always sure what the students are learning.

Things are more chaotic. (Interview with LS #1)

Let us recall the problem of decentered authority from the analytical structure laid out in the previous chapter. LS gives us a good example of the kinds of certainty many teachers look for in schools, which is an appeal to authority. LS, as the above conversation illustrates, wants order in the form of expectations and rules. She is also looking to be trained in the correct way to do things. She uses the term 'culture' to mark a difference, of not being at ease herself in a space that is unfamiliar. LS wants to be sure of 'what the students are learning' perhaps in clear quantifiable terms. LS says twice, "I am not always sure..." The need for surety, certainty is so ingrained that we rarely stop to question it. Hartley (1997) observes,

The school is a monument to modernity. Virtually everything is arranged rationally, including space, time, curriculum, assessment and discipline. Children are classified according to a range of criteria. Rules regulate us. There are set procedures [for everything]...Schools are places where reason prevails over emotions" (p.125).

Given that achievement of rational order is of the highest priority, it is not surprising that LS feels uncertain in her role at The City School, that represents what Hartley calls a "lapse" that is "too unwieldy for our tidyminded modern ways" (p.125). The unwieldiness comes from an entangled, multiplications and divergent space in which things refuse to fall into neat categories.

The entangled character of curricular relations in the school leads me to posit the concept of multiplicities—a key Deleuzian term. Every event or entity including ourselves, according to Deleuze is a multiplicity, or rather, multiplicities. Beneath the apparent unity or coherence of an entity or an event lie fields of flux and indefinitude out of which arises a temporary assemblage of elements, composites that follow abstract lines of development and organization. Take an "event" like the French Revolution. Once we get past the label that identifies "it" historically, it becomes impossible to localize it or see it as something unified with a clear boundary. There are too many things going on for there to be a center that can be clearly identified. Further, Latour (1993) notes that French historians have recently discovered that "the actors and chroniclers of 1789 used the notion of revolution...to influence their own fate" (p.40). In other words, the revolution was being produced in part by the idea of revolution. It is the lack of a center of coherence that makes all phenomena multiplicities.

Thinking in terms of multiplicities become important, and gains theoretical power when we realize that each abstract line of potentiality or combinations of sense-matter-thought that enters into a multiplicity also has an exit. That is to say, although events or entities are born of capture of these virtual lines that produce the illusion of a localized phenomena, there are also exits or escapes from these gross categories. In other words, each entry or virtual line is also a potential escape route from the assemblage and multiplicities can be rearranged, disassembled and reassembled to form new assemblages.

Another name for operational multiplicities used by Deleuze is the rhizome (Deleuze and Guattari 1987, p.3). Rhizomes are contrasted to trees or arborescent systems in Deleuze's work; whereas trees are vertically ordered, rhizomes tend to be nonhierarchical, laterally connected multiplicities that do not feature linear development. Like tubers and mosses, they grow laterally and entangled; any point on a rhizome can be connected to any other point making such a structure open and democratic. Rhizomes can be interrupted at any point only to start up again, proliferating lines of flight that sprout contingently, not according to fixed pathways. Rhizomes thrive in irregular and in-between spaces, and have no specific starting or ending point; they are always in the middle. I claim that the concept of the rhizome is particularly suitable for theorizing the tendencies and potentialities of the narrative and descriptive spaces of The City School. Seeing ourselves as rhizomes or collectivities that are laterally dispersed and connected gives us room to challenge the vertical inner authority of our reified notions and boundary constructs about learning, as well as the way we structure our organizations. The rhizome is at the same time an analytical tool and a becoming that can help in constructing new spaces for teaching and learning. As a tool of analysis it helps us to see the possibilities and connections in a non-Cartesian way, that is, in non-binary modes of thinking. As a way of becoming it allows us to conceive of linking our collectivities to other assemblages for acting upon the social field.

Introducing this vital Deleuzian notion, I claim that the City School has in it potential rhizoid spaces. I watch a minor student "revolt." They insist that the name of the school be changed. The actual name, which cannot be revealed here, is found to have certain associations that are unacceptable to many of them. After several discussions, they have a confrontation with the staff over this, and propose a referendum on it. There is resistance from the staff but power relationships are challenged. Staff and students agree to do a survey on possible alternatives and let it go to the ballot. These moments of rupture, which are mostly discouraged in regular schools, allow for a creative uncertainty and inversion of power relationships to occur without being stamped out. It is for this reason that I claim that a rhizomatic possibility exists in the school. For, the example cited above is more than a mere instance of student empowerment. The rhizome grows from within, making the necessary connections in a system-environment coupling, whereas the notion of empowerment invokes an external empowering agent.

In contrast to the open structure of the rhizome, is the hierarchical structure of the tree or "arborescent" systems that constitute "State" or "Striated" space:

Strata are Layers, Belts. They consist of giving form to matters, of imprisoning intensities or locking singularities into...molar aggregates. Strata are acts of capture, they are like black holes striving to capture whatever comes within their reach. (Deleuze

and Guattari 1987, p.40)

Strata are bands of thickness produced by repetition; they generate gravitational fields, fields of determinate spaces like techno-managerial ones that provide a sense of certainty and security. To seek certainty in the context of learning is to inhabit striated space; that is, to operate in determined territories that resist border crossings, and therefore cut communication lines stretching across boundaries. Open borders are terrains of uncertainty and are the very conditions of the possibility of learning, a movement in thought. The growth of the rhizome in unpredictable ways and its self-description can provide learning with a cross fertilization between widely separated lateral spaces that promote a dramatization of knowledge.

To go back to the Learning Experience Activity Packages (LEAP) that trouble LS, these are as much a creative effort as a procedural one, according to the more experienced teachers. There is no one way of doing the LEAPs, since placements change all the time, new ones are added and some old ones are dropped. Additionally, teachers have to design the LEAPs according to the project the student is working on at the placements and cannot be generic, thus giving us an instance of the analytical category I have called the "missing middle." For example, at a placement in the Legal Action Council, a student may either work on a project that is based in History or in Citizenship. The teacher must create a LEAP that is congruent with the project and the disciplinary

credit granted for it. Further, students' requirements are different, with each configuration required to dovetail with in-house classes that lead to graduation. In this way, curriculum appears more and more like rhizoid structure, concerned with building connections.

In other words, we ask what constructs we want and what determinations and intensities we are prepared to countenance. The curriculum seen more like a rhizome, that is in terms of connectivities, than as a rigid structure, has lots of advantages. As Deleuze points out, rhizomes are offshoots and not sowings, irregular growths and not deliberate plantings, therefore, a Rhizomatic conception allows existential narratives to be reinstated in learning and in the classroom by finding educational opportunities in irregular spaces not provided for by the official curriculum but that are lived realities of the social actors in the school. In other words, every movement, gesture, autobiographical event, accidental phenomenon can become a learning opportunity. LS' concerns about what the students are learning are mostly to do with learning on the visible and officially approved plane. As we see later on, there is important learning going on in non-regulated spaces, learning that is important for the lives of these young people.

Coming from a way of doing things that is firmly "territorialized" or set in its practice of containment as well as predetermined in terms of the intended effects, the activities at the school seem "chaotic" to LS.

But, as she acknowledges, seeing the various activities as disparate and

isolated from each other is not helpful. Instead, it all seems to come out of a certain "culture." This culture is what I call a "practice of the contingent," an exercise of a not fully determined space without which a school catering to urban conditions cannot survive—a repetition with a difference.

But contingency is seen "as an enemy" of the modern governmentalized social order (Bauman 1992). Giroux (2000) observes,

Rather than accepting the modernist assumption[s]...it makes more sense in the present historical moment to educate students to theorize differently about the meaning of work in a postmodern world. Indeterminacy rather than order should become the guiding principle of a pedagogy in which multiple views, possibilities, and differences are opened up as part of an effort to read the future contingently...(p.179)

Partly, the necessity for understanding the nature of contingency arises from the changed global conditions related to work, markets, media and identities, that require new forms of literacy on the part of the teacher as well as the student, since both have to face these radically changed post-industrial conditions in which the character of the economy, culture and knowledge have become uncertain. I do not mean to suggest here that schools ought to change in order to fit in with the emergent world order and help to normalize it, but that curriculum must take advantage of fissures that arise in times of acute change, and open up complex,

indeterminate regions, that are "not-fully-formed" elements but patches of intensities and connections. This impulse flies in the face of the modernist urge to regularize events and prevent change.

Following is an example of the predicament teachers face in educating in this changing and problematic space.

TG: Take S, she is currently undergoing training for six weeks and is out of school. This is part of the W2 requirements. The law now requires that she get training in order to qualify for welfare, she is a teenage mom and wants to complete school. However, by the time she completes training, she will turn 18 and so legally she can be asked to work full time. That effectively puts her out of school and she can kiss graduation goodbye. We here have decided not to let that happen. So she is taking Independent Studies with us and that will give her the few required credits she needs to graduate. One of our teachers goes to visit her regularly to check up on how she is doing. She is a diligent student and will graduate but we have to find ways and means and come up with creative solutions to these conditions that kids face. They are at the intersection of work, the law, poverty and needing to graduate. (Interview with TG #1)

Here is an instance of the problem of multiple roles. As TG relates it, there is a gap between what the students need and what bureaucratized education provides, a gap between schooling and education. Nancy Lesko (1995) has identified such mixed needs that policy is unable to come to terms with as "leaky needs" (p.199). There is a necessity for teachers to find creative solutions to meet such leaky needs and find the resources to be able to do so. Often, it is the flexibility and the mutual understanding that the teachers have developed between themselves that provides the ground for this additional "respond-ability." But just as often, it requires a somewhat different sensibility that is able to see the curricular possibilities of the in-between or irregular spaces that come up in investigating difference. It is this sense of connected-ness and the ability to function in between things that evoke the notion of the rhizome. The rhizome is always reorienting itself along new lines of becoming.

From a critical angle, it is possible to read the above example as a neo-liberal mechanism that does not question the underlying ideology of W2, and merely ensures that the student fits in with the needs of the marketplace. But the thing to which I point here is the multiplicitous and provisional roles and alliances that teachers have to form in order to function. I am not suggesting that teachers at The City School are already installed in a Deleuzian plane. Instead, it is the echo and the resonance issuing from the site that alerts me to the possibilities of using a Deleuzian framework in order to understand experience, and work out a praxis. These timbres suggest the possibility of becoming, of encountering the student along dimensions not usually considered by teachers in more conventional settings.

The plane of becoming, also called the plane of immanence, is a powerful Deleuzian concept in which incorporeal transformations take place that insinuate us into new becomings:

The plane of composition knows nothing of substance and form. It consists of modes of individuation, in relations of speed and slowness between unformed elements, and in compositions of corresponding intensive affects [that] ties together heterogeneous multiplicities of the rhizome type. (Deleuze and Guattari 1987, p.507)

Substance and form are useful, but they become obstructive when overemphasized as in the modernist curriculum. Instead, Deleuze offers conceptions of speed and slowness, flows, densities and transformations that help us to change the image of ourselves and open ourselves to the nonhuman. There is an evocation of a sense of the fluid and of continuous transformation rather than staticity and status quo. The fluidity allows us to open up boundaries long reified by linguistic habits and cultural normalizations.

In developing the concept of multiplicities and a plane of immanence in which bodies come together to form different intensities, Deleuze offers the possibility of a new pedagogy of complexity in which teacher and the student are in a rhizomatic relationship that goes beyond the separate individualities that is emphasized by the moderns. It reveals the radical possibilities of new kinds of conjugations unthought

before that are composed of singularities or moments of life. The word individuation as employed here must not be confused with the notion of individuality. As used by Deleuze, individuation refers to traits or attributes that pre-exist the entity and continue into other becomings even after the entity has ceased to exist. Thus an individual is only a bundle of individuations that come together and fall apart under certain circumstances. I explore these ideas at length in chapter 5, but will observe here that such a perspective and the insight it offers is useful for constructing a different and more generative image of ourselves with regard to the formation of multiplicities and alliances that is the focus of this chapter. It also offers new ways of connecting to "border youth" who, as Giroux (2000) has pointed out, anyway reject the modernist world of certainty, and increasingly inhabit what Paul Virilio has called "speed space," seeking other ways of becoming (cited in Giroux 2000; p.180).

Concerned about the despair and indifference in contemporary youth and the ebbing away of "ethical discrimination" and "social responsibility," Giroux above notes: "The challenge for critical educators is to question how a transformative pedagogy might be employed to cancel out the worst dimensions of postmodern[ism]...while appropriating some of its more radical aspects" (p.181). Reading Giroux along with Massumi's (1992) commentary on Deleuze, what is under criticism here is the "consumer/commodity axis of the capitalist relation" that increasingly allows participation in the life of the world only as

consumers (p.133). Massumi contends that although the body's realm of possibility has expanded infinitely, the transformational potential is still, for the most part, subordinated to the axiomatics of capitalist relations. In order to release "postmodern" transformative potentialities from the grip of existing power relations we have to realize and embrace our collectivities that presents an avenue for escape. And this, according to Deleuze, becomes possible when we begin to think in terms of production—the production of *affect*: "For affect is not a personal feeling, nor is it a characteristic; it is the effectuation of a power of the pack that throws the [constituted] self into upheaval and makes it reel," and we cross over into our multiplicities, into becomings that release active passions, we become "sorcerers" (Deleuze and Guattari 1987, pp.240/241).

Observing existing conditions, I catch a momentary glimpse of the affect at The City School. An opening into such a plane is provided by JS, a teacher, who although new to the school, has had several years of grassroots organizing experience in raising "ethnic consciousness" and bringing about awareness of cultural heritage among minority groups:

For me it is passion that holds the things together. That makes the connections. But I need to know that others are in it with me, that

I am not alone in feeling this way. (Interview with JS #2)

Passion helps JS move beyond the personal frame and into a collective field of action. Active passions in Deleuze are what creates expanded

powers of being and affecting; passion, is not subordinated to thought but is a field of becoming through which we form new assemblages.

Desire, or active passion, is the matrix of connectivities, and contains the possibility of taking us beyond our subjectivities. Unlike psychoanalytic space, where desire is a lack, in Deleuze it is the very field of production. This replaces lack by a proliferation of possibilities, especially in a pedagogic encounter, as I explain below.

Observe below the reactions of LS, who sees the lack of academic rigor and equipment in the school as problematic and is frustrated by her own construct of science as a formalistic exercise:

LS: Going over to the science museum what does it achieve...I would not give science credit for it. I'm sure of that.

I: Could it maybe fit in some other way with the rest of the program?

LS: Maybe. But it cannot compensate for competency in specific areas such as science. I don't believe it can.

I: What about emotional growth, would you consider that as part of science education?

LS: No, I don't know how that fits. My frustration is that I find no science equipment. That's another source of tension for me.

Nothing here to show that the school has been up and running for the last eight years. (Interview with LS #2) LS' thinking is representational; she is concerned with the fact that students are not obtaining the science lab experience, but she does not consider the possibility that perhaps the museum might serve as a lab for learning science in unexpected ways. Varela (1992) observes that

Cognitive science is waking up to the full importance of the

realization that perception does not consist in the recovery of a pre-given world, but rather in the perceptual guidance of action in a world that is inseparable from our sensorimotor capacities. (p. 17) Learning, therefore, consists not of representation, but what Varela calls "embodied action." It is to the pedagogic possibilities of embodied action to which LS must be invited to open her mind, instead of being fixated solely upon the recovery of existing knowledge. I argue that such an approach works better in the urban situation and moves away from the notion of lack or deficiency. Deleuze points out that our fixation on deficiency or lack is due to a general Oedipal orientation that prevents our opening up to the forces that lie within the immediate: "In order to harness the active forces that lie embedded within mutant empires of reactivity, [we] must acquire an altered sensibility to deficiency and lack" (Conway 1997, p.82). In my reading, whereas The City School, through its innovative curriculum, has made attempts to mine the urban situation for providing learning opportunities, beginning teachers like LS are conceptually under-prepared for it.

Progress and proof of growth is important for maintaining a sense of orientation in striated space. But when these old coordinates come under suspicion as they increasingly have in our times (Giroux 2000), we need a different metaphor to help us construct alternative paths of becoming that may be more generative like the rhizome. Further, frustrations are also part of the curriculum; they are not extrinsic to our becoming. A new lens can alert LS to the fact that her frustrations are also entry points into a curriculum of affective becoming. For, the rhizome is also connections between intensive states or plateaus of intensities. Frustrations in this view would form what Deleuze calls "sad passions," and have the potential to turn into generative ones as it helps us to change the image of ourselves from entities to multiplicities: it moves us from a transcendent viewpoint to a Deleuzian plane of immanence or becoming. This is further explained in chapter 5. Below is another example of how the allegiance to rigid boundaries brings about frustration in its wake.

Another new teacher AD expresses similar concern for low academic standards:

I feel like I am doing nothing here. I feel like I am wasting my time here. The standard is so low and students do not show any interest in learning at all. Ask me questions, I am here for you. There are only 6 students in the class – so take advantage of this. (Interview with AD #1)

AD sees the "low" standard as a problem of the outside, as an objective thing, and gives it a transcendent meaning beyond the active processes of which he is a part. But where is the "standard," this material abstraction of the level of ignorance? If AD perceives himself as a part of the process he is discursively engaged in, the issue of low standards evaporate. Immanence evokes life, eschewing the notion of lack. Deleuze helps us to change our image of ourselves: from solid entities to processes and composites, currents and intensities that can combine or flow differently.

AD also feels discouraged by what he sees as an unsupportive atmosphere:

AD: This is the most hostile environment that I have come across in all my years of teaching.

I: Can you elaborate on that a little bit?

AD: They don't do any orientation here at all. New people are left to find out things themselves.

I: Is that the only reason for the hostility you feel?

AD: No, there are others. It's hard to put your finger on them. The atmosphere of the place is part of it. Some people here like to think of themselves as really big and go about shouting—"we built this school"; So what? They think that they are the only ones doing work. RS [refers to another teacher] told some visitors that I watch TV! Yes, I watch the news when I finish

teaching. I am not disturbing anyone and what else do I do when I finish teaching? (Interview excerpt)

RS, an older teacher, responds to AD's comments:

One day he said – "well, it is 2:00 pm and I am going to get a haircut"! Sorry, if you are here and you have nothing to do then you should go out and start cultivating some resources. That is why he was hired. (Interview with RS #1).

AD exhibits an 'us-versus-them' angst, a minor power struggle between new teachers and older staff to determine the boundaries of what constitutes teacher's work. In the regular schools this is decided through established mechanisms like a union contract. Although part of the union, The City School has relied more on internal negotiations to determine how the unconventional nature of its curricular demands could be met by the group. The older staff insist that they do not wish to impose their vision on newcomers, but as Cherryholmes (1988) has observed, the search for a negotiated settlement "cannot proceed without normative commitments and power arrangements" (p.91). Here we have a double bind: the senior staff not wanting to exercise authority but wanting newcomers to "voluntarily" see the needs of the place. I suggest that a way out of the double bind can be seen in Deleuzian pragmatics:

There's nothing transcendent, no Unity, Subject, Reason; there are only processes. These processes are at work in concrete multiplicities. It's multiplicities that fill the plane of immanence.

[that] has to be constructed area by area, any given multiplicity is like one area of the plane...As one area links up with another [what emerges is] the world as a patchwork. (Deleuze 1995, p.146-147)

Processes have no subject: "it's raining"; this has been known since the days of Heraclitus. What Deleuze adds to this is that processes are becomings or "nonsubjective individuations" and can enter into other becomings to form a plane of immanence, productions of patchwork. In this new image of ourselves as process or patchwork we can break out of the double bind by entering a different level of description.

Further, AD's "Ask me questions" approach is a symptom of the traditional role of teacher as repository of knowledge. Britzman (1986) has observed:

The view of the teacher as expert also tends to reinforce the image of teacher as autonomous individual. As a possession, knowledge also implies *territorial* rights, which become naturalized by the compartmentalization of curriculum. The cultural myth of teachers as experts, then, contributes to the reification of both knowledge and the knower. (pp.450/451) [italics mine]

'I am the teacher, ask me' is precisely this territorial problem, the problem of boundaries that needs to be deterritorialized in a way that those boundaries are reconfigured. In my own experience in urban schools, the "ask me" approach rarely works. For, teaching and learning

are much more furtive and surreptitious acts than is often acknowledged, and in the representational space of the formal curriculum furtive moves appear ingenuous.

Thus far we have seen how The City School offers new challenges and reveals irregular learning spaces that often result in difficulties for new teachers when they are unable to appeal to the authority of conventional assumptions about teaching and learning. I have suggested that a Deleuzian lens is useful for teachers not only to consider what is going on in those fissures but that such a perspective helps us to loosen the boundaries and assumptions about the identities in which we are often "locked" as Deleuze points out. This is important, for, how we think is closely tied to our notion of who we are. Such a praxis of "destratification" in the way of an apprenticeship of the sign is offered in Chapter 4. In the rest of this chapter I will explore the space of difference that arises in the school that further sheds light on how a Deleuzian praxis might contribute to teacher becoming.

Difference and Repetition

The present is always problematic, multiple, not only because it is the ground for a colossal struggle between different pasts, different lenses, but also because it is a contest between different futures, different desires. It is this multiplicity I have to contend with in my relationship to the school. Every time I walk into The City School, the first thing I notice

about the atmosphere is a certain gruff security. Students look at me in the eye, and most nod or smile, but these are also tempered by a wobbly sense of difference: What the school has not eliminated is a certain productive sense of indeterminacy that comes partly out of the fact that these students spend much of their time in placements and bring those qualitatively different experiences with them into the school throughout the day.

Consequently there seems to be a clearing here, a differential space in which besides the repetitious formal curriculum "issues of allegiance, commitment, destruction, trauma, and community can be taken seriously" (Britzman & Dippo 2000; p.36). In other words, there is space to consider issues that often tend to get censored or elided or reduced by repetition into facile vocabulary and unproblematized assumptions. One teacher, CM, tells me that she has been helping some of the teenage single mothers with day care issues and other kinds of support that are key to their remaining in school. CM denies my suggestion that this was out of a sense of charity, but instead says "it is a building of something in myself" (Fieldnotes 04/12/02). Rhizomes are extensions and entanglements.

The setting of the school, its beginning, and its continued struggle to remain different within a bureaucratic space that attempts to reduce everything to identity bestows on it a certain sense of urgency that is not simply the urgency born of daily business. Instead, it is born of asking

searching questions about curriculum, pedagogy and its relevance to the lives of the people it is meant to serve. At weekly staff meetings, there are always questions, reservations, and contrary opinions about the directions the school is taking. More importantly, student views are actively sought, discussed and taken into consideration in determining curricular directions. In a recent vote on a vacant slot for a course, seniors voted to learn Latin. Some of them thought learning Latin was "cool." Urban kids voting to learn Latin took even staff at the school who are used to unpredictability by surprise. As a result, there is a distinctly nebulous quality, a becoming that is uncertain and has a mitigating effect on the strict boundaries that define teacher and student roles in larger, more impersonal settings where difference gets reduced or forced into identity with its resultant violence.

Deleuze (and Guattari, 1987) claims that dogged identities are the product of an "arborescent model" of thought, a proud, tree model of hierarchic representation that replicates the established order. I am a teacher because the statute book has laid down the model of a teacher and I am a replica of that model. In repetition there is certainty, and since Descartes, certainty has been regarded as a desirable trait of modern thinking. The "arborescent" order functions on the basis of resemblance: on likeness to the model of the good student, or the model of the good teacher, a derivation of the Platonic 'image-copy' or repetition. Its modus operandi is negation: if you are not a good student then you

are a poor student (X = X = not Y). There are clear outlines and categories that one must fit, or fall into an alternative category. Such spaces thickened into strata by repetition demand clear and constant reinforcement of boundaries for the purpose of not losing control, for lines of delineation are also borders that control possibilities of movement.

The relatively fluid space at the school however does not mean that teachers here give up their adult roles and become indistinguishable from adolescents. As MS, a senior teacher, observes: "Some people come in thinking I want to be their friend,' I too went through that phase, a long time ago. But they [students] don't want that, they want you to be the adult...the caring but firm grown-up. They want to feel the boundaries" (Interview with MS #1). So it is much more complex than simply a question of dissolving all boundaries. It is not difference or repetition, but difference and repetition. It is what Deleuze calls the "molar" within the "molecular," or "striated" spaces within "nomad" territory, implying that there are and have got to be regulated spaces within more open territory and one has to pay attention to both because the binary is always breaking down—controlled spaces lose their boundaries at critical moments and open territories become bounded and reified over time.

As I probe and listen, it appears that The City School is groping toward a different order for which it does not yet have a language. It has

the appreciation of difference and leaky spaces in the context of which teachers might profitably embrace a Deleuzian perspective and acquire theoretical power. More importantly, theorizing this attitude, I believe, will help to communicate this better to new teachers.

In some of the teachers' actions at The City School I see the inchoate stirrings of the "nomadic." This is an instance of the category I have called affect in the framework. Many of them go way beyond the call of duty to accommodate students' needs. In Brian Massumi's words "Nomad thought replaces the closed equation of representation (I = I = not you) with an open equation" that might look like: I + you + her +...(Deleuze and Guattari 1987, p.xiii); that is to say, it opens up chains of communication to create open patchworks rather than delimiting boundaries. To give an example from the field notes, one student commented: "What kind of teachers would come together for us like they did when we had to take the proficiency tests...It was like they were taking the tests with us, helping us study, buying food, doing everything else just to get us going" (Fieldnotes 04/19/02). Here I see evidence of a different kind of responsibility functioning and a greater degree of conductivity and communication across boundaries than present in regular schools.

The somewhat open patchwork that I sense here, on which a Deleuzian lens can operate to generate new possibilities, is also a

challenge to the liberal-technocratic vision that rests on the ideology of possessive individualism, that is, on repetition:

The view of society as composed by "possessive" individuals provides a basis for organizing schooling. Attitudes, knowledge, and skills were conceived of as personal property of the individual. The psychology of a possessive individual is incorporated into contemporary curriculum through the use of behavioral objectives...and psychological testing and measurement. Methods of teaching are to enable individuals to develop particular attributes and abilities and to internalize some logical state which they "own" as one would objects or commodities. (Popkewitz 1988, p.86)

The organizing of schooling based on the idea of the possessive individual that emphasizes conservation and resemblance, leads to a strange dilemma for the critical theorist. If one criticizes the notion of possession one risks further dispossession for the already marginalized. If one embraces the dialectical position, one remains wedded to the already staked out territory in which the rules of the game are the master's, that is the dominant group's. Between the Scylla of the cult of possession and Charybdis of taking away possibility of struggle and agency lies the escape route to a nomad territory, where the dialectical opposition possession/poverty is replaced by becoming in a plane of immanence. Struggle for worn out spaces is replaced by production of new spaces.

Here a creative becoming makes up for what might be perceived as a loss of critical leverage. The patchwork is a rhizome of connections in field of immanence where ownership, or "thickening" by repetition, has little meaning other than in transition to combine and recombine with bodies in order to become something else, a movement of difference, and thereby a new politics emerges; a politics of becoming that refuses the master's tools and invents a new plane.

A minor movement in this direction is evidenced in the way in which teachers often break down the boundaries between personal time and work time. MS observes:

Sometimes I have to work during weekends and the evenings because the students are in all kinds of placements. We are not in a position to make those clear distinctions here between personal time and school time, but we try to be fair in load distribution" (Interview with MS #2).

This attitude makes a minor dent in the ideal of possession, the clear boundaries of the mine and the yours. But this can also be oppressive to some as we saw earlier in the chapter, and therefore an open patchwork in the Deleuzian sense wherein all arrangements along with the actors in it are in the process of becoming becomes important.

Connectedness to the multiplicities does not mean the actors become amorphous or lose any of their sense of personal identity. A useful metaphor for thinking about this is the "pack" (Canetti cited in Deleuze & Guattari 1987). Canetti notes that in a pack each member is alone even as they participate closely in the activities of the group: "In the changing constellation of the pack, in its dances and expeditions, he will again and again find himself at its edge. He may be in the center and then, immediately afterwards at the edge again. As the pack forms a ring around the fire...each man's back is naked and exposed to the wilderness" (p.93). This sense of being in the group and yet having one's back exposed is peculiarly present here. Deborah Meier (1995) has observed that it comes partly from the dangers many of them face everyday in order even to get to school and the lived uncertainty of their lives. It is important for new teachers to appreciate the complexity of the lives of some of these young adults whose economies often run without intersecting adult ones in regular schools. Pedagogies are apt to undergo change when a teacher actually comes to terms with the ever shifting horizons in the lives of these young people and the world into which they awaken each day.

MS says, "Every little thing affects the whole school" (interview with MS #2). This recognition that each encounter has consequences for the entire school shows how discrete categories breakdown replaced by a web of connectedness. In striated space or on a State grid, encounters are assumed to take place in isolation with local effects only. But in Deleuzian space each point is connected to all other points in a "rhizomatic" relationship. Such an approach leads to a very different

response to, say, the manner in which disciplinary issues are handled, among other things. There are no detentions or suspensions here, a fact that new teachers often find problematic, nor is there a principal to whom you can send a recalcitrant student. Thus there are openings or beginnings of a rhizomatic or lateral relationships.

As there are no isolated events on this plane; no absolutely bounded sequences; a minor quaver at one corner of the web sends a message through all its whorls and radials. By avoiding the one versus the many—child versus the school—mode of 'State' interactions what is avoided here is the constant threat that is present in rigidly managed climates, or in State spaces: the absolute penalties of transgressions and boundary violations. Threats and punishments are ways of maintaining and reinforcing boundaries, of insisting on separation from entanglement in the first place.

Grassroots Organization

The City School teachers believe that what young people need most, in the kind of school they had created, were "sane adults" in whose presence "students felt safe," who were "willing to listen to them," and with whom they could hold conversations without the feeling of "being judged all the time." I ask DN, one of the teachers, what the term "sane" meant to him in this context. He said, for him it meant "people who were willing to move away from fixed positions" (Interview with DN #1)).

Phil, a fifteen year old, was expelled from his previous school. His story of the events that led to his expulsion is as follows: Phil lived with his grandmother and earned for the two of them working in the evenings after school. Phil fell ill and was absent from school for a week; then his grandmother fell ill too. Being unwell himself, Phil could not work nor could he take care of his sick grandmother. So he took her down to Texas to some relatives, and when he came back to school he found that they had struck his name off most of the classes that were important to him, and wouldn't let him back in. When he protested, one teacher dismissed him saying he was "totally irresponsible." Irresponsible? He, caring for a sick old woman? Enraged, he yelled back and was promptly thrown out. No one was willing to hear his side of the story (Journal entry #14).

State space is also mutilated silence. In this domain one can move only along approved gridded points; all other movements are illegitimate. This was unlikely to happen to him at his present school, Phil asserts, "Here, they listen to you...most of the time" (Fieldnotes 04/17/02).

Flexibility once again becomes visible in a positive way through the lens of the rhizome. The rhizome is contrasted with arborescent systems, that is with roots and trees, that, according to Deleuze, "fix an order" and are thereby restrictive and authoritarian. The image of the tree with its linear hierarchy is present everywhere in Western thought (the tree of

knowledge, the tree of lineage etc.) that denies multiplicity; there is very little lateral movement. Rhizomes, instead, slide laterally, tubers or mosses spread sideways, grow from the edges at any point. Evidence of lines of communication criss-crossing and making possible new becomings are always present here, teachers becoming counselors, students taking charge of their classroom.

Selena and Jennifer, two seniors are offering a semester-long course on Greek mythology. The class is full. They demonstrate a surprising depth of knowledge on the subject. Observing these two students take on the role of the teacher and co-teach gives a sense of the different possibilities that arise when students are involved in the curriculum not merely as recipients but also as organizers. JC says, "this is a *grassroots* organization. We have to be prepared to do different things, do what's necessary" (Fieldnotes 04/19/02). For Deleuze, grass is rhizome, grows through the cracks, and "in-between" the cracks. The grassroots metaphor is therefore strikingly apt.

Developing the metaphor of the rhizome further, in Deleuze these are collective assemblages of enunciation, heteroglossic chains of every kind that bring into play not only different regimes of signs but also states of things of different status. A rhizome "ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to [knowledges] and social struggles." Deleuze explains semiotic chains as tubers "agglomerating very diverse acts, not

only linguistic, but also perceptive, mimetic, gestural, and cognitive" (Deleuze & Guattari 1987, p.7). In other words, a rhizome cuts across boundaries between the discursive and the non-discursive and directly acts upon the micropolitics of the social field.

Also, it is to the rhizome that one can appeal in order to understand a system that tries to function without a center or a clearly identifiable central authority, and with a positive affect in that regard. The City School, with no administrative center that is distinct from the teachers or knowledge workers is of the order of the moss, one that has multiple connections and is held together by the dynamics of its multiplicity of intertwining conductivities, and not by a central arboreal structure. But this can function only through making "ceaseless connections" between people, ideas and materials, and through entanglements of concept, percept, and affect.

Mentoring is part of this rhizomatic dispersion and links back to multiple connections. Asked to identify one key factor that played a role in his renewed interest in academics, Jardine, a senior at the school who had once been a drop-out, said it was the way teachers here mentored him and "were interested in his life." It had little to do with academics directly. It was as if he had suddenly "regained something," a side of him that was missing and had rejoined him. MS observes that "in large urban schools students survive and sometimes even do well, but they do it by shutting out a part of themselves" (Interview with MS #2). That is, MS

seems to suggest, it is only by severing certain pathways and ways of connecting to the world around them, that students are able to remain within the restricted domain where State space puts them. In Deleuzian terms, the rhizomatic multiplicity of ourselves is forced into arboreality by repetition, with the resultant loss of intensity as well as breakdown of communication among people at the school.

Reading Signs

"I am always having to read students' auras," laughs MS (Interview with MS #2). Several things in this utterance are remarkable. First, it is unusual to hear a reference to "auras" in mainstream discourse of schools. Auras are not objectively observable; they are esoteric, uncertain and according to the literature have fuzzy boundaries. Metaphorically, the "aura" that MS attempts to "read" is not only a reference to the occult personality that hides behind the visage but also an acknowledgement of the uncertainty of its boundaries, and a degree of mutability that is inherent in the educational encounter. For, the aura has to be "read," according to MS, which I take to mean interpreted, and does not disclose itself as transparent self presence. The reference to the aura is thus also an indirect acknowledgement of the presence of the absent. It is an important indication of the impossibility of reducing everything to the simplistic grid of techno-managerial space. The value of such a reading is that it leaves room for the student's becoming in the encounter, of the

possibilities of realizing unsuspected movements that striated space excludes in its reinforcing of rigid boundaries.

But "Every rhizome contains lines of segmentarity according to which it is stratified, territorialized, organized...as well as lines of deterritorialization down which it constantly flees" (Deleuze & Guattari 1987; p.9). Elena, who is also a teenage mother, has not fared too well academically. Her placement is at NH Academy, a private school. CM and I talk to her placement mentor who is full of praise for Elena.

She has developed a full schedule for herself here, teaching library skills and tutoring math. But what is remarkable is that she has this strange way of communicating with the girls. We have some middle school girls who give trouble to some teachers. Elena just pulls them aside and talks to them and they listen to her. She has become an advocate for them with their teachers as well.

From a critical angle, it is unclear whether Elena's efforts at enhancing communication between students and teacher by a certain advocacy and informal advising is empowering for the girls or is complicit in further extending the teacher's authority over them. But seen from a Deleuzian perspective, it is not necessary to "clarify" or comprehend Elena's position as either empowering or subordinating, but instead whether the girls find new ways of expressing and communicating, that is, ways of becoming.

(Fieldnotes 04/09/02).

According to Deleuze, liberatory acts and acts of capture go on side by side. There is no dichotomy, only selections says Deleuze. That is to say, although hidden in every rhizome is also the possibility of recapturing centrist movements, "Oedipal resurgences and fascist concretions," we can choose to focus on the deterritorializing aspect being aware at all times of the reterritorializing movement. In terms of the above example, while Elena's acts may be liberatory and hegemonic at the same time, we choose to focus on the creative possibilities while alertly watching for the other movement. New boundaries come up all the time, even as the effort goes on to hold the existing ones open and flexible. A constructivist curriculum may contain in its bosom modernist assumptions even while attempting to escape from it.

Therefore there is no question of forming a "dualist opposition," as Deleuze points out, between unitariness and multiplicity. Trees have rhizome lines, and rhizomes have points of arborescence. "How could," asks Deleuze, "mad particles be produced with anything but a gigantic cyclotron? How could lines of deterritorialization be assignable outside of circuits of territoriality?" (Deleuze & Guattari 1987, p.34). State space and nomad territory, each needs the other for definition and for action. What state philosophy tries to do is to bring under control the unmanageable existence, but in the process of doing so it reifies the reference points, thus reducing existence to a grid. Nomad thought,

which is its outside, can reintroduce multiplicity to free thought from the death grip of gridded existence.

At their placements, some of the students display a singularly different disposition. One student, a surly youth disconnected from academics and at times facing difficulties in school relationships, is a very different person when he enters the elementary classroom where he is placed. The children obviously adore him and he is absorbed in his work with them. Watching him stand there loosely, talking with staff at the placement facility, one notices the emergence of a different person. State space denies this multiplicity by casting people into fixed roles.

Also, what the multiplicity allows is a cross-fertilization between zones that need to be explored more seriously by the teachers at the school than it is at the moment. While the language of the placements intermingle at a certain level with the language of the school, a more substantial cross-use of the different experiences is not often there. For instance, the stories of students' experiences can consciously form a "rhizome" with the rest of the curriculum; these narratives can reach into the very micropolitics of public formation at the school. We form a rhizome with our viruses, says Deleuze that transport genetic material between species, thus making it impossible to draw definite lines between species (Deleuze & Guattari 1987). Here the "genetic material" would be field material available daily once students are trained to be careful observers and biographers, a task that invokes the emphasis on

autobiography in Pinar (1995) and Grumet's (1980) work. Through material drawn from the field and connected to the school curriculum learning becomes cross-fertilized, exchanging material along many lines, as will be clear from the following narratives.

A field visit to the local newspaper office turns out to be instructive in a surprising manner. We sit around, and the editor holds forth on an issue he is bringing out on alternative schools: addressing issues on teenage pregnancy, drug abuse etc. Macy whips around angrily: "Did you hear how he said "teenage mothers"? What's he know about teenage motherhood? I'm a teenage mom and am proud of it. Wouldn't give it up for nothing. I love my baby." With these words, Macy thrusts away the patronizing discourse about teenage pregnancy, a new plateau of intensity emerges showing the poverty of the discourse. I am witnessing a living curriculum. Macy spotting patriarchy, Macy grappling with monolithic patriarchy, Macy resisting with her multiplicity, with her right to be a student + a mother + a teenager +...+.

Talking to AD later on, I realize that he was more focused on what the editor had to say and had not paid attention to what Macy said and the curricular possibilities and connectivities that could emerge out of that experience. AD seemed more focused on the formal aspects of "what the students learned," that is, on *recovering* what was given in the newspaper office, rather than actively seeking the embodied perceptions of students. In the process, he missed what the students had to offer and

the rhizomatic connections that surrounded him. Part of the challenge of an innovative curriculum is to continually turn situations into learning opportunities, and to produce the curriculum in conjunction with the students. That is to say, it urges us to conceive of learning and perception in terms of constructing rhizoid spaces. This means remaining ever vigilant about the production of signs that is going on all around one, and aware of the clash of forces that generate these new regimes of signification.

Conclusion

As I investigated the curricular and learning relationships in the school, it seemed to me that the problem new teachers faced in finding their feet in this fluid environment could be seen as a semiotic problem: of getting away from perceiving the signs of learning as bounded, convergent and a function of representation, towards experimenting with differential possibilities within repetition, and multiple ways of making connections that continually undergo change and reveal unexpected and irregular learning opportunities. I have suggested that a Deleuzian praxis can help teachers constructively to come to terms with the somewhat open and indeterminate spaces in the school that provide new openings for the play of signs.

In the next chapter I discuss ways of taking this deterritorialization or undermining of conventional wisdom further through a semiotic

exercise of getting to experiment with signs in a Deleuzian manner, an exercise I call "apprenticeship of the sign." Umberto Eco (1980) remarks that signs are all we have to orient us in this world. Also signs displace us from the world of representation onto a differential plane. Therefore a lot depends on how we read and experiment with signs, and I claim that investigating the sign reconfigures some of the existing boundaries that have become normalized in the teachers' lifeworld. What follows are some ways in which teachers can rethink the signs that arise in the educational encounter and see themselves not as something outside the production of the sign, that is as something transcendent, but as an entanglement, or as part of the generation of the sign itself. In this way we move from the transcendent plane to one of immanence in which we are always implicated in the signs that we observe. In other words, we realize our productive role in the generation of the sign that can lead to a more active mode of being. To put this in systems theoretic terms, with which Deleuze's philosophy resonates closely, we see learning and perception as "embodied action," or recursive loops in perpetually shifting and changing cognitive structures or becomings that result out of the coupling of the system and the environment, neither of which exists without the other (Varela 1992). These parallels will be helpful in grasping some aspects of what follows next.

Chapter 4

Signs and Nomad Thought

The nomads are the ones who don't move on, they become nomads because they refuse to disappear.

A. Toynbee.

In the previous chapter we saw the manner in which the learning activities and needs of the actors in The City School as well as their identities leaked happily out of the regular and more circumscribed spaces onto irregular territory, as also the difficulty new teachers faced in contending with complexity and indeterminacy that arose in spaces of difference. Observing that difference and divergence and not representational certainty was key to understanding what was going on at The City School, I offered the Deleuzian notion of the rhizome not only as a descriptive tool but also as a way of conceiving identity in terms of becoming; for, who we are, that is, the image we have of ourselves, is inextricably linked to how we act. I argued that rhizomatic thinking would be able to respond more adequately to the flux and indefinitude of urban education in particular.

But a fundamental rethinking or reconceptualizing of the ways in which we construct learning and the image of ourselves also requires a different semiotic exercise; it needs a reexamination of the ways in which we read reality or signs, for all percepts and constructs are made up of signs that arise between perceiver and perceived (Deleuze 1972, Bateson 1991). Deleuze (1972) observes:

Learning is essentially concerned with *signs*. Signs are the object of a temporal apprenticeship, not of an abstract knowledge. To learn is first of all to consider a substance, an object, a being as if they emitted signs... Everything which teaches us something emits signs, every act of learning is an interpretation of signs or hieroglyphs. (p.4)

This seems to evoke a classic hermeneutic position. However, as we shall see, Deleuze takes us in a very different direction and into the sign itself, to enter it, to take apart the hecceities or singularities of its composition,

This chapter, then, sets itself the task of inquiring into the complexity of the sign from a Deleuzian perspective, and offers a certain semiotic experimentation which a practitioner might undertake so as to be able to insinuate her/himself into differential spaces. In order to construct such a conceptual apparatus I offer here a mode of experimentation that I call an apprenticeship of the sign that allows us to uncover the nuances of signs. I argue that for teachers entering into the profession it is important to become apprenticed to the sign; become what Deleuze (1972) calls "Egyptologists" of the signs generated in encounters. Therefore, a substantial part of the chapter is devoted to developing an analytical framework derived from Deleuze's work for studying signs, an endeavor which I have said in the introduction is a

major purpose of the dissertation; in the other part I use data from the case study to throw light on the working of the framework.

The framework developed here is directed at raising complex issues around teacher becoming and teacher education. As Britzman, Dippo et al. (1998) have pointed out, the question of teacher becoming must consider "complex conversations about... conflictive forms of knowledge, culture, identity, community, language..." without which inequalities in education will persist (p.15). For, denial of complexity is the counterpart of denial of heterogeneity. And in a highly differentiated environment to deny complexity is to abet hegemony.

I claim that an apprenticeship such as I suggest here can help teachers open themselves up to the kind of conversation that Britzman has indicated. And this means that teachers have to learn to problematize what they are "seeing" and not fall into the trap of a naïve realism; they have to see themselves as joint *producers* of the sign regimes in which they participate. This switch in the mode of perception is attempted through the apprenticeship, which is very different from "reader" or "interpreter" of signs. The very ontological assumptions and boundaries that construct school and learning undergo a fresh examination once we become apprenticed to the sign differently. And a new sense of looking and listening is urged on us by the realization that we are at all times implicated in the signs that we become part of. This brings about a fresh orientation in the educational encounter where the

opposite end of the encounter, or the 'other' is no longer an absolute other but an inescapable part of the signs that are jointly generated in the encounter.

Referring to Derrida's phrase "Tout Autre est Tout Autre," Doll (1999) says: "The phrase is easily translatable as a truism "every other is every other." But it can mean... Every one is every bit other. The challenge then, ethically and educationally, is to work with this new notion of "otherness," to realize that as humans we are all other generally and locally" (p.89). That is, we are at the same time self and alterity—repetition and difference. To put it differently, no identity is selfcoincident, and most importantly, identity is produced always and only in an encounter. It is the clash of forces between the observer and the observed, each of which is implicated in the production of the other, that gives rise to the sensible, the sign. And, it is the sign that we must learn to engage in this new way, that is with the awareness of co-production, if we are to respond to the challenge of becoming aware that we are both self and other, difference and repetition. No longer is it possible to believe that the signs—the students that we face, the curriculum that is handed down to us, the concepts and language that we use—are independent of us. In this manner we "enter" the sign, as it were, become implicated in it.

This complexifies the way we observe and react to things, and brings about a moment of diffidence, of creative hesitancy, between observation and recognition, producing a murmur or a "creative stammering," to use a Deleuzian concept (Deleuze & Guattari 1987, p.98). For no longer is the sign entirely outside of us. I present an excerpt from the case:

I: On quite a few occasions I have heard you refer to having to read students' auras. Can you clarify it a little for me what you mean by this process?

MS: Well, I don't mean anything very esoteric. It is a sort of intuitive grasp of symptoms they show.

I: Are these symptoms entirely generated by the student or are these subjective as well?

MS: I am not sure I understand. Do you mean whether I am imagining it?

I: No. I mean do you see yourself only as a passive receptor of these symptoms?

MS: No, I think a lot of me comes into play, my experience and so on, so in that sense it is subjective. (Interview with MS #2)

The grouping of symptoms or signs is a creative act, something that happens between the student and the teacher. An explicit realization of this creative process, I claim, changes our habits of thought and the construction of relations, we become every bit other.

The creative moment of hesitancy or stammering brought about by the realization that we are implicated in the signs we experience is a minor but important surge of destratification; it opens up a space for moving away from repetition and toward a careful experimentation with signs. It helps us set aside our habitual, everyday mode of apprehending reality, and we begin to read signs as if in a "foreign language" (Deleuze 1995, p.133), which is the breaching of the old boundaries and divisions producing minor disorientations and dissident flows in an otherwise repetitious reality. I argue that the reorientation in thought's relation to signs in terms of a "foreign language" is facilitated by an apprenticeship of the sign. In the following pages I aim to show what that involves and develop a framework for such an apprenticeship.

Apprenticeship of the Sign

It will be necessary, before going on any further, to dwell for a moment on what I mean by the sign. One way to talk about signs is to say they are aggregates of differences by which a perceiving organism is able to orient itself. Bateson (1991) observes that the key question at any given moment of human life, or probably any life, is, "What's happening?" In an effort to respond to this existential question the organism encounters differences that constitute information. Broadly speaking, then, a sign is anything that brings about a perception of change, difference, or information. From a systems theory perspective it is a difference that makes a difference (Bateson 1991).

But to Deleuze, signs are the result of a clash of forces. Therefore Deleuze looks at the processes that occupy the sign itself:

A phenomenon is a sign, a symptom which finds its meaning in an existing force. The whole of philosophy is a symptomatology, and a semiology...

The sign in this view is therefore simply a vehicle of force, it is an arena for the struggle of forces for possession and it is in this sense I will use it here. The same object, phenomenon or sign "changes sense depending on the force which appropriates it" (Deleuze1983, p.3) and therefore my focus will be on the becoming of the sign, on the forces that appropriate it, rather than on signification; that is, on construction rather than recognition. Therefore, to read signs is to stutter in a foreign language, to construct a language of difference.

The plane of representation cuts off the becoming of multiplicities which is a mutant space or a plane of difference, that is to say, it hinders our understanding of the multiplicity of forces that occupy a sign at any moment because the drive is toward recognition through resemblance.

The Deleuzian attempt is to reconstruct the sign, to enter the sign itself and *become* with the sign in an immanent fashion, situated in the plane of the sign. To recount our major purpose, it is the formulation of certain conceptual tools for ways of looking, thinking, and experimenting that loosens the grip of existing boundaries and categories. Ceaseless

problematization of signs is one way to prevent boundaries from closing in on us.

To attempt a praxiological analysis therefore, or to serve what Deleuze (1972) calls an "apprenticeship of the sign," I will offer next a four-part analytical frame derived from Deleuze's work and illustrate its working through examples from the case study. "Experiment," says Deleuze to the apprentice, "don't signify and interpret! Find your own places, territorialities, deterritorializations, regime, lines of flight! Semiotize yourself instead of rooting around in your prefab childhood" (Deleuze and Guattari 1987, p.139). To semiotize ourselves is to ride the differential of the sign and recreate ourselves, a fashioning of the self after Foucault (1994), a practice of freedom that alters our sensibilities. Following are the components of the framework that I propose as an aid to thinking and experimenting on sign regimes that bring about a change in our relationship to signs and help us to be situated at the level of the signs themselves without seeking a transcendental viewpoint: 1. The Generative; 2. The Transformational; 3. The Diagrammatic; and 4. The Vacant. I will explain each of these components below.

1. The Generative. The generative element shows "how a form of expression located on the language stratum appeals to several combined regimes" (Deleuze and Guattari 1987, p.145). That is, in apprehending signs, the generative factor involves an awareness of the different regimes and orders of signs that come into play in any situation. It alerts us to

what Deleuze calls "the points of subjectivation" (Deleuze and Parnet 1987, p.114), that is, where signs begin to coagulate toward specific and dominant significations. To give an example, the notion of "care" in current educational literature is a complex mix of different regimes of signs—essentialist, liberal, black feminist, etc.—that try to give it particular signification. But in actual practice, care remains an uncertain heterogeneous flux with continuous variation even within each subconversation. This shows how signs coagulate toward specific meanings. Let us look at a very different example next— Thanksgiving. It has a powerful majoritarian cohesive signification for White America, whereas for Native Americans it is a day of mourning and of loss. To see the polyvocality and the multiplicity of the event is a first step away from being trapped in dominant significations that prevent new ways of looking. This does not mean replacing the majoritarian view with the Indigenous People's view. It means engaging with the term in its multiplicity of meaning. It is not simply a question of decentering of meaning, but the associated "prefab" constructions of the self that are washed away in the process that opens the door to possible new orientations. It is important to clarify that sign regimes are not to be confused with language. Instead, they are "fluxes of expression and fluxes of content" and "language is never the only flux of expression" (Deleuze and Parnet 1987, p.117). Therefore language is only one aspect of assemblages of enunciation. For Deleuze, signs have as much to do

with the extra-textual as with text. It is through careful attention to the sign and a persistent awareness of the generative factor that we begin to lose the sense of reality as concrete and given.

2. The Transformational. This element or function shows how one regime of signs gets translated into another, that is, with what "transformations, residues, variations and innovations" change becomes possible. It would show "not simply how semiotics mix, but how new semiotics are detached and produced, and how they inspire new assemblages" and mutants (Deleuze and Parnet 1987, p.114). Awareness of transformation or mutation show us how reality is produced out of mutating sign regimes. For example,

We may ask when statements of the Bolshevik type first appeared, and how Leninism, at the time of the break with the social democrats, effected a veritable transformation that created an original semiotic...In an exemplary study, Jean-Pierre Faye did a detailed analysis of the transformations that produced Nazism, viewed as a system of new statements in a social field. (Deleuze and Guattari 1987, p.139)

It is crucial for the apprentice to become aware of these births and transformations for they constantly lead us to view how new regimes emerge from old ones, and what residues they leave behind. These residues no less than the emergent regimes define the boundaries of what we consider as reality.

In studying transformations, it is useful to make distinctions between several kinds. Transformations that take sign regimes into a "presignifying" zone, that is, where the privileged status of language is no longer assured, are called analogic by Deleuze. An example from the case study is MS' evocation and tracing of auras which have an "extra-textual" aspect. Second, transformations that take signs into a "signifying" zone, that is, where the signifier dominates and there is uniformity of enunciation and expression, are called symbolic. An example is LS' insistence on the formal way of doing science seen in the previous chapter. Third, transformations that take sign regimes into a "countersignifying" zone, that is, into an oppositional frame are called strategic. An example is Macy's rejection of the editor's point of view that we saw in the previous chapter. And finally, transformations that take semiotics into a "postsignifying" zone, that is, into mimicking consciousness itself, like the experience of E in the next chapter where she cannot name her feelings anymore, are referred to as mimetic (Deleuze and Guattari 1987, pp.135-136). Close attention to these four aspects, the analogic, the symbolic, the strategic, and the mimetic together show the constant becoming and unbecoming of sign regimes from moment to moment, and help us to access differential spaces by moving away from identitarian frames of thinking.

3. The Diagrammatic or Pragmatic. Transformations that "blow apart semiotic systems" and bring about large scale deterritorialization

are diagrammatic (Deleuze and Guattari 1987, p.136). In other words, on the diagrammatic plane the regime of signs collapse and consequently there is a freedom from signification, momentarily. The separation between perceiver and perceived or experiencer and experience is momentarily lost, the dualism between cogito and consciousness is eroded. This plane of destratification is also called the plane of immanence by Deleuze. Now, how does this occur?

Events or phenomena, including ourselves, according to Deleuze, are multiplicities composed of bundles of unformed traits or abstract lines of possible trajectories that have no name. The diagrammatic component consists in extracting from regimes of signs traits that are capable of being combined with one another to form new matter-sign assemblages or multiplicities that is the basis of a creative moment. In other words, the diagrammatic function tips us over momentarily onto a plane of immanence from which we emerge with new combinations. The first step to freeing the unformed trait is to find what Deleuze calls secret lines of disorientation; we have to find the breaks in our rigid subjectivations through awareness of what Deleuze calls "haecceities" unique moments of rupture in our apparent continuity; singularities that arise when in moments of crisis feelings break down to reveal fields of flux that have no particular name, alerting us to the tiny cracks in our postures. A further discussion of this follows in Chapter 5.

Here, I will add that observation, insight, art, literature, scientific breakthroughs, existential moments, critical experiences, all accomplish such moments of deterritorialization. Through these micromovements, that is, with the aid of these tiny flows, we move toward an anonymity that is the beginning of a subconversation within the micro-politics of larger discourses. Thus, underneath the vast movements of regulated discourse that correspond to the overt social attitudes and positions of each of us, we come upon uncertain terrain, an indeterminate inbetween-ness of sensations, feelings, changes and becomings that cannot be forced into any category; we find a gap, an impossible question, an aporia through which to escape to new becomings. And as knowledge and curriculum cannot escape the flux and indeterminacy of this new terrain upon which we find ourselves (Ricouer 1985), we begin to see and create new curricular opportunities.

The usual thing is to walk past such moments either ignoring them or seeing them as aberrations in our repetitive continuities. But once alerted to the creative potentialities of difference, or the possibilities of becoming, we begin to seek out these haecceities, and study these unique moments of becoming that are ever forming and reforming.

Nurturing these inaudible murmurs opens a crack through which life leaks out on to a nomadic terrain, and we learn to redistribute ourselves in different ways; the traits freed from the limitations and boundaries of

a coherent subjectivity can then function in conjunction with other traits to form multiplicities.

4. The Vacant. Lastly, the apprentice must also know how to recognize what Deleuze calls the "worldly sign." The "worldly sign" is the vacant or empty sign, stereotypical and vacuous. It is the product of repetition. It invents the stereotype and attempts to replace or "stand in" for action and thought. It repeats, and "anticipates action as it does thought, annuls thought as it does action." Although empty, these signs are everywhere, and Deleuze (1972) says that the apprenticeship would be incomplete "if it did not pass through them" (p.7). Pedagogically signs that typecast the poor student as incapable, that see political resistance or dissent as intransigence, and differing abilities as failure, replace thought and action with empty vacuity. Nevertheless, to wake up fully to the sign, the apprentice must live through these vacant signs as well and be aware that s/he is capable of producing the worldly sign which incapacitates.

To observe how the worldly signs—"inner city," "Hispanic," "multicultural," to give a few examples—operate in education, and to see how these reify categories through repetition, is crucial for the beginning teacher. Teachers must seek these out and discover together with the learner how these empty signs anticipate thought and action by staking out the ground, propel the observer toward certain overarching modes, and thereby prevent the arising of multiplicities. The thing to observe

though is that the worldly sign itself is not the stereotype; it *invents* the stereotype. It has other potentialities or ways of becoming, which is a pointer that any sign can begin to function like a worldly sign. Therefore one must enter its plane of becoming in order to become familiar with how it acts. In other words, while criticism is possible from the outside, in a Deleuzian perspective one must in some sense *become* the empty sign in order to perceive what it does. Another cautionary for the apprentice of the sign is that s/he is capable of slipping into the worldly sign at any time. In other words, without constant watchfulness, a "deterritorialized" sign can quickly become reterritorialized again.

Working on the above components allows us to see how "abstract diagrams" actually operate in concrete assemblages. Abstract diagrams are maps of the "line of flight" of each group of signs or assemblages that can be explicated with the help of the framework as we shall soon see in our analysis of the data. The dominant features of assemblages at all times are difference and repetition; they may sometimes obstruct new possibilities and other times liberate. A map of the different becoming of signs, different lines of flight at each moment makes a diagram.

Awareness of the above *is* the nomadic territory in which the apprentice becomes located. The relentless examination of signs and our relationship to them opens up minor fissures, cracks, fault lines and gaps through which fresh orientations and new imaginings become possible. The apprenticeship therefore leads to what Deleuze and

Guattari (1987) have called "schizoanalysis," referring to the possibility of minor schisis or fissure in our normal flows (p.146). Minor here does not mean unimportant, but not readily discernible. Small changes or dissident flows may begin as a result of schizoanalysis, and minor flows of disorientation have the possibility of changing the habitus (Bourdieu 1990) of thought from relying on representation and recognition to difference and experimentation. The four components of the praxis can generate a new image of ourselves as assemblages or compositions that can be recomposed at any time.

Britzman and Dippo (1998) have observed that the conventional approach to curriculum is to get teachers to move toward a more certain ground, toward more rigid planes or "segmentarities," through higher requirements, testing, certification and so on. The teacher preparation and professionalization literature and the standards movement extol the objective side of teacher education. Being concerned with regulated spaces they mostly do not take into account irregular becomings, the actual starts and stops, the faltering, the errors and accidents, desires and other complexities that constitute learning. In contrast to the "segmentarities" or stratifications assumed by conventional teacher education as pointed out by Britzman (1998), Hargreaves (1994) and others, a Deleuzian analysis reveals fields of indefinitude and flux that underlie events and identities, mixing in new compositions, becoming that are filled with learning and educational opportunities. Ignoring

becoming, ignoring moments of deterritorializing leads to great contradiction and to impotence, since what is ignored is precisely what we need to get people interested in education: a sense of becoming that is not merely a signifier on a grade sheet, but something palpable.

Case Analysis

Next we will look at an example from the case study to see how the Deleuzian analysis operates. Following is an excerpt from the fieldnotes:

This is a Friday seminar on journalism; the students are working on the school paper. All around me are signs of different kinds: linguistic, photographic, artistic, all being processed toward a final articulation. Some of the students are working on PCs editing their pieces. According to the teacher, Carla has been uncooperative for some time, and her work has suffered. She is sitting in one corner frowning at some sketches.

Teacher: Carla, these cartoons of yours, you'll have to explain to me what they mean.

Carla: I don't know. Cartoons don't have to mean anything.

Teacher: Probably 'mean' is not the right word. What do they indicate? What do they direct the reader at?

Carla: [Pointing to a Calvin and Hobbes strip] What's this one mean here...a child and a stuffed toy?

Teacher: Now just a moment. You said "a stuffed toy." Is that just a

stuffed toy to Calvin?

Carla: I don't know. Well, yes and no. I mean, He knows it's a stuffed toy...

Teacher: Yes?

Carla: He's also talking to him, and pretending it is talking back at him, so in some ways it's real to him I guess.

Teacher: So there are already two viewpoints, right?

Carla: How does it make a difference? It's all in the author's head anyway.

Teacher: But animals do communicate. Children talk to animals all the time.

Carla: Only children and people who are screwed up.

Teacher: But you do see the possibility of at least two perspectives? Why's that important here?

Carla: Yes...okay, it's like...there are different ways of looking at something.

Teacher: No, not looking at something. But they are different things depending on how you look. So now let's look at your pieces. What are you indicating here?

The discussion continues in an uneasy fashion with Carla participating reluctantly and becoming increasingly fidgety.

(Fieldnotes # 15)

As I read the situation, the teacher saw Carla's attitude as a case of a disengaged student, going through the motions of school reluctantly. Positions of oppositionality and conflict have been theorized by contemporary curriculum theorists such as Deborah Britzman and Henry Giroux among others. As a contrastive device I will briefly allude to the positions of the two theorists mentioned above in order to situate my analysis.

In her recent work in curriculum studies, Britzman (1998) has cast her arguments in terms of a Freudian ontology and epistemology, and works with the psychoanalytic assumption that education is necessarily an interference with the various unconscious desires of a child which give rise to fundamental conflicts not only between the learner and the teacher, but within the learner herself. Britzman (1998) observes:

At the heart of psychoanalytic work is an ethical call to consider the complexity, conflicts, and plays of psyche and history. These are the conflicts—Eros and Thanatos, love and aggression—that education seems to place elsewhere. And these forces seem to come back to education as interruptions, as unruly students, as irrelevant questions, and as controversial knowledge in need of containment...The problem is that...How might educators begin to complicate not just the difficult knowledge on the outside but also the response to the difficult knowledge within—that other war? (p.133).

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That "other war" Britzman refers to is the Freudian theatre of the unconscious and its battle with the ego. The oversimplified modernist curriculum remains in denial of these complex dramas, and results in placing the difficult questions of life elsewhere, outside the realm of education. But these forces, so carefully kept out, come back to haunt the teacher in the classroom. They return in the form of interruptions, disengagement, and classroom battles giving rise to feelings of oppression and irrelevance in the student and to a sense of hopelessness and defeat in the teacher.

Thus far I go along with Britzman's position, but by tying her analysis to the twin forces of Eros and Thanatos of Freudian theory Britzman directs attention to the psychological aspect of the individual rather than toward the possibilities arising out of desire in the learning encounter. Deleuze (1995) iterates his position with respect to Freud:

What we're saying is that Freud at once discovers desire as libido, as productive desire, [but] is constantly forcing the libido back into a domestic representation within the Oedipus complex. (p.16)

The Oedipal theater rests within the individual unconscious, and therefore Carla's "oppositionality" in this framework must be seen as arising from the repressive mechanism of the Freudian position. But from a Deleuzian viewpoint Carla's indifference or hostility must be engaged with as an instance of the in-between, it takes place in an

encounter, and it is precisely this encounter which is the theater of production that must be theorized and not the individual unconscious.

I would like to examine the above data from yet another perspective before I proceed to the Deleuzian analysis with regard to this case, this time from the critical perspective of Henry Giroux, a curriculum theorist who may be seen as occupying a sort of border land between critical theory and postmodernism. Giroux is a significant commentator on contemporary urban youth culture, especially what he calls "border youth," and so is most pertinent in this case. Giroux (2000) has pointed out the "fractured condition" of the new generation of youth, as well as those who attempt to educate them, who are caught "between the borders of a modernist world of certainty and order, and a postmodern world of hybridized entities, electronic technologies and local cultural practices" (p.176). In this shifting context, Giroux advocates a critical appropriation of postmodern pedagogic practices and a strategic engagement with modernism for a transformative political project in education.

Criticizing the "racially coded cultural legacy" of modernist schooling which valorizes the experiences of the middle class, Giroux (2000) notes:

The modernist nature of public schooling is evident in the refusal of educators to incorporate popular culture into the curricula or to take into account the...massively new socializing contexts for

contemporary youth. (p.178)

The fact that education has not been able to come to terms with popular culture and has often deliberately overlooked it is an important point in understanding the coolness of youth toward schools, and their view of them as hostile places.

Given the gap between the official culture of schools and that of youth who inhabit them, it is possible to see Carla's cartoons (apples talking to each other as they are being baked) as a sign of popular culture and her mood as resistance. Her inability or unwillingness to explain her work can be seen in the light of a refusal to participate in the overt culture of the school, and an air that seems to say, "Oh! What's the use. You wouldn't get it anyway even if I told you." Writing about the increasing alienation of dislocated youth Giroux (2000) argues passionately about the need to rethink the entire curriculum of schools that take into account the "cultural transformation" of schools that has occurred in recent times due to "massively new socializing contexts" (p.178) that includes change in demographics and the impact of the information age.

But Giroux's critique, like those of some other critical theorists, while important and incisive, rarely gets down to the question of practice. In other words, while Giroux offers a powerful "language of critique," what is often missing is a micro-analysis of the "language of possibility," to use Giroux's own terms. Hlebowitsh (2000) has remarked that there is

an explicit admission of this among some critical theorists themselves:

"Giroux and Aronowitz have noted that the scholarship inspired by
critical theory has a pessimistic character that tends to default on the
commitment to curricular possibilities," further, he also cites Giroux's
observation that "radicals need to develop theories of practice rather than
theories for practice" (p.91).

The above lacuna is met to a large extent by the Deleuzian approach, a thoroughgoing pragmatist one that is concerned with experimentation at the level of practice. To move to the Deleuzian perspective then, the first thing for the apprentice to note is that the pedagogic encounter itself is a production of which teacher/apprentice is a co-producer. Several regimes of signs enter into the production. This may be seen as the generative component of the framework I developed earlier: ...+ Teacher + Carla + Cartoon + Classroom +...is the matrix of the signs or the theater of production. Multiple regimes of signs converge in this production or subjectivation of the cartoon. In other words, the question of cartoons and the rest is itself within the production of signs and the teacher as a participant is involved in their generation. This shifts attention from the macro-perspective of subjects and interpretations to the micro-production of signs—that is, to the gestures, language, semantics, speech acts, color, support, lines, body movements, random thoughts, irritation, irregular breathing, and to all other signs that arise in the tri-partite encounter consisting of teacher, student and

cartoon, each of the multiplicities bringing forth a pedagogical possibility opened up when we shift our attention to the micro-movements and becomings of the signs.

Admittedly, it takes a considerable effort of thought to get away from the phenomenological subject, that is, to give up the transcendental viewpoint of the teacher and enter into a destratified plane wherein one has the same status as the signs themselves. But it becomes attractive once we see the pedagogical opportunities in doing so. The semiotization makes us lose the hard boundaries of our identities and the image of ourselves which makes a considerable difference to the encounter. The entire scenario of Carla, the cartoons, her uncooperative mood are now no longer wholly outside or independent of the teacher and is in a sense a production in which the teacher, who is the other end of the encounter, is inextricably implicated. As we "semiotize" ourselves, our reactions undergo a minor deterritorialization. This is the first step toward a Deleuzian empiricism, and the construction of the plane of immanence. It is also a first step toward establishing a more creative relationship with the 'outside,' as well as a way of making fuzzy one's notion of boundaries.

The second component of the analysis is the transformational.

Looking at the conversation, it is interesting to note that throughout the piece neither teacher nor student mention humor, which is what cartoons actually generate. They *produce* humor. They collapse different orders of concepts, or what Bateson (1991) has called "logical types" in a

sudden precipitous move that brings about laughter. This is the transformational aspect, when sign regimes undergo change or mutate to produce new signs, new matter-thought conglomerates. Observation of these processes makes visible formations of micro-identities (Maturana and Varela 1998), and makes our identities and boundaries more open and fluid. Also, the teacher's idea that cartoons must mean something undergoes a change once attention moves from meaning to experimentation and production of humor. Thus there is transformation of sign regimes. In the play of difference and repetition, differences repeat, but in the act of repetition become different. The transformational aspect helps us realize that we are constantly being produced even as we produce signs because there is no resting place; signs are constantly undergoing transformation, being taken over by new forces; new connectivities alter the significance of a sign, no longer signifying today what it signaled yesterday. This is important in the pedagogic relation—it foregrounds the continual minor transformations going on in our relationship to the distinctions with which we orient ourselves. Such reorientation, even if they be minor, result in a changed relationship of ourselves to ourselves, to knowledge, and to the student, and I argue that a different sensibility comes into play as a result of becoming aware of the flux that underlies the sign. It is an important step in the construction of the plane of immanence, where no firm line can be drawn between the experiencer and experience or observer and observed.

The third factor in the apprenticeship is the diagrammatic. In the above example, humor as a deterritorializing, carnivalesque factor (Bakhtin 1984) brings us to the diagrammatic or pragmatic part of our analysis. We have seen that signs contain singularities, haecceities, moments of becoming that begin prior to and spill beyond entities or subjectivities. Humor or laughter as packets of sensation spill out of the boundaries of personhood and are the reason why they are important in creating free spaces that are indeterminate, unregulated, even if momentarily, before being taken over by other forces.

These "free spaces" by loosening older arrangements make room for new sensations to arise (Rajchman 1998). In the case of Carla's cartoons, as a teacher one would have to refer to the production of humor, to the "anorganic vitality" of laughter which develops through minor crises in the sensory system. It is at this point, when teacher and student discover together their respective sensations in viewing, or otherwise reacting to a sign, that an infinitesimal moment of deterritorialization occurs. For "sensations are prior to forms and representations" (Rajchman 1998, p.7), and provide a space for embodied action or a becoming. Teacher and student occupy, if only for the briefest of intervals, an indeterminate space. As we have noted earlier, the small interval is crucial for Deleuzian analysis, and in this case the space of the sensation construct becomes the smallest interval in which differential movements can be discerned. Varela (1992) argues that, " the

temporal hinges that articulate enaction are rooted in the number of alternative microworlds that are activated in every situation. These alternatives are the source of both common sense and creativity in cognition" (pp.17/18). The alternative microworlds thus generated become sources of new curricular possibilities. To put it differently, since the sensation in the small interval is indeterminate and emergent, other configurations are always possible; that is, Carla's reactions may find new architectures in which to express themselves. Thus affects become ways of generating new spaces that spin out of the cracks provided by the small interval.

And finally there is the fourth component of the analysis—what I have called the vacant. The vacant sign is the worldly sign that reterritorializes, that is, reduces signs to clichés and stereotypes. In this case the teacher struggles with the student over the meaning of cartoons and thereby reifies it. The teacher remains with the representationalist ideas of what cartoons are rather than what they do, and thereby hollows out the sign eliminating the possibilities of becoming with the sign and forming alternative microworlds.

Next I will employ the framework of the analysis on another piece of data from the case study. This time I will turn the Deleuzian lens on a lengthy conversation I have with JS, a teacher.

I: The other day you mentioned some difficulties you were having with one group of students. Could we discuss that a little bit?

JS: Yes. I was doing some slave narratives and they seemed not to be interested in it at all.

I: Do you feel they should be interested?

JS: Well, I certainly think these pieces are relevant. They are powerful and moving. It is also our history.

I: What themes were you thinking of, precisely?

JS: Well, there are issues of power and domination, subjection and dehumanization...

I: But on what plane are you casting them? I mean, there are the students, there is yourself, and there are these narratives, right? It seems to me that something else must happen for us to take our place within these narratives.

JS: You mean, I have to connect it to the students' experiences, is that what you are saying?

I: Not exactly. But let's see if I can get this right. What is the sensation one might have when reading about extreme domination or dehumanization?

JS: Oh! Fear, hopelessness...and also anger.

I: Okay. Let's take fear for the moment. Fear has a way of removing the barriers.

JS: What barriers are you talking about?

I: In the moment of fear there's not your fear or my fear, right?

There's fear as an impersonal movement. Fear is just fear, the

animal's fear is the same as my fear. The your and the mine come later.

JS: I am not sure I get this, but go on.

I: I am basing this on my observation that fear is nothing special to me. Just like pain: neuromuscular discomfort. Therefore, I say we can construct the map of fear together. That's what I meant by taking our place in it. We can do the same for hopelessness or whatever. These traits can issue from...

JS: You mean like separate threads but coming together. Sounds weird. But I can see vaguely what you mean.

I: Right, functioning together in a way that is neither you nor me nor anybody else, but at the same time all of us because we are made of these traits...

JS: And you think we can do this with the students?" [Laughs]

I: I think we can, we have to be careful with this though. We have
to talk about it in a very careful way. (Interview with JS #2)

The above is more a dialogue than an interview; here I am trying to test Deleuzian ideas with the teachers. Fear as an abstract diagrammatic deterritorializes, releases us from strata I claim, forms a rhizome with others' fears. There is a becoming in fear or in any other trait that flees along virtual lines that have nothing to do with historical circumstances. It has to do with becoming. Capture it, enter into it and we begin to develop a plane of immanence that ultimately changes the nature of fear

itself, becoming something else. The same thing happens with desire. For Deleuze, desire precedes being, and is therefore immediately practical and political. It is practical precisely because it can actively participate in the drawing of the traits before the terms and relations are set, that is, before the boundaries of self and other are drawn. Fear and desire, reward and punishment have been used in the conventional curriculum as instruments of territorialization, that is, for emphasizing repetition and the thickening of strata through repetition which become authority structures. In a Deleuzian analysis, the same are now overturned to be used as tools of deterritorialization, as instruments of flight, of becoming.

To proceed with our analysis, let us look at the first component of our framework, the generative. The sign regime of the slave narratives in our example above was ostensibly bringing into play another set of signs seen by the teacher as disinterest and apathy—fluxes of expression and fluxes of content. But the important thing is to see the different regimes as mutually productive and playing into each other. That is, we do not look to see how to overcome the signs of apathy. Instead, we let the students' reactions or sign regimes flow into the theater of production. In other words, to the narratives of enslavement the teacher can invite the students to add their own feelings of being enslaved—to the teacher, the topic, the curriculum, or any other aspect—and dramatize the situation. Dramatizing the situation here would mean subjectivizing the feelings in different ways and connecting it to the topic of discussion. This way there

is a cross-fertilization between two regimes of signs that may give rise to yet others. Of course, the students may refuse to participate. But refusal brings forth an equally interesting regime of signs, evoking a new trope of resistance which is the transformational aspect—when signs mutate or undergo transformation and a new regime is born. The important thing in this is to look at all the signs as production, and keep oneself at the level of the sign.

Next we must consider the diagrammatic component. In the conversation above, I discuss with JS the possibility of detaching traits like fear or pain or helplessness and the possibility of constructing a map or an abstract diagram of traits or microworlds issuing from different bodies whereby our separate boundaries might undergo a minor destratification. In other words, experimentation with the generational and transformational aspects of signs can bring us to a point where we can see the possibility of traits emerging from under signs and combining to form new multiplicities. This changes the image we have of ourselves as fixed entities, as there is the possibility of a sudden crossing of boundaries when the traits become deterritorialized, that is released from the composites or aggregates. This dissident flow or a minor current of disorientation unsettles our subjectivities and a rhizomatic moment can emerge. The rhizoid spaces thus generated create alternative microworlds for curricular exploration and is an enactment of a praxis that brings about embodied action rather than representation.

In order to construct the diagrammatic, we have to pay attention to the smallest interval of interaction, in order that we may work our way past the dominant significations. We begin by paying attentions to the small differences, inconsistencies, and gaps in our feelings, thoughts and attitudes. In other words, subversion must be carried out at micro levels. In the small interval, Deleuze remarks:

We witness a transformation of substances, a dissolution of forms, a passage to the limit or flight from contours in favor of fluid forces or flows such that a body or a word does not end in a precise point. We witness the incorporeal power of that intense matter, the material power of that language. (Deleuze & Guattari 1987, p.129).

It is the small interval where incorporeal transformations occur, where catastrophic changes take place, where according to Varela (1992) new microidentities emerge. An incorporeal transformation is thus "a passage to the limit" where change occurs like at the limit in differential calculus wherein lies the power of that notion. We cease to end at a point or in the vicinity of a pre-given representational outline. In terms of practice we observe and practice small changes in daily interaction, each observation of flux and indeterminacy constructs new awareness of embodied action in place of representationalist thought that leads to further changes in the ways we think and act. Bring about change in homeopathic doses, says Deleuze, not in grand sweeping reforms. It means, in order to deterritorialize our boundaries and subjectivities we have to observe the

smallest variations in tone, language, gesture, thought and movement that we produce in encounters. The more minute the observations the more effective it is. It is in the small interval that our traits and singularities begin to detach themselves from the composites, and we become aware of our collectivities.

Lastly, we have to consider the vacant component of the apprenticeship, or the empty sign. The sign regime of the slave narrative that JS brings into play can quickly turn into a cliché or acquire stereotypical features unless an investigation into the micropolitics of desire, subjection and resistance makes each sign also into an action, a becoming in the lives of the actors that allows it to escape repetition. At the same time the desire to enslave or be enslaved must be part of the forces that occupy the above signs and therefore must be kept under close scrutiny. The purpose of the whole exercise, it is useful to remind ourselves, is to establish a different relationship with signs that allow fresh pedagogic possibilities, to enter the sign itself, and unleash a becoming that is a joint production in the learning encounter. We become not reflective practitioners but creative ones.

This then is nomadic territory, populated by fluxes, flows, densities, and intensities, rather than things and outlines where new pedagogic possibilities arise as a result of attaining the limit in the boundary constructs and the consequent collapse of dominant significations. We have to be cautious though, for as Deleuze points out,

stratification and destratification follow each other, and there is no such thing as being permanently situated in the nomadic, as we see below.

Some Methodological Precautions

In the following section I will explain certain additional methodological precautions that we must observe in the apprenticeship and in creating a logic of multiplicities, that is, a logic of difference.

First, encounters continually generate signs which coagulate or decompose in multiple ways. To make sense of these continuous streams of signs is to invent a language. Deleuze has observed that there are many languages within a language. The reference here is not to a langue/parole distinction, nor is it an allusion to different registers or dialects within a language. Here Deleuze is asking us to take responsibility for creating our own minor languages within major ones, languages of becoming without which we fall prey to the worldly sign. This acutely brings out the ethical responsibility in an encounter.

The second thing one must note is that deterritorialization and reterritorialization follow closely on each other's heels. To give an example, let us look at some excerpts from Maxine Greene's *Teacher as Stranger*. Greene admits the impossibility of establishing fixed criteria for interpreting cultural signs, but immediately afterwards declares,

Nevertheless nostalgia remains, and it is significant too. When a person thinks, for example, of *The Iliad*, with its heroic seekers

after excellence...or of Shakespeare's plays, the magnitude of these works make them seem truer, more intrinsically artistic than, say, Samuel Beckett's Waiting for Godot, Bernard Malamud's The Fixer, John Barth's End of the Road or Sylvia Plath's Ariel. (p.292)

Greene makes a move away from any attempt to totalize signs, but she cannot maintain that line of flight and reterritorializes the ground she had opened up by claiming nostalgia as "significant," which takes us back to representationalist ground.

Again, let us consider Greene in the same essay. She importantly notes the necessity of setting aside "everyday mode of apprehending" in interpreting signs, but then goes on to establish representational boundaries around a sign:

Encountering a work as art, the beholder is expected to set aside his everyday mode of apprehending. *Guernica* cannot be encountered as if it were a cartoon or a distorted rendering of an actual bombing (p.293).

In the production of the sign, which is relational, an interdiction or taboo merely interferes with seeing the multiplicity of forces that occupy a sign. To say *Guernica* cannot be encountered as a cartoon is to reify both *Guernica* and the notion of the cartoon and deny their multiple ways of becoming in relation to the observer. In both the above examples, the apprentice must note the manner in which deterritorialization or

destratification is quickly followed by reterritorialization. Dominant significations make their appearance after a momentary decentering.

The third thing to be aware of is that signs or phenomena are only partly sheathed in history, and therefore we must not make the error of over-historicization. Chaos and complexity theory have amply demonstrated that a system's behavior cannot be wholly predicted from its history. Citing Nietzsche, Deleuze (1995) observes that "nothing important is ever free from a "nonhistorical cloud." What history grasps in an event is the way it's actualized in a particular set of circumstances; [but] the event's becoming is beyond the scope of history" (p.170). This can be illustrated by taking an example from embryology. An organism starts with a single cell, with a certain amount of genetic information. Then through mitosis the cell divides and multiplies, at all times the DNA replicating itself. But then at one point groups of cells begin to differentiate, and one clump becomes the heart and another the liver. Nothing in the chemistry of DNA itself can tell us how this happens, since all the cells had the same initial conditions. Historical determinism fails since historically all the cells had the same initial conditions. There is no way to tell which group of cells would acquire certain morphological characteristics. Chance and contingency cannot explain the process of differentiation either. Something else is going on here that Deleuze terms pre-historical. This cautions us against overly historicizing phenomena.

In the view that I take here, the sign's becoming is partly an atemporal flux that has no directionality but one which appropriates all the tenses simultaneously. Its becoming is prior and parallel to its unfolding in time. It has the advantage of giving the teacher the space not only to think of her/his responses in learning encounters in terms of "Chronos" which has directionality, but also in terms of "Aion" which is timeless in the sense of maintaining no linear direction (Deleuze and Guattari1987). A meditation on this can give insight not only into the historicity of our subjectivities but also the other dimension, that is, into the atemporal flux which is the outside of history—the "Untimely" of Nietzsche (1983). The awareness of the timely and the untimely together aid the apprentice of the sign to destratify and enter nomadic terrain.

Conclusion

There are no grand plans here, no overarching schemes for change, but an awareness of the smallest interval in which transformation can take place, a constant looking out for microfissures through which life leaks: "Imperceptible rupture, not signifying break" (Deleuze and Guattari 1987, p.24) open up these possibilities, stammerings and murmurs that start the movement toward a nomadology. To this end, the apprenticeship of the sign involves the realization of the following: a) every encounter generates signs; b) the meaning of a sign is not a given; c) signs are the result of production in which the observer and the

observed are both implicated; d) one must forsake all tendency toward nostalgia in reading signs and treat them as a fresh problematic; e) signs are partly sheathed in a becoming that is outside history, that is, they are partly *Chronos* and partly *Aion*; f) one must hold at bay habitual responses while observing signs, the way one would in looking at a piece of art; g) signs must be freed time and again from old meanings and observed to see what they do and to whom; h) the apprentice must be aware of her/his tendency to produce the worldly sign. A four-fold framework called the apprenticeship of the sign is advanced as praxis toward such a transformation in thought.

The work here is one of constructing a nomadic topos, an agencement or assemblage that is an intersection between teacher, student and curriculum, between matter and thought, consisting of singularities that are not bound by subjectivity, because, as we have seen, the old boundaries cannot deal with the multiplicities; using the differential of the sign we construct a region that mainly consists of connectivities, lines, flows and densities, for these are much more useful in place of conventional identities like student, teacher, and other well determined categories. It involves a certain movement in awareness beyond these habitual categories that can be accomplished through paying close attention to the nature of signs.

And this leads us into the question of affect, since a key move in the formation of such rhizoid spaces is to "free the trait," or become aware of haecceities or microidentities that are also affects—the transforms and fields of flux beneath our constituted selves. I discuss this at length in the following chapter.

Chapter 5

Affect and the Power of Thought

Affects aren't feelings, they're becomings that spill over beyond whoever lives through them.

Deleuze, Negotiations.

Let us recall that one of the categories in our six-part analytical framework outlined in Chapter 2 was the problem of affect, in particular, stress, in beginning teachers. In the introduction and the third chapter I observed that a restrictive and limiting view of curriculum and learning that came out of representationalist conceptions created resentment and stress in teachers who unfortunately sought resemblance and identity in the highly differentiated urban conditions of The City School. Let us also recall that our commitment is to find ways of looking, thinking, and experimenting that allows us to escape the representationalist ground and enter a more nomadic terrain that can deal with irregular and divergent spaces. In this connection I noted that the way teachers looked at learning and curriculum could not be fully separated from the kind of images they held of themselves and their roles as teachers. That is to say, representationalist and identitarian notions went along with certain kinds of affective investments. Therefore, an investigation of stress would involve looking at both concept and affect simultaneously.

In this chapter, our effort will be to help teachers move away from resentment and stress to a more generative and productive terrain through a reconceptualization of identity and affect. To this end I will continue to develop notions of the diagrammatic in Deleuzian schizoid space, and show that the remapping of identities and boundaries with different kind of conceptual coordinates and ontological characteristics has a meliorative effect on teacher stress.

In explicating this position, besides Deleuze, I am going to draw on parts of Deborah Britzman's work who has made some important contribution in this border region, where the conventional divisions between concept, affect and percept are no longer clear or unambiguous. I hold, along with Britzman and Dippo (1998), that

Conceptualization is not just about articulating ideas but also about making sense about the myriad feelings one has about ideas. Conceptualization brings together affect and cognition precisely because structures of meaning cannot be divorced from structures of feeling, investments, and desires. (p.22)

Thus, a concept is not just an intellectual notion, a product of Cartesian reason; it has woven into it affective qualities at the same time. How we construct something conceptually is inextricably linked with our structures of investments, feelings, and desires. Conceptualization is a hybrid of thought, emotion and desire. Therefore reconceptualization can also affect stress. In other words, my claim is that a change in the

conceptual structure can deeply influence affective states and thereby diminish stress. But what is more important is the possibility of *producing* affect, a unique contribution made by Deleuze, that goes beyond containment to the generative. It is this positivity of affect that can lead us into new becomings.

Review of Literature

First, in order to establish a horizon for our discussion, I look at the problem of teacher stress as portrayed in mainstream education scholarship, and briefly review the literature around it. Stress is an aspect in the becoming and the unbecoming of a teacher that is of serious concern according to all available indices (Byrne 1998). Abel (1999) observes that prolonged stress associated with the gradual erosion of important technical, psychological, and social resources result in burnout. Maslach (1993) has suggested that burnout among individuals who do "people work" tends to be multidimensional composed of emotional exhaustion, depersonal-ization, and reduced personal accomplishment. Emotional exhaustion includes increased feelings of depleted emotional resources and feelings of not being able to provide oneself to others at a psychological level. Depersonalization occurs when an individual develops negative attitudes toward students because of depleted emotional resources. Abel and Sewell (1999) emphasize the need for effective coping strategies targeting sources of stress.

The existing literature recognizes that relationships with pupils have been the most important source of stress for teachers (Friedman 1995), and several studies have also indicated that poor student attitude is consistently a predictor, if not the best predictor, of teacher stress (Borg & Riding, 1993; Boyle et al.,1995). Some other major sources of stress identified by teachers have been administrative apathy and work overload. A review of the literature also reveals that the organizational approaches which have been used in schools to combat burnout have been managerial in style and technique (Boice, 1993). These include the skills of managing time, communicating, planning leisure time, and reducing psychological stress. Finally, the literature states that in-service programs and workshops devoted to various forms of relaxation training, such as visualization, quieting reflexes, autogenics, and biofeedback, often provide renewal techniques for the burned out teacher.

What is important to note in the above is the way stress is taken to be an attribute of the teacher. This contrasts with the Deleuzian viewpoint where affects are not attributes of an entity but are prior to, and constitutive of that entity. The second thing to note is the localized nature of the actions proposed in order to "combat" stress and burnout. Each of these, ranging from positive feedback to stress reduction training, from meditation to managerial techniques, are individualistic and therefore deal with one end of the problem ignoring the relationality of the issue. I claim that although the symptoms that are grouped and

labeled as stress are easily identifiable with the body of a teacher, the problem itself cannot be separated from the educational *encounter* of which the teacher is only one end. In the tormentor/tormented mode of analyzing the problem, the vital two-way relationality of the encounter gets eclipsed. There is, thus, in the mainstream literature, a one-sided analysis of the problem. And further, it sees feelings as things-in-themselves, having ontological status, around which boundaries can be drawn, whereas in the Deleuzian view, affects are differential relations between states and are always becoming; not something fixed. In a preview of what is to come, this leakage and spillage of affect in the Deleuzian construct allows us recompose stress in productive ways as we shall see.

Going back to Deborah Britzman, who shows a more complex understanding of this problem—that is, of the relationality of feelings—Britzman (1998) notes, "feelings are a response to something and are already constitutive of other relations," and to deny this is to "shut out the infinite variations and slippages of affect...and ambivalent forms of thought" (p.84). It is precisely this relationality and ambivalence that is constitutive of other relations that gives us an opening into a Deleuzian approach. Other phenomena or agglomerates are implicated in feelings, and must be taken into account if we are to find a tolerable response to stress. In other words, we have to investigate entanglement.

Apart from Britzman, another body of literature that I will draw on here is the systems theory of Maturana and Varela, to which I have alluded from time to time in other parts of the dissertation. For Varela (1992), "who we are at any moment cannot be divorced from what other things and who other people are to us" (p.10). In other words, in the moving, seething flow of existential moments, every transition or change in the direction or architecture of relations produces a new cognitive being that cannot be determined in advance. These ephemeral, emergent, and enactive singularities Varela calls "microidentities," and their corresponding lived contexts "microworlds." The notion of microidentities resonates with Deleuze's haecceities, and supports the Deleuzian contention that we, as well as phenomena in general, are aggregates and multiplicities that decompose and recompose in multiple ways. It will be important to remember the notion of the microidentity and transitionality in breaking down ideas of "presence," and the apparent coherence of preexisting identities that resist new ways of becoming.

In Deleuze (1988a), affects, also called traits, are not feelings or emotions, but movements from one state to another, "transitions, passages that are experienced, durations through which we pass" to an enhanced or diminished sense of being. Here too, as in Varela, we encounter the notion of transitions. For Deleuze, "these continual variations" that create a movement in time from a "preceding state towards the next state" are called affects. That is to say, affects are

modifications that act upon previous modifications leaving corporeal traces which involve both "the nature of the affecting body and the affected body." And further, affects are "purely *transitive*, and not indicative or representative, since [they are] experienced in a lived duration that involves the difference between two states" (pp.48/49).

In other words, affects are transitions or *differences* between states produced in relationship, and if we ask about the nature of these differences, we cannot get a representational interpretation precisely because difference is experienced as a transition *between* states. "But the idea which constitutes the form of the affect affirms of the body something which involves more or less of reality than before" (Spinoza cited in Deleuze 1988a, p.49). This means that although we cannot translate the differential into representational terms, its effect is felt as an expansion or diminution of our "mode" of being, that is, our capacity to be affected and to act.

To put it simply then, affect is something which either increases or decreases our power to be affected, and since it is always relational, it produces new modes from preceding states that affect all parts of the relation, that is, all bodies that enter into the relation. So when I say a body is affected, I mean that a certain mode encounters another mode and enters into a composition with it thereby increasing or diminishing its "power of acting or force of existing" (Deleuze 1988a, p.50). This way of visualizing affect is more helpful in constructing a praxis for dealing

with stress, as we shall see. I will next attempt to highlight how the Deleuzian praxis can help teachers to emerge onto a new terrain that is generative of affect instead of being depletive.

Analysis of Data from the Case Study

Let us look at the following example from the case study. I talk to a new teacher who reveals an unusual angle to the problem of stress.

[TR: teacher; I: Interviewer]

I: Could you talk about some specific things, behaviors, attitudes that have been stressful for you this last year.

TR: Oh, where shall I start! There are several things but I have this feeling that some of the students either want to push you up or bring you down. And that is one. Do you know what I mean?

I: I am not sure if I followed you. Could you elaborate on that?

TR: Well, I think it is a status thing. Either you must have status in their eyes or they ignore you. I have spoken to some others and they have similar feelings.

I: Oh I see. But how does one acquire status?

TR: Oh, it could be many things. You may come in with a certain status for various reasons, or it could be the way other staff treat you, the way they look at you. It could be the subject you teach.

I: And in what ways does this affect you?

TR: It interferes with the way you function as a teacher; there is

an invisible frame around you. And the status determines whether students pay any attention to you or not. And also you feel crowded, less room to maneuver.

I: Do you feel this is entirely beyond the control of the teacher?

TR: I think a large part of it comes out of certain expectations.

(Interview with TR #2)

TR sees the problem of stress as vitally related to the issue of status, to the way one is seen in the other's world, to how one is positioned. Thus feelings of indifference or student apathy that cause stress are importantly shown to be constituted of yet other complex relations. And this complexity cannot be treated in one-sided analyses. Further, it also reveals how the idea of status, or the perception of how one is viewed, has a significant effect on affective states, thus bringing the two, concept and affect, close together. Observing TR further, I note:

One thing to be noticed about TR is how hard she tries to be part of the youth culture, adopting their manner of talk and attempting to relate to the students by talking about details from her personal life while teaching in class and outside. But the harder she tries the more the students seem to spurn her, make fun of her language, and in small ways repudiate her. All this is taking an immense toll on TR. The other day she was complaining about how quickly she is "getting old" here. (Journal entry # 11)

In attempting to follow the student in the psychologistic game of affirmation or negation TR is engaged in a mental effort of representation, one that attempts to create a coherent map of her relations in advance and thereby brings forth a compelling narrative-world that is negative and stressful. The conceptual shift that is to be made here is to realize that these relations are not positivities but emergent differentials, and the affects they trigger are fields of flux. In other words, stress is not a state but a sensation that arises in transiting between states. And therefore, the causal claim that "I am stressed due to..." is an abstraction whose actual embodied action needs to be studied, for, as Varela (1992) has pointed out, "cognitive intelligence resides only in its embodiment" (p.59). What all this amounts to is a shift in attention from overarching descriptors such as stress to the planes of fracture and microintervals produced by tectonic shifts wherein the nameless enactive moment actually emerges, and which contains generative possibilities. Such a praxis can be achieved by becoming aware of the transitional moments of the appearance of the haecceities or microidentities and microworlds. The excitement begins once we take hold of this theater of production and the dissipative structures within it (Massumi 1992, p.67), and through careful observation and experimentation discover what Deleuze calls the possibilities of the virtual, and what Varela (1992) would call "neural narratives" of the imagination. That is to say, one becomes situated in the in-betweenness of the transitive that moves not along predetermined lines, but along the virtual and therefore has a certain flexibility and spontaneity.

The above points may be further clarified by looking at another piece of data from the case study and the analysis that follows. E, an older teacher expresses her fears and her stressful condition:

E: I think my real stress has come about because of working with students and getting closely connected to their problems for a long time. I love the students and many of the kids come in and tell me what is going on. Sometimes listening to them can be exhausting. I find myself jumping in wanting to act and do something to change what is going on in their lives. I feel very strongly about this and this causes me a lot of stress. I go to their homes, I contacted T by going to her house to tell her she has to be in school to meet the psychologist the next day if she wanted a referral from her. But her home conditions overwhelmed me. I found I could not teach after that for a whole day. Over time, this has become very depressing for me. How does one listen to the depressing stories of kids lives and not get depressed oneself? But maybe depression is not the word. I do not know my own feelings anymore. That is my question. I have been working with these kids and their personal problems so closely and I have felt recently that I cannot continue here anymore because I am too fragile now. (Interview with E #2)

Here we see the case of a teacher who is close to what she feels as a breakdown in her emotional well-being due to stress. The pressure of consistent close interactions have opened up lines of fracture, but it is these lines of break or affective rupture that offer possibilities of fresh investigation. To quote Britzman (1998):

Precisely because feelings are a matter of history, of location, and of bodies, one might consider them as symptomatic of contradictory pushes and pulls of relationality and need. In this context, a more useful way to think about feelings requires attention to what it is that structures the ways in which feelings are imagined...[Therefore] pedagogy might provoke the strange study of where feelings break down...pedagogy might become curious about what conceptual orders have to do with affectivity. (p.84)

According to Varela (1992), where feelings break down, is precisely where "the concrete is born" (p.11). In other words, knowledge as action takes place in between states; critical transitional moments open up gaps in our "molar identities" or apparent continuity and inspire a certain force, a freedom of observation and action due to the indeterminacy inherent in the situation. Even more emphatically, Varela (1992) notes that " it is the breakdowns, the hinges that articulate microworlds, that are the source of...the creative side of living cognition" (p.11). In Deleuzian terms, schisis leads to leakages and the consequent regaining of a degree of

"molecularity"; it acts to remove the organism from its normal habitat of sameness and identity to a *becoming-other* or a continually differentiating space where a degree of spontaneous generation can occur. In other words, "breakdowns," or critical moments of transition are generative moments when something new might happen. In such a praxis, concept, percept, and affect act together to produce the observation of a microidentity or haecceity that is

a mode of individuation very different from that of a person, subject, thing, or substance. They consist entirely of relations of movement and rest...capacities to affect and be affected. (Deleuze & Guattari 1987, p.261)

These becomings that spill out of determinate boundaries form modes of enactive perception. E's condition inadvertently exhibits such a becoming. The temporary absence of boundary or "supermolecularity" that E experiences, rather than diminishing her capacities to be and to act, can actually enhance it once she learns to look in terms of haecceities or microidentities and fully embraces the field of entanglement giving up the struggle to maintain transcendent categories. According to Massumi (1992), such an operation "opens a space in the grid of identities those categories delineate, inventing new trajectories, new circuits of response, unheard-of futures...and maps out a whole new virtual landscape" (p.101). It is the deliberate cultivation of this field

through the observation of transitions and the arising of haecceities or microidentities that is key to the praxis.

Further, E says she does not know her feelings anymore, revealing an indeterminate state where E can only have a sense of her fragility.

According to Massumi's (1992) reading of Deleuze, the "zone of indeterminacy, creating the conditions for becoming-other [is] a process as fragile as it is infectious" (p.101). It is the careful direction of such moments of "schisis" aided by a conceptual deterritorialization that leads to the opening of a

fractal abyss where [earlier] there was only a hyphen between stimulus and response, and canned reaction. The body's zone of indeterminacy...widen[s] beyond measure. This increase in the body's degrees of freedom is called "imagination." Imagination ... takes the body not as an "object" but as a realm of virtuality...as a site for superabstract invention. (Massumi 1992, p.100)

Therefore, E would be helped if she rethought her body as a realm of the virtual, and move away from the habitus of whole dimensions—like "me" and the "kids"—to the fractal alternative of microidentities that recombine in spontaneous and newly affective ways.

Without the benefit of an experimentation of the kind outlined in the apprenticeship to direct her deterritorialization, E unfortunately has moved toward a diminished state of powers of acting and being. I claim that, with an experimental awareness of the process of becoming and deterritorialization teachers can turn such affective moments to productive use and redirect them into the forming of multiplicities. That is, they can allow themselves to generate new microworlds and microintensities that have the possibility of escaping stress.

To recount then, in Deleuzian-Spinozian terms, stress can be redescribed as transitional states in the combination of bodies that leads to negative consequences. Given the concept-affect correspondence, it leads to the position that stress or a decrease in powers of acting and being, can be a consequence of the habit of maintaining transcendent categories. This can be reversed by affective formations that recombine intensities according to a different schema. In the above example, E says that her condition is the result of "being too closely connected" to the kids and their problems. But these categories are external to the experience of stress itself. In other words, these categories do not preexist on the plane of affect; instead, what is, is the experience of intensity and entanglement. A Deleuzian praxis can help E to widen her repertory of responses.

However, no one knows at the outset, the affects of which the body is capable. Therefore, "it is a long affair of experimentation, requiring a lasting prudence" (Deleuze 1988a, p.124) that is necessary to enter a widening range of responses and invent the necessary neural narratives for those becomings. Below is a piece of case data that exhibits possibilities of pedagogic experimentation.

JS has been teaching slave narratives in his literature class. It is something he feels passionate about but he is disturbed by his students' lack of response to these powerful accounts. Over the term JS' anxiety rises over the apathy and general indifference of the students. He admits to feeling increasingly stressed. But something happens that begins to turn things around. JS' class starts to move in a new direction when in a series of individual interviews with students he discovered that they had very different perceptions of the class. Many of them were sixteen and over, and felt that the classroom was an aging process and that they were wasting their time in school. The compulsory credits that they had to earn in order to graduate were thus gone through in opposition that had its effect on the teachers. Reflecting on this, JS said, after a while he could see their point of view and shared the students' sense of frustration. As soon as that happened, the character of his negative emotions began to change. Now, he said, the study of frustration was a key element in his teaching. (Fieldnotes # 16) JS: At this point I realized that I have to change my orientation, that I had certain fixed ideas about what they should be learning and how.

- I: What about the sense of frustration you spoke about earlier?
- JS: There's less of that now, that's one result of the change, I began to feel less of it personally.

- I: Why do you think that happened?
- JS: I think it happened one day when I had hit the bottom. I asked myself what was I opposing. I hadn't taken into account student frustrations seriously up until that point. Since then I have begun to change some things.
- I: You mean there is no frustration now?
- JS: No, but it does not have the emphasis on myself anymore. I am doing things differently now. (Second interview with JS)

Earlier JS had not taken into account students' views and frustrations. In other words, their affects were not allowed to enter into a rhizomatic relationship with the material. Instead, the focus was on the material, and the maintenance of "molar" categories. Once he did, the character of his own stressful feelings began to undergo a change. The small shift in the order of concept in JS allowed a corresponding shift in the order of affect. On allowing stress into the curriculum the very negativity began to change and turn productive. Proceeding in this manner, with careful experimentation, JS can attain a degree of supermolecularity and "evoke an indeterminate number of pragmatic responses" (Massumi 1992, p. 100). The space that was occupied by personal stress can now be remapped onto a different set of coordinates consisting of becoming-other and its fractal geometries or non-whole dimensions, and this is the beginning of a Deleuzian construction.

Conclusion

Thus in a given encounter or combination, careful observation and cautious experimentation will reveal the scope of affectivities. This has significant consequences for the problem of stress. For, it means that certain modes and images of thought—thought invested in molar categories— will induce stress in the pedagogical situation, and once reframed the same will turn around and help us escape or diminish it. The effort is to somehow take charge of that production, seize the means of constructing the patchwork of the plane of immanence in which we ourselves become the cause, the *producer*. This is the central difference between say a social psychology approach to stress and the Deleuzian approach. Deleuze discusses and shows us the possibility of the *production of affect* which is not found anywhere in the social psychology or psychoanalytic literature.

In our analysis, the production begins when we realize, by means of the apprenticeship, that our molar categories are built from "small domains composed of microworlds and microidentities..." (Varela 1992, p. 18) the "unruly interactions" and not totalizing integration between whom give rise to a cognitive moment. The realization of these microidentities or multiplicities that links up with other microaffects affords us the possibility of moving from effect to cause or stress to productivity, and is capable of dealing with the problem of stress and affect in a singularly comprehensive way.

Chapter 6

Conclusion: Mapping the Leaks

Upon me and many of my contemporaries the stuttering of birth weighs heavily. We learned to mumble—not to speak—and it was only after paying attention to the increasing noise of the century, and after we got bleached by the foam of its crest, that we acquired a language.

Ossip Mandelstam, Le Bruit de Temps.

We started by looking at some problems that surfaced in the case study—the difficulties beginning teachers faced in a highly differentiated environment where they sought identity and resemblance. The urban school described in the case offered pedagogical possibilities more in the way of irregular, uncertain, and in-between spaces that were closer to the "leaky" needs of urban youth who attended the school. Whereas the data showed that teachers who were new to the environment were often unable to take advantage of these in-between spaces for making pedagogical moves, the dynamics of school relations at this particular site often resisted being confined to the staid space of representation and resemblance. Something substantial always leaked—the school leaked out of "State" space in serious ways; few in the district office understood what it was doing; the staff leaked out of contractual space in attempting to make school somehow relevant to youth with different needs within an unresponsive and wooden state system; the students spilled out of the

formal curriculum and onto wider social spaces, and the curriculum was designed to be full of leakages through which students, many of whom would otherwise have dropped out, could find escape routes to different becomings not anticipated within the district's official curriculum.

The case study illustrated the difficulty beginning teachers had in constructing and practicing a contextually relevant pedagogy in this highly differentiated urban space; the tendency was to reduce difference to identity, to the established, conventional mode of curricular practices from which the school had attempted to escape in the first place. It resulted in a strong pull toward the center. Therefore, my theoretical intervention in the way of offering theory as praxis was to find a way to make teachers aware of the constructivist possibilities of positive difference. My theoretical effort was to help educators to imagine a conception of reality other than the representationalist one—I worked within a Deleuzian pragmatics that insists that reality is cocaused, and is not a given but rather an "eternally recommenced creation" (Massumi 1992, p.53).

Following Spinoza and Hume, Deleuze considers all phenomena or beings to be nonidentical, provisional, multiplicitous, and a product of difference. In considering the case study in this light we saw the case data resonate with the notion of multiplicity and rhizomatics. Realizing our multiplicities is a first step toward breaking down identitarian ways of thinking, and releasing the power of difference. It is not a mere

question of teaching ourselves to value diversity in which difference is still the "other"; it is to realize that we are ourselves the *product of difference* and not static beings, thus allow ourselves be located in the ever-shifting interstices of difference itself. In other words, it is an invitation to occupy, even if momentarily, unknown regions in which the Platonic pressure to seek resemblance and identity shrink giving us glimpses of alternative possibilities of which the rhizoid space is one.

Thus, Deleuze's philosophical project is to release us from representationalist thinking by embracing "the constantly changing sensible world of multiplicity and becoming" (Hayden 1998, p.133). Ethical experimentation with the manner in which boundaries come up around the sensible helps us to remain close to the relations of existence/difference themselves instead of relying too much on existing categories. Deleuze offers useful insight into the ways in which arbitrary composites or aggregates like the human identity gain sovereignty through "despotic sign systems" and acquire reified boundaries through re-presentation. Therefore, examining sign systems earnestly begins the work of theory as praxis; experimenting with signs leads to an altered perception of the learning encounter as a cocausal, joint production of signs. And since signs are differentials the productive power of positive difference comes into play. Each new sign or movement of difference poses a fresh problem for pedagogical investigation.

Further, Deleuze's concepts allow us to travel beyond our confining coordinates to a field of flux and indefinitude from which arise sensibilities and assemblages that are able to operate in new ways. From the point of view of meeting successfully the challenges of divergent spaces, this is of great importance; it validates differential experience not merely as an acknowledgement of an other, but as the very processes through which reality is generated. Therefore it frees us to look for and affirm curricular possibilities in unusual spaces that are generally overlooked. In particular, it helps us to see how the student and the learning encounter are fonts of curricular possibilities. Deleuze urges us to reach for the haecceities and singularities of our experience with which to strive for new configurations of thought and feeling. From being transcendentally situated as the experiencer, there is the possibility of being inserted into the plane of experience itself. For example, when the categories around feelings break down, we enter an uncertain field of flux that is usually pathologized as schizophrenia by institutionalized psychoanalysis. But for Deleuze there is a creative schizoid process that gives access to an immanent state if "controlled schisis" can be maintained. Using Deleuzian concepts allows not just new curricular spaces but new ways of defining identity that is more compatible with irregular spaces.

Boundaries around curriculum and boundaries around identity are seen to open up when redescribed in Deleuzian terms of composites

or aggregates. But, for this to happen, we have to pay close attention to the internal differences within them. In other words, through theory as praxis the "badly analyzed composites" can be seen to be nothing other than exactly that—composites made up of traits, which can be destratified, and the haecceities or microidentities released.

Once our sensibilities are opened up in a Deleuzian manner, life leaks out of the holes or fissures and forms multiplicities or rhizomes or plateaus of intensity with other composites. Entities lose "faciality" and become anonymous; boundaries lose their hard edges. The advantage of creating the image of ourselves as a rhizomatic multiplicity is that rhizomes have open borders and are constantly changing in architecture. They are non-hierarchical and more democratic. They are of the *order of the moss* and form plateaus of intensity, laterally strung out and contingent. And because of this flexibility they are eminently suitable for modeling uncertain and irregular spaces and becomings.

In terms of the curriculum, they offer great flexibility, for rhizomes are connectivities; they ceaselessly attempt to establish new connections and interrupt molar formations. New connectivities generate vectors of virtuality and regions of surprise. They give us the freedom to consider new matter-thought compositions. In short, rhizomes have the possibility of reinserting life into the classroom because they search for intensity and cull it from difference; they show new ways of becoming, tapping

from the existing life around them, bringing forth new concept-affect and matter-thought combinations.

As a first step toward such destratification I offered the "Apprenticeship of the Sign," derived from Deleuze's work. The apprenticeship as I have constructed it, consists of four components: the Generative, the Transformational, the Diagrammatic, and the Vacant. Each of these components performs a particular work of destratification, or conducts a move away from representation and resemblance. The apprenticeship is geared toward a moment to moment transformational awareness of the way sign regimes behave, and within that awareness, the rhizomatic possibilities of becoming different, of becoming somebody else together with other bodies. It teaches us to read everyday reality in a "foreign language" with a hesitancy and a stuttering, keeping in abeyance our everyday modes of apprehension.

The stuttering as creative hesitancy, a moment of generative flux in the curriculum is another point I make in this work. In applying the fourfold analytical framework of the apprenticeship to the conversation between Carla and the teacher in chapter 4, we see how the possibility of such a moment arises but goes unheeded. If the attention was turned at that point to production of affect instead of being centered on meaning, it is conceivable that the entire situation could have evolved differently. In a different example, another teacher (JS) takes advantage of hesitancy or

"stuttering" and begins to put to productive use the negative affect—in this case frustration and stress.

The next important point to come out of this work is the potency of the small interval. It makes use of the systems theoretical perspective of Francisco Varela in particular to support and clarify the Deleuzian emphasis on the small interval. The apprenticeship opens the door to dissident flows and lines of disorientation. It creates minor derailments from our gross identities, and contains the possibility of generating out of that disturbance minute, qualitatively different, space-time intervals. Small intervals can be very potent and theoretically powerful. The study of change must inevitably look into the small interval, since all transformation takes place in the confines of the infinitesimal as a passage to the limit. "Imperceptible rupture," and not "signifying break" thus becomes, in terms of praxis, the sites of rupture, allowing us to become aware of the fluxes that lie beneath our constituted selves. The signifying break or grand schemes of reform or change becomes quickly taken over by territorializing forces, but an imperceptible rupture remains the hidden, unnoticed faultline that can allow what Britzman and Dippo (2000) have called "awful thoughts" or dissident movements to surface.

In terms of education, what this signifies is that the grand scale reforms and large structural initiatives, although they may look impressive, are less important from the point of view of real change, than

the minor movements of disorientation and dissidence. For, as Deleuze has observed, major signifying breaks are always captured by existing forces after a brief while and reinserted into the old spaces. This is what Deleuze calls reterritorialization. Instead, smaller acts of rupture have greater possibility of escaping capture.

This brings us to yet another praxial point offered in this work mapping affects. When we realize our multiplicities there is a change in the image of ourselves, and what escapes through these ruptures and fissures are traits and singularities that can combine with other matteraffect combines to form new multiplicities or rhizomes or plateaus of intensity. Beneath the gross categories in terms of which we have become accustomed to thinking of ourselves, lie singularities and what I call complex fields of indefinitude, fluxes and tendencies that have no particular shape and cannot be fitted into preexisting categories. It is precisely these unqualifiable fields of indefinitude that holds out the possibility of escaping our constituted selves or to "pour out of the holes of subjectivity," as Deleuze and Guattari put it (1987, p.190). The case of E in the previous chapter was an illustration of the beginnings of such a deterritorialization, but without the necessary conceptual shift, E's partial deterritorialization could not be mapped onto other assemblages.

To map affects therefore requires a combined concept-affect shift.

In fact, in Deleuze, these are not ever fully separable. Concept and affect go together; conceptual architecture is closely connected to affective

states which in turn affects what it is possible to conceptualize. To create a map or an abstract diagram, sensation in the smallest interval must be watched for in a pedagogic relationship, and like in E's case, sometimes a spillover occurs and a loss of sense of boundaries take us to the limit where feelings intermingle with other bodies resulting in the intensification of our powers of affecting and being affected. This is the construction of the diagrammatic.

The important claim here is that the pragmatics of the diagrammatic can help prevent stress and burnout in teachers, that is, in those who are willing to experiment with the apprenticeship, by inserting the experimenter in a plane of immanence through minor destratifications.

This work of controlled schisis that Deleuze describes, must proceed with a lot of caution and careful experimentation. Desubjectification and the attempt to place the body in direct relation with the flows of other bodies by working past the naturalized organic unity does not imply a complete loss of all sense of cohesion and integration: "You have to keep enough of the organism for it to reform each dawn; and you have to keep small supplies of significance and subjectification, if only to turn them against their own systems when the circumstances demand it...and you have to keep small rations of subjectivity in sufficient quantity to enable you to...[m]imic the strata. You don't reach the plane of consistency by wildly destratifying" (Deleuze and Guattari 1987, pp.160-

61). In other words, it is neither possible nor desirable to fully deterritorialize the apparent organic unity of the entity; for strategic purposes we have to maintain certain outward stratifications. Instead, the way to go about it is through minor destratifications and small intensifications, changes of velocity, retarding flows here and intensifying it there.

To summarize the significance of the study then, it offers four things. First, it offers a praxis in the way of the apprenticeship that allows the teacher to become experimental with percept-concept-affect conglomerates in the pedagogical context, and insert her/himself in the plane of experiment by means of a semiotic exercise. Second, it turns attention to the small interval as the important unit of change as opposed to large scale reform that plays such an important role in conventional wisdom. Third, it offers a way of mapping affects that spill over to generate plateaus of intensity and new becomings. And finally, it points to the need for constructing the immanent plane using the tools and insights acquired from the above three as a way of deterritorializing stress and burnout.

I have described my work here as fieldwork in philosophy, in that it is a theoretical mode of analysis that nevertheless pays close attention to the complexities and dynamics of the educational encounter. It puts philosophy to work in a true Deleuzian fashion. I have tried to use philosophy to interrogate the lived experience of curriculum and thereby

find new possibilities of action. It involved replacing the one-sided analysis of what happens to the teacher, usually found in mainstream literature, to the more complex one of theorizing the pedagogical encounter itself.

The shift from transcendence to immanence implies a renunciation of apriori, transcendent categories in terms of which change usually is sought. The transcendent is "paradigmatic, projective, hierarchical and referential" (Deleuze & Guattari 1994, p.89), whereas immanence is the jouissance of difference and movement. Instead of the transcendent which blocks movement and becoming, we construct a plane of immanence or of teacher becoming from within, through cautious experimentation and our eye on differential movements in small intervals. According to Deleuze, this is perhaps "the supreme act of philosophy," the task of showing the plane of immanence. The plane of immanence is not given but is constructed piece by piece even as we take our place in it, and it is subversive to domination and oppression. Deleuze (1995) remarks: "It is not immediately clear why immanence is so dangerous, but it is. It engulfs sages and gods. [For] immanence is immanent only to itself...and leaves nothing to which it could be immanent" (p.45). Immanence flattens authority structures and all transcendent claims to truth; it fills the dimensions with the jouissance or ecstasy of difference.

Future Research Possibilities

There are several strands of research that can be generated from this work. One possibility is to further develop the four part framework I have offered here and bring it into teacher education as a way of theorizing the pedagogical encounter beyond the usual "molar" or macropolitical categories of race, class and gender. The advantage is that it allows a "molecular" or minoritarian perspective—a posthumanist lens to look at curriculum theory and relations to the 'outside.' A second possibility is in empirically testing the hypotheses about the release of traits and the formation of assemblages in learning spaces by means of further dialogue with teachers. A third possibility is to take this conceptual structure to the level of the functioning of teachers and see what effect it has on their levels of stress and affectivity. A further research direction is to appropriate Deleuze's work and link it up to the work of Luhmann, Maturana and Varela, and Donna Haraway to more fully explore and elaborate on what a posthumanist curriculum would look like without much of the presumptions of the prevailing humanism that has been so thoroughly criticized in postmodern discourses.

REFERENCES

- Abel, M. H. & Sewell, J. (1999). Stress and burnout in rural and urban secondary school teachers. *The Journal of Educational Research* (Washington, D.C.) v. 92 no5 (May/June 1999) p. 287-93
- Agar, M.M. (1980). The professional stranger: An informal introduction to ethnography. New York: Academic Press.
- Bakhtin, M. (1981). *The dialogic imagination: Four essays*. Austin: University of Texas.
- Bateson, G. (1991). A sacred unity: Further steps to an ecology of mind. New York: Harper Collins.
- Bauman, Z. (1992). Intimations of postmodernity. New York: Routledge.
- Best, S. & Kellner D. (1991). Postmodern theory. New York: Guilford Press
- Blake, N., Smeyers, P. et al. (1998). Thinking again: Education after postmodernism. Connecticut: Bergin & Garvey.
- Boice, R. (1993). Writing blocks and tacit knowledge. *The Journal of Higher Education*. Vol. 64, Jan/Feb; pp 19-54.
- Borg, M.G. & R.J. Riding. (1993). Teacher stress and cognitive style. *The British Journal of Educational Psychology, Vol. 63, June; pp 271-286.*
- Bourdieu, P. (1990). In other words: Essays towards a reflexive sociology. Stanford: Stanford University Press.
- Boyle, G. et al. (1995). A structural model of the dimensions of teacher stress. *The British Journal of Educational Psychology. Vol. 65*, pp 49-67.
- Britzman D. P. (1986). Cultural myths in the making of a teacher. Harvard Educational Review. Vol. 56, No.4; pp 442-455.
- Britzman, D.P. & Dippo, D. (1998). Toward an academic framework for thinking about teacher education. *Teaching Education. Vol.9, No.1.* 15-26.
- Britzman, D. P. (1998). Lost subjects, contested objects: Toward a psychoanalytic theory of learning. New York: SUNY Press.

- Britzman, D. P. & Dippo, D. (2000). On the future of awful thoughts in teacher education. *Teaching Education*, Vol. 11, No.1; pp 31-37.
- Buchanan, I. (2000). *Deleuzism: A metacommentary*. Durham, NC: Duke University Press.
- Byrne, J. J. (1998). Teacher as hunger artist: burnout, its causes, effects, and remedies. *Contemporary Education v. 69 no2 (Winter 1998)* p. 86-91.
- Canetti, E. (1984). *Crowds and power*. Trans. Carol Stewart. New York: Farrar, Strauss, Giroux.
- Cherryholmes, C. (1988). Power and criticism: Poststructural investigations in education. New York: Teachers College Press.
- Conway, D. W. (1997). Tumbling dice: Gilles Deleuze and the economy of repetition. In K. A. Pearson (ed.). *Deleuze and philosophy: The difference engineer*. New York: Routledge.
- Cicourel, A.V. (1963). *The educational decision-makers*. Indianapolis: Bobbs Merrill & Co.
- Deleuze, G. (1968/1994). Difference and repetition. Translated by Paul Patton. New York: Columbia University Press.
- Deleuze, G. (1972). Proust and signs. New York: George Braziller.
- Deleuze, G. (1983). *Nietzsche and philosophy*. New York: Columbia University Press.
- Deleuze, G. (1985). Cinema 1: The movement image. Minneapolis: University of Minnesota Press.
- Deleuze, G. (1988a). Spinoza: Practical philosophy. San Francisco: City Lights.
- Deleuze, G. (1988c). Foucault. Translated by Sean Hand. Minneapolis: University of Minnesota Press.
- Deleuze, G. (1990a). Expressionism in philosophy: Spinoza. Translated by Martin Joughin. New York: Zone Books.
- Deleuze, G. (1990b). *The logic of sense*. New York: Columbia University Press.

- Deleuze, G. (1993). *The Deleuze Reader*. C. Boundas (ed.). New York: Columbia University Press.
- Deleuze, G. (1994). Difference and repetition. New York: Columbia Univ. Press.
- Deleuze, G. (1995). Negotiations. New York: Columbia University Press.
- Deleuze, G. (1997). Essays critical and clinical. Minneapolis: University of Minnesota Press.
- Deleuze, G. & Guattari, F. (1983a). On the line. New York: Columbia University Press.
- Deleuze, G. & Guattari, F. (1983b). Anti-Oedipus: Capitalism and schizophrenia. Minneapolis: University of Minnesota Press.
- Deleuze, G. & Guattari, F. (1986). *Nomadology: The war machine*. New York: Columbia University Press.
- Deleuze, G. & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia. Translated by Brian Massumi. Minneapolis: University of Minnesota Press.
- Deleuze, G. & Guattari, F. (1994). What is philosophy? Translated by Hugh Tomlinson. New York: Columbia University Press.
- Deleuze, G. and Parnet, C. (1987). *Dialogues*. Translated by Hugh Tomlinson and Barbara Habberjam. New York: Columbia University Press.
- Derrida, J. (1970). Structure, sign, and play in the discourse of the human sciences. In R. Macksey (ed.). *The structuralist controversy*. Baltimore: Johns Hopkins University Press.
- Doll, W. (1999). Conversing with "the other." Journal of Curriculum Theorizing. Vol. 15, No. 3. 83-89.
- Eco, U. (1980). The name of the rose. New York: Harcourt Brace & Co.
- Fendler, L. (1999). Making trouble: Prediction, agency and critical intellectuals. In Thomas Popkewitz and Lynn Fendler (Eds.), Critical theories in education: Changing terrains of knowledge and politics. New York: Routledge.

- Foucault, M. (1977). Nietzsche, genealogy, history. In D.F. Bouchard (ed.) Language, counter-memory, practice: Selected essays and interviews. New York: Cornell University Press.
- Foucault, M. (1977). Theatrum philosophicum. In D.F. Bouchard ed., Language, counter-memory, practice: Selected essays and interviews. New York: Cornell University Press.
- Foucault, M. (1983). Introduction. In Deleuze, G. & Guattari, F. Anti-Oedipus. Minneapolis: University of Minnesota Press.
- Foucault, M. (1984). *The Foucault Reader*. Paul Rabinow (ed.). New York: Pantheon Books.
- Foucault, M. (1994). Ethics, subjectivity, Truth. Paul Rabinow (ed.). New York: New Press.
- Friedman, I. A. (1995). Student behavior patters leading to teacher burnout. *Journal of Educational Research, Vol. 88, No. 5* (May-June 1995): 281-289.
- Giroux, H. (2000). Postmodern education and disposable youth. In Peter Trifonas (ed.). Revolutionary Pedagogies: Cultural politics, instituting education, and the discourse of theory. New York: Routledgefalmer.
- Greene, M. (1973). Teacher as stranger: Educational philosophy for the modern age. Belmont, CA: Wadsworth Publishing Co.
- Grosz, E. (1994a). A thousand tiny sexes. In Boundas & Olkowski (eds.). Gilles Deleuze and the theatre of philosophy. New York: Routledge.
- Grosz, E. (1994b). Volatile bodies: Towards a corporeal feminism. Sydney: Allen and Unwin.
- Hargreaves, A. (1994). Changing teachers, changing times: teachers' work and culture in the postmodern age. New York: Teachers' College Press.
- Hartley, D. (1997). Re-schooling society. Washington D.C.: The Falmer Press.
- Hayden, P. (1998). Multiplicity and becoming: The pluralist empiricism of Gilles Deleuze. New York: Peter Lang.

- Hlebowitsh, P.S. (2000). Radical curriculum theory reconsidered: A historical approach. New York: Teachers college Press.
- Irigaray, L. (1985). This sex which is not one. Ithaca: Cornell University Press.
- Jardine, A. (1985). Gynesis: Configurations of woman and modernity. Ithaca: Cornell University Press.
- Kliebard, H.M. (1992). Forging the American curriculum. London: Routledge.
- Latour, B. (1993). We have never been modern. Cambridge, MA: Harvard University Press.
- LeCompte, M. & Schensul, J. (1999). Analyzing and interpreting ethnographic data. Walnut Creek, CA: Altamira Press.
- LeCompte, M. & Schensul, J. (1998). Designing and conducting ethnographic research. Walnut Creek, CA: Altamira Press.
- Lesko, N. (1995). The "leaky needs" of school-aged mothers: An examination of US programs and policies." *Curriculum Inquiry. Vol.* 25, No.2.
- Levi Strauss, C. (1969). *The raw and the cooked*. Transl. J. Weightman & D. Weightman. New York: Harper & Row.
- Liston, D.P. & Zeichner, K.M. (1996). Culture of teaching. Mahwah, N.J.: L.Erlbaum Associates.
- Luhmann, N.(1989). *Ecological Communication*. Trans. John Bednarz. Chicago: University of Chicago Press.
- Luhmann, N. (1990). The cognitive program of constructivism and a reality that remains unknown. In W. Krohn et al. (eds.). Selforganization: Portrait of a scientific revolution. Dodrecht: Kluwer.
- Maslach, C. (1993). Burnout: A multidimensional perspective. In W.B. Schaufeli (ed.) *Professional Burnout: Recent developments in theory and research.* Washington D.C.: Taylor & Francis.
- Massumi, B. (1992). A user's guide to capitalism and schizophrenia: Deviations from Deleuze and Guattari. Cambridge, MA: MIT Press.

- Maturana, H. R. & Varela, F.J. (1998). The tree of knowledge: The biological roots of human understanding. Boston: Shambhala.
- McCarthy, C. & Dimitriadis, G. (2000a). All-consuming identities: Race and the pedagogy of resentment in the age of difference. In Peter Trifonas (ed.). Revolutionary Pedagogies: Cultural politics, instituting education, and the discourse of theory. New York: Routledgefalmer.
- McCarthy, C. & Dimitriadis, G. (2000b). Globalizing pedagogies: Power, resentment, and the renarration of difference. In R. Mahalingam & C. McCarthy (ed.). *Multicultural curriculum: New directions for social theory, practice, and policy.* New York: Routledge.
- Meier, D. (1995). The power of their ideas: Lessons for America from a small school in Harlem. Boston, MA: Beacon Press.
- National Commission on Teaching and America's Future. (1996). Report of the Commission. Washington D.C.
- Nietzsche, F. (1967). On the genealogy of morals. Vol.I. Transl. W. Kaufmann and R.J.Hollingdale. New York: Random House.
- Nietzsche, F. (1982). Daybreak: Thoughts on the prejudices of morality. Transl. R.J. Hollingdale. Cambridge: Cambridge University Press.
- Nietzsche, F. (1983). *Untimely Meditations*. New York: Cambridge University Press.
- North Central Regional Educational Lab (NCREL). (1998). Milwaukee Public School District Innovative School Program: Final Report Addendum. Oak Brook, IL: NCREL.
- Olebe, M. (2001). Beginning teacher support and assessment program. Teacher Education Quarterly. Vol. 28, No.1; 71-84.
- Pearson, K.A. (ed.). (1997). Deleuze and philosophy: the difference engineer. New York: Routledge.
- Pinar, W. (1994). Autobiography, politics, and sexuality: essays in curriculum theory (1972-1992). New York: Peter Lang.
- Pinar, W. (1995). Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses. New York: Peter Lang.

- Pinar, W. (1998). Curriculum: Toward new identities. New York: Garland Publications.
- Pinar, W. (2002). The Internationalization of curriculum studies: A history and status report. Paper presented at AAACS Conference, New Orleans.
- Popkewitz, T. S. (1988). Educational reform: Rhetoric, ritual, and social interest. *Educational Theory 38, (1)*.
- Rajchman, J. (1998). Constructions. Cambridge, MA: MIT Press.
- Rajchman, J. (2000). The Deleuze Connections. Cambridge, MA: MIT Press
- Ricouer, P. (1985). History as narrative practice. *Philosophy Today*, *Fall* 1985.
- Sanders, M. (2000). Schooling students placed at risk: research, policy, and practice. Mahwah, N.J.: L. Erlbaum Associates.
- Schwanitz, D. (1987). Systems theory and the environment of theory. In C. Koelb and V. Lokke ed. *The current in criticism: Essays on the present and future of literary theory.* W. Lafayette, Ind.: Purdue University Press.
- Shukin, N. (2000). Deleuze and feminisms: Involuntary regulators and affective inhibitors. In Ian Buchanan and Claire Colebrook (eds.). Deleuze and feminist theory. Edinburgh: Edinburgh University Press.
- Taussig, M. (1993). Mimesis and alterity: A particular history of the senses. New York: Routledge.
- Varela, F. (1992). Ethical know-how: Action, wisdom, and cognition. Stanford: Stanford University Press.
- Weisberg, J. & Sagie, A. (1999). Emotional burnout: impact on intention to quit. *The Journal of Psychology v. 133 no3*; (May 1999) p. 333-9.
- Weiss, E. & Weiss, S. (1999). Beginning teacher induction. *ERIC Digest*; US District of Columbia: ERIC; 1999-11-00.
- Wolcott, H. (1994). *Transforming qualitative data*. London: Sage Publications.

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