KNOWLEDGE TRANSMISSION: EDUCATION IN THE POST-SECONDARY SYSTEM

KNOWLEDGE TRANSMISSION:

TEACHERS' EXPECTATIONS AND ASSUMPTIONS

IN THE POST-SECONDARY SYSTEM

By

JOANNE NAKONECHNY, B.A.(HON.), M.SC., M.ED.

A Thesis

Submitted to the School of Graduate Studies

in Partial Fulfillment of the Requirements

for the Degree

Doctor of Philosophy

McMaster University

Copyright by Joanne Nakonechny, March 1996

DOCTOR OF PHILOSOPHY (1996)
(Anthropology)

McMaster University
Hamilton, Ontario

TITLE: Knowledge Transmission: Teachers' Expectations and Assumptions in the Post-Secondary System.

AUTHOR: Joanne Nakonechny, B.A. (Hon.), M.Sc., M.Ed.

SUPERVISOR: Professor R. Preston

NUMBER OF PAGES: v, 191

ABSTRACT

Knowledge transmission in post-secondary education is shaped by a variety of macro and micro influences ranging from the educational system, to the institution, the instructors and the students. The major classroom actors are the instructors and the students whose relations are formed by their historical and current contexts both in the private and public sphere through cultural and social themes. Teachers, representing dominant culture themes, predominantly control the format and transmission of knowledge without elucidating (or being critically aware of) its interior structures, so that students do not have equal access to success given their differing levels of preparedness to interpret the educational codes.

Teachers construct templates, or meaning bases, from which they understand how the information is constructed. These templates are developed within the larger components of culture - identity, values and the system of education. The teacher templates include academic and social attitudes and expectations towards learning which shape their interpretations of what occurs/should occur in the classroom. In order to provide students with equal access to education, instructors need to explain the steps necessary for adequate knowledge transmission encoded in the templates, or meaning bases, from which they teach.

Acknowledgements:

I would like to thank the many people who made this thesis possible:

Drs. Preston, Feit and Warry - without their support and encouragement I would not have been able to develop my ideas to the level which I did.

People who opened doors: Professor Mary Ashworth, Dr. David Counts, Dr. Peter Ramsden and Victor Gulewitsch.

My fellow students for their questions and comments in classes and discussions.

Cookie (Isabelle Brymer), Janice (Weir) and Rosita (Jordan) for their help, kindness and general encouragement throughout my years in the department.

The many people who agreed to talk and work with me during the time I did my research. Without their help this research could not have proceeded.

Gordon Slade, who helped me go back to university and encouraged me throughout the process.

TABLE OF CONTENTS

Abstract	iii
Acknowledgements	iv
Table of Contents	v
PROLOGUE	1-3
CHAPTER 1 - **Theory: Searching for Patterns in Field Research**	4-40
CHAPTER 2 - **Education: Macro to Micro Influences on Three Levels: State, Institution, and Culture**	41-75
CHAPTER 3 - **The Individual, Culture and Knowledge Processing: An Intersection**	76-97
CHAPTER 4 - **Bringing the Individual, Education and Culture Together: From Micro to Macro, Pattern Cognition As a Linking Strategy**	98-118
CHAPTER 5 - **Expectations - Subliminal Structures and Roles: The Cultural Basis for Academic Success**	119-146
CHAPTER 6 - **A Case Study: On-going Problems in Essay Construction = Disjuncture in Transmission of Knowledge Structures**	147-167
CHAPTER 7 - **Conclusion**	168-179
Bibliography	180-191

PROLOGUE

This is an ethnography about the many layers of participants in the college and university system in Ontario and how they influence the transmission of knowledge. Although I did my fieldwork in a particular college in southern Ontario, the central themes which emerge from the actions/reactions in this college are likely to be generally representative of those of the entire post-secondary education system, as I have drawn on extended experiences in other institutions. I am concerned with clarifying the patterns which emerged from my field work, and to what degree and how these patterns are replicated throughout the system. When one views, individually, the parts of the term, **college system of education** various patterns begin to emerge. Seeing the individual parts -- the state, administration, staff, faculty and students -- in their contexts enhances recognition of the factors which influence and create the plethora of relations which keep the system functioning at this particular historical period.

The writing of this dissertation takes place after nearly nineteen years of practical experience and fieldwork. My ability to focus on the actual process of the transmission of knowledge during this period was both direct, as an instructor and course designer, and indirect, as a programme manager and curriculum designer in various educational institutions. These two viewpoints gave me an unusual perspective for a researcher as I influenced both how curriculum was developed and taught.

Through teaching my own courses and talking with students, instructors and administrators about and during the process I began to see elements which remained hidden when seen from only one perspective. I had the opportunity to test out a variety of hypotheses and explore what might work and what did not. Through this process my own understanding and interpretation of events responded to and changed given the various contexts. The last period of field work, undertaken for my doctoral research, gave me the opportunity to test my hypothesis about knowledge transmission in the classroom and refine my theoretical understanding of how and why the transmission occurred.

As a result of this field work process and my professional concern with establishing a practical method for dealing with knowledge transmission in the classroom, the focus of this dissertation is on the integration of previous field research and theoretical perspectives with my current work at both theoretical and practical levels. Although intuition can provide a way into understanding a problem, there must be an explanation of the problem solving steps if replicability, evaluation and deliberate transformation is to occur. The analysis of this problem solving creates theoretical and practical stances which can be appropriately applied in various situations and levels of the system.

In order to write text which has some representative diversity, I combine a variety of themes, analyses and perspectives. The central themes are concerned with students, teachers and how culture and the education system influences their actions and interactions. Analyses focus on how hegemony influences the construction of educational

curriculum and the types of relations inherent in the development of curriculum and teaching. Hegemony is used here as a backdrop, the context for social actions, and is not solely located in state actions. It works through and unconsciously guides the intuitions that are made explicit throughout the dissertation. The theoretical model envisaged is one which utilizes both post-modern and modern views, as I do not believe the separation is as yet clear or well enough constructed to afford a comprehensive analytic position. Lastly, I include the differing perspectives which emerge from administration, staff, faculty and students. Each shared their views with me, talked to me, listened to what I thought, let me work with them, and above all showed me the repeated actions/reactions which formed the patterns.

Two language choices I made when writing this dissertation relate to participant anonymity and description of process. In order to provide the type of anonymity requested by participants I have used gender neutral language throughout the dissertation. In an attempt to demonstrate the subtlety of the change process, the transition from one stage to another, I have chosen to use slashes between words to indicate the linked quality of what is being described.

CHAPTER 1 THEORY: SEARCHING FOR PATTERNS IN FIELD RESEARCH

> S(Student): What is expected in this paper?
> I(Instructor): Present a point. (A short synopsis on what is an anthropological position followed.)
> S: OK - so for this paper - Is it more of a research paper or are you looking for a perspective?
> I: I'm looking for a research - for a unique argument.
> S: I'm not in interested in the X, but I would like to focus on my own culture and look at how animals are viewed.
> I: Inside view could be good. There could be a comparison made with other anthropological knowledge.
> S: So, I could present my own view.
> I: You should try and be analytical - pick two or three points and build an argument.

> Informant: I think it would be most useful for them, certainly note-taking. I think, when I talk to my students, it's not a problem in my class, because my materials are very structured for them, but I have heard them say that they have a lot of difficulty with note-taking; how to structure taking lesson notes. And some of them are saying, that after the first twenty minutes of listening to a lecture and so much content they just stop altogether.

These two quotes represent the heart of the problem which I began researching nineteen years ago - how knowledge transmission is accomplished in post-secondary institutions of education. As an anthropologist, I use ethnography as the research method to gain insight into the problem. The ethnographic process requires immersion and reflection about the subject material through an interactive relationship between the ethnographer and a variety of sources which in this case includes personal fieldwork notes, interviews, conversations and readings. The transformation of the information collected through this process into themes, and then patterns from which meaningful

categories of knowledge are constructed is diffuse and non-linear. After an intense period of reflection, reading and discussion, the information, hopefully, "takes shape" and the patterns emerge.

This first chapter begins by speaking directly about the problem with which I was and still am engaged: the transmission of knowledge. The research study specifically focuses on knowledge transmission in post-secondary institutions in Ontario. In order to contextualize the study for the reader, I begin this chapter describing the process through which I became involved in the problem of knowledge transmission and education. The chapter then continues with a more detailed summary of work dealing with social context and cognitive development as it establishes boundaries which influence how other themes are analyzed. This is followed by an analysis of why a multidisciplinary theoretical approach, linked to a multi focal anthropological theoretical view, is utilized in this study. The chapter ends with an introduction to the major themes in the dissertation.

1.1. Contextualizing the Problem: Theory and Practice

> I call ethnography a meditative vehicle because we come to it not as to a map of knowledge nor as a guide to action, nor even for entertainment. We come to it as the start of a different kind of journey. (Tyler 1987: 216)

The start of this ethnographic journey began with multiple observations and questions in classrooms nineteen years ago. I watched bright, articulate, non-dominant culture students fail college courses while their less or just as capable dominant culture counterparts passed. I started to observe overt and subtle factors that influenced

student success: which attitudes caused problems, how language use aided or hindered responses, how individual personal development meant more or less security in social relations. I realized that school success was more complex than just working hard - doing the assignments, studying and reading; there existed an undefined Other, something that enhanced the possibility of educational success. In order to begin to make sense out of what I was noting, and since my focus of attention was on education, I began to look at what could interfere with learning.

My first area of investigation was language in response to my observation that students who were not successful educationally usually had some difficulty with expressing themselves. Socio- and psycho linguistics provided the necessary theoretical and practical information. However, as my research and teaching continued, and given only a slight improvement in classroom results even with the application of "new" teaching methods, I chose another problem area, reasoning that perhaps the language focus was either: a) incorrect or b) only a partial answer.

I shifted my research focus to learning styles, which I became interested in while studying the literature on English as an additional language. The literature on learning styles prompted questions about cultural influence and development of the individual. Further, at this time my employment on a minority student retention project made me realize that issues of power and control vis-à-vis the state, the institution and the individual (through the socio--cultural filters of class, gender and ethnicity) were also part of the equation for

educational success or failure.

I realized at this point that educational success was multilayered and multi focal. Each of the parts which I had encountered was part of the problem, but each part, if solved only in and of itself, would not bring academic success for the unsuccessful student in a dominant culture institution. On the other hand, solving all the problems was inconceivable without a major societal transformation. I began to question whether there might not be another level on which a variety of the components necessary for educational success occurred - a place where some form of interactive process amongst a variety of the major learning components happened. This layer or level would still require technical educational skill development, but it would also facilitate the students' cognitive environment so that learning could occur. Work by Kleinfeld (1979) which demonstrated that students needed to be able to culturally situate themselves and the knowledge being taught before learning became feasible, gave me the impetus to further investigate this idea.

I found that my research would have to be multi- and inter-disciplinary. The following four disciplines supplied the theoretical perspective for my research. Sociolinguistics provided concepts of how class, gender and ethnicity influence school achievement. Psycholinguistic concepts of how to understand text, and how exist, beyond simple decoding of text, multiple interpretations based on rhetoric and personal knowledge linked to cultural and societal frames. Both of these areas noted the relevance of schemas, scripts and roles

(clarified in chapters 2, 3 and 4) and how they influenced the individual. Cognitive psychology added information and theories on how the brain functions. Anthropology added concepts of culture, cultural change, cultural transmission and a set of theoretical models for connecting all the different parts.

The theoretical diversity presented by these fields requires an integrative theoretical approach which also responds to my threefold perceptions of what theory needs to accomplish. Firstly, the usefulness of a theoretical perspective is in its ability to help us make sense of how our realities are lived. Theory can help us identify major themes in our lives, which we can then link together to form patterns which describe meaningful occurrences in our cultures. Secondly, theory is also important from an epistemological perspective, for once a particular theory is accepted by a culture it is then used to designate what other actions are pertinent. It becomes self-reproducing, often to the detriment of other important ways of understanding particular phenomena. Thirdly, a theoretical perspective is helpful if it is responsive and adaptable. A responsive theory, one which offers options for inclusion or exclusion at change or entry points, provides a more realistic model of how we make decisions and live our lives.

1.2. Social Context and Cognitive Development

Anthropology and related disciplines offer rich theoretical and practical perspectives for a major educational question: "How much influence does social context have on cognition?" The following section, while examining some of the major topical areas relevant to

this question, presents the first part of the theoretical framework through which I analyze interactions amongst the educational system, the teachers and the individual.

I. Introduction

The amount and type of influence which social context exerts on the course of cognitive development has engendered marked interest among researchers from various disciplines. The framework used to conduct the relevant studies is based on developmental psychological theories which have as a common referent point the concept that people are seen as,

> ...progressing through successively more complex stages, each building on the other, each characterized by a particular structuring of component cognitive and affective capabilities. (Scribner and Cole 1981: 12)

Cognitive development has many specific component parts which have been defined by these theories. Essentially though, cognitive development is linked to the ability to solve problems from a variety of perspectives and levels of abstraction. (Margolis 1987: 3). In order to do this, specific skills related to framing, recognizing and organizing specifically relevant items pertinent to the situation are required. Margolis notes this when he says:

> ...patterns, frames, schemata, attunements, and so on, ..are somehow recognized and ..provide a key input to whatever happens next. (Margolis 1987: 3)

Response to the recognized, organized and framed information is the answer to the problem. This cycle, based on previous information and response patterns, repeats and/or elaborates itself recursively as new information and situations demand. The patterns emerging from these

cycles are tied to unconscious and conscious stimuli. They also evolve frames of reference from known information patterns which form the basis for further responses to new situations; a cognitive map from which responses and action, context driven, are appropriately selected in response to a given condition. What types of information are available and how they are organized and framed is related to social context, as it is society which provides frames of reference which give meaning to perceptions and actions.

The conclusions from these cognitively oriented studies are pertinent to anthropology where there has long been debate over the question of whether all people have the same or similar cognitive abilities. While results, over a wide range of cultures and experimental tasks have been consistent in indicating that,

> ...Schooled children have generally outperformed nonschooled children on cognitive tasks considered indicative of level of intellectual functioning. (Scribner and Cole 1981: 12)

the larger question of what this actually means in terms of cognitive development has not yet been answered. The larger question looks at both specific and broader issues such as: What are the mechanisms of change between the stages of development? How does interaction with the social environment influence the child? (Scribner and Cole 1981: 12)

Social context provides a framework for understanding how interaction with one's environment influences cognitive development. Three particularly relevant areas within this category are: 1) how the world is framed; 2) how the world is expressed; and 3) how the world is transmitted. **How the world is framed** refers to the cultural forms

expressed in socialization practices, and the consequent roles which gender, class and ethnicity play in shaping one's interpretation of the environment. **How the world is expressed** refers to oral and written language and the transformational link it provides among the different stages and roles as language is the encoder and decoder of public and private experience. **How the world is transmitted** refers to informal and formal education and the influence each type of education has on its participants. These three areas of social context contribute to the course of an individual's cognitive development as they provide the learning environment where cognition develops, whether through directed (taught) or non-directed (play), reflective or active activities.

A. How the world is framed through gender, class and ethnicity

Socialization into a culture provides a person with the rules by which s/he can participate in the culture. These rules are obtained through exploring, classifying and framing relationships. In the interplay amongst these relationships issues of social control and power arise. Three major social markers, gender, class and ethnicity, influenced by issues of power and control, shape what type of socialization occurs. Each of these markers influences which relationships and what types of activities are permissible. In fact, they help to create the kind of world we react to and experience. This has an important impact on cognition as:

> How a particular situation is studied or framed can have a significant biasing effect on decision making. (Glucksberg 1988: 225)

In other words the type of information available to us, whether

through observation or participation, provides a basis for developing cognitive strategies useful in dealing with everyday reality.

gender: Brice-Heath provides a description of how gender influences the framing of response when she notes that girls and boys have different levels of access to entering conversations and adding new discourse topics with adults. Speaking of a Black, working class community, she states:

> Thus the major occasion in which the boys practice nonverbal and verbal communication with substantial reinforcement is denied to girls. (Brice-Heath 1983: 96)

So, while boys are reinforced for their social participation girls are not, which leads girls to initiate different ways of achieving socially acceptable communicative competence. However, this gender based interaction pattern not only shapes relationship patterns, it also presents different puzzle pieces for use in solving future situations. As Brice-Heath asserts:

> As adults talk to their children, they teach them how to talk and how to learn about the world. (Brice-Heath 1983: 127)

class: Class also influences what information is received, organized and framed. Halliday and Bernstein, through their analysis of language, provide instances of class differentiated knowing. Halliday proposes that as language is a product of social process and a shared meaning potential, it is a social semiotic. (Halliday 1978: 1) Language acts as a sign system which, as it is rooted in social process, is a means through which people can interpret social actions and interpersonal relations. Bernstein extends and reinforces this concept

by maintaining that semiotic systems of culture become differentially accessible to different social groups as a result of class differentiation. He postulates that social class, as a social group, influences how family role systems are maintained, what types of semiotic codes are used and how they create different orders of meaning and relevance depending on where one is situated in the class hierarchy. (Halliday 1978: 88). Language, as the communicative conveyor, manifests how this is enacted.

Bernstein has postulated that there are two varieties of language available to a speaker: "elaborated" and "restricted" codes. Elaborated code tends to be used in more formal situations such as school. It has a relatively high proportion of subordinate clauses, passive verbs, adjectives, uncommon adverbs and conjunctions and the pronoun "I". Restricted code, on the other hand, tends to be used within the family or with friends. It has a high proportion of personal pronouns, particularly "you" and "they". (Bernstein 1971) While all individuals possess a restricted code, class regulates the distribution and realization of elaborated code. (Bernstein 1975: 27) The importance of this unequal distribution and realization of elaborated codes is that it is the elaborated code

> ...which facilitates the <u>systematic</u> examination of, and change in, the boundaries of experience (but it) is not initially made available to children as an <u>essential</u> part of their socialization within the family. The contradiction is that where such a code plays an essential role in family socialization, its realizations are shaped by the ideology of class. (Bernstein 1975: 28)

ethnicity: Ethnicity, whether from a dominant or non-

dominant culture perspective, influences how categories and links are established and how we respond to demands initiated by the categories. Cazden and Brice-Heath detail episodes which delineate how ethnicity reflects on some of the structural components of cognition. Cazden evaluates how "sharing-time" stories in her primary school classes are constructed. The two dominant groups, black and white, create different stories based on differing concepts of what a story entails. Black students generally produced episodic stories while white students generally produced topical ones. (Cazden 1988: 19)

Aspects of topic and form offer a way to understand the differences which ethnicity can conceptually impose on a structure - in this case, story telling. Episodic stories are longer than topic centred ones. They tend to be idiosyncratic, have shifting scenes and often have a large cast of characters. (Cazden 1988: 19, 22) Frequently, there is awareness of what the audience needs to know in order to understand the story (metapragmatics). [Cazden 1988: 21] Topical stories, however, tend to be shorter, be about one incident, and contain few characters. Here too, the story-teller employs metapragmatics. (Cazden 1988: 21-24) When teachers were asked to respond to these different styles of stories the following comments were typical and demonstrate how communicative structures are ethnically linked.

Response by white teachers to a black student's story:

> ... terrible story, incoherent...."This kid hops from one thing to the next" When asked to make a judgment about this child's probable academic standing, they without exception rated her below children who told topic-centred

accounts...(Cazden 1988: 18)

Response by black teachers to the same student's story:

> The black adults reacted very differently, finding this story well formed, easy to understand and interesting, "with lots of detail and description." ... all but one of the black adults rated the child as highly verbal, very bright, and/or successful in school. (Cazden 1988: 18)

Brice-Heath also examines narratives and her findings parallel Cazden's and extend them. In the two communities she studies, Trackton (Black working class) and Roadville (White working class) stories are used to achieve very different ends. Aspects of topic and form are still important but so are those dealing with reinforcement of group identity. A summation of the stories major components clearly show how story telling is structured differently and achieves a different end for each group.

Roadville (White Working Class)	**Trackton(Black Working Class)**
. factual	. reality as a germ
. affirm group membership	. individual strengths and powers
. formulaic openings	. few formulaic openings
. maintain strict chronicity	. maintain little chronicity
. direct discourse	. move from event to event
. no analysis of main character	. evaluation of characters
. parable-like endings	. no formulaic endings
. behaviour of story teller exemplifies weakness of group	. story telling highly competitive; emphasizes individual strengths

(Brice-Heath 1983: 166)

Narratives are a universal meaning-making strategy embedded in each cultural system's organization and presentation of information. As Rosen notes, "There is no one way of telling stories; we learn the story grammars of our society, our culture. (Cazden 1988: 25) I would also

add "of our class" as well to the list as Brice-Heath's work (and Cazden's) indicates that the school, based on middle-class cognitive structures does not "link with or reinforce the norms of story-telling in the home, church and community." (Brice-Heath 1983: 166)

* * *

How the world is framed by gender, class and ethnicity presents one facet of how social context can influence cognitive development. The emphasis in this first part has delineated how various socializing factors can structure the same information into differing frameworks. These alternative frameworks portray very different realities to individuals and may engender dissimilar responses. As Rogoff states:

> The person's interpretation of the context in any particular activity may be important in facilitating or blocking the application of skills developed in one context to a new one. (Rogoff 1984: 3)

These frames of reference influence the course of cognitive development in the individual as they initiate and develop cognitive strategies which the individual uses to respond to his/her environment.

B. How the world is expressed through language

Language, in its oral or written form, provides the predominant means through which communication occurs. It gives us a way of interpreting and discussing that which is around and inside us. It facilitates elementary logical relations such as "if-then" while describing the roles we live. Furthermore, language is structured to permit organized, relevant discourse to convey the ideas, emotions and needs of the speaker. (Halliday 1978: 21-22) The structuring of

reality, of creating categories and boundaries is, in part, determined by language.([1]) For example different cultures use different colour terminologies to describe the visible spectrum. One group, the Bassa, differentiates only between light and dark colours. (Glucksberg 1988: 228)

This use of language to facilitate a system of perceptions also includes cultural values, styles, and ways of structuring information. Language and culture interact instantaneously and constantly; language reflects the possibilities of and preferences for actions within the culture. As a result, attitudes towards objects/people are reflected through language.

> ... the different ways children learned to use language were dependent on the ways in which each community structured their families, defined the roles that community members could assume, and played out their concepts of childhood that guided child socialization. (Brice-Heath 1983: 11)

Further, how information is structured is also communicated through language use and interaction. As Halliday notes:

> The sociolinguistic patterns of the community, the language of the family, neighborhood and school, and the personal experience of language from earliest infancy are among the most fundamental elements in a child's environment for learning. (Halliday 1978: 5)

The structuring of relationships from information creates knowledge structures which are then implicitly transmitted through

---

[1]. In this dissertation I am supporting a weak version of the Sapir-Whorf hypothesis; language, as part of culture, does shape possibilities for communication and, to a certain degree, how we experience, systematize and react to the world.

language and learning, whether formalized or not.

> They have learned to use language to acquire the knowledge their community has judged they should know at their age, and they have learned appropriate ways of expressing that knowledge. (Brice-Heath 1983: 145)

* * *

How the world is expressed through language demonstrates another perspective on how social context influences the course of cognitive development. The focus of this second part has been on outlining how language acts as an encoder and decoder of experiences. These acts of coding are linked to various socialization factors such as class, ethnicity, social groups and gender. Language is the means through which learning takes place as it is, amongst other functions, used to form relationships, designate boundaries, and assign categories. However, as language reflects social context, it presents those categories, images and relationships as created by the context and only if there is sufficient linkage between the world represented and a different one e.g. the world of school, can different forms of learning take place.

C. How the world is transmitted through formal education

Education, whether formal or informal, provides the mechanism for transmitting knowledge. Formal education is generally represented through schooling and includes numeracy and literacy while informal education pertains to knowledge obtained outside of school. Although researchers have tended to equate higher order thinking with schooling, Scribner and Cole warn against this as they maintain that everyday tasks

also require higher order thinking depending on the complexity of the task. (Erickson 1984: 531) Cole and Means contribute further reasons as to why the above assumption of the cognitive simplicity of everyday tasks has been made.

> ...everyday cognitive tasks are difficult to isolate, fluctuate from moment to moment, are carried on in combination with other goals, and can be approached through different strategies including the use of other people to assist (or hinder) in problem solution. (Cole and Means 1981: 154)

Formal education engenders certain types of relations in how and what is learned which are embedded in social context. The school in any society is an institution which reflects "...both the distribution of power and the principles of social control." (Bernstein 1975: 85) As such, there are certain assumptions and practices built into the educational process which reflect the learning styles, values and communication patterns of the elite. (Halliday 1978: 106) The effect of this is to impede the learning process for those who are the outsiders, as learning depends significantly on the establishment of a zone of discourse where both participants (teachers and students) structure the cognitive task and influence each other's action and communication. (Rogoff and Gardner 1984: 113) When this zone is poorly established, due to a failure in communication based on alternate ways of constructing social reality, then the student is at risk. Further, as Cazden notes, "A great deal of education is devoted to teaching students to see phenomena in a new way.." (Cazden 1988: 112) If this reconceptualization consistently takes place while ignoring the differing assumptions of the student and teacher then the student will

fail. As Halliday states:

> ...educational failure ...is at bottom a semiotic problem, concerned with the different ways in which we have constructed our social reality, and the styles of meaning that we have learnt to associate with the various aspects of it. (Halliday 1978: 163)

What is learned in school is always subject to debate. However, studies by various researchers indicate that ways of interpreting and manipulating information do occur. Scribner and Cole identify as a pervasive effect of schooling the ways in which people handled verbal explanations, the discussion of mental operations or reasons. (Scribner and Cole 1981: 255) Furthermore, students are exposed to large amounts of information, "..organized into subject areas exhibiting common conceptual structures and many examples of problems of the same type. (Scribner and Cole 1981: 13) This type of structure for information may be an important part of building background knowledge for problem solving. Although people's abilities to reason and problem solve appear to be mainly domain specific, there is some transferability. (Erickson 1984: 528) Rogoff and Gardner postulate that people need to be able to see similarities between problems before the transference can occur. Thus,

> Aspects of the particular problem context are ...important in facilitating or blocking the individual's application of skills developed in one context to the new situation. (Rogoff and Gardner 1984: 96)

As such, the different social contexts which people know and understand in their daily lives influence how they will respond to a problem given its contextual setting. Brice-Heath encapsulates the importance of social context for academic success:

> Academic success beyond the basis of readiness depends on becoming a contextualist who can predict and manoeuvre the scenes and situations by understanding the relatedness of parts to the outcome or the identity of the whole. (Brice-Heath 1983: 352)

How the world is transmitted through formal education portrays the third facet of how social context interrelates with cognitive development. The emphasis in this section has been on demonstrating how schooling, which represents the values, structures and communicative patterns of the dominant group, structures the academic success of students given their class background. Moreover, the type of problem solving skills learned in school is also influenced by social context as it is linked to context framing, designation of similarities and then transferability. Hence, social context influences cognitive development in school by providing categories of reality, classification systems, structures and communicative relationship patterns which hinder or aid the transmission of concepts and problem solving schemas.

* * *

The previous sections have discussed how social context influences knowledge transmission for the individual and what effect social context has on the student in the educational context. The next section introduces the second major theoretical focus, the selection of anthropological theory as an analytic tool. Currently, three perspectives receiving attention in anthropological theory are: the philosophical shift from subject/object to intersubjectivity; the issue of representation including who controls and how the control is established; the idea of power relations, both at global and local

levels, and how the subject is affected by issues of dominance and resistance. The dominant theme arising from these areas is that a variety of analytic approaches and techniques need to be used in order to construct viable, responsive, recursive and dynamic theoretical perspectives.

1.3. General Overview

The discipline of anthropology is currently undergoing intensive internal and external scrutiny. Mason (1990: 49-50) notes that key structural concepts which have driven anthropological research since the 1800s have involved such dichotomous issues as: self/Other; inner/outer; civilized/wild; and Europe/America. (Currently, other geographic locales take the role of "Europe" and "America".) The philosophical basis for these structural components was based on subject centred reason and the domination of nature, society and Self which it promotes. (McCarthy 1972: vii-viii) The dominant theoretical stance in anthropology which emerged from these positions was one which provided a categorization of information according to various analytical frameworks such as evolutionism, functionalism, structuralism. These socio--cultural theories exerted real influence on policies and programs during the time when they flourished. For example, evolutionism and its use for the support of colonialism (Comaroff and Comaroff 1991; Cooper and Stoler, 1989).

In the past one hundred and fifty years the world has undergone enormous social and structural changes. These changes have produced

theories and analyses which now move toward a multi focal viewpoint. Although these "new" perspectives are not always entirely free from their former roots, they do embody a general change of paradigm which provides materials for new techniques, forms of analysis, and a theoretical position which is not subject centred or ethnocentric.

1.4. Three Major Themes from Current Anthropological Theory

There are many themes which arise from the current literature in anthropological theory but three in particular strike me as being especially relevant. The first deals with a shift in philosophical understanding that fundamentally changes the nature of the researcher-researched interaction from objectivism to a position that stresses intersubjectivity. (Holub 1991: 67) This change influences my choice of the second theme, representation, in that who and how a particular culture/subculture is represented refers back to how one conceives of relationships between/among subjects. (Comaroff and Comaroff 1991: 4-11, hooks 1990: 133) This theme has grown in importance as the West emerges from a colonial past and must now recognize other structures of knowledge, discourse and perception as having equal validity to its own. Who represents whom and how this is controlled gains special relevance against the history of previous power relationships. The impact of these power relations links to my third theme, dominance and resistance situated within a global/local context. (Scott 1990: 2, Said 1989: 211)

* * *

The following section examines each of the above categories in more detail and demonstrates how their approaches add to and mirror the larger shift taking place within the discipline.

1.5. Philosophical shift from subject centred reason to Intersubjectivity

Habermas, Foucault and Gadamer represent the essence of a major philosophical shift which: a)changes the position of the "knower", decentering him/her; b)includes language as a determinant in human activity; and c)the importance of hermeneutics for the social sciences;. (Holub 1991: 67) The theme arising from these positions recognizes that: objectivist models of the natural sciences are inadequate and distorting for the social sciences (Holub 1991: 69); language is a critical element not only in its descriptive and relational aspects but also as a control agent; and the influence of analysis is tied to a historical past-present which helps to generate current acts.

The decentring of the subject has an enormous impact on anthropological theory and its application to research, in this case studying the transmission of knowledge in the education system. The new intersubjectivist communicative paradigm stresses interaction and the Other. Habermas, in his vision of an intersubjectivist, communicative action paradigm underscoring the concept of mutual understanding (Habermas 1972: 196), counters the predominant theme of subject centred reason, the objectifying attitude of the knowing observer regarding others as it would entities in the external world. The way of knowing is now through interaction between Other and Self rather than through

the Self. The following informant quote demonstrates how this shift to thinking of the Other is crucial in the transmission of knowledge.

> **Informant:** It just makes such a big difference. When you teach, you read automatically - to set yourself up for - okay I understand it. But where does it come from? Okay, what does it link to and where is it going? So you've got to extend your continuum on either end, because you don't just dump some isolated thing on students. How does it relate to the program, the course, the rest of the world? Whatever the current thinking - it just takes you all the way, right away. And then I anticipate questions, and I guess that happens automatically, after teaching for five years.

The instructor speaking here condenses the process of trying to know the Other. The instructor notes the major steps which s/he encountered in establishing a working guideline for understanding what is required in the classroom for knowledge transmission. S/he notes that: a)information must be socially and personally contextualized; b)information must be linked structurally within the discipline; and c)there are steps to understanding the information, generally represented through questions. This teacher also alludes to experience bringing with it practical understanding of where students are likely going to encounter difficulty. Throughout the interview the instructor made references to students in her/his class who helped him/her build her/his understanding about the class culture. It is through these interactions, these on-going continual interchanges, that the teacher was able to construct a form for responding to students. In this way the instructor was constantly refining her/his understanding of what caused students' difficulty.

To extend beyond the Self to encompass others' paths of knowing

requires stepping beyond the boundaries of the Self. It means no longer assuming the way one thinks and understands the world is the template for all other people. In acknowledging the existence of this difference, the possibility and actuality of many degrees of realties, the importance of communication becomes central.

The shift to an intersubjectivist positioning also highlights the necessity in education of engaging the student as an individual within the unity of the classroom. In terms of knowledge transmission, one of the ways in which this can be achieved is by focusing on the process of knowledge acquisition to determine where problems in learning are occurring. As an individual in the classroom, each student approaches a learning task from a set series of actions. These actions match, to a lesser or greater degree, a hypothetical best learning strategies model held by the teacher. In order to facilitate student learning, teachers cannot assume students possess their learning model, rather the teachers must provide the means to achieve the model. The following reflection from my field notes illustrates the need for this type of linking:

> *Field notes:* I seem to be repeating a lot of the steps for essay writing over and over again. It's almost like they do not exist until the actual moment for them to be utilized. The bigger picture seems to be too vague and in the future for it to make much sense. Even when I have talked about something and X attempts it often there is not a match between my expectation and X's performance. Again I think this is a question of attempting something which X has not quite internalized. We'll see how this process of learning continues - whether this becomes less as X becomes more familiar with the process and so can then extrapolate more from the base. Perhaps there is a real need to have the building blocks established before a take-off can occur. The more I think about this the more this seems true. Y does this too but in a different way - Y says Y does understand but when Y tries to reproduce it, it is clear

> that Y doesn't. This is the same process but done in a slightly different personal manner. Approximation. The scaffold is not near enough to make the actual jumps easier.

This perspective stresses the interrelationships amongst parts and how language provides a communicative link for these relations. It is here the work on discourse by Foucault (1972) contributes to an understanding of how and why a mutual dialogue for understanding is important. In his concept of discourse there is a system of formation, the sub-categories of discourse (formation of objects, enunciative modalities, concepts and strategies), that is relevant to the construction and understanding of a cultural system of knowledge.

> By system of formation, then, I mean a complex group of relations that function as a rule: it lays down what must be related, in a particular discursive practice, for such and such an enunciation to be made, for such and such a concept to be used, for such and such a strategy to be organized. To define a system of formation in its specific individuality is therefore to characterize a discourse or a group of statements by the regularity of a practice. (Foucault 1972: 74) ([2])

The other essential property of discourse which influences analysis is that it is not static but emergent. Foucault, Habermas and Gadamer all insist that discourse stimulates reflection on the process rather than the product of the discourse within the ethnographic encounter. This perspective of discourse as emergent rather than static means, educationally, that each student/student or student/instructor interaction requires on-going interpretation and contextualization.

---

[2]. My field note reflections on page twenty-five are also an example of the confusion which occurs when students are not conscient of the system of formation in use for essayist literacy.

Each participant's part in the dialogue influences the interpretation of the experience and the information gained from it.

Too often in an educational exchange the discourse does not reflect the substance of the message, only its surface form. For example, I had a discussion with a student about writing a thesis statement. The student was having an inordinate amount of difficulty in choosing an argument. S/he actively avoided choosing one. I could not understand this reluctance and, because I was focused on the thesis statement, I did not actually dialogue. My interpretation and contextualization did not truly fit the dynamic of our interchange. The student returned after a couple of days to show me his/her thesis statement and it was acceptable. S/he then told me that her/his difficulty in being able to formulate a thesis statement arose from an extreme sense of lack of personal choice brought about by abuse.

If I had been engaged in the discourse, seeing it as emergent, rather than as reflecting a way to achieve my end teaching goal, I would probably have recognized the student's barrier around choosing and would have stopped the lesson and asked the student to reflect on the situation, leaving the student with the choice of going away and coming back or discussing it. The process of understanding the system of formation that was active could have occurred sooner with less stress on either side. However, the static structured nature of the teacher-student discourse pattern hindered this.

Gadamer's contribution to modern hermeneutics, the concept of "horizon" - a description of our situatedness in the world, and how

this horizon can be separated momentarily to form a "historical horizon" provides a pivotal point as it connects past with present to formulate ongoing processual discourse. (Holub 1991: 58-59) The concept of discourse-text, as meant in this chapter, is,

> ..we enter into an open conversation with the past in which the give and take, the questioning and answering leads to understanding. Application, then, can be described as a mediation between the then of the text and the now of the reader, as a conversation between the "thou" of the past and the "I" of the present. (Holub 1991: 59)

Although this system permits more flexibility in accepting various forms of information it does not deal conclusively with whose reality or truth is being portrayed. Moreover, even when adding Habermas' constraint that "...language is also a medium of domination and social power.." (Holub 1991: 66), relations of power and domination and how they are achieved are not straightaway visible.

* * *

This section has examined the influence of the current modern/postmodern philosophical shift on major conceptual elements in anthropology. The focus of this shift, encapsulated by Habermas, Foucault and Gadamer centres around a shift from subject centred reason to intersubjectivity. The relevance of this to ethnographic research and to my work in education was explored through informants' experiences and my own reflections.

1.6. Representation: Who and How?

WHO: Who is represented by anthropological work? This question focuses on who are chosen as informants, and who are chosen to be

written about, and why. The very act of choosing informants skews the information as the researcher, author and informants cannot represent each person in a given group. The anthropologist's act of choosing informants shapes the course of the ethnographic work, the data collected and the analysis of the information. At best, the patterns which emerge from the data will portray some of the dominant themes of the group in the study.

> ...anthropologists in general...are part of the colonizing horde because they seek to take away from us the power to define who and what we are, and how we should behave politically and culturally. (Trask 1991: 162)

The idea of who has the right to represent a given part of a culture has strongly come into focus as the end of the colonial era has enabled more non-dominant anthropologists and other people to make themselves heard. The questions which surround representation are not only concerned with surface structure, whether a European male or female has the right to represent the experiences of an African female, but also with deep structure, who has the right to interpret/explain cultural information. Anthropologists' perspectives on this issue range from wanting to dismantle anthropology to saying everything is fine as it is. Most, however, are struggling with the concept of how to adequately represent the subject.

In the work I have done, the voices which have formed the base for my analysis come from a variety of sources. The first source was from myself - my perception that non-dominant culture students, whose ways of knowing were not similar to dominant culture structures, tended to be less successful academically than dominant culture students. The second

source was the students themselves who articulated how they felt they had "missed" something in high school which other students had "got" that enabled these students to be successful. The third source was other teachers. The fourth source was the literature on the subject. Lastly, administrative sources added yet more information. All these sources have interacted recursively and the information which emerges reflects the influence of this process.

Trask, as noted above, is vehemently opposed to non-culture specific anthropologists defining the native way thus imposing another's reality. Trinh adds another dimension to this perspective by noting that subject/object is still, unfortunately, part of anthropology's theoretical stance even though change is occurring. Her critique also involves gender and how this is in- and/or ex-cluded from various interpretations.

> The "conversation of man with man" is, therefore, mainly a conversation of "us" with "us" about "them", of the white man with the white man about the primitive-native man. (Trihn 1989: 65)

Limon contributes a different focus as he details the difficulties in being an ethnic anthropologist. He realizes that information which he has gathered can be portrayed in a manner which he does not want. (Limon 1991: 128) Chatterjee extends this perception of the ethnic anthropologist as a creator of information to the creation of information and text by particular interest groups within a given culture.

> ..nationalist discourse not only demarcated its cultural essence as distinct from that of the West, but also from the mass of the people. (Chatterjee 1989: 632)

The final contributions to these elements of representation is furnished by the Comaroffs, and hooks. Comaroff and Comaroff refer to the necessity of having a multifaceted perspective of a given situation; whether this is through a multidisciplinary approach or from looking at narratives from different segments of the population(s) under study. (Comaroff and Comaroff 1991: 4-11) hook's contribution urges anthropologists to:

> ..celebrate the polyphonic nature of critical discourse, to - as it happens in traditional African-American religious experience - hear one another "speak in tongues", bear witness, and patiently wait for revelation. (hooks 1990: 133)

It is with hook's perspective that I situate myself. My representation is another thread of the polyphonic critical discourse on education and knowledge transmission. It is aimed at adding one more viewpoint in a multi focal theoretical and practical perspective.

HOW: How information is controlled is an important part of the larger questions about representation. Information/knowledge dissemination is a critical part of representation, as it is here that other's reality is represented and validated. How this knowledge is acknowledged, controlled, whether it is printed or not, is linked to group identity and cultural reproduction. There are many levels from which to explore how information is controlled from individuals to transnational corporations. James Scott, for individuals and groups, contributes to a better understanding of the complexity involved in the how of representation.

Scott's ideas on "public" and "hidden" transcripts provide a useful

context for understanding how representation for individuals in dominant and subordinant groups is achieved. According to Scott,

> I shall use the term *public transcript* as a shorthand way of describing the open interaction between subordinates and those who dominate. The public transcript, where it is not positively misleading, is unlikely to tell the whole story about power relations. It is frequently in the interest of both parties to tacitly conspire in misrepresentation. (Scott 1990: 2)

This is the record which is read in the newspapers, seen on television and taught in school. By acknowledging a particular interpretation of events, the "public transcript" forms and validates the general interaction patterns for the society.

In contrast,

> ...the term *hidden transcript* (is used) to characterize discourse that takes place "offstage," beyond direct observation by powerholders. The hidden transcript is thus derivative in the sense that it consists of those offstage speeches, gestures, and practices that confirm, contradict or inflect what appears in the public transcript. (Scott 1990: 4-5)

This is the record which takes place on the street, in alternative publications and in other everyday small gestures against the public transcript such as graffiti.

The issue of representation is complex as it not only addresses the anthropologist but also the participants in the study. Each anthropologist, whether "native" or not, must address these issues every time s/he goes into the "field". To choose a particular representative stance and not understand, or at least attempt to understand, the various controlling parameters initiated by the stance is untenable.

Authors have raised a variety of viewpoints regarding

representation. I agree with those who posit that a multiplicity of voices is best for several reasons: a) There are many different groups/classes/levels to any given society or educational setting. If only those from one group speak then we only have a representation of life from their particular perspective. b) There is a question of authenticity. As an insider of a particular group I may have a particular interest which is representative for only part of my group. Should my particular viewpoint take precedence and be viewed as "authentic" over all others? c) There is also the question of being an insider or outsider of the society or sub-group studied. Each vantage point produces unique perceptions of any given event. The two viewpoints (insider/outsider) on the activity are valuable as they set up contradictions and tensions which can be places for discussion and interpretation. Furthermore, my knowledge as an insider is framed by particular structures to which I have become accustomed and do not question. A view from an outsider may give me the opportunity to question/understand my own belief systems and vice versa.

This "how of representation" is reflected in my ethnographic work. At times the conflict in the discourse between the public and hidden transcripts at the institutions studied meant not following certain research themes. At other times, informants would ask that their comments be kept "off the record". Although their perceptions were useful in confirming some of my "guesses", the public presentation of this information still requires quotable affirmations. As well, some of the student informants did not feel comfortable in talking to me, an

older female whose research affiliation was not a known quantity. These types of issues always shape ethnographic representation and their impact needs to be acknowledged.

* * *

The first two parts of this section have discussed the philosophical shift from subject/object to intersubjectivity and representation. These two themes are linked relationally through the idea of the subject - who represents the subject in an ongoing dialogue; how is this representation controlled? The third section introduced the idea of power relations and how dominance and resistance encompass a set of actions/reactions which represent a set of possibilities on either global or local scales for the subject.

1.7. A Multiplicity of Theories, Post-Modernism Plus

When I began to analyze the data I found that no one current theoretical perspective encompassed all the various elements in which I was interested. Instead of trying to make the data fit a particular theory, or discounting that portion of the data which did not conform, I decided to incorporate a variety of theoretical perspectives as needed. This approach permits the relevant information to be understood from an appropriate theoretical perspective which, when conjoined with other theoretical stances, provides a more in-depth understanding of the problem and a variety of options for understanding why a particular action was chosen. This theoretical position was adopted not because the data could not "fit" a particular theoretical perspective but to

portray the variety of complex issues involved in the problem and to show how a differential analysis can offer more relevant solutions. Just as in real life we do not use the same strategies to solve all our problems, we should not need to do this in the intellectual realm either.

The multifocality now apparent in anthropological theory presented a format for integrating a variety of theoretical perspectives. One of the over-arching theoretical approaches used in this study is post-structuralism. Post-structuralism is one theoretical position which permits a heterogeneity of focus. (Sarup 1993: 107) For my purposes, there are three other important elements of post-structuralism which contribute to its flexibility of application:

1) The assertion that meaning is not held solely in the text, but is created through reader/writer interactions. This shifts meaning away from a subject and positions it between the subject and text - open to countless interpretations. Endless interpretations, according to Nietzsche (Sarup 1993: 45). But although this may be true at an individual level, at a group/social level the individual perspectives overlap at various points to produce discernable patterns. The remaining "unpatterned" perspectives are useful indicators of possible emerging/emergent choice patterns which deviate, support tangentially, or undermine the main pattern. They remain possible outcomes and, in and of themselves, may form interesting and revealing cultural patterns.

2) The need to remove binary opposition within analytic frameworks. This type of oppositional stance enforces an either/or

categorization of information, causes and choices. The categories in response to their general and large boundaries become overgeneralized and overdetermined which makes them vague and difficult to implement. There is little room for the multitude of shadings with which one is actually faced daily in this form of categorization. A more continuous/contiguous multidimensional model better encompasses the dynamic and recursive nature of actions and reactions in our lives.

3) The realization that knowledge is enmeshed in disciplinary power: knowledge = power. This concept is mirrored in Freire's work when he asks the power question, "In whose best interests?" (Freire 1970) This question directly challenges hierarchical structures and acknowledges the impact and power of knowledge. Knowledge is powerful not only because of <u>what</u> it tells, but also <u>how</u> it tells the information. Knowledge represents particular perspectives and interests and disciplinary knowledge focuses on special domains where social validation maintains the dominant ethos. In order to give credence to knowledge generally perceived as not being part of the dominant culture, as being Other which means no or little power = no knowledge, acknowledgement of a variety of perspectives is mandatory.

The above three elements of post-structuralism change the nature of practical inquiry as they open new pathways for analyzing the data. No longer is one confined to presenting information without acknowledging personal interpretation or personal voice; or held within oppositional pairs to explain actions and re-actions or emerging patterns or caught within one theoretical perspective to explain

patterns which are complex configurations of reality.

However, there are currents within post-structuralism which are not amenable to the analysis of cultural patterns and which create instead a multitude of points on a map without interconnections. Sarup succinctly notes the major difficulties within the post-structuralist paradigm.

> These intellectuals focus only on the heterogeneous, the diverse, the subjective, the spontaneous, the relative and the fragmentary. (Sarup 1993: 107)

To counter these difficulties, a merging of several theoretical frames is required in today's praxis to contend with ever accelerating change and the repositioning of Self in relation to others whether on a family, neighbourhood, state or global level.

The theoretical framework from within which I develop the analysis for my fieldwork data rests on several post-structuralist points - admitting the relationship of subject and text; evincing a complex formulation of relations and maintaining the relationship of knowledge = power. But, I also include other analytic forms which examine relations of power through class, gender and ethnicity with respect to social and cultural systems. This provides a format which deals not only with a subject but also with the relations of the subject at either a personal, social or cultural level. It permits a shift in focus from the individual to the state, and the various local to global influences which interact and influence the individual

1.8. Theory and Practice: The Construction of the Scaffolding

The theoretical perspectives used to construct a scaffold linking theory and practice were decided upon after locating the principal actors and establishing their relationships to each other and what influences shaped the relationships. The major actors are the students and teachers whose relations are shaped by their historical and current contexts both in the private and public sphere through cultural and social themes. The "question" posed balances on relations of power, concepts of knowledge and cognition, and the relationship of Self and culture to the entire enterprise of education. The research and analytic premise is that: *Teachers, representing dominant culture themes, predominantly control the format and transmission of knowledge without elucidating its interior structures, so that students do not have equal access to success given their differing levels of preparedness to interpret the educational codes.* Of course, the teachers are influenced by forces over which they have little or no control such as system and institutional requirements and state curricular demands.

The theoretical themes, emerging throughout the dissertation, flow from macro-to micro-to macro; from the educational system, to the institution, to the Self, to the institution and to the educational system. Chapter one introduces the problem and the theoretical perspectives used in the analysis from a multi-focal anthropological view. Chapter two establishes the initial frame, a relation amongst social context, education and the state. The concept of hegemony is explored and linked to the needs of the state and how it is used in the

construction of curriculum and pedagogical practices. The second theme, chapter three, focuses on concepts of Self within a cultural construct. Here the focus begins at the micro and develops to the macro: how the individual is determined by, and determines the cultural. I find it crucial to consider the nature of the individual within the larger context of education, as it is the individual who undergoes the experience. Chapter four commences with a discussion of the issues surrounding the influence of culture on cognition and then presents a dynamic model of cognition based on pattern cognition. Chapter five revolves around pedagogy and curriculum; what elements are constant and what they indicate about the process of education. Included within this chapter are issues surrounding concept formation and thought systems. This theme merges with the following one (fifth), chapter six, which analyzes how patterns for knowledge acquisition emerge. Chapter seven examines how culture influences teaching and learning.

CHAPTER 2 EDUCATION: MACRO TO MICRO INFLUENCES ON THREE LEVELS: STATE, INSTITUTION, AND CULTURE

The education system is shaped by many factors ranging from economic considerations, cultural values, to pedagogical applications. In this chapter three levels of educational functioning are discussed. The first level is concerned with the workings of the state. A brief characterization of how the development of the public school system is related to state goals and how these goals are shaped through hegemonic and ideological practices is presented. The second level, the level of the institution, examines how hegemonic and ideological precepts are manifested in the development and teaching of the educational curriculum. The third level carries on the analysis at the individual level. Here the focus is on concept formation and how cultural and social "framing" (the outcome of moral and perceptual conditioning) shape our interpretation of events.

2.1 Level # 1: The State: The role of formal education as a response to changing economic and social conditions

The rise of the industrial capitalist system in Europe and its colonies required a new type of worker to meet the demands of the emergent social order and the workplace. The new social order placed emphasis on achieved or acquired characteristics rather than on ascriptive or inherited ones. (Graff 1979: 55) The change in personal and public interactions was from a system based on social obligation to

one based on individual responsibility. With this promise of class mobility based on individual achievement workers began to exchange and modify their social and work expectations.

Workers were needed in the new industrial centres and this required not only a transfer of the workforce from the country to the city, but also the creation of a new type of worker/boss relationship - one based on wages in exchange for labour rather than labour in exchange for protection as in the previous feudal system. This social change also extended to the workplace where a new work environment was being created. This workplace was autonomous, more regulated and repetitive than peasant production and required more circumscribed behaviour inherent to the new system of production.

These social changes, while providing more personal opportunities and choice, also produced a greater potential for chaos in three ways. Firstly, the majority of people were no longer situated within a system of fixed ties as people no longer remained in small villages all their lives. Now, they were moving to cities where their previous kin networks no longer functioned, or functioned less well. The system of obligations and repayments, of closely watched social performance and standards no longer held as much force. New, more fragmented and fluid social relations were established which provided more possibilities for unsanctioned behaviour in both private and public spheres. (Graff 1979: 29)

Secondly, the shift in responsibility from public to individual responsibility for personal provision also lessened the individual's obligations to the state. No longer did the requirements of the feudal system bind the new worker. The new capitalist economy espoused the

need for a portable, replaceable workforce. To enhance efficiency this workforce could not be dependent on a state system of provision, as in feudal times, as this would detract from the level of profitable economic activity for this new economic mode of production. Individual responsibility, a concept embedded in the shift from ascribed to achieved status, aided its acceptance. (Graff 1979: 30-35)

Thirdly, the state was promulgating a new economic vision which required an acquiescent work force. State hegemonic shaping of the population was required at both public and private levels in order to advance the "correctness" of the new type of production and reduce the potential for anarchy which these massive social and cultural changes could engender. Without the establishment of control points the new order would have taken longer to establish and involved more social unrest.

The potential for negative social response was partially defused through the establishment of a public education system both in Europe and the New World. Formal public education played a transformative role, as it was through the institution of education that ideas congruent with the state's goals were transmitted, modifying and shaping the flow of socially sanctioned activities. Public education, Graff notes, was a new instrument which the state used to alleviate apparent social stressors:

> The new consensus, and its institutional forms, stressed schooling for social stability and the assertion of appropriate hegemonic functions; these dominated the goals of educational reformers and their supporters throughout Anglo-America. This view emphasized aggregate social goals - the reduction of crime and disorder, the instillation of proper moral values and codes of conduct, and, to a more limited extent, increased economic productivity - rather than the more individualistic ends of intellectual

development and personal advancement. (Graff 1979: 22)

The outcome of these functions is an education system which upholds the requirements of the state through various means: by stressing individual success (change between ascribed and achieved status); by providing access to the success dream for those who co-operate (acceptance of private property/capitalism); and by creating a system of mores which privately and publicly prevents the destruction of the system (surveillance and anomie).([1]) In its transformational role, education reflects the tensions produced by societal and cultural dynamics. This means the system is both responsive and repressive depending on what types of tensions are occurring within the macro-society.

An example of how these elements influence public school education is given by McLaren (1986) who writes about the effects of schooling for students from a Portuguese immigrant community in Toronto. He says, essentially, that schooling prepared the students to enter the work world and become passive participants in it. In becoming conditioned to time-tabling, punctuality, attendance and repetition in the course of their schooling, students became accustomed to the requirements of their work world. Most of the students did not see education as a way of obtaining a better rung on the ladder of the Canadian dream. They saw education as a required stumbling block, a precursor to obtaining "real" work which would give them food, shelter and clothing. In this context,

---

[1]. Giddens establishes the categories of private property, surveillance, and anomie as part of the structural components of the modern state that reside on four axes: private property (class), surveillance (polyarchy), military violence, and transformation of nature (created environment). (Giddens 1985: 311-319)

schooling becomes a means of serving the needs of the state, which means the needs of the dominant class and culture within an industrial capitalist economic order. The other elements of schooling, self-actualization and individuation (Maslow and Kohlb) (McLaren 1986: 137) are enacted intermittently in this type of school format. These goals remain more under the purveyance of schools in middle and upper class neighbourhoods.

2.1.1 Hegemony: An Implement for Social Influence in State Dynamics

The transformation of society to an industrial capitalist system required new philosophical and moral values as the old social frames were no longer valid. Public education provided/provides one forum for presenting and inculcating new perspectives. In order to understand how these new values are transmitted and reproduced it is helpful to look at the concept of hegemony and its application. This section begins with a general description of how hegemony functions and is followed by a discussion on how hegemony transforms into ideology. The section concludes with an analysis of a current educational document to demonstrate how hegemony and ideology influence educational theory and praxis.

The definition of hegemony, using a Gramscian approach, means:

> ...moral and philosophic leadership, leadership which is attained through the active consent of major groups in a society. (Bocock 1986: 11)

Hegemony, then, is the unarticulated, pervasive force which gives direction to individual and group action in a "habit" form. Hegemony brings into focus new sorts of relations, those concerned with shaping a functional societal discourse which reinforces the growth and

maintenance of a master narrative or contributes to the development of competing ones. Economic, civil and state describe the areas in social formation which contribute in the historical moment to the construction of a dominant narrative. Each one strives to influence people's lives in order to produce a:

> ...set of beliefs, values and practices which are an incipient form of world outlook, or even philosophy (in Gramsci's view). (Bocock 1986: 60)

Hegemony here is used not in a monolithic "thick" (Scott 1990: 72) description, rather it provides a way of orchestrating a backdrop, the context for social actions and is not solely located in the realm of state actions.

> ...hegemony is conceived of as being exercised in the economy, in factories and offices, in the state, especially in law and the legal process and in state educational institutions, and in civil society, in the mass media and the arts, and in religions. (Bocock 1986: 94)

The narrative which drives the acceptance of and resistance to state, civil and economic means derives from socially constituted reality. There are various methods and formats for its transmission ranging from myth, religion, education, employment through to ideology, or from civil, economic to state perspectives. Each element influences all the other elements and the gestalt which is produced is the everyday reality of the society. The hegemonic narrative is more or less sharply defined depending on what types of crisis points, or change points, are current within a given society.

For Gramsci, the location of hegemony was still tied to the classical Marxist idea of only one hegemonic centre for any society. (Bocock 1986: 106) However, I believe that Laclau's and Mouffe's position is preferable as they maintain it is necessary to break with

this tradition in order to encompass the new forms of relations which occur amongst societal groups,

> In other words any connections among groups in a society have to be constructed, articulated, and maintained; they do not arise automatically out of a mode of production, or out of any other component of a social formation. (Bocock 1986: 106)

This creates an environment where relations, and the signs, symbols and concretizations of them, are the constructors of interpretive programs of information for the populace. Rather than tying the conceptualization of hegemony to an Enlightenment perception of function Laclau and Mouffe provide the means to understand how competing hegemonies are constructed and maintained through the dislocation of a stable centre [economics] and by requiring the construction, articulation and maintenance of nodal points where meaning and identity reside. (Bocock 1986: 107) The function of hegemony:

> ...is only going to be found as the partial exercise of leadership of the dominant class, or alliance of class fractions, in some of these spheres but not in all of them equally successfully all of the time. (Bocock 1986: 94)

The impact of hegemony is profound as it is a major factor in our personal or group interpretation of events. Edwards, in his article "Mad Mullahs and Englishmen" (1989) demonstrates not only the power of metaphor (which is his analytic tool) but also the power of hegemonic precepts. (In fact, metaphors grow from the hegemonic underlay as it provides the interpretive themes from which metaphor functions.) The events which took place at Jarobi Glenn in India are differentially explained according to different hegemonic perspectives. For the British, their triumph reinforced their own concepts of justice and moral courage, but the local tribes did not recognize the British

triumph as such. The defeat of the Mullah provided a condition for the perpetuation of a local myth ([2]) and the continuance of future miracles. As Edwards notes:

> It failed in relation to the tribes, however, for the simple reason that they succeeded in remembering the encounter in a way reflecting their own sense of moral determinacy of history ... (Edwards 1989: 669)

The moral and philosophic idea of both groups enabled them to construct accounts of the event which satisfied the requirements of their separate realities and reinforced them.

By its very nature, hegemonic influence is invisible and becomes visible only at points of crisis where there is an irritation which challenges the "usual" interpretation of events. At that point, the major assumptions which frame our responses become visible as they are called into question. The response, "Because, that's the way it is." is no longer regarded as valid. By questioning the "common sense", hegemonic themes and their outcomes become known. This leads to further questioning of givens producing a tear in the hegemonic fabric. Hegemony functions best when it is mute - when people do not question its existence. Once visible it is open to challenge and change.

2.2. Ideology: transforming hegemony

Hegemony is also subject to transmutation and when this occurs then the unstated becomes codified:

> ...when the ineffable is put into words - then hegemony becomes something other than itself. It turns into ideology and counterideology...(Comaroff and Comaroff 1991: 24)

---

[2]. The term myth is used here in the sense of being a narrative about an important social construct.

This change in the level of conscious recognition of the themes which guide our responses to events is where concrete discussion occurs with respect to policy decisions. Comaroff and Comaroff, following Raymond Williams, see ideology as,

> ... an articulated system of meanings, values and beliefs of a kind that can be abstracted as (the) worldview of any social grouping. (Comaroff and Comaroff 1991: 24)

The articulation of the system is the disclosure of those elements of hegemony which are practicable in order for the system to present a cogent accounting of itself to dominated groups in society. Ideology also serves a masking function as it elucidates only particular concepts while neglecting others:

> Ideology is the repression of those underlying contradictions that have their source in history. (Sarup 1993 :179)

The differences between hegemony and ideology reside in representation. Hegemony is the presentation of,

> ... constructs and conventions that have come to be shared and naturalized throughout a political community. (Comaroff and Comaroff 1991: 24)

This naturalization of constructs and conventions passes into habit - subconscious/subliminal patterning. The patterns are nonrecognized and nonnegotiable. Ideology, however, is conscious and,

> ... is the expression and ultimately the possession of a particular social group, although it may be widely peddled beyond. (Comaroff and Comaroff 1991: 24)

This means that ideology is open to argument and criticism. While ideology and hegemony may work in concert, hegemony at the covert and ideology at the overt level, they may also be oppositionally situated to one another depending on the relations of particular groups. For example, a totalitarian state, where the ruling group attempts to impose

a world view (ideological precept) on a populace which is not willing, preferring its own (hegemonic precept). (Bocock 1986: 123)

The importance of identifying what and how hegemony and ideology are and how they function relates to understanding what is the "norm" in a given society and how it is established and maintained. Unless we are aware of the agencies and ideas which shape our interpretation of the world it is difficult to deconstruct them in order to make them visible and comprehensible.

2.3. Level #2 - The Institution: Hegemony and Ideology and their implementation in state educational guidelines, teaching and program development

The effect of hegemony and its concretization, ideology, are found throughout the institution of education. From the goals or purposes of education (policy), the implementation and delivery of courses (administrators and teachers), to the receptivity of the message and information (students), all these levels act and react to the shaped substance of these interpretive screens.

2.3.1 Educational Guidelines

The institution of education with its attendant administrative agencies provides a locale to examine the transmission process of the shaped message. The development of a document of generic skills learning outcomes (GSLO) for college students by the Generic Skills Council (GSC) of the College Standards and Accreditation Council (CSAC) of Ontario provides a case study for how hegemony and ideology are intertwined in the education process. The generic skills learning outcomes are not just simple learning outcomes. Rather, they encompass

cultural and class assumptions about what kinds of knowledge and activity are to be valued in the classroom. Furthermore, by linking these values to a list of required skills, teachers are tightly bracketed in what and how they can teach in order to achieve a required result.

There are five main components in the GSLO:

1. communications (including language and literacy)
2. mathematics (including numeracy and mathematical concepts)
3. computer literacy (renamed technological literacy)
4. interpersonal skills
5. analytic skills (including critical thinking and problem solving) (GSC 1994: 3)

These components not only cover required occupational knowledge, but, as outlined in the document's **rationales**, also cover social patterns, personal actions and analysis. For example:

> 1. Communications: However, our graduates also need to be effective communicators in their personal and social lives... Being a good communicator also means being a good learner. (GSC 1994: 7)
>
> 2. Mathematics: Mathematics would allow graduates to do various tasks such as managing household finances, ...verifying discount prices, reading tables and graphs in newspapers, passing judgement on the reliability of the statistics we read, and designing and making a bird feed container. (GSC 1994: 9)
>
> 3. Technological Literacy: In order to facilitate this integration, team-teaching with subject matter experts and Information Systems faculty could be a satisfactory solution, especially until all faculty gain confidence and become technologically literate themselves. (GSC 1994: 11)
>
> 4. Interpersonal Skills: Because business in particular seems prepared to hire, nurture and promote "team" players, one of the most important employability skills is the ability to function well in groups or teams. (GSC 1994: 13)
>
> 5. Analytic Skills: Many interpersonal problems that arise may be attributed to ineffective use or absence of logical,

> rational thought processes to compliment more commonly use intuitive styles. (GSC 1994: 15)

These excerpts provide the outlines of an external and internal program for world interpretation and action which form part of the larger Canadian hegemonic and ideologic fabric. The new college graduate will be able to function skilfully in our modern world; a productive member of society who busily fulfills economic and social needs on the job and at home through the surface level use of rational Enlightenment strategies. This college graduate is not being taught how to think, how to systematically analyze a problem from a variety of positions - from relations of power, economic influences, gender or ethnic perspectives.

The ideological nature of these higher order goals becomes visible in the translation of the social themes into actions. For example, the use of "..and designing and making a bird feed container (GSC 1994: 9) as the final personal-use for mathematics, given that it follows "..passing judgement on the reliability of the statistics we read.." (GSC 1994: 9) signals at one level, the new importance of ecological concerns and how that can be translated into action - building a bird feeder, not measuring effluent in the local streams or mounting a social protest against various industrial polluters. On another level, the placement of "bird feeder" at the end of a string of uses, projects the lack of its integration into the ideological format of the state as it is tagged on at the end, out of the flow and rhythm of the other activities. **Analytic Skills** furnishes another example, one representing social patterns - the idea that rationality is what is missing in the solving of problems in interpersonal relations. There is no discussion here about relations of power, whether in terms of gender, class,

ethnicity, or employment position, and what that means to relationships, nor to the psychodynamics of interpersonal relations. It is the influence of the Enlightenment and the surface application of its dedication to rationality which is alluded to here.

The curricular impact from these types of directive statements is one which frames teacher actions and student responses. As Simon notes:

> The productive apparatus at issue here is the sets of organizational, curricular, and teaching practices that attempt to frame the ways in which meanings are produced, identities shaped, and values changed or preserved. (Simon 1992: 40)

The policy of the government, through the Ministry of Education, lays the groundwork for a clearer concept of how a person emerging from the education system should function. There is, however, an indication that the ideological formation has not managed to complete a change around the knowledge and transmission of technological information. "..until all faculty gain confidence and become technologically literate themselves " (GSC 1994: 11) indicates a tension point in the state's ideological formation. It is through this statement that we become aware that the transmitters of interpretations and skills are not ready to undertake the new role. The teachers have not yet accepted, or been able to acquire the new skills and understanding necessary to perpetuate this new ideal and will not be able to accurately transmit a suitable picture of why and how these new skills and ways of thinking are invaluable and normal.

> When we teach, we are always implicated in the construction of a horizon of possibility for ourselves, our students, and our communities. (Simon 1992: 56)

Although hegemony frames our responses as it creates the norm, ideology provides the concrete manifestation of it and as such supplies

a testing or sounding board against which ideas and attitudes can be assessed. Bloch recognizes the importance of ideology in three ways: 1) how it is enforced by authority because it legitimates the authority; 2) how it offers an all-encompassing scheme in which any event may be placed; and 3) how it both affirms and denies at the same time. (Bloch 1985: 41) Ideology furnishes a glue between the subliminal patterns of social interaction and the overt requirements of state and economic interests.

In examining how ideology functions, the crucial element for this study, is how certain ideas are accepted by the populace. Root, in his work on the rhetorics of popular culture, emphasizes the importance of an ethical appeal in manufacturing consent in the general populace:

> ...the ethical appeal may be the strongest of all, because it is the rhetorical element that most clearly distinguishes one (company) from another. (Root 1987: 59)

Although Root is referring to the impact of the ethical appeal in television advertising, I believe his perception is equally well applied to the acceptance of the broad intent of ideological claims in society. It is the ethical sense of claiming "the high ground" which eases people into accepting a particular vision of themselves and validating their actions against others. This level of ethical appeal is present in the creation of goals for the public school system in Canada since its inception in the nineteenth century. Graff, in his analysis of the reasons for the implementation of a public system says:

> Education, of which literacy was the medium, comprised Christian duties, character and habit formation, and discipline. Morality was at the core of education, as Ryerson never failed to repeat throughout the two and one-half decades of his tenure as Chief Superintendent and principal architect of the school system. (Graff 1979: 30)

In today's curricular goals, the dominant social notion of morality is still evident. In the Generic Skills Learning Outcomes (GSLO) consultation paper, under Analytic Skills Outcomes, we read A8 as:

> Account for the moral/ethical dimension of decision-making and/or professional behavior by examining the inherent values and explaining the challenges involved in making responsible decisions and demonstrating integrity. (GSC 1994: 16)

This outcome in itself is ambiguous on many levels - Who is going to be able to measure this skill and against what measure/s? - but foremost is the indication of an existing script which supplies a working definition of what is professional behaviour and what constitutes responsible decisions and integrity. The approved response will have to coincide with established parameters that meet dominant culture norms. The presence of this moral knowledge script is further alluded to in the "Examples of embedded skills':

> . exerting moral stamina which implies being able to exercise backbone in affirming what is right and honourable in the face of opposition, to admit one's mistakes and examine the values and moral judgements behind a position that one is taking or claims that one is making (GSC 1994: no pagination)

Inherent in these skill outcomes is an appeal to actions which substantiate the dominant group. However, although the major outlines for correct behaviour are indicated, they are not explicated which is an example of how educational goals function as gatekeepers. Not knowing the rules makes it difficult to successfully play the game.

The perspective outlined above is not intended to be merely critical or cynical in its presentation of the role of moral goals. The ability to structure a moral code from which to base and judge actions

is a functional and necessary end for individuals and groups in any society or culture. But it is how this moral stance is developed that presents potential difficulties. What I am arguing against is the imposition of morals by fiat without a debate which establishes a variety of options. The creation of ethical precepts within a subject centred universe of Self, class, ethnic and gender interests without regard for the Other perpetuates the uncritical continuance of the dominant system. The transnationalization of the world requires cross-cultural sensitivity and the establishment of ethical codes which reflect the new concerns of these communities and individuals. As ethical positions are so powerful a legitimation for actions, they need to be developed carefully, within an inter-related, inter-subjectivist context rather than from a singularly centred position.

2.3.2 Teaching

The above analysis of the influence of the GSLO document is not just linked to curriculum development. The GSLO document is powerful not only because it establishes what is to be taught and in what context but also how it is to be taught. The implementation of government/societal goals in educational institutions, such as the ones presented above, establishes an atmosphere which authorizes particular forms of teaching over others. The following quotes from informants, teachers in the college system, speak to this. One informant speaks about the difference between learning and teaching, another speaks about differentiating course material, and a third speaks about memory versus analytic skills:

> A: I think that if one recognizes that there is a difference between the teaching and learning process, one

> structures one's teaching in a way that will accommodate a whole variety of ways that students learn rather than structure it in one single way. If I believe that the students in my classroom are going to learn not only from what I say but also from what they see on the street, what they talk to their fellow students about, what they read in books, what they see on television, what they hear from their peers and on and on and on, then I open up my style of teaching and the requirements of the program, the course, to accommodate all of those.
>
> If I say that teaching and learning are the same process, then obviously I must control as a teacher the process at all times because if I don't, then what they learn may not be what I want them to learn. Therefore, I really structure the classroom not to encourage questions; I certainly don't want them challenging or questioning and God forbid that they would ever disagree. As soon as I do that I open up the possibility that they are not the same process. I see it all the time; I see teachers who because they believe in that set up what I call "learning hurdles" and they insist that students go through this process where they jump the hurdles and go through the hoops and do all those things. The only answer I can find when I ask why is that unless they do that they can't learn what I'm teaching; of course, in my opinion, that's nonsense but nevertheless we have it. It's like the teacher who says unless you come to my class, I won't pass you. My reaction to that is if the student has the knowledge, how can you fail him? The answer is that because he couldn't possibly have the knowledge unless I taught him. So it tends to feed back into a position which in my opinion does not lead to particularly positive teaching. However, having said that, it's very common in our system.

This instructor emphasizes how teaching style influences what and how a student learns. The teacher interviewed here makes a clear distinction between product and process learning. There is another layer to this discussion and that is linked to "the learning hurdles". These "hurdles" establish who maintains power and how. But, more importantly, these hurdles form the gates which help or hinder student success in the institution. These "hurdles", rarely necessary to actual learning, represent parts of the dominant hegemony and ideology as outlined in the above GSLO document.

B: My concept of education is spending a lot of time with the kids. And if you happen to be playing cards in the cafeteria, so be it. That's the way I get to know what my students are thinking. If I can get a little bit of an edge on changing the way they think, on what I feel is an inappropriate way of thinking and acting, then that works.

I give them two courses in one; I give the book course and they get me. And they can't get me anywhere else except in class. That's why I like them to come to class because I try to personalize it for them; I like to give them the big picture which they don't often get from a book.

B: That is, that the requirement of the system to be primarily content-oriented as opposed to being analysis-oriented.

Interviewer: Or having a problem-solving based approach.

B: Exactly. Instead of doing problem-solving, you do puke back. And you write all multiple choice tests that are primarily recognition rather than recall,

Well it's called control; it's called power, you see. In the mere giving of a certificate or giving of a grade in a course is power in the hands of those people who want it or want to misuse it. I'm afraid it's misused in many instances; I don't know what the percentage is but I could hazard a guess. Certainly a third of the instructors are power-oriented rather than learning-oriented or student-oriented.

This college instructor discusses two facets of classroom interaction: who controls the information and what information is considered relevant. In addition s/he notes that in order to be effective in transmitting the information one needs to know one's clientele. As in the previous vignette attention is focussed on learning and who controls the learning environment.

C: And someone said to me, not long ago, in the core system, "You're not supposed to educate, you're supposed to train." Well, I think I can't. I don't think I can train someone without educating them.

I don't think I need to be here to teach someone the same things that I did ten years ago. I need to teach them how to learn those themselves. That's what I see my role as

> today. And it may mean cutting myself out of a job, I suppose. But the point is, I don't see myself being very useful in saying to somebody, "Do what I tell you to do, because it works". And that's what we've done in the past. We've trained people to do the skills that we knew worked because we did them and that was acceptable in those days.

This last instructor describes how s/he views his/her role as an educator not just a trainer. The important element here is that the instructor perceives that his/her role should/must be to teach people how to learn but s/he is doubtful whether the system will permit this type of learning relationship. The unstated theme here alludes to how teaching must occur and what information is to be presented. The preferred format for the information transfer is revealed in all three excerpts.

All the informants speak about the transmission of knowledge and how it is shaped through the delivery process. Their references to the resulting end product outline the influence that the state contains, effects and maintains through its manifestation of the conceptual framework of the dominant ideology. The dominant format noted by these informants is one of product production rather than process analysis. And this fits very securely into the end goals of the institution of education: to create a general populace where

> ...the need to meet the perceived threats from crime, disorder, and poverty; the need to counteract cultural diversity; the need to prepare and discipline a work force; and the need to replace traditional popular culture with new values and skills. (Graff 1979: 28)

can be secured.

However, the effect of the education system on the general populace ranges beyond the creation of a secure state. The points of tension between the baseline goals of the state, economic interests and

responses from participating individuals/groups lay the groundwork for challenging, discussing, working with and against dominant societal themes. These tension points create a more complex situation that necessitates a multiplicity of reactions which form into layers of response patterns that address various social, interpersonal and personal goals. The tension is created when the interests/needs of individuals, then group, run counter to, or cannot be adequately met if the goals of the dominant social strata/state are met. Influence from the previous Enlightenment era also encroaches and edges the current hegemonic themes with echoes of an additional perspective on the benefits of education. As Sarup expounds:

> I believe that it is important for people to support the Enlightenment project because education is closely connected with the notion of change of consciousness; gaining a wider, deeper understanding of the world represents a change for the better. And this, in turn, implies some belief in a worthwhile future. Without this supposition the education of people would be pointless. (Sarup 1993: 183)

The counterpoint nature of education is revealed when all the players and how they are influenced are considered - the players: the state, the institution, the individual; the factors: class, gender, ethnicity; the elements: personal, and group dynamics. There are a multiplicity of combinations possible which reinforce particular goals of the players, the factors and the elements at a given moment. But it is how the major and minor themes are constructed, maintained and transmitted that influences success or failure for students in the education system.

2.3.3 Programme Development

Who designs college curriculum? Who designs courses? What

training do the course designers have? What experience do they have in designing courses? Who decides which programs are designed? These and other similar questions provide the basis for investigating the process of programme development and its effect on pedagogy for both instructors and students.

Informants: ([3])

> A: ...but the attitude more is: I'm the professional from the field. So whatever I have to share is what you want to hear. And I will go in and do a class or do a course on special populations and facilities or any of the other areas and I will simply talk to you about what I know. And I have some idea of all the things I want to be sure I cover. But in terms of really designing it and setting it up, and lesson plans that have continuity, that have cohesion, that have a cumulative effect building on each other - that's not there.
>
> A: And they have a course outline against which they have to cover material, but we all know that course outlines are pretty general. When they handed me the course outline for XXX I mean, just about anything goes.
>
> B: Up until the last, the beginning of the last recession, let's say in '89. We were still defining that our students had to be technically capable. Technical competency was the criteria for any course, any content. ...the question was, the test was, "Does it make the student more technically competent to do a job?" Now that whole idea, with the concept of generic skills, CSAC (College Skills and Accreditation Committee), the whole philosophy of the council of regents - and I don't like what's going on there either but anyway - has said, "Well, no, now what we got to do is we got to train people to be lifelong learners." Well, the implication of that then is, again, we're in this dilemma, "What is the body of knowledge?" People only have so much capacity in two years. There's only so much you can do in two years.

There is, in these informants' voices, a perception that current college curriculum does not fulfill program design or course creation needs.

---

[3]. The informants interviewed were college teachers with many years of experience. All of them were employed full-time.

The perspectives shift from the individual institution to the college system as a whole, but the continuing depiction is one of non-achievement. This lack of structural and system clarity speaks to one of the ways through which the maintenance and replication of the existing system occurs. The configuration which emerges seems to reinforce change but actually perpetuates the older structure as there are no guidelines and ways to gain and implement knowledge about a new system. Further, although new sets of power relations seem to bolster change and set up new power relational grids, in actuality, the old ones remain - based as always on gender, class and ethnicity - as these factors have never actually been recognized by the course designers, and so possible means to change is blocked. The script remains one where the college administration is apparently asked to change its approach to curriculum but where the changes are imperfectly implemented if at all.

> A: ...we are producing workbooks for our students. ...so we can give them the information and then have more, sort of fun, in the classroom - learning it, processing it, playing with it. So, we had to develop all these books and then we had to develop ways to use it; and we spent a lot of time. We did get some money for it. As it turned out, they were paying us 50 cents an hour... And we didn't do it for the money anyway. We believed in this. We believe that you have to do this. Well, when it comes to our SWIF (teaching load) in the fall, I said to XXXX, "Well, wait a minute, the evaluation factor - when you're using, when you have generic skills in your program, there has to be the essay evaluation factor."

> A: `Cause we're making them write. We're evaluating their writing, we're evaluating their - valuing is one of the skills that I implemented, and how they argue things. It has to be there. And XXX said, 'I can't give it to you." I said, " Well, wait a minute, YYY got it, why can't I get it?" (XXX said) " `Cause that puts you in an overtime situation, so you can't have it." I said, "Wait a minute. I'm entitled to it, and isn't this important enough that we're, the college is saying we're supposed to have this in our programs? And XXX says, "I've been told." XXX came

> back to me and XXX says, "I'm told that you will have to change your delivery to reflect that new evaluation factor." So in other words, it wasn't important. Because actually, we can't give you the extra hundred bucks it would mean or something over the year. So in other words...

These comments from informants not only delineate the actuality of implementing new strategies in the college system and how courses are developed (at least to some degree), it also demonstrates how other considerations, rather than those concerned with 'education' influence decision making. There is money available to produce the GSLO documents but there is little money for new adequately developed curriculum, course design and implementation.

The diagram which emerges from this is one where power relations are established and maintained through belief systems which enumerate what the institution of education should accomplish and this is not far removed from Ryerson's goals of the nineteenth century. The hegemonic current from this era is still adequate to mould the actual process and product of the college system today. To be sure, there are points of rupture - more non-dominant culture students, more awareness of gender issues, more helping mechanisms for students who are not adequately equipped for college. But, the baseline goal of the education system remains - to channel and mould students into forms which are part of the existing social structure.

2.4. Level #3 - The Impact of Culture: Concept Formation and the Individual in contrast with Institutional Goals

The view thus far presented establishes two major determinants of the education system: stakeholders and how ideology and hegemony influence the development of the societal flow. These determinants

form the conceptual framework or substructure with which the student interacts when s/he enters school. However, by the time a student enrolls in the school system her/his structure of values and thought may conflict, to a lesser or greater degree, with the model proposed by the dominant culture school system. In the following section, we will explore how the formation of concepts and values can contribute to whether a student will be successful or not in the school system.

2.4.1 Concept Formation

> To understand people, one needs to understand what leads them to act as they do, to understand what leads them to act as they do, one needs to know their goals; to understand their goals, one must understand the overall interpretive system they have that triggers these goals; (D'Andrade 1990: 117)

The above quote describes a cultural perspective for understanding information. Moreover, it emphasizes the importance of acknowledging cultural constructs of information when examining how people interpret and respond to the world around them. The "interpretive systems" referred to require the construction of scripts and cognitive map boundaries; the response patterns which ensure appropriate reactions. These patterns are framed from concepts which are culturally influenced. In order to understand the impact which a governing thought system can have on subject material if the learner utilizes a different world view from which to interact with given material, it is relevant to understand how concepts are formed from data.

Until the 1970s cognitive psychologists followed a "classical position" for concept formation which stated that:

> ...the properties contained in a concept are **singly necessary** and **jointly sufficient** to define that concept.

> For a property to be singly necessary, every instance of the concept must have that property; for a set of properties to be jointly sufficient, every entity having that set must be an instance of the concept. (Smith 1988: 21)

However, there have been several challenges to this viewpoint which rest on: 1) the failure of this perspective to specify defining properties for a concept and 2) the import of typicality effects (typical or representative of a concept) which demonstrate that non-necessary properties give rise to these effects and that not all instances of a concept are equal. (Smith 1988: 22) These findings have given rise to a new viewpoint surrounding concept formation which includes a category of "fuzzy" concepts as well as "classical" ones. Fuzzy concepts, unlike classical ones, do not offer defining conditions, occur only in some instances and are perceptually meaningful. (Smith 1988: 25)

It is in the internal elements of each perspective, core and prototype, that inferences on how cultural systems of knowing/seeing contribute to the organization of information are found. Fuzzy concepts are composed of cores and prototypes. The core of a fuzzy concept is not a definition as it is often too incomplete. Their most important role is in reasoning as they provide the space for inferencing - making assumptions based on classical core knowledge. (Smith 1988: 22) In contrast, fuzzy prototypes are used for rapid categorization and are perceptually salient. Classical concepts are composed of a core plus a prototype constructed from definitions depending on the given situation. "Prototypes of classical concepts are learned before their cores". (Smith 1988: 29) When the internal components of both concept types are either separate or combined, depending on the circumstances, they form instances or units of perceptual concretization which can then be

shifted into organizational taxonomies to create cognitive maps for the subject/object in question. The formation of these fuzzy and classical concepts does not occur in a vacuum. Rather, these concepts are constructed within particular environments which are influenced by personal interpretations of cultural parameters. Culture in this instance should be seen as being active rather than passive as it is not just received but acted upon and transformed.

> ... culture consists of learned and shared systems of meaning and understanding, communicated primarily by means of natural language. These meanings and understandings are not just representations about what is in the world; they are also directive, evocative, and reality constructing in character. Through these systems of meanings and understanding individuals adapt to their physical environment, structure interpersonal relationships, and adjust psychologically to problems and conflicts. (D'Andrade 1990: 65)

This perspective of concept formation when linked to values (stakeholders) introduces a useful triangulation around school learning. If a child learns concepts which: 1) contain different meanings for words/actions than those which the dominant culture uses; and then 2) structures the concepts into taxonomies in different ways than the dominant culture; and 3) uses a different governing system of thought to engage these concepts/taxonomies when problem solving, then different answers/reactions are to be expected. The different reactions/answers which students may demonstrate in school need not be very noticeable at the start. But, over a period of time, if multi-thematic cognitive spirals are not constructed, the student will find him/herself farther from the main academic ideology of the classroom without understanding why or how this happened. The only thing of which the student will be sure is that s/he does not "fit" and feels anger or anomie about the

situation. These emotional reactions to the school situation reinforce negative perceptions of learning in the dominant culture system and provide a basis for disregarding and resisting further dominant culture education, in school or out.

2.4.2 The Example: Ontario History Curriculum([4])

A practical demonstration of how the elements discussed above influence curriculum is provided through an analysis of the "Cognitive-Skills-Development Model" from **History and Contemporary Studies Guide - Part A: Policy and Program Considerations** for secondary school students in Ontario.

1. FOCUS *Limit, direct, or define a problem or issue.*

This cognitive skill, as with the subsequent ones, appears to be clear in its intent. However, the three action words: "limit, direct or define", depending on which governing system of thought template is used, can lead to very different representations of any given problem. This became evident when I worked for the Native Indian Teacher Education Programme (NITEP) at the University of British Columbia (UBC) as their on-campus tutor. Students were able to pick a focus and define, limit and direct a problem or issue but the parameters which

---

[4]. I have chosen this secondary school guideline for two reasons: 1) The guideline was developed by the provincial Ministry of Education as the framework to be used in teaching. It clearly sets out what is to be achieved during the teaching of the course in way which is not stated (as yet) for individual subject areas in colleges and universities. 2) The guide is for students who are nearing the end of their public school careers and as such presents the type of end goal states which are perceived as beneficial by the state/society for the soon to be graduates to have achieved.

were used to accomplish this were far different than those for dominant culture students. For example, during an English Literature class, a professor was asking students about their responses to a particular play. When a First Nations student was asked about her/his response to the play s/he replied, after some thought, that s/he had not finished thinking about it. The professor's reaction was to ask her/him whether s/he had read the play. S/he said s/he had. The professor asked her/him again about his/her response and s/he repeated her/his previous statement. The professor then accused her/him of lying about reading the play. The discussion deteriorated at that point.

From the student's standpoint s/he focused on the problem and defined/limited/directed it as: professor asks question ---> appropriate response. The action from this definition, which further clarifies his/her focus statement, was responding truthfully to the professor's question rather than demonstrating her/his ability to fabricate a response at that moment. From his/her cultural thought system his/her focus was correct: professor asks question ---> action = truthful response. However, from a dominant culture perspective this focus statement lacked another element or layer: appropriate dominant culture response ---> action - display knowledge. A focus for any action/problem is achieved through the end goals of an individual which are in turn shaped by cultural goals and values (including social and self identity structures) and if these goals and values are different from dominant culture perceptions then responses/actions which are not compatible with dominant culture goals/values occur which causes difficulty/frustration and a sense of shock - "How could X do Y?"

2. ORGANIZE *Select or develop a visual representation, chart, or organize for the focus.*

The cognitive skill of organization depends here on selecting a visual representation, chart or ORGANIZER for the focus. The visual representation and chart are fairly explicit and coincide with how dominant culture proceeds for problem solving. Whether non-dominant culture groups tend to select either visual representation or a chart to help organize a response to the focus statement is as yet undetermined; at best one could say that some non-dominant culture groups would utilize the above to organize information around the focus statement. I find the use of the next word ORGANIZER interesting as it seems to indicate that any type of method which allows the student to systematize a response to FOCUS is valid. Yet, if the organizer chosen by the student does not reflect dominant culture thought processes (goals and values), the outcome of the organization around the focus statement will initiate patterns which, depending on the variables present, can provide marginally correct or invalid responses within the dominant culture system. For example, in the situation described under FOCUS the student used a different type of ORGANIZER to respond to the professor's question. The ORGANIZER whether actually physically represented or mentally held, did not include a sector for interpreting dominant culture teacher questions as demands for displays of knowledge.

When one begins to deal with focus statements and organizational systems the internal constructs of a person's cognitive structure are invoked. These cognitive structures, developed through a recursive and interactive process between the Self and Others, form patterns which are transformed through time and experience into concepts, the latticework

of thought. As Glucksberg indicates,

> Words are one form of concrete imagery, visual images another. Abstract imagery refers to the propositional code that has been called the "language of thought" [Anderson 1980]. (Glucksberg 1988: 221)

3. LOCATE *Identify, find, and use reliable, relevant sources of information.*

The first two steps in the Cognitive-Skills-Development Model form the framework for subsequent ones as without problem delineation these steps would be unable to occur. Once again the implication from the **Locate** sentence seems to be non-culturally biased. But, if one shifts the template from one cultural world view to another, the action verbs and the descriptors for information become culturally tagged. Each of these words, within given personal/cultural visions has a different meaning. When I worked as the NITEP on-campus tutor the students often came to get help with information acquisition in a variety of different areas. One of the areas which provided difficulty was in translating and understanding what was meant by their professors' comment, "poorly structured". Before the students could go on to explore the concept of structure, I had to work out what their definitions of structure entailed as compared to their professors' ideas.

For most of the students, structuring an essay meant making sure to write in sentences and paragraphs and to address the chosen topic. The students did not understand that European essayist literacy requires a particular form - that of an "I" - with the thesis at the top, then the body explaining/verifying the thesis, and finally a conclusion which re-states the thesis or integrates the themes explored in the essay. If the students chose a writing structure following their internal

structural concepts of writing, most of them chose to write in a circular style. In this style, the starting point is the main topic. After this, however, all information which pertains to the topic is included no matter how slight the attachment may be. The essay ends when a conclusion is reached from the assembled information. The conclusion from both these essay styles may be the same, but the organization of the information is totally different. For professors, the "I" shape produces the correct structure; one which links information in a particular way. However, the circular style, because it does not link information in the approved ways is perceived as being chaotic and not well thought out. Once students realized they had to shift their understanding of what structure meant, they were able to find help and information on the topic. But it was not until the students could shift their internal constructs that change could occur.

4. RECORD *Summarize and translate information.*

5. EVALUATE/ASSESS *Determine the validity, appropriateness, significance, and accuracy of information.*

"Record" and "evaluate/assess" compliment "locate" and when these three steps are viewed as one step, form a secondary layer for the first two steps, "organize" and "focus". But, as with "locate" these steps involve recording and assessing material from a particular viewpoint which may not coincide with the non-dominant culture governing system of thought. For instance, when I lived in northwestern British Columbia, I was told the following vignette: In a Gitk'san village in northwestern British Columbia, some people saw a "haldogit" or a spirit who brings misfortune to those who see it. At a village dance that evening, a son

of one of the women who saw the spirit was knifed. Now , if the first five cognitive skills were applied to this situation the following would arise:

1. **Focus** - seeing "haldogit" -----> misfortune
2. **Organize** - draw a visual representation of the spirit
3. **Locate** - talk to Elders in the community about other such incidents.
4. **Record** - write down what happened when the visual sighting occurred and what happened later on that night.
5. **Evaluate/Assess** - talk with all others who had seen the spirit and find out whether anything bad happened to them.

One can use all the cognitive skills required and still produce end results which are at such variance with dominant culture governing thought systems that they are discounted. If a child came to school and told about the above encounter more than likely the dominant culture/acculturated teacher would try and convince the student the above did not REALLY happen. This type of situation occurred for one of the students in the NITEP programme. The student had just completed a science lesson for elementary school children on the difference between animate and inanimate objects. S/he was walking with her/his science professor when s/he stated that although s/he understood the difference between the two, that a rock, by the definition used in class is inanimate, for her/him the rock had a spirit and so was animate. The professor was shocked and spent a good deal of time trying to convince her/him that a rock was inanimate even though s/he had stated and proven that s/he could use the professor's definitions satisfactorily. What was actually occurring was a paradigm shift of such magnitude that no matter what type of cognitive skills are utilized the product will not easily fit with dominant culture beliefs.

6. SYNTHESIZE/CONCLUDE *Observe relationships in and draw conclusion(s) from information.*

7. APPLY *Predict, generalize, compare, and decide, basing these formulations on the conclusion(s).*

8. COMMUNICATE *Express information and ideas, and describe the cognitive processes involved.*

These last three areas form the last layer of the problem solving equation generally utilized by the dominant culture. Unless the other two layers (focus, organize, locate and record, evaluate/assess) are negotiated this third level will not be generated. As with the previous two levels, the conclusions reached, applications realized, and the communications about the process attained from the information presented, may be very different depending on which governing system of thought is utilized. Sometimes these differences in end product are construed by dominant culture teachers/investigators as the presentation of a cognitively underdeveloped society. However as D'Andrade points out:

> Cultural idea systems - about morality, aesthetics, science, human nature, and so on- typically have both universal and culturally specific components. There is little evidence that cultures can be characterized as more or less advanced according to stages of cognitive development, or even that children understand the universal components of these systems more easily than the culturally specific components. (D'Andrade 1990: 110)

In other words, it is not that students from non-dominant cultures may be deficient in some part of their cognitive development, or that they cannot conceptualize appropriately, rather it is that their governing

system of thought does not match the dominant culture one.([5])

The college system differs from the public school system in that it does not have a standard curriculum. However, the problems which have been demonstrated in the Grade 12 History guide are still present and form the backdrop for information presented to the student who enters the college or university system. It is this backdrop which creates the structure that performs gatekeeping functions on students who enter the different levels of the education system.

* * * *

This chapter examined the major functions of three interlocutors, the state, the institution of education, and culture in their various spheres of influence and their regulation of how and what information is transmitted to the individual. The state, hegemonically and ideologically influenced by the dominant culture, produces policies which are enacted by various social institutions - education being one of them. The institution of education, whether through its educational guidelines, teaching structures or programme development, reinforces the dominant culture's process and goals. This process was then linked to how this influences the actors - in this case the individual's construction of knowledge, by examining how culture influences concept formation, the initial step in ordering, categorizing and integrating information. The following chapter elaborates on this theme and examines how culture influences the development of the individual and

---

[5]. I think, too, that teachers must be overwhelmed when children or older students present alternate views of reality from information and processes which seem to indicate only one possible range of answers. Our teacher training system does not provide the methodology to cope with these alternate views, and nor does our society.

how this cultural individuation affects patterns of knowledge processing.

CHAPTER 3 THE INDIVIDUAL, CULTURE AND KNOWLEDGE PROCESSING: AN INTERSECTION

This chapter examines the dynamics between the individual and knowledge processing through the filter of culture. In the first part of this chapter definitions for the terms culture and individual are explored by comparing various definitions and using Hsu's model of "man", culture and society to elucidate how movement occurs through interior (individual) space to public representation and interaction. The last section of this chapter demonstrates how the cultural filter can effect an individual's performance in the dominant culture education system. Throughout this chapter the complex and transformative nature of cultural and individual relations are stressed.

3.1. The Concept of Culture

> The true locus of culture is in the interactions of specific individuals and, on the subjective side, in the world of meanings which each one of these individuals may unconsciously abstract for himself from his participation in these interactions. (Sapir 1985: 515)

> Culture or civilization, taken in its wide ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society. (Tylor in De Waal Malefijt 1979: 139)

> Culture is an ordered system of meanings, values, styles, and symbols which guide human action, while the social is the specific form of interaction itself. Individuals define their world and make their judgements in the framework of culture, but the specific form of their actions and interactions takes place within the framework of the actually existing network of social human relationships.

> The two are no mere mirror images of each other, but may well be conflicting. (Geertz in De Waal Malefijt 1979: 212)

> As I see it, "culture" designates a cognitive system, that is, a set of propositions, both descriptive...and normative...about nature, man, and society that are more or less embedded in interlocking higher-order networks and configurations. (Spiro 1984: 323)

As one reads through these and other definitions of culture ([1]) several key ideas keep re-appearing: interaction, meaning, complexity and system. This list provides the basis for a general definition of culture, but does not address its narrower descriptive components. For example - Is it a matter of social interactions or cultural interactions? Is it solely about cognitive systems? What does acquired mean? What is the definition of society? Anthropologists appear to agree on the broad outlines of culture, but when elaborating this outline choose particular facets.

The anthropological definition which I have evolved includes the familiar but also adds several other elements:

> Culture is an ordered system of meanings which is both embedded in interlocking higher order networks (cognitive structures) and within interactions/relations (social action). There is a dialectical and recursive interaction between the frame and its component parts such that action (relations/interactions) can change the structural component part of the cultural matrix. As well, actions/relations may vary from a common cultural theme depending upon individual circumstances.

My reasons for choosing this particular definition of culture are

---

[1]. Kroeber, Morgan et al. (De Waal Malefijt 1979)

determined by four beliefs: 1) It is necessary to combine structure and interaction at both the personal and group levels. 2) It is essential to include an element of change within any construct of culture so it remains active over time. 3) The individual is the component actor segment for micro or macro interaction as s/he initiates action and thereby reaction. 4) There is an acknowledgement of the dialectical and recursive qualities of human action which develop into both linear and non-linear segments of systems.

This definition of culture stresses the transformative forces inherent within social actions, whether they are linked to systems, institutions or individuals. The reference to the notion of non-linearity or chaos, borrowed from the physical sciences, brings into focus how the process of pattern making occurs and its relative influence on other actors.([2])

The introduction of chaos theory provides a new perspective on how personal and social activities can go beyond predictable patterns to form new patterns around various conditions which arise. (Gleick 1987) A focal point for the concept of chaos in anthropology is the need to examine given conditions and perceive the multiplicity of patterns which can arise from various combinations. The norm, the element of predictability in a linear system is lost, but the recognition of

---

[2]. Of course, there cannot be a direct application of the actual mathematics used in physics (at least not yet!) but the concepts are thought provoking and their orientation reveals new possibilities for making sense out of confusion.

actions and the transmitting patterns they construct in a non-linear system is gained. The actual functioning of the culture rather than its ideal form, the replicability or linearity changing into the non-predictable or chaotic, is revealed.

The attractiveness of chaos theory for anthropology resides in how systems can start linearly and then become non-linear or chaotic. The difference between a linear and non-linear system is in the linear system's capacity for replicability and prediction of approximate behaviour of the system. In the non-linear system, even given an approximate knowledge of a system's initial conditions, the approximate behaviour of the system cannot be determined. (Gleick 1987: 24-25)

In anthropology certain initial conditions, at least systemically, are known and fairly accurate predictions can be made about what will generally occur. For example, Y type of economic gift-giving will engender X types of social relations (Levi-Strauss 1969). There is also a generalized understanding of what constitutes a culture and when these subparts are placed together a total representation is formed. This corresponds to the linear aspect of a system.

The transformation from a linear to a non-linear system requires explanation and new means for searching for patterns. The non-linearity is introduced to a linear system by increasing a parameter. Small changes are magnified and this magnification can bring the situation to a critical point beyond which the pattern becomes unpredictable and chaos sets in. (Gleick 1987: 69-71) Anthropologically, many systems seem to function in this way. For example, the notion of rate of change

in societies introduces a change in a parameter which can introduce non-linearity into a linear system. The questions, "What are the mechanisms encapsulated by the transnational change process transculturally?" and "What are the socio-cultural effects?" refer to a complex and non-linear set of processes currently taking place. Questions like these illustrate that anthropologists may find in the notion of chaos the conceptual tools for a deeper structural analysis of complex systems.

Although predictability is lost in a chaotic system a type of pattern for various conditions can arise. The acculturation process offers an example of this. Anthropologists can make certain assertions about how acculturation proceeds but at some point the system becomes non-linear when non-generalized acculturation statements are made perhaps about a specific sub-group. Various other parameters such as: ethnicity, class, gender, up-bringing, urban/rural location, and self-identity amongst others provide the intensification which destroys the linearity of the analysis. However, this may also provide a type of pattern. Even within chaotic regions their remains a certain amount of self-similarity. (Gleick 1987: 55) These elements of chaos theory could provide a way for anthropologists to merge known givens with destabilized patterns.

> The intellectual aspiration to the elegance of order as well as its repugnance for a disorderly mysterium and the flux of events are overcome in the perception that truth lies closer to the currently unordered than to the currently ordered. (Burridge 1979: 31)

* * * * *

The first part of this chapter outlined the major conceptual

elements of culture and provided an introduction to the possible utility of chaos theory for anthropology. The following section provides an outline for a concept of Self from the perspective of Hsu's schema of man, culture and society.

3.2. A Definition of Self

> A person is someone: a precise intersection of the common and general categories prescribing the series of dyads,([3]) a combination or permutation of category cliches. These yield an identity which, readily identifiable in terms of the cliches, is also unique in virtue of the integrating self. Possessed of a unique constellation of genes, sensations, and experiences, the self puts its stamp on the cliches but, because of the cliches, remains someone, a person.
>
> An individual is not anyone, though anyone may become an individual. The person, someone, may strip himself of given roles and statuses, distance himself from the dyads - thus loosing identity - and, in moving into the unstructuredness of no one, may become an individual by extracting an order from it. (Burridge 1979: 41)
>
> .....I think of "Self" as a text about how one is situated with respect to others and toward the world - a canonical text about powers and skills and dispositions that changes as one's situation changes from young to old, from one kind of task to another, etc. (Bruner 1982: 848)

All these definitions refer to human beings, but they also address different viewpoints on how humans interact with the world. Descriptions of the Self in the above quotes range from inclusive to

---

[3]. Burridge's demarcation of what constitutes the publicly acknowledged components of a person begins with recognizing dyadic relationships. Each part of the dyad creates the role for the other and brings the other into reality. (Burridge 1979: 40-41) Burridge goes on and describes another element which the dyadic relations engender, stereotypical patterns that create boundaries for the actions of people in the dyadic relations.

particular, from looking at relations in the interior individual world to focusing on the exterior social world. Each of these descriptions pertains to a particular facet of a complex whole which constitutes the Self and its concomitant projections of the Individual and Person. The overlapping nature of these items requires an analysis of each constituent part so the gestalt of the idea, Self-Individual-Person, can be viewed.

Hsu's model of the "elements of man's existence" (Hsu 1985: 27) provides for an integration of the many levels of the Self which are apparent through a person's actions. This model is conceptually very useful as it establishes a culturally comparative structure. Before proceeding with the application of this idea, a minor caveat. I do not agree with Hsu's acceptance of Freud's conception of the unconscious and preconscious. (Hsu 1985: 28)([4]) Freud's theory spoke to the pathological rather than creative nature of the unconscious and pre-conscious and while this description has been the lynch pin for psychoanalytic theory, it does not adequately deal with positive, healthy, and inventive responses from these layers. Given this lack of inclusiveness in Freud's concept, I propose to consider the unconscious and pre-conscious as layers of the self which contain the propensity for healthy or pathological response given particular initial conditions.

---

[4]. I reached this decision after a presentation on the unconscious before Freud by Dr. Preston, McMaster University, November 26, 1991.

Hsu's model begins or ends with layers 7 and 6, the unconscious or pre-conscious (Hsu 1985: 28) where information is not easily accessible, if at all. Layers 5 and 4, the inexpressible conscious and expressible conscious, (Hsu 1985: 28-29) follow and Hsu indicates they contain material which may or may not be communicated or not given individual proclivities. These layers also mark the potentially communicable part of the Self. Layer 3, intimate culture and society, presents a bridging layer between inner and outer, or public and private Self. This is the actualizing layer where internal constructs (needs, wants) become visible; where relations and intimate attachments are formed. The last three layers of Hsu's schema represent differing relations with the larger world. Layer 2 refers to societal roles, layer 1 to cultural knowledge and layer 0 to the larger world. (Hsu 1985: 30 -31). When these eight levels are combined, the gestalt ([5]) which is achieved is different than the sum of each of the parts. Just summing the parts cannot portray the complexity of interactions amongst these layers that results in the development of unique individuals who interpret and react to situations from their own particularly determined universe.

---

[5]. Gestalt here is used as defined by Wertheimer, Koffka, Kohler and Lewin:

> All emphasized the principle of relational determination - that is, that properties of parts depend upon the relation of the parts to the whole... A whole is a dynamic system that is fundamentally different from <u>any kind</u> of sum or summative, accidental concatenation. (Wertheimer 1970: 132-133)

Hsu's schema reveals the multifaceted nature of the different layers constructing the entity of Self. The complexity of these issues reinforces the need to blend a variety of viewpoints to achieve a comprehensive representation of Self. But, for this discussion, one paramount feature, the influence of culture on the Self is examined.

> We will assume that any kind of psychology that explains the behaviour of the individual also explains the behaviour of society in so far as the psychological point of view is applicable to and sufficient for the study of social behaviour. (Sapir 1985: 544)

Sapir's reference here to the way in which the map of the individual and society can be overlain ties together individual and cultural presentation. His reference to the links between individual and social action reinforces the relational aspect of action/interaction whether at the micro or macro level. Sapir also acknowledges that effecting a direct transference from individual to societal behaviour rests on whether a particular perspective, in this case a psychological one, is adequate for developing additional assessments of a social behaviour.

The relational aspects amongst these two intermeshing systems, culture and Self, are points on a multidimensional field which create points of action/change whenever an action is initiated.([6]) Patterns become evident out of this maze given the strength of the overall

---

[6]. Although Hsu refers to homeostasis within his perspective (Hsu 1985: 28) I believe he may be actually referring to change within acceptable boundaries as true homeostasis or balance is achieved only when an organism is dead.

guidance system or culture. But the patterns are never absolutely accurate as individuals work out their particular personal relationship to their cultural guidance system as well as to their own interior cultural system. The interior cultural system is one which develops in response to external cultural influences and how they are interpreted by the individual given his/her experience of the world. The interior cultural system usually merges with the dominant external cultural system at various points but retains interpretations which may be at variance with it based on other interpretive variables such as gender, class and ethnicity. This promotion of a multidimensional approach engenders a more accurate perception of events and encourages a fully relational interpretation of cultural and Self patterns.

* * * * *

Thus far, a general working script has been developed for both the terms, Self and culture. The major parameters for these terms have been linked together through action and relations. The following sections of the chapter discuss how Hsu's schema about the elements of human existence can be divided into two main categories: 1) world and Self, and 2) individual response, and how these categories have effected the Western concept of self and culture.

3.3. The Development of Self in Western Culture

Hsu's (1985) analysis of how human beings (Self) interact with their surroundings (culture) is predicated on the distance of a specific stimulus from the core Self. The author enumerates eight layers and

makes a distinction between conscious and unconscious response patterns. These eight layers broadly but essentially characterize the activity of the Self. The transformation from a Self perspective to a cultural one can be achieved by grouping the layers into two clusters called: world and individual [social roles] (layers 0,1,2,3,4), and individual response (layers 4,5,6,7).

The development of the Self in Western culture follows, synchronically and diachronically, all of the layers which Hsu describes.([7]) There are two viewpoints for this synchronic and diachronic activity, the position of the actor and the position of the viewer or system. From the actor's position the diachronicity is not consistently well marked. Activity is based on an interactive, pragmatic basis. From the system perspective the synchronic activities of the actor disturb the historical flow producing small deviations that over time influence change in the historical line.

The diachronic element for this schema resides in the world layers and is established through an historical perspective. These world layers are where continuity over time occurs for the cultural themes and practices of each culture. It is in these layers that intergenerational knowing becomes historically situated. The resulting themes and patterns are then transferred from the general culture to the individual-in-the-group. The enactment of the historical patterns at a

---

[7]. It is this duality of existence in the unconscious and conscious response patterns which adds to the difficulty of comprehending the developmental process of the Self in and by culture.

group-individual level is through life-long learning of social roles. These social roles cum cultural themes are finally located in the individual and his/her relations which provide the synchronic perspective. This synchronicity appears in the interaction of the individual with his/her on-going diachronic cultural themes. The historic meets the present through the individual. The change process, or the linking of diachronic and synchronic elements is through their interaction. The individual interprets the cultural knowledge from the general stream surrounding him/her and through his/her reactions and actions, reinforces and minutely or greatly changes cultural practices. The elaboration of these particular facts of Self/culture are recursive as there is constant movement from one level to another and back again.([8])

3.3.1 Developing Social Roles

The development of social roles differs, in response to particular circumstances, from culture to culture. Some cultures view social roles as being a-individual (Geertz' description of Indonesian culture [1983]) while others require a significant amount of individual determination (Bellah et al.'s description of American culture [1985]). But within the different forms that social roles assume from culture to culture

---

[8]. The development of particular cultural patterns of response is described in work by Margolis (1987) and Cole and Scribner (1974). These patterned cultural responses are part of this interactional network of self and culture and demonstrate the intricacy of linkages amongst the various components of self and culture.

some of the defining parameters remain general: separation of the differentiation of the public/private self, the influence of gender, class and ethnicity.([9])

It is through the inter-relationship of these parameters formed from cultural themes, that social roles are constructed. These roles are individually interpreted according to a person's specific situation. De Vos in his discussion of the individual's role in the Japanese family notes:

> Later he comes to have his own opinions about other family members but characteristically he still does not voice them openly as this would be a breach of expected behaviour. (DeVos 1985: 153)

This quote also alludes to the distinction between the concept of private and public self. The public self is governed by social roles and norms, whereas, the private self contains emotions and thoughts which may by inimical in the presentation of the public Self.

Evolving culture shapes not only particular institutions but also the types of roles which are available to and required from people who live in that specific culture. The social roles mimic the necessities of given conditions and provide guidance to individuals in their never ending task of shaping action and constructing meaning from reality. Mead outlines this connection between roles and the Self:

---

[9]. I am using these terms knowing that a specific interpretation of them in a given culture will result in a different representation. This difference may be so radical as to negate their experiential existence in our cultural descriptive terms. However, I feel they are useful here as parameters which are understood in this culture.

> ...the development of the self...(is) on the basis of reflected symbols from others and the learning of roles which one undertook to live. (Mead in Perry 1982: 227)

Roles and social institutions combined with the Self form the expectations for the inter-relationships which develop through social interaction. The actual process of interaction, of negotiating response, is the transformative and elucidating part of this meaning structuring engagement.

> So if one asks the question about where is the meaning of social concepts - in the world, in the meaner's head, or in interpersonal negotiation - one is compelled to answer that it is the last of these ....Rather, it is what we can agree upon or at least accept as a working basis for seeking agreement about the concept at hand. (Bruner 1982: 837)

This structure is located not only in the outer world but also in the intermediate world where the elements of class, gender and ethnicity act as symbols from which individuals can gain some understanding of their actions in society and the structure of their personal Selves.

Hsu's use of layers to depict the differences between inner and outer worlds of social relations is useful in theoretical discussions. However, in reality there is a constant blurring and meshing of various layers at any given point in response to various demands. The same dichotomy is true with role definitions. While reading through the literature on culture and interpersonal communication with respect to role definition, I noticed the tendency of researchers to over-generalize specific traits. The tendency to utilize polarity rather than contiguous categorization methods produces a clean template but as Rosch points out:

> ...Categories may be analog rather than digital in nature

> and may consist of prototype (the best example of the category) surrounded by other category members of decreasing distance form the prototype. (Rosch 1975: 201)

3.3.2 Individual Personal Response

This last level of individual development is primarily based on distinctly private thoughts and reactions, constructed from reactions and actions both at interior and exterior loci. This layer of development corresponds with Hsu's layer 4, expressible conscious, layer 5, inexpressible conscious, layer 6, pre-conscious and layer 7, unconscious. It is in these layers that outwordly experience is personalized and made real to the individual. These layers encompass images, sounds and memories, influencing feelings that actively mould the inner state of being. These layers of the Self provide a processing/reactive venue for the individual, defined in Western or non-Western terms, to interiorize and/or exteriorize his/her experiences.

The construction of a functioning Self requires a merging of the inner and social role layers. Without this conjoining, the individual would be unable to interpret situations, perceptions, or circumstances in a culturally appropriate manner.([10]) The process of integrating individual experience, of making sense or understanding stimuli is like a kaleidoscope where every turn of the cylinder produces a new configuration with different nuances and points of dominance. The understanding of each scene or picture in the kaleidoscope, as within

---

[10]. Layers 6 and 7, the outworld in Hsu's schema give form to the culturally appropriate response.

the individual, is based on the relationship of the parts and finally on the end gestalt. The development of the Self and the translation of the Self into a functioning integrated individual who is able to transform perceptions into meaning and then act on that meaning requires a synthesis of all the levels which Hsu outlines.

The emergence of a core personality from the experiences and perceptions of the inner Self requires, according to Sullivan, two basic elements: the need for satisfactions and the need for security. (Salzman 1967: 342) The need for satisfactions comprises the biological needs of the person e.g. food, shelter, air, sex, etc. The need for security consists of social relations and specifies, "...the need for status, recognition and a relationship to others." (Salzman 1967: 342) If the Self cannot acquire certain minimum levels within these two categories then pathological behaviour occurs.

> Therefore, mental illness, or personality disintegration, that results from excessive anxiety is intimately linked to the lack of self-esteem and self-regard, and the feeling of powerlessness in interpersonal activities. (Salzman 1967: 342)

The individual personality structure which arises from these elements is built in relations, internally and externally, personal and group. The net of interlocking relations, provides the parameters for creditable cultural interaction over time. The enactment of the individual in everyday life requires a degree of cultural "fit". But, within the boundaries of this cultural "fit", many degrees of flexibility for individual expression in relations exist. The distinctiveness of a Self and portrayed individual does not rest in a

particular rigidity of individual interaction. The particular role which an individual assumes in a given context does not remain fixed. Various external and internal factors influence how an individual acts and reacts in a given context. As Sullivan noted:

> For all I know... every human being has as many personalities as he has interpersonal relations. (Sullivan in Perry 1982: 108)

Another component of the Self-in-relations, which is often not addressed, is emotions. Emotions are generally set to one side when schemas for culture and Self are discussed as they are ephemeral and difficult to trace, investigate and project. But emotions provide another dimension for understanding the texture of the relations we daily enact/encounter. Moreover, it also seems possible that emotions themselves provide bridges amongst the different levels of Self. This bridging does not necessarily occur in an orderly fashion as levels may be jumped and some may have more bridges or access points than others. ([11]) In this portrayal, emotions act as a type of conjoiner, almost like blood in the body, touching various areas and layers and bringing renewal or pathology depending on the "health" of the individual.

The journey from the inner layers of a person to the exterior representation of the interior, is one which includes formalized patterns as well as unique responses. This process also creates the

---

[11]. A comparison can be made with the children's game of "Snakes and Ladders" where different levels of the board game can be won by climbing ladders or lost by sliding down snakes. The important image here is one of connecting different levels with the connectors being emotions.

potentialities for relations which are the essential milieu of the exteriorized Self. In turn, these relations are meaningful to the interior layer and further supply the interior Self with experience. Halliday's definition of the two functions of language, pragmatic and mathetic, parallels the type of development which occurs through relations for the inner Self. The pragmatic function is concerned with the orientation of the Self to others - interpersonal relationships. (Bruner 1982: 842) This is the counterpart of the exteriorized self which forms relations with others within the parameters of cultural requirements. The mathetic function pertains to heuristic, imaginative and informative functions. It is , "... the means whereby we create a possible world and go beyond the immediate referential." (Bruner 1982: 842) This function is a facsimile of the inner layers of personality where the essence of the Self constructs and re-constructs itself based on information, projections, perceptions and feelings.

The realm of the inner Self, this least accessible and unstructured area of culture, is where as Burridge so aptly says:

> .... events happen and facts are made, person and individual, respectively precise and imprecise intersections of the common and general categories... (Burridge 1979: 42)

This creative and synergistic area brings texture and colour to our interpersonal relations at whatever level they occur. Without the construct of the Self, shaped by whatever particular cultural configuration, the ability to be creatively innovative would be lessened. Particular individual gestalts would be concerned with recurring patterns rather than with a complex set of personal historical

memories (memories and emotions) and how they currently reflect on particular activities.

3.4. Cultural Influences on the Self during the Educational Process

Examining how the individual/Self inserts him/herself into patterns of cultural knowledge is a base point from which to understand the constraints and openings that emerge in the creation, reproduction and transmission of knowledge:

> At question here is the issue of who speaks, under what conditions, for whom, and how knowledge is constructed and translated within and between different communities located within asymmetrical relations of power. In addition, there is the important issue of how identity itself is constituted and what the enabling conditions might be for human agency. (Giroux 1992: 26)

The construction, translation and transmission of knowledge define how we interpret and organize the world around us. We learn how to understand which pieces of information are important and under what circumstances through a variety of relationships. The nexus for these relations begins with our primary care giver(s) in infancy and expands outward to non-family members as we mature. Our family selects and shapes the data we first receive and superimposes an order on it based on their frameworks for understanding public/private information, and local/global knowledge. It is within these primary interpersonal relations that individual identity is formed. The psycho-social boundaries are etched and then patterned with the repetition of sanctioned acts until an accepted script of actions/reactions, based on the constructed categories of the individual's culture, become

rationalized and routine.

This cultural formatting means that people from each culture encounter information differently and have unique culturally influenced, unconscious and conscious ways of experiencing and processing the data. These cultural patterns, whether for accessing "general knowledge" or for applying analytic categories to the data, determine how information is analyzed and whether an individual will feel "at home" in a given situation. These cultural structures of knowledge have an immense impact on students and educational institutions as they shape individual information processing and influence social and intellectual interactions and reactions. The following excerpts from my field notes emphasize the barriers that students face when the cultural role in knowledge construction is not acknowledged and incorporated into curriculum and instructional practices and institutional policies.

> *Field notes:* After meeting with X I found out why s/he had been avoiding working on her/his writing even though s/he has expressed interest in doing so. Turns out the very though of bringing in writing makes her/him feel powerless, stupid and out of control.

> *Field notes:* Then we started talking about information and research and s/he still seemed lost about how to handle the topic. I suddenly thought that maybe s/he didn't realize what the ultimate goals of the essay were and so explained that s/he shouldn't know what type of tests were needed; that that was part of the game --> you researched until you found the relevant material and there were many places to go. As well, the prof has a different goal than the student - the prof wants to see how you can research and pull information together - the student wants to prove a point. X was *very* distressed at this point. When X could talk again s/he voiced a heartfelt complaint, and one I could heartily empathize with - "Would s/he ever catch up?"

> *Field notes:* Very interesting day with Y. (Y is an informant who grew up in three different countries, Spain,

> France and Canada. S/he did not attend an English as an Additional Language class when s/he first came to Canada and feels this has caused her/him a great deal of difficulty.) First thing, I went to visit the counselling department to inquire about Y. The counsellor's analysis of Y was that s/he was working above his/her capacity. I told the counsellor about Y getting a "B" in Physics and her/his response was that a mentally retarded or semi-retarded person - IQ 70 - had passed a psychology test.
>
> Y showed me his/her test - Y got 74% on his/her Canadian economic history test when quite a number of others had failed the exam. Hmm, this just doesn't sound like someone who is borderline intellectually.
>
> Plan of attack: Perhaps I'm not dealing with someone who has learning disability problems...maybe I'm dealing with someone who has been seriously undereducated.

In the context of the individual/Self reaching out to the public domain, culture is the translation medium which authorizes some selected actions over others. It is in this process of how the individual/Self configuration participates in a given culture and in the culture's assertions that patterns of knowledge transmission occur.

3.5. Conclusion

The focus of this chapter has been the exploration of relations between the Self and culture. The first portion of this section developed a working definition of culture which emphasized relations, process and the individual as key components. The following segment went on to locate the concept of Self within culture. Hsu's model was presented as a useful schema for tracing the complex pattern of relationships produced by examining an individual actor within the larger culture. The third division of this section provided an analysis of the development of the concept of Self in Western culture by merging

Hsu's categories to form structural units for internal/external definition. These categories consisted of world and individual or social roles and individual personal response. The component parts or layers of these two categories are the themes which guide personal actions and relations. Within each theme a variety of individual circumstances produces diverse actions. The initial conditions, whether at an individual theme level or a cultural one, produce patterns with variable parameters and cores, each more or less flexible depending on particular requirements. This process of pattern formation links the Self to culture and vice versa as the relationships are dynamic and recursive, producing personal and cultural constructs which give meaning to the infinite onslaught of perceptions and actions. The final section situated the Self in the educational process and demonstrated how cultural information patterning can effect knowledge transmission.

CHAPTER 4 BRINGING THE INDIVIDUAL, EDUCATION AND CULTURE TOGETHER: FROM MICRO TO MACRO, PATTERN COGNITION AS A LINKING STRATEGY

Introduction

The preceding chapters have provided an analysis of micro and macro actors relevant for the construction of a model for how culture influences educational achievement. In chapter four I use the theory of pattern cognition to draw together the micro and macro levels of interaction taking place in the classroom. The first part of the chapter outlines several relevant educational contributions from three disciplines which contribute significantly to the field of education. These include: psycholinguistics and psychology, sociolinguistics and anthropology. This is followed by a survey of the theory of pattern cognition and how it is useful for educational theory and practice.

4.1. The Nature of Education

What Johnnie doesn't learn, John will be unable to. (Ukrainian Proverb)

The essential nature of education requires one to pose and answer questions, to find relationships and patterns in the myriad of facts and ideas presented in classrooms, books and in each person's lived experience. But what happens if the questions asked, the responses given, the relationships and patterns created are not suitably encoded linguistically, socially or culturally for the school setting? Students who are unable to establish the necessary relationships and patterns

relevant to the information taught in the education system are at a distinct disadvantage. Not only are they not able to ascertain what is significant in the information they receive, they are not able to establish which types of relationships are validated in the system.

The impact of not being able to establish educationally relevant relations and patterns is noticeable among non-dominant culture students whose world construction differs significantly from dominant culture students. How culture influences interpretations of information in several academic skills areas, reading, problem solving and language use, has been provided by psycholinguistics, psychology and sociolinguistics. Anthropology provides a socio-cultural contextual form in which these fundamental educational skills are learned.([1])

1. Psycholinguistics and psychology provided information on the dynamics of reading and problem solving patterns. Goodman's (1976) view of reading as a psycholinguistic guessing game, rather than as a precise process of decoding, links reading with personal experience and hence cultural knowledge as well.

> Efficient reading does not result from precise perception and identification of all elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses which are right the first time. (Goodman 1976: 372)

---

[1]. There will be, however, inevitable cultural transformation as new information and framing systems become the way of knowing and reacting to events. But this type of change is natural in the continuing growth of any culture. I believe it is more the rate and degree of control over the process of change which tends to destroy cultures rather than change in and of itself.

Cole and Scribner (1974) look at the effect of literacy and schooling on problem solving abilities cross-culturally and speculate that education rather than cognitive capability is the pivotal point when assessing cross-cultural learning achievements. Bruner (1966) regards cultural cognitive cohesion as a probability among people. This infers that the cognitive capabilities of all peoples are the same, with different dominant productive capabilities being mediated by responses to various economic and ecological conditions.

2. Sociolinguistics has provided information on language and its relevance in cultural interaction. Researchers such as Halliday (1978) look at language and how it serves as a decoder and encoder of specific acts. Cazden (1972) describes the different learning styles amongst children in the school system. Labov (1966) outlines the impact of dialect and how it affects human interaction. Bernstein (1971, 1975) demonstrates the effect of class and gender on language use. Scollon and Scollon (1981) attempt to integrate cultural values using an industrialized/non-industrialized dichotomy in order to provide a framework which delineates each group's learning requirements.

3. Anthropology has provided research on how culture can affect students in an educational setting. Kleinfeld (1979) proposes a type of culture fusion which would permit students from one cultural group to become bicultural. Philips (1974) documents how learning patterns in a reservation school support traditional learning methods, while Murdoch (1986) focuses on the need for school curriculum and teaching methods which fit indigenous peoples' paradigms. Brice-Heath examines how

language and schooling are influenced by ethnicity, class and gender.

Each of these perspectives provides insight into the difficulties which students may encounter in the classroom. But, as each perspective is domain-specific, it cannot be simply generalized in order to adequately analyze other significant concerns or provide an integrated position as to why students encounter learning obstacles in classrooms.

4.2. Pattern-Cognition (P-cognition) as a Linking Theoretical Standpoint

From the outset it is necessary to acknowledge that an accurate theory of how the brain operates has yet to be offered. However, P-cognition with its emphasis on patterns ([2]) and relationships as a basis for learning provides a framework from which to assess the variety of elements introduced in the last section. Basically, Margolis' definition of P-cognition consists of the following four steps:

> **1.** P-cognition consists of a series of cognitive cycles or spirals-to-patterns-to-cues-to-patterns.
> **2.** Each cycle or spiral is prompted by some pattern which is influenced by immediate context, individual experiences and the priming/inhibiting effects of other patterns. (These cycles in turn cue other cycles.)
> **3.** Only a small amount of these prompted patterns are

---

[2]. I will use Margolis' representation of pattern as it is sufficiently broad to cover all elements:

> ...a pattern (the arrangement of features in a room, phonemes in a word, for examples) is prompted by cues in the context. That patterns itself then becomes part of the environment which cues the next pattern. Sometimes a pattern, or a feature or subpattern within that pattern, is externally expressed (something is said or done); sometimes (not the same thing) a feature or pattern comes to conscious attention. (Margolis 1987: 2)

actively perceived.

4. The patterns which are recognized/formed concern either context or action. (Margolis 1987: 1-3)

These four steps offer a non-mechanistic approach for analyzing cultural structures and actions as they provide a format for sorting responses into groups or cycles of activity. The repetition of these cycles engenders patterns, some of which may be narrow and non-transforming in response to cues, while others may be broad and transforming. Tied to unconscious and conscious stimuli, these patterns evolve frames of reference from known information patterns, thereby creating the basis for further responses to new situations. These patterns make a cognitive map from which context governed responses and action are appropriately selected in response to a given condition.

P-cognition, because it addresses patterns and how they evolve and change, is a useful connecting theory for perspectives which are culturally situated. Margolis (1987: 1-3) maintains that pattern recognition occurs in spiral sequences and can occur in several dimensions at once, i.e. playing the piano and conversing at the same time. However an object or action is portrayed through the five senses to the brain, its recognition is prompted by contextual cues and serves, in itself, to act as the context for the resulting pattern. It would seem, given the above, that there is also a continual sorting and gathering of main data/themes needed for problem solving from each

spiral([3]) which are then shifted to subsequent spirals as required. These data/themes act as outer boundaries to encapsulate and retain information in accessible units for pattern-processing.([4])

To accept the use of pattern recognition as a viable theory, how pattern recognition reveals an effective design for efficient brain functioning needs to be examined. Margolis (1987: 28) lists four steps,([5]) which he believes necessary for cogent and coherent functioning:

Information Processing:	**Blended with:**
1. jumping (reaching a response)	instinct
2. checking	
3. priming (becoming inclined to make certain jumps)	habit
4. inhibiting (opposite to priming)	judgement

(Margolis 1987: 28)

These four steps are merged with pattern recognition protocols which

---

[3]. I like Margolis' choice of a spiral as a metaphor for cognitive process for several reasons: 1) It carries with it the notion of ongoing movement; the ability to cope with new situations as they arise. 2) The use of the spiral also permits transformation of responses to particular cues without breaking the links to initial responses which have laid the basis for the possibility of the transformative response. 3) The spiral metaphor also encourages recursiveness as it is not a closed system.

[4]. Perhaps poetry is effective because it draws on the outer frameworks of these spiral patterns by using word association cues which bring forth subconscious responses. This may be a short or interrupted form of accessing the larger/longer spirals.

[5]. These steps are Darwinian in the sense that competition, seen as the basis of that theory, creates a pressure for efficiency which is in turn shaped by cognitive processes. (Margolis 1987: 27)

give them further clarity and definition. Essentially, the pattern recognition protocols form a bridge between functioning and building pattern response spirals. As well, these P-cognitive steps enable individuals/cultures to develop personal/group cognitive repertoires which equip them to contend with their world. There are five main elements to these overheads:

> 1. Cognition is built out of sequences of patterned responses to cues.
> 2. The cued patterns of judgment can be expected to involve important parallels with other cognitive operations such as those governing physical habits, memory, moods, emotions.
> 3. These patterns are not necessarily or even ordinarily consciously perceived...
> 4. Patterns play a dual role: we recognize patterns in making sense of the world; we are prompted to use patterns to guide activity in the world.
> 5. Explicit reasoning is based on patterns of language ...and, through language, tied to sociality. (Margolis 1987: 72-73)

These steps imply that certain set procedures take place in all humans as they try to make sense of their worlds and so are crucial in the development of a theory which looks for common principles underlying human cultural diversity.

4.3. Pattern recognition steps and their educational impact

> 1. *Cognition is built out of sequences of patterned responses to cues.*

As we collect data from our world we tend to group like experiences together. This not only makes it easier to access relevant information, it is also necessary for memory and problem solving as our brain's short term memory can only hold 7 plus or minus 2 units (Miller 1956: 81-97) before interference becomes a problem. Given the necessity

of organizing stimuli in some type of order for quick assessment, we build up repertoires of cloze-like([6]) sequences which can be amended as necessary. As Margolis contends:

> ...our thinking will be biased toward 'bundle-able' or 'patternable' sequences, so that what we find plausible and comprehensible is intimately tied to what can be assimilated to patterns already in our repertoire and built out of bundles (smaller patterns) already in our repertoire. (Margolis 1987: 77)

Without the smaller patterns, the linkages to new sequences can be difficult. Cole and Scribner discuss the impact of culture([7]) on perception and conclude that "culturally patterned conventions" (Cole and Scribner 1974: 71) do influence perception. In other words, our responses to particular situations are guided by what responses have been deemed valid and expedient by our culture. We respond to stimuli based on learned patterns of response and we respond to new situations by interpolating past patterns to develop culturally appropriate new responses.

The implication of these sequences of learned patterned responses

---

[6]. Brown's definition of the use of the cloze technique in reading provides a clear description:

> The cloze test ... is a reading selection in which every nth (where n usually ranges from 5 to 8) word has been deleted and the testee is asked to supply in the blank words that are semantically and syntactically appropriate to the sense of the surrounding language and the selection as a whole. (Brown 1980: 218)

[7]. Culture from a p-cognitive perspective can be seen as the repository or logbook of responses which are acceptable in various situations.

for education is startling. If a student does not come to school with learned response patterns (cognitive maps) which can be easily integrated with the school setting (including information sets and responses) then the student will underachieve if not fail. Halliday (1978: 163) takes note of this when he discusses the basis of educational failure as lying in the different ways in which people have constructed their social reality and the meanings they have learned to associate with the various aspects of it. There are certain ways of organizing the world which are expected of students when they enter school and are necessary if the student is to succeed in school. The student who cannot quickly adapt to these other organizational modes, whether by interpreting and using the designated structure of knowledge and/or by negotiating with, adapting to or working around the bureaucratic structure of the educational institution, will have a difficult time succeeding.

An example of how cultural response patterns (cuing sequences) can differ is outlined in Scollon's and Scollon's work.([8]) In *Narrative, Literacy and Face in Interethnic Communication* (1981), the authors examine two types of consciousness (response to environmental/cultural stimuli/patterns) which they label "bush consciousness" and "modern

---

[8]. Although I disagree with some of the categories and their definitions (number 3 and 4) and definitions ("bush" as opposed to "modern" consciousness) which Scollon and Scollon use, I am using their work to illustrate the above point as they are, I believe, asking and trying formulate responses to a crucial question: "Do lifestyle requirements influence how and what knowledge is learned?"

consciousness". Scollon and Scollon list four aspects of "bush consciousness" (paraphrased):

> 1. individual respect which takes into consideration the ability to survive in the surrounding environment;
> 2. non-intervention which is perceived as the action of leaving people the space to observe and learn from their own motives or through observation;
> 3. integration of knowledge which is seen as the necessity to integrate only that knowledge which will help in survival
> 4. entropy, which is the rejection of higher order structures that organize irreconcilable events and views. (Scollon and Scollon 1981: 101)

The interactive pattern which arises from these four premises is one of "space" amongst people both physically and intellectually. Key factors which are part of this set of P-cognition responses, non-intervention and observation before action, are formulated by cultural parameters.

Modern consciousness, on the other hand, is typified by the following characteristics (paraphrased):

> 1. individuality which is perceived not as the ability to survive in the surrounding environment but as an interchangeability of parts;
> 2. non-intervention which is not typified by the same amount of distance as in the bush consciousness; Learning is done didactically and through instruction and not by observation;
> 3. integration is perceived as the ability to acquire as much knowledge as possible and systematize it into a latticework where the knowledge can be accessed whenever needed.
> 4. lack of entropy which is perceived as being able to establish higher order structures from which to organize the world. (Scollon and Scollon 1981: 103)

The differences between these two frameworks are significant. The information schema for "bush consciousness" is based on immediate physical survival and the requisite social skills from the perspective of a hunting and gathering people. These skills/requirements are not

necessarily the same ones which are required for survival in an industrialized society. Although Scollon and Scollon's analysis does not fully encompass the complexities of the types of consciousness which they have used in their analysis, the idea that differing lifestyle requirements produce various ways of coping with knowledge is significant as it provides an analytic framework for understanding why students from dissimilar backgrounds may have difficulty in a school system based on one particular orientation.

Kleinfeld's (1979) culture fusion method attempts to provide a framework which enables non-dominant culture students to access dominant culture information systems. Moreover, her work underscores the adaptability/flexibility of an individual to shift from one knowledge construction framework to another without loss of cultural identity. The procedure which she describes includes explicitly outlining for students the new patterns of knowledge required to understand school information. Kleinfeld also requires discussions of how the two cultural knowledge systems are similar or dissimilar. However, this successful method is impractical within todays multicultural classroom. The time required to substantiate and integrate all cultural response patterns would simply take too long.

> 2. *The cued patterns of judgment can be expected to involve important parallels with other cognitive operations such as those governing physical habits, memory, moods, emotions.*

Step 1 of Margolis' P-cognition theory relates to building cognition from sequences of patterned responses to cues. Margolis then adds judgement to cognition and implies that parallels exist between

judgement and other cognitive areas. The focus of this next section will be on the subject of the above sentence, "..cued patterns of judgement" and its implication for a cultural learning/response framework.

Judgement (problem solving) from a p-cognitive stance involves a "seeing that/reasoning why" (Margolis 1987: 76) dichotomy. "Seeing that" refers to recognizing a pattern in one or many jumps while "reasoning why" pertains to describing how a judgement is reached. The application of this dichotomy of understanding/interacting with one's surroundings is a continuous process with recursive properties at any given stage of the response to the cuing patterns. This notion of judgement, of applying patterns to stimuli for response, adds another dimension to the problem solving equation. As this judging is built on previously cued patterns, particular responses generally emerge depending on the strength of the stimuli and patterns encountered. Margolis elaborates on this when he states,

> The more a pattern is used, and the more ways in which it is used, the more elaborate the neural connections required to mediate the behaviour. Consequently, the harder the disruption of that network will become. (Margolis 1987: 126)

Cole and Scribner (1974) demonstrate, through several studies of reasoning tasks done with Kpelle people in Liberia, that problem solving patterns are culturally and socially embedded. The patterns and methods of problem solving are consistent and relate to what is viable within the workings of the community. Cole and Scribner found several different response patterns to problems from people in traditional

societies. These include: refusal to remain within the boundaries of the problem; non-acceptance or modification of problem terms; supplying additional information to bring statements and their implications into closer conformity with daily experience; rejection of solutions if they violated some standard of social truth. (Cole and Scribner 1974: 168) The lack of "accurate" responses lead these authors to conclude that although the responses were,

> ... "wrong" as far as the experimental problem is concerned, it is the outcome of a beautiful piece of logical reasoning from **new** premises. (Cole and Scribner 1974: 163) (emphasis mine)

The "new" premises which Cole and Scribner allude to are in fact only new to the curriculum, but were not new, indeed, were traditional to the culture of the people now being moved into problem solving behaviours that had new cognitive rules, defined by the curriculum structure of the school.

The types of Kpelle response patterns, while meaningful in their daily lives, do not fit the school context where answers are tied to different response patterns built on different structures and inter-relationships of knowledge. Changing from one system of knowing to another is difficult as the conservation of problem solving patterns even after instruction underlines the endurance and dominance of previous patterns. Margolis contends that:

> There may be profound problems in managing such a transition, even when there is nothing intrinsically very complicated to be learned. For getting from A to A + B may disrupt the network of priming and inhibiting that facilitates fluent use of A. (Margolis 1987: 126)

In other words, during transition from A to A + B the underpinnings

become fuzzy and confusion can set in.

An example of this type of transition became apparent while I was teaching a writing course for the Native Indian Teacher Education Summer Preparation Programme on the Sugarcane Reserve near William's Lake in British Columbia, in 1983.([9]) This was a three week intensive summer programme where students had four hours of English and four hours of math per day to prepare them for university course work in the fall. I was to teach them how to write essays and generally improve their reading and writing skills. Over the three week period I took, with the students' permission, samples of their writing and then assessed the sentence complexity of these samples by using "T-units".([10])

From the beginning to the end of the course, improvement in the students' writing, as measured by increases in the number of T-units and the overall quality of the writing, was minimal. However, what was noticeable was a change in **how** students were attempting to write. The two independent readers of the "before" and "after" written material remarked on the appearance of a "transition" phase in the writing of most students. These students seemed to be attempting a new strategy

---

[9]. I worked with the Native Indian Teacher Education Programme (NITEP) at the University of British Columbia as the on-campus tutor from 1982-84; and as the English Composition instructor for the NITEP Summer University Preparation Programme in July and August, 1983.

[10]. T-unit: "...one main clause plus any subordinate clause or non-clausal structure that is attached or embedded in it." (Hunt 1970: 4). For a more in-depth discussion of the findings of this study see Nakonechny 1983.

which was not yet totally understood. The result was writing which read worse than at the beginning, if the reader was unaware of the changes being attempted. Eventually, I imagine that most students would be able to make at least moderate changes towards an essayist style. But for the students who are caught between two systems, change is disruptive, difficult and slow.

> 3. *These patterns are not necessarily or even ordinarily consciously perceived...*
> 4. *Patterns play a dual role: we recognize patterns in making sense of the world; we are prompted to use patterns to guide activity in the world.*

Steps Three and Four expand how the patterns, established in Steps One and Two, function. Their significance for education is in how they encompass the actions of learning and problem solving. Steps Three and Four not only underline how patterns are used to help us define and establish our realities, they also provide us with a format for approaching the information. An educational problem arises if the patterns constructed do not match those used by the teacher in the classroom. The following excerpts from my field notes illustrate the complex set of problems which can arise when pattern matching does not occur in the classroom.

The first excerpt speaks to both Steps Three and Four. The student in question had not learned an adequate pattern to help him/her answer a class assignment:

> *Field notes:* S/he had no idea how to explode/explore a question. S/he needed to do an oral presentation and the directions said that it was a show and tell event and the only parameter was that s/he could not bring a real gun into class. S/he ignored most of the directions and decided that it said just to TELL. As well, s/he was just going to give

> a brief history of skeet shooting and then talk about trap shooting. S/he didn't even realize that trap and skeet shooting are two different sports. S/he had no idea of how to brainstorm or generate questions about a topic. I showed her/him the 5WHs (who, what, where, when and why) and s/he generated a variety of questions. It's almost like s/he has never been introduced to these techniques and her/his own natural inclination gives her/him nothing more than a very superficial response to a question.

This student had not generated a pattern for problem solving that would help him/her in an academic setting. His/her response was very basic - look up the information in an encyclopaedia and repeat it. The student did not actively read the text or pick up textual cues, rather, anything on the page became incorporated into the presentation whether it was relevant or not. Further, his/her category construction was not well developed for academic work as s/he did not differentiate between what types of information were central to understanding the topic and which information was useful to round out the information. Ultimately, the student did not have patterns primed for problem solving relevant to the assignment. The end result: a bewildered student and frustrated teacher.

The second example predominantly illustrates Step Three but also applies to Step Four. The unconscious nature of an established pattern makes the user feel its use is "natural" and makes recognizing and explaining it quite difficult.

> *Field notes:* I was able to show her/him how a particular paragraph worked because of the relationship amongst the elements in a sentence. I told her/him that a sentence pattern follows a particular form with information and that that information is repeated in the same pattern in subsequent sentences so that it is all linked together. S/he found this very interesting and again wondered how I know this. I'm not sure how I know this - will have to ask

> others....

This student is more aware that s/he is not using the same patterns I am to structure her/his writing. However, even though I explained and demonstrated the process to her/him, s/he still found the operation opaque. S/he was in the same type of position which students in the NITEP summer writing program (described on page 111) encountered; the need to and difficulty of creating new patterns.

The last example is a reflection contained in my field notes where I explore the inherent form of pattern construction. I am concerned with how the patterns are constructed and how they influence our abilities to process information in particular ways.

> *Field notes:* I'm not sure what the problem is - it's not just a question of arranging information - it's more than that...there is almost a confusion at some structural level of how is this possible - what is abstraction and how do you do it... how can you go from the brainstorming into something else -- maybe it's also a question of categories. How can different categories be assessed and implemented? Does this get me back into the category of concept formation?

The academic implications for Steps Three and Four are in how information is presented in both written and oral forms. If the students and teacher are not aware that accessing and utilizing information in an academically sanctioned manner requires particular patterns, then students and teachers are ill prepared and equipped to learn, utilize and teach the required patterns.

5. *Explicit reasoning is based on patterns of language ...and, through language, tied to sociality.*

The impact of language on human culture is profound. It affords us a way of interpreting and discussing that which is around and inside

us. Language functions as a system of signifiers through which we can interpret and categorize private and public, intimate and social experiences and inter-relationships. It is through this communicative and interpretive mode that language meshes with cultural patterns and reflects the possibilities of actions within culture. As part of this cultural world construction, language not only reflects attitudes towards objects/people, it also imparts how information is structured and what is considered relevant information. As Pines indicates,

> In the mature linguistic adult, thought and language are inextricably entertwined (Vygotsky 1962) because of the fundamental role that symbols play in the manipulation of concepts in thought and communication...A word is like a conceptual handle, enabling one to hold on to the concept and to manipulate it...A concept can be thought of as a theoretical point where meaningful relations converge, and each concept is a crossing point for a multitude of relations. (Pines 1985: 108)

The structuring of relationships from information creates knowledge structures which are then implicitly transmitted through learning, whether formalized or not. This relationship is illustrated in my following field note entry:

> *Field notes:* I'm also finding out that s/he has some constructions which are not English and s/he doesn't recognize them. S/he's going to take some ESL classes this summer... The other thing I have asked him/her to do is to start reading more. S/he doesn't read much except for school and "how to" manuals - maybe a bit of Readers' Digest. So, I suggested Equinox and Psychology Today as a way of getting her/him into reading discourse about subjects that s/he is interested in. I don't think this is giving her/him enough in terms of denser English language patterns. S/he's got some pretty frozen usages - of, in, at, that give him/her a lot of trouble. When I look at some of the sentences s/he has written, I realize they are not English ... "The corruption of blood was so much out of control." I can get a sense of what s/he means but certainly not the entirety of what s/he wants to say. Here I suppose that

> there is some type of condensation working as well as s/he was trying to get across a lot of information about a subject.

The sentence, "I can get a sense of what s/he means but certainly not the entirety of what s/he wants to say." displays the crux of the problem. Unless the relationships and structures of the language are clear, alternative meanings contrary to the author's intention are probable. Further, if the internal structures of information are condensed or improperly connected different information and meaning are transmitted. As well, problems in knowledge transmission can arise if a group or an individual expects the information to be delivered in a particular pattern and it is not. Bernstein's (1971, 1975) work on interclass communication modes demonstrates this type of difficulty and delineates an area of educational concern: the influence of language on the transmission of knowledge.

Bernstein has postulated that there are two varieties of language available to speaker: "elaborated" and "restricted" codes. Elaborated code tends to be used in more formal situations such as school. It has a relatively high proportion of subordinate clauses, passive verbs, adjectives, uncommon adverbs and conjunctions and the pronoun "I". Restricted code, on the other hand, tends to be used within the family or with friends. It has a high proportion of personal pronouns, particularly "you" and "they". (Bernstein 1975) The critical component in the above is its implication for student access to information codes in the dominant culture school system for, as Halliday contends:

> ... the codes themselves are types of social semiotic symbolic orders of meaning generated by the social system.

> Hence they transmit, or rather control the transmission of, the underlying patterns of a culture and subculture, acting through the primary socializing agencies of family, peer group and school. (Halliday 1978: 68)

Although Halliday's comments relate to Bernstein's work on codes I believe it is easily transmutable to other language situations as described by Murdoch (1986), and Nakonechny (1982) for Native students and Brice-Heath (1983) for Black students. Language is indeed one of the major pivotal points in cognition.

4.4. Conclusion

The major steps of p-cognition provide a usable theoretical structure from which to examine the multi-layered complex issue of cross-cultural learning systems. This pattern based theory provides a way of encapsulating a variety of different issues from one perspective so that a connected appraisal/examination of the issues of multicultural education can be undertaken. Without this type of theory, assessment and action by educators is bound to be piece-meal and fragmented as different specific issues, important as they may be, rather than fundamental theme(s), will be the focus of efforts to create change. The results of issues being used as pivotal change points leads to little real metamorphosis in any system as the underlying problem/issue has not been modified. P-cognition, with its emphasis on how cognition is achieved, rather than on intellectual ability, offers insight into how cultural patterns of thinking cause educational difficulty for students from cultures whose basis for cognition is primed by different

response patterns than those of the dominant school system.

CHAPTER 5 EXPECTATIONS - SUBLIMINAL STRUCTURES AND ROLES: THE CULTURAL BASIS FOR ACADEMIC SUCCESS

Each of the preceding chapters has addressed specific themes contributing to the analysis of how knowledge/information is constructed and transmitted in the education system. This chapter emphasizes how the construction and manifestation of subliminal structures of knowledge, and roles of instruction and learning, come together in the classroom to inhibit or promote learning. The chapter starts by re-engaging a previous theme, culture, and focuses on Hannerz's concept of cultural flow to explain transmission of information. (Hannerz 1992: 14) I use the concept of cultural flow as a backdrop for analyzing how inter and intra student and teacher classroom expectations and understanding, templates, shaped by cultural influences mould how information is perceived and understood. Then, I present an outline of Freire's educational model as a method for assessing the components of a system within the boundaries of cultural flow. The final section examines how forms for learning/teaching information emerge from the cultural flow and how these templates influence student success in the classroom.

5.1. Cultural flow and how it influences template construction

This section discusses how information is transmitted in the cultural context of the education system. Hannerz' recognition that "...we must deal with other people's meanings." (Hannerz 1992: 14) raises questions about how this can be accomplished. I propose that we

form templates, or meaning bases, from which we interpret and act given a particular circumstance. These templates are part of the educational process as, depending where students are culturally located (as well as by class, gender and individual placement), students' interpretation and enactment of learning in the classroom may differ from the classroom norm.

> The major implication of a distributive understanding of culture, of culture as an organization of diversity, ...(is) that people must deal with other people's meanings; that is, there are meanings, and meaningful forms, on which other individuals, categories, or groups in one's environment somehow have a prior claim, but to which one is somehow yet called to make a response. (Hannerz 1992: 14)

Hannerz' description of human interaction in a given culture is predicated on meanings, structures, and/or power relations. People's interactions distribute meaning throughout the culture, and in doing so provide cultural flow. Cultural flow, according to Hannerz,

> ...consists of the externalization of meaning which individuals produce through arrangements of overt forms, and the interpretations which individuals make of such displays - those of others as well as their own. (Hannerz 1992: 4)

How successfully these interactions or meaning exchanges are negotiated make the flow smooth or disrupted. Different forms of meaning shape required responses and if the expected responses are not received then a rupture or disjuncture occurs in the cultural disbursement of knowledge. This transmission dynamic not only informs individual exchanges, it also shapes the type and content of exchanges which occur in more formal contexts such as in the education system.

In the education system during the process of teaching and learning, a variety of meaning forms and social interactions, mediated

through language, are active at any given moment. The curriculum represents the established core of culturally relevant meaning forms, the basic relevant blocks of knowledge which individuals in this culture must acquire in order to facilitate smooth cultural flow. The interpretation of these meaning and response forms is expressed in the interchanges between those who teach and those who learn the syllabus. The interchanges, some positive, some negative, between these two groups, occur throughout the teaching/learning experience. Each student/teacher is likely to find that his/her position in the meaning exchange can shift given the interactive requirements of a given context. However, the structural power relationship, teacher dominant, remains essentially unaltered during these shifts as the teacher remains the general distribution point of appropriate knowledge.

This delivery and reception of information occurs at many points throughout the education system. But I want to focus on the relationship between teacher and student. How their dialogue and actions fashion and are fashioned by particular cultural patterns. These cultural patterns create strong bonds of action and re-action producing a consistent response pattern or more solidified frame. The cultural patterns underpinning the teacher/student interchange are encoded in response patterns which, when merged, form templates that are identifiable as teacher or student roles with their attendant scripts.

These templates, I hypothesize, are constructed in much the same manner as concepts are - that is there are both "fuzzy" and "classical" layers to the template. They represent the guidelines for interpreting,

connecting and acting on information. These templates while apparent at a surface structure level are manifestations of deep structure processes such as thinking and problem solving. It is their surface structure placement which makes them seem easy while in actuality the processes they are tied to are complex and difficult. These templates are the recipes through which we sift information to produce meaning and because they shape the flow of information, including and excluding, giving dominance or not, are powerful cultural influences.

The templates for students and teachers also exist for each other. This means that a teacher has a template for how a student should act and what degree and type of knowledge s/he should operate with and on and vice versa. As well, the teacher and student templates not only encompass having adequate subject knowledge, they also require adequate representation of major cultural themes either covertly or overtly. It is through these themes that general themes of meaning are generated. These meaning themes give shape to our world and help us to translate, understand and react to a variety of situations without having to figure out an appropriate approach each time. These themes of interpretation and behaviour create outlines for communication in the forms of social scripts. The teacher and student templates, constructed over time, represent a multitude of responses which have been condensed into a single "best fit" layer with a multiplicity of approved responses which represents the current response to a situation. The multi-layering of responses is a continual one which means the template changes over a period of time to accommodate new conditions.

5.2. How Templates Influence Pedagogy: A Freirian Approach

The concept of templates, introduced in the previous section, provides a way of accessing the structures which we use automatically in education in both teaching and learning. The following section presents an analysis of an alternate pedagogical method to demonstrate how these templates influence our knowing. I have chosen Freire's pedagogical model for this task as it effectively identifies the areas where our cultural habits influence how and what we learn. I do not continue to use Freire's model for further analysis as I am not concerned, here, with teaching for critical consciousness, but rather with understanding how cultural influences are manifested in the educational process and system.

Various authors have focused on particular elements of the template - Bernstein on class, language and education; Brice-Heath on ethnicity, gender, class, language and education; Cazden on discourse strategies, the classroom and education and Simon on pedagogy and education. The results of their studies are twofold: part of their research links education to major social issues of class, gender, and ethnicity, while the other part speaks to expectations of students and teachers. These issues and expectations configure the templates. Depending on the context, either the social issues and/or expectations form the required response. The differences which emerge between actual and desired performance of students and teachers are linked to these cultural and social categories. A theorist who critically analyzes these issues, Freire, advances a process based model of education. This

theory provides a useful basis for an analysis of current Canadian educational practices which are product based.

Freire, in *Pedagogy of the Oppressed* (1970) uses broad themes to present a clearer representation of how the learning or transmission process should proceed, in contrast to how it usually proceeds. He uses a method based on dialectical exchange between teacher and student. He claims there is an emergent, transformational movement which creates disturbances in the information transmission. This movement disrupts the cultural flow of knowledge, instigates a counter-dialogue, and gives more access for analysts to see how information transmission occurs. Through this process the smooth acceptance of hegemonically influenced and processed reasoning is no longer as easily accepted.

The elements of Freire's work which are a counterpoint to regular schooling, are concepts such as:

1) how information is transformed, communicative or dialogical education; "The students - no longer docile listeners - are now critical co-investigators in dialogue with the teacher." (Freire 1970: 68)

2) how information is perceived, problem-posing; "Problem-posing education bases itself on creativity and stimulates true reflection and action upon reality..." (Freire 1970: 71); and

3) how information is located, change oriented.

> Education is thus constantly remade in praxis. In order to *be* , it must *become*. Its "duration"....is found in the interplay of the opposites *permanence* and *change* . (Freire 1970: 72)

Another important element which Freire addresses is the idea that education is not only incessantly remaking itself in praxis, but that

this rejuvenation also reinforces particular social and cultural structures of control. These structures may have a positive or negative influence on people depending on where they are hierarchically located within the system.

Two types of education emerge from Freire's description: one which currently serves the needs of the dominant class and one which could serve the needs of the non-dominant class and bring about the creation of a radical democracy. The first system, our current one, relies on a static approach to education that encourages: "banking" or narrative education, passive acceptance of information, and inclusion of information as permanent, unchanging, static. (Freire 1970: 68-71) The second system relies on a process approach to education that consists of: communicative or dialogical education, problem-posing or questioning of information, and inclusion of information as change oriented. (Freire 1970: 68-71) The first system, while describing the type of system active today, does not delineate the processes of reproduction that enable this system to continue functioning.

These functioning processes relate to how the system, through the institution of education, meets the requirements of various segments of society sufficiently well to continue reproducing itself and the society which depends on it. Although there is a level of hostility and resistance in and towards schooling amply documented by many

researchers,([1]) the educational system and institution have not radically changed as they have continued to meet the social and economic needs of the dominant class and nation state. Moreover, the roles of teacher and student are likely to remain unchanged because there are sufficient students from these institutions who can fill the various required economic and social niches. In this vision of education, the objective is not to "produce" an inquisitive, skilled populace who could question a variety of societal structures. Rather, it equips a small percentage of the population with the skills needed to become the managing intelligentsia, and the majority with the ability to adequately function in and maintain the societal cultural flow. As long as the education system can continue to sufficiently meet the major demands of the dominant class - social stability and its own reproduction - there will be no significant change in the school system.

Although the Freirian versus current system of education are sharply oppositional in theory, their implementation is less so. The heterogeneity of educational responses to the perceived requirements of our system generates a multiplicity of answering forms or formats some of which support and encourage certain Freirian elements. But, it is with what consistency they are implemented that differentiates between these two approaches. In our system, as presented through various interviews in previous sections, teachers often purport to want same or

---

[1]. These analysts include: Bernstein (1975), Halliday (1978), Brice-Heath (1983), Phillips (1974), Simon (1992), McLaren (1986), and Giroux (1992) amongst others.

similar goals as Freire. Nevertheless, a variety of personal and public, cultural, social, local, and global concerns prevent teachers/administrators from sufficiently implementing Freirian ideas (or any ideals) that would perterbate the general social and cultural flow.

5.3. Building the Templates for Students by Teachers from Teacher-Student Interaction

The cultural and social themes which influence what and how we learn are reinforced in the classroom. Teachers and students are active actors in the construction of the roles and scripts which inform their interaction in the classroom. These roles and scripts provide a background for what and how we learn in the classroom. In addition, templates, built from cultural and social themes mediate in this process of knowledge transmission. It is through the templates that active interpretation of information about knowledge occurs. The following discussion establishes the elements through which teachers construct their template for students and thereby teacher-student interaction.

The work of Freire and other critical ethnographers provides a foundation for further investigating how expectations surrounding knowledge transference influence its transmission. These cultural influences and expectations, templates, are created and held by each group within the education system. Each template is a multilayered construction that shapes how information is transmitted and received. The template for teacher includes not only a general outline of what is acceptable teaching and social behaviour but also what a teacher expects

from students. The position which the teacher holds is one of interpretation and bridging as s/he must not only transmit appropriate knowledge and attitudes but s/he must also facilitate the students' acceptance of the template for student as understood by the teacher.

The template for students, generated by teachers in response to social and cultural demands, serves as the shape-setting format for activities in the classroom. Students' level of responsiveness varies depending on how private and public sphere interests influence their perception of the usefulness of education for their lives. The transmission of knowledge deemed essential by ruling blocks occurs through the teacher-student relationship.

These two different levels of the teacher template guide knowledge transmission in the classroom. However, the teacher-constructed student template and teacher perception of students actual abilities are unsynchronized and represent the rupture between surface and deep structure goals for education in this society. By juxtaposing the two layers of the "teacher constructed student template" with actual classroom student response, what becomes visible is that although parts of the cultural flow are being transmitted in more or less coherent fashion, whole chunks of meaning forms are altered or dropped. The form but not the substance is being transmitted and with this lack of substance transfer, the structure of the templates is less clear. An example of this for knowledge transmission can be seen in essay writing where students know that an essay contains an introduction, main body and conclusion but have little idea how to produce these sections. The

form which the writing should take is understood but what happens inside the form and the means to produce it are not. As a consequence of the partial transmission of meaning, norms essential for transmission of cultural and social knowledge become de-stabilized. With only the form and not the content being transmitted in the classroom, emerging students are insufficiently equipped to deal with the demands of today's society. The education system's response addresses form rather than content and adds more formats such as competency based education or generic skills learning outcomes to curricular guides that do not address the central issue of how to initiate information transfer in the classroom. The result is an education system which has a multitude of sub-foci in order to shore up the public-culture-social dimension of what education does, how this is accomplished and for whom.

The meaning forms which teachers transmit through the curriculum they teach are part of the general dominant cultural system of meaning. These meaning forms not only contain and provide particular types of knowledge, but as they are taught other levels of cultural expectations, such as how and when to ask questions, are also disclosed. The cultural flow during the school learning cycle is smooth if the following pre-conditions are met: 1) students demonstrate appropriate conduct towards knowledge acquisition and classroom social behaviours and 2) students possess the necessary academic and social information blocks from which to proceed to new learning. These two culturally determined conditions permeate the learning medium making it smooth or bumpy, enjoyable or irritating or a combination.

The following sections of this chapter discuss some of the social and academic cultural expectations required for success in the school system. The interviews conducted with faculty provide a good guide to the major elements of a Canadian teacher template of students. The image which the teachers' template of students promotes is one of students having a positive open attitude towards classroom learning and where academic skills are being appropriately mastered through a process approach to learning.

5.4. Teacher (system) template element: Students demonstrate appropriate behaviour towards knowledge acquisition and classroom social behaviour.

How are students prepared to learn the social and academic formats required for school? How are students taught to learn? What is considered appropriate classroom behaviour? Who teaches it? These questions focus on what elements of cultural patterns influence classroom learning. Cazden recognizes three features of classroom life: "..the language of curriculum, the language of control, and the language of personal identity.. (Cazden 1988: 3) Although she phrases these features in terms of language they are also part of a more generalized cultural system of: the transmission of information, the establishment of power relations, and the development of self identity. Further, these features not only describe language interactions but also the relationships within which verbal exchanges occur. There is within these features a merging of structural patterns and personal interpretation of public and private spheres of knowledge. The

distributive model of culture which Hannerz refers to (Hannerz 1992: 14) refers to this interpretation of knowledge. In the next chapter, chapter six, throughout the analysis of students' writing processes the strategies used in attempting to understand Others' meaning is demonstrated. In the classroom, teachers' language asserts and affirms the legitimacy of certain types of knowledge. Teachers maintain classroom authority by manipulating approved knowledge forms and social norms. Students' personal identities are negotiated in the classroom through the interfaces between the public sphere of the classroom, teacher and students, and the private interior sphere of the student, culturally and individually determined.

Teachers, as representatives of authority and transmitters of the curriculum, communicate their beliefs about what type of activity will be productive for learning in the classroom and in doing so set out conditions for identifying appropriate information, how to link information to other pieces of information, and how to personally respond while engaged in this activity. However, these expectations are generally not discussed between those who maintain them (teachers) and those who function under them (students). This tends to lead to a classroom situation where students, unsure of how to achieve the intellectual demands made by their teachers, concentrate on mimicking, ignoring and/or resisting their teachers' demands. The overall effect of this disjuncture creates a rupture in knowledge transmission.

The excerpts below outline how teachers perceive what their students lack and through inversion what students should demonstrate for

positive knowledge acquisition attitudes. These excerpts also delineate the teachers' frustrations with the system which has produced these students. The interviews acknowledge how past education experience has shaped the students but there is little admission of how the current classroom and systemic practices reinforce these habits. The teachers see themselves as situated at a stationary point in the educational process where what they do has little or no effect, given the residual power of the past, current, and future years of learning which are beyond their control.

[These excerpts are taken from separate interviews.]

> A: That may be, what you're talking about, could be a carry-over. I don't think that they've [students] been held, again to get back this, really accountable, that much for their efforts in high school. And it carries over here too. It seems to be quite acceptable to them, I'm sorry I couldn't get that done, but I had to work last night. You know, I can't come to class today, X, I've got to go to work.

> B: They believe that if they raise issues, that if they challenge they will be disciplined; somehow there will be retaliation. Our system has not freed students from that, and it's amazing to me how many students continue to come into our system with that kind of attitude, which, of course, in my opinion is a barrier in preventing them from participating in the learning process. That's another thing; I wish the students had a rare sense of confidence in the system.

> C: But most of them don't think they need any help. And that's really a false confidence. It's not a lack of confidence, it's in fact a false confidence, when they first start. I think it's also a fear, that if they ask for help, then there's something wrong. It's a fear, that if I go to someone and say, "Can you help me out here?" Then that person is going to say, "Well what's wrong with you?" And I think that that's also a result of high school. Because in high school, there's some such streaming, so much

> preconclusions as far as where people are because of how they behave or whatever. There are. They've seen other students who have maybe have not done particularly well, and they went for extra help, and then they were just labelled as slow kids, and suddenly they get terrible marks all the way across. So that's one of the considerations.
>
> D: I also see that students nowadays lack respect. I don't mean just respect for me, they certainly lack for their teachers. They lack respect of other people and for themselves. And I think that a lot of that is reflected in their learning, and their attitude towards learning.
>
> I: Could you explore that a bit for me please?
>
> D: I'll just paint a scene here. Students nowadays. Alright I could be giving a lecture at the front of the room, and someone could walk in fifteen minutes late, walks through the class, throws their books down, noisily pulls up the chair, talks to everyone around them, and starts to giggle. If I stop and ask them to be quiet, they might for two minutes, and then continue to disrupt the class, or at least bother me. I have asked students to leave the class, and the comment that I get is, you have no right to kick me out, I have paid for this, so I'm staying. However they did leave. They want me to amuse them throughout the class, and I know that classes should be stimulating and exciting, but not every class can be like that.

The elements which arise out of these interviews stress attributes which are generally regarded as part of the profile of a mature learner who has certain levels of genuine control. The elements are: being accountable for one's actions; knowing when to get help; acknowledging and dealing with fear; knowing how to work a system; being able to go beyond explicit instructions in order to complete a task; and being able to think critically. These qualities, all valued from a Western cultural perspective, are seen as the socio-psychological basis from which students are expected to operate. Yet, even at college age, 18+ years, students are not functioning at this stage for reasons such as: 1) social position and role definition (exterior) and 2) interpretation

and response (interior).

Combining the external and internal reasons for students not functioning as mature learners provides the following scenario of student classroom learning and interaction patterns. Social position (exterior) refers to students' perception of themselves within a hierarchical system. This status assessment is important as it influences students' interpretation (interior) of how to be a student. Their correct perception of occupying a low hierarchical position in the classroom means the skills learned to make task completion easier are centred on teacher and system demands rather than learner demands which can often be in conflict with the smooth flow of information in the classroom. Further, in the classroom students are in a non-negotiable subordinate position where their role is fairly static. The asymmetry of power relations is further developed by McLaren portrays teacher attitudes thusly:

> We, the teachers, are the dispensers of that knowledge. Just as "many are called but few are chosen", not everyone is worthy of receiving the sacred wisdom imparted by the teacher. If we watered down the curriculum so every group could succeed, schooling would lose its present status and power. (McLaren 1986: 153)

How students interpret school expectations (societal and cultural forms) shapes what knowledge is learned, academically and socially. Student learning does not automatically contribute to the growth of academically productive learning strategies given the variety of constraints covertly or overtly imposed by the socio-cultural system.

McLaren alters this focus slightly from one focused on power relations to one focused on ritual, but that still characterizes the

student role as subservient. This subservience not only reinforces the hierarchical position which younger people hold in this society, it also prepares them for specific types of work which the economy predominantly requires - repetitious factory assembly and the new McJobs.([2])

> Youngsters in the student state are generally quiet, well-mannered, predictable and obedient. There is a pronounced systematicity of gesture. The mood of the state is 'indicative' - meaning it prevails in the world of actual fact...Metonymy is prevalent and helps to produce predictable and restrictive cultural forms..Symbolization is primarily through the use of signs and religious symbols...Time is segmented and monochromatic...Movements are often resolutely routinized and rigidified into gestures...There is little physical movement unless on the cue of the teacher. (McLaren 1986: 89)

Students are successful in this cultural construct when they merge sufficient competence with political acuity and emerge past the gatekeeping of the institution.

* * *

This chapter section delineated teachers' expectations about which student attitudes are most beneficial to learning in the classroom. The emphasis was on the teachers' expectations and perceptions rather than the students', as teachers strongly represent, replicate and shape the classroom formats for cultural norms. It is through teachers' perceptions that major themes surrounding educational attainment are enacted, sorted, changed and finally emerge as either covert or overt

---

[2]. "McJob" is used in popular culture to refer to a job which, like a job at McDonald's (a fast-food chain) is low paying, unskilled, has little job security and is regarded as an entry level job with little room for advancement.

sanctioned or unsanctioned classroom learning strategies. The next section depicts the academic skills necessary to advance within the education system.

5.5. Teacher (system) template element: desired student skills for knowledge acquisition.

Teachers' perceptions of students' attitudes towards knowledge acquisition frame one level of response that is monitored in the classroom. Another element in the development of this complex student template by teachers is the delineation of the academic skills necessary for school knowledge acquisition. A comparison between what teachers desire from students and what students are perceived to be able to do provides informative data about which type of skills are judged to be important by the teacher. Teachers' perceptions map one part of the responsive dialogue around social interaction conducive to learning in the classroom and act as a channel for system identified academic skills. They also determine other required skills and interpret how the system required skills are identified, taught and evaluated. The information here is once again from teachers' perspectives as they determine on a practical level in the classroom which skills, and what levels of these skills, are sufficient for academic success.

Desired Ability: [Individual interviews]

> A: I think, for them to develop an ability to read and comprehend and then paraphrase in their own terminology is more important. We want to challenge them to put that in English. You know, put that in your own words. And some were totally unable to. So unless they're able to do that, they haven't absorbed it, they haven't internalized it.

B: Well, I wish their grammar skills were a lot better. Some of them can't express their thoughts well enough. Their answers are too short. Again, I think this is because they haven't been held accountable for their answers before. State things precisely, read precisely, and to be able to express their thoughts.

C: In all groups, I would like them to be able to understand some basics, or to comprehend the basic, fundamental issue or concept if you will. And not get confused with what they feel, or what they might have pre-defined that item to be or that topic to be.

I would like students to be able to understand in more generic ways, or to be more receptive to ideas or concepts that I'm trying to teach them. Some fundamentals. And I find that some of them can only understand as long as it's, as long as it coincides with the way that they work, taught elsewhere or what have you. So, the ability to deal with a fact or a concept more generically, and to comprehend it.

Research. I'd like them to be able to use research skills. And again along the same line, I suppose, I'd like people to be able to develop the skills necessary to be able to teach themselves. And I think that goes hand in hand with the job I'm trying to do in the classroom.

I would like to see the students coming in being able to read and write at a grade twelve level. Unfortunately, I don't think, I'm not sure that that's as clearly defined as it should be. So, I would want a reasonable level of language and mathematical skills. Whether that means, or whether it's acknowledged with a grade twelve diploma or not, I really don't care, that's secondary to the issue, I would certainly like to know that they have at least a minimum acceptable level of ability in reading, writing, math and comprehension.

D: I like them to be able to write a reasonable paragraph. I suppose I'd like them to make thoughtful...I would like them to be able to think. Okay, in an unfettered fashion is really all I expect; I expect them to try to some extent to be nonprejudicial. I expect them to be discriminating but nonprejudicial. I also want them to be receptive, to accept new ideas.

E: Okay we would like them to have the ability to work as a

team player, the ability to work in a group. We'd like them to have that personality of someone who is interested in other people and someone who's caring and someone who is flexible. We want them to arrive that way because if they're not like that, if their personalities are not like that, they at this point pass the program but they will not be successful in the field.

F: So I believe students coming into an advanced level class should come in well prepared; ready to deal with the issues at hand, ready to challenge and ready to accept their role in the learning-teaching process and who are prepared to spend the time and effort necessary to do that.

G: I want them to interact with the materials, with their own experience. I want them to identify their own experience. I want them to abstract both from the material, and their own experience. Those are the kinds of things that I mean by analyze. I guess it's another way to define learning. Because those are some very important learning skills. But that's also the kinds of things, that if I had my druthers, I would be very happy to see students able to do. Of course, that's very challenging to an instructor, a teacher, if the students really can do that.

H: I'd like them to be able to think....to look at both sides or the many sides of a point or an argument. To analyze what I say and not be picky about it, but ask questions if they're unclear, about what I have to say to them or if they disagree, then to be able to state their points. I also would like them to be able to write in sentences and paragraphs logically.

Given the above, the desired abilities for students can be divided into two categories: academic skills and social skills. The dominant academic skills identified by instructors revolve around thinking/analysis skills, reading/ writing skills and research/problem solving skills. The academic-social skills particular to classroom functioning are group skills and non-disruptive behaviour. These desired academic skills form part of the template which informs the

instructors' teaching in the classroom. They provide a common backdrop against which other expectations are developed about how students can be expected to demonstrate particular skills. But, when a comparison is made between desired and perceived actual skills a noticeable gap appears.

Although some of the perceptions and phrasing in the following excerpts of teachers' perceptions of students' actual academic and academic-social abilities may be negative, these items expand understanding of appropriate student behaviour. The following quotes outline the major issues noted in student learning actions in the classroom:

[Individual interviews]

A: Well, you know, we screen for certain academic levels, which has really helped a lot. We know now that our students are coming in and that they can read and write at a certain level. Some of them still need that extra help in that, but we know now that they come in that level. Group skills, no. Your group skills are nurtured along, they certainly don't just happen. Leadership skills are nurtured along. Again, you have to interfere with that, or else the set leaders will be the set leaders for two years.

B: They're all very eager, which is nice. And they're eager to please, they're all eager to do what you ask. And X's doing a lot of different things with them right now, and they're keen. They're picking up on all this stuff and doing it. So sort of, what I like about when they come in they seem so enthusiastic and you can, they're almost like dogs, they're so eager to please you.

C: Post-secondary students tend to go by the course outline. And they will interpret those items in the course outline. And that's all they will do. And they feel that's all that's expected of them, but it's..

D: I find that they appear to be much more motivated, if they have some control.

S: I think that they can do things like, I think that they can passively receive information. I think that they can even do that, they can even process it. I think that's what they often have been used to. I think that they can, I would say that they can do, most of them can write something, most of them can read to a certain level or degree. I think that they can, most students have some method of approaching tasks. It varies from student to student, but they have some task analysis, if you want, skills. And some problem solving skills. I think the problem solving skills, I think that they do have problem-solving skills. I perceive that students do face problems and can do that. I think that they can use prior experience, either experience through high school or life experience. I think that they can often integrate that, because they tend to talk of their prior experience.

S: I think that they can do hands-on sort of things. For instance, I think that they can buy their textbooks. They can organize themselves in class, they can develop peer relations, fairly quickly. Much of what they can do, what I perceive them to be able to do when they come into class, I think, are the same things that I expect them to do, when they leave the classroom. It's the quality change, a bit. And maybe the quantity. Like the types of problems they might be able to solve, there maybe more of them of higher sophistication, or something like that.

E: Most of them have relatively sophisticated social skills before they get here.

F: They know words and they can read sentences, but as far as formulating their own ideas and putting them down, they just can't do that smoothly and coherently. I feel that I'm far too critical of these students but I'm at the point where I can't believe what's coming to me. I just can't believe they got here. How can you live this long and go through the school system and be functioning at this level?

I think the students are full of hope when they come. I think that they're enthusiastic but they have no idea what they're getting into. I think that the students can listen and regurgitate when they come in but they can't think from there for themselves. And they don't expect to have that expectation placed on them. And I guess that's what it all stems from. Not all of them are as bad as I have said but when I look at the average student, I really do see a very weak English student.

G: That's right, and that's what I would like. And so, the

> next question, is what I perceive the students can do? I don't perceive they can do very much. They can read stuff and memorize. But they can't join, they can't assimilate information and draw conclusions. Especially they can't assimilate information, from different sources. They have no capacity to do that. They can't integrate at all. So, my perception is that all they can do is read and regurgitate.

From the above and previous interviews a complex profile of actual student performance emerges. At one level, teachers' frustrations with what they consider to be poorly prepared students are evident. At another level, the teachers acknowledge and appreciate some skills which the students have. Overall, though, there is a sense that the students do not fit the profile which the instructors carry for what makes a successful student. On analyzing the perceived abilities of students, two categories arise: academic and academic-social skills. For academic skills two types of learning become evident, process or active and product or passive education, with the students fitting overwhelmingly into passive product learners. Students are seen as being capable of: listening, taking notes, memorizing and reciting (passive) rather than: analyzing, formulating ideas, integrating information and drawing conclusions (active).

The academic-social skills needed to acquire knowledge in the classroom are also split into two categories: school and non-school. School social skills require good group working skills as well as some leadership skills. Students are not identified as having this ability but they are seen as having good peer relations and being quite eager or enthusiastic, at least initially, about a new school experience. Although these types of social skills are mandatory for smooth cultural

interchange in wider societal circumstances, they also contribute to academic learning. Good peer relations mean being able to act appropriately in a variety of socio-cultural contexts in both public and private spheres. This also applies in the classroom, but generally these skills are not tagged as being part of the essential foundation for working in groups. Teachers often assume that group work proceeds from outside peer relations/social skills rather than from it. However, peer relation activities form the basis for developing academic-social skills. As with other factors there is a non-merging of school and non-school existence which tends to reinforce the product form of education and reinforce the separation of school and non-school realities.

The picture which emerges from this discussion is no longer clearly defined. Instead there are major themes such as a positive open attitude towards learning, appropriate academic skills and a process approach to learning (Section 5.3). Points of interchange such as academic and social skill requirements become visible and surface and deep structure elements such as proper manner (surface) and thinking, reading, and problem solving skills (deep) become apparent in the context of societal and cultural patterns. This picture more closely resembles the reality of the educational process than a view which offers a static portrayal of learning in the classroom where only one of the above elements may be mentioned. The templates or outlines of various approaches guide the process but do not provide an exact replica of what transpires in the classroom. As well, these templates indicate the forces which need to be appraised when analyzing how education

functions in our society.

The teacher templates of students create the structure where information is transmitted - where the actual learning process occurs. The templates encourage and facilitate certain types of information transfer over others. The example given at the beginning of this chapter of a Freirian format compared to a standard Canadian one demonstrated the structural differences between the two and how these structures reinforce particular learning patterns. A point of disjuncture occurs in the replication and implementation of this template as teachers are teaching within the boundaries of the template but their expectations are linked both within and beyond the boundaries. The theoretical model of education which teachers attempt to enact stresses a more processual form of education as demonstrated in the "desired ability" interviews, but the actual practice, the real implementation still follows an older, more rigidly controlled mode of transfer. The kinds of information which are being transferred, as noted in other chapters, not only relate to data, but also to attitude, skill expectation, and social skills.

The influence of these templates on teaching and teacher expectations occurs covertly and overtly. The covert level of influence works on a level of "common sense" - it is the way it is: one teaches a subject - gives facts, provides demonstrations and students learn. There is no questioning at this level of how teaching and teaching expectations engender particular kinds of learning. Some covert administrative practices that reinforce the total learning template are:

the lack of support given to creating recipes learning strategies; the lack of interest in creating active, competent academic curriculum departments;([3]) and general levels of inattention to the real requirements of student learning.

The overt level of influence is tied to curriculum and administrative requirements as teachers are required to teach X amount of material in a semester. The teachers do, in many cases, care whether the students understand the material but feel caught in the production of education. They must teach a certain amount of curricular material as the students require the background for subsequent courses. If some or all students do not quite understand the material the teachers feel they must still press on and hope that understanding will emerge later for the students. As well, the teachers feel irritated with what they perceive as a lack of academic preparedness amongst the students. The teachers feel they should not have to teach catch-up skills because they are already short of time for their current curricular demands. This leaves the teachers feeling upset with the system which has not adequately prepared the students and with the students for not being prepared. To alleviate this feeling of irritation teachers frequently place the onus on the students in the learning process rather than sharing in it.

Examining this classroom experience from a larger social dimension

---

[3]. The college in which this study took place, as with many other colleges, does not have an academic department which develops programs and curriculum.

suggests there is a trade-off between system (state) and individual expectations mediated through the educational institution. The trade-off concerns not only what is acknowledged as information worth learning, but also who learns what information in what way for which purpose. In other words, the encounter during the education process between the system (state) and the individual is about the cultural and social construction of meaning in both social and formal categories of knowledge. As may be expected, there are multiple places where the transference of state socially or culturally marked knowledge does not occur smoothly if at all. If state marked information is not successfully transferred then discomfort with and antagonism against established norms is likely to occur. If cultural knowledge is inadequately transferred student alienation may occur with associated high drop-out rates. Lastly, if social knowledge is not adequately conveyed then student response patterns in the class will not match expected teacher constructed student templates. Overlay these particular categories with the layers of what type of knowledge, and at what level, surface or deep structure, the information is to be taught and the complexity of the situation begins to approach the actuality of the classroom today.

5.6. Conclusion

This chapter has examined how culture influences students' chances for academic success. The first section of the chapter discussed how information is transmitted in the cultural context of the education

system utilizing Hannerz' concept of cultural flow. Following this, I introduced the idea of templates, meaning bases for interpreting, connecting and acting on information. Freire's pedagogy was then used to demonstrate how we can become aware of some of the major elements of the template structures in our education system. Section three dealt with how to construct a model of a template for students from teacher interpretation of student actions and listed three major elements of this template: attitude, academic skills and process oriented learning. The last two sections examined these elements and described, through instructor interviews, how instructors' perceptions of their students matched the instructors' templates for student behaviour.

The following chapter continues this analysis of how templates influence student learning by examining what happens when a disjuncture occurs in the transmission of knowledge structures. The area of essay construction was chosen for a case study as this is a commonly required academic activity. The chapter is divided into two sections. The first one deals with two general problems associated with essay writing: general academic skills and learning strategies. The second section elaborates on four types of knowledge which provide a template layer for writing essays: general essay knowledge, concept exploration, information research and writing skills.

CHAPTER 6 A CASE STUDY: ON-GOING PROBLEMS IN ESSAY CONSTRUCTION = DISJUNCTURE IN TRANSMISSION OF KNOWLEDGE STRUCTURES

Discussion in previous sections on the different elements shaping classroom knowledge transmission provides the background for analyzing a particular academic product - the essay. The first segment of this chapter discusses two general problem types: general academic skills (surface structure) and learning strategies (deep structure). General academic skills consist of proper academic behaviour, knowing what is appropriate in a given situation, and basic course skills such as note-taking, exam preparation etc. Learning skills are concerned with categorizing, grouping and contextualizing information. The following sections examine four interlocking types of knowledge from surface and deep structure levels which provide the template for writing essays. These areas include: 1) general essay knowledge, 2) concept exploration, 3) information research and 4) general writing skills.

6.1. General Academic Skills and Learning Strategies

The role of a student is complex; it requires a student to not only learn how to be a student - the social and cultural rules which govern this activity - but also how to learn information - what is important, how it is integrated - and how to understand information - how it is contextualized. The previous chapter discussed the concept of student and teacher templates, culturally constructed patterned frames that structure the types of social and educational interchanges,

occurring within educational institutions. The surface manifestations of these templates act as surface structure modifiers; their function is to facilitate the assemblage of pertinent information clusters that then respond to local demands and shape/enable/activate/fuse particular responses.

Unless these surface structure template functions are connected to their deep structure base these templates do not provide a means for learning how to process information according to the categories maintained by the education system. Students who have not learned the required academic skills may still fit the teacher template for students and engage in appropriate behaviours, but they will not be successful academically. Or, they may experience enough frustration and bewilderment at both surface and deep structure levels that they exit the system. There is also a third option that hinges on sufficient success to pass most/all courses at a minimal level. Oftentimes the "sufficient" student seems to be capable of more, yet does not accomplish it, and is frequently diagnosed as having insufficient focus or motivation. I think the difficulty for the student often exists at another point - a deep structural one which is masked by the surface application of the teacher template for students - learning how to learn what information is considered important and how to contextualize it.

This difficulty with "how to learn", "how to contextualize" is demonstrated by the types of problems which students showed when they came for help: general academic skills and learning strategies. The general academic skills (surface structure) cover such elements as:

academic protocol i.e. not using an essay for more than one course without instructor permission; note taking, study skills, exam preparation and writing, general library information etc. This information set ensures that the student has the basic skills from which to proceed. Proficient use of these skills disentangles information/knowledge and makes it possible for the student to systematically operationalize the knowledge s/he has. Without these general skills the student remains ineffective, only partially fulfilling the student template for students.

The second set of problems, learning strategies (deep structure) is more diverse and critical. The problems here are concerned with understanding how to break information apart; how to align information linearly and in clusters providing analysis and synthesis; how to contextualize the information within other frameworks of knowledge; and how to perceive which information is relevant and why. If the student does not know how to engage in the above activities, then the critical thinking and problem solving skills which are indispensable to success in dominant culture education institutions will not be part of the student's repertoire and repeatable success will not be forthcoming.

6.2. Essay Writing: Four Interlocking Regions of Knowledge

In this section essay writing provides a concrete demonstration of how failure to competently function at both surface and deep structure levels generates difficulties. After analyzing the data on essay writing gathered from working with key informants (students), a self-

selected subset of students at a writing clinic, and from previous research([1]) four interlocking regions of knowledge emerge. These four areas include: 1) general essay knowledge, 2) general writing skills, 3) concept exploration and 4) information.

1) *General essay knowledge* is a category of skills and information which deals with concepts about essay writing. Students who were having difficulty discussing their essays often had not grasped the purpose of the academic essay. They did not realize they were to construct an argument and support it by demonstrating, through rhetoric, writing, and research, its viability. As well, they did not recognize that writing is a way to clarify one's position on a question; that one may start the process supporting A and end up supporting Z. These students were also generally unaware that an academic essay follows a particular structure which establishes boundaries for the argument considered in the essay. Without this understanding of what function and form an essay serves and follows, the student is often left with the understanding that an essay is the reporting of information found in books; a stringing together of quotes until the required eight pages are filled, rather than an analytic argument designed to present and clarify ideas.

2) *General writing skills* also present another area of knowledge

---

[1]. This refers to work which I did as part of the Black Student Retention Project in the School of Engineering at the University of Virginia 1985-86, and with the Native Indian Teacher Education Program 1982-84 (see MEd major essay "Cross-Cultural Learning Systems: A Case Study of Native Indian Teacher Education Programme Students in the Summer University Preparation Programme - English Composition, University of British Columbia, 1983).

that inhibits adequate functioning. There are two levels to this knowledge: 1) basic writing skills - fundamental sentence grammar - subject, verb, object; sentence construction and paragraphing and 2) writing integration - paragraph linkages, appropriate word choice, control of formal academic voice and discipline jargon, correct academic style (bibliography and quotations) and information organization. If students cannot perform these writing skills at an adequate academic level then their writing becomes confused and interferes with the exploration of the argument they are advancing. Adequate functioning and realization of these two knowledge areas are often assumed by instructors in post-secondary institutions with unfortunate results. Generally, students at the college and university entrance level only have control over part of the basic writing skills. Student understanding of the purpose of an essay and their ability to function effectively at paragraph creation and writing integration is usually/often minimal.

3) *Concept exploration and 4) information research:* The last two knowledge areas - *concept exploration and information research* - are more difficult to discuss. These two areas, concerned with how information is categorized, organized and inter-related, are often sources of student difficulties. The types of problems which occur during concept exploration, are related to topic choice. The question clusters surrounding topic choice with which I dealt can be divided into six areas: i) difficulty making up one's own topic; ii) difficulty in defining a given topic; iii) difficulty in understanding the

significance of the topic question; iv) difficulty in understanding the topic from the course/discipline's perspective; v) brainstorming and vi) difficulty in exploring the topic through discussion. Some students only experienced one difficulty in topic choice others had several.

The above six areas under concept exploration indicate a lack of student understanding about the process of establishing themes for topic inquiry. The developmental essence of structured investigation is missing. When students have difficulty making up their own topic it is because they usually have little real understanding of the subject material and are lacking nodal points in their cognitive maps of the subject from which to start the investigation. Their maps are flat and generally have only the name of the course on them. Difficulty in defining a given topic is different from generating one, in that part of the identification process is already completed. In the former case the topic has been generated. Here the problem rests in what to do with the topic. For many students the topic remains encased in acrylic, totally impervious to any of their attempts to do something with it. In both cases understanding how knowledge is categorized and how to access it are lacking.

Students who have missed acquiring the skills and information about topic choice (concept exploration) are not floundering in a sea of information, confused about <u>which</u> topic to explore. They are, instead, contemplating a waste land without signposts where silence and confusion reigns. It is at this level of information manipulation that the student template is no longer sufficient to support the student. It can

still offer option for actions - don't do it; get help etc., but it does not generate patterns for understanding information.

Students, as demonstrated above, are faced with a plethora of decisions based on their comprehension of the general skills and specific knowledge required as they begin to encounter their assignment. The following conversation is representative of countless students who are trying to understand how to generate appropriate choices for topic selection and exploration. This example is followed by an excerpt on brainstorming from a text on essay writing which further illustrates the gap that exists between those who understand how to manipulate information and those who do not.

Topic Definition Discussion:

S: I'm totally stumped on how to define my topic.

I: There are two places to go to - notes/lectures or your personal interests. Pick something that interests you.

S: There was no real definition of the type of topic required.

I: What are you taking?

S: X and Y.

I: What are you interested in?

S: I'm interested in environmental interaction. In the class I'm interested in how cultures treat animals; their spirits etc.

I: Are you interested in anything about other cultures?

S: Environment wasn't defined.

I: Anthropologists have a wide viewpoint. Look for connections between animals and people. Maybe a Western ecological perspective with...

S: I don't know a lot about other cultures. Bit about the Inuit, Iroquois from high school..

I: If you choose one group - Inuit - you are already ahead. I could help you with some references. You need to pick a group.

S: I don't even know what to ask --I don't know anything about anthropology...I know about making masks before they go hunting.

I: This book - the instructor's manual - might give you a really good idea about what anthropology is all about. The learning objectives might really help.

S: I just wanted to get going on this during the break. So what about a topic relating to animals?

During the first part of this conversation, the student fulfills the teacher template for student but has difficulty negotiating information structures. There are numerous information exchanges occurring here and the end result is that the student, a little more focused, will proceed to research <u>something</u> on animals plus culture. The instructor was responding to the student's request for information and also to the instructor's internal format of what should govern topic choice. While the student is trying to merge information on culture and environment to produce a topic of interest within the boundaries of the question for the essay, the instructor is giving the student more information on how to research/write from an anthropological perspective. There is a lack of integration of personal interests of the student with the themes of the class.

The above discussion demonstrates the difficulty students have with questions four (difficulty in understanding the topic from the course/discipline's perspective) and six (difficulty in exploring the

topic through discussion) under topic choice on how information/knowledge is inter-related. Many students are not able to contextualize the topic. They are not able to relate to other sub-topics or relate the topic to other related concepts and themes. As well, the students are unable to respond from a discipline's perspective. They are firmly anchored in a synchronous world view which does not easily admit a multifaceted focus. This makes their approach to topic development very generalized at a surface structure level.

During the second part of the conversation the student, although expressing a need to understand an anthropological perspective, in actuality by-passes a fairly easy solution - the learning objectives from an instructor's manual. The student is more concerned with achieving a topic for the essay and rather than retracing his/her steps to re-evaluate his/her notes, s/he goes forward to pursue, "how cultures treat animals". This "topic" was in response to the instructor's general question, "What are you interested in?" at the beginning of the discussion. The interchange ends with the student having a topic, but how interested in the topic the student will remain and how the student researches and writes from an anthropological perspective is in question. The form of the essay is being observed - topic choice and exploration research. However, the keys to successful argumentation from a discipline perspective (specific knowledge) have not been elucidated. The student remains firmly within the teacher template for students but only partially within the appropriate knowledge and information structures necessary for a successful essay.

The last two question areas mentioned under topic choice refer to organization. Both brainstorming and exploring the topic through discussion help to establish the general flow of the essay. Brainstorming provides a way of getting questions out, following different ideas and seeing whether they can be tied back to the main argument. Discussion affords this same exploration as well as providing a chance for developing the argument through questions, and challenges. But when students cannot generate questions or engage in discussion around their topics then the topic remains underdeveloped.

Stewart et al. provide a theoretical position of how a brainstorming session should conclude:

> When you finish, you will have a mixture of generalizations and details radiating from your central subject. You can then draw lines to connect related points. (Stewart, et al. 1994: 20-21)

Unfortunately, this task often stumps students who are not used to shaping and exploring information in this manner. These students are not uncommon and are well represented in the student group which has difficulty writing not because they lack the intelligence to formulate ideas, but because how they organize, recognize and integrate information differs from the dominant norm. These differences may be due to class, gender, and/or cultural considerations. When I use the brainstorming technique with such students, I find two consistent occurrences: 1) I am the one who is constantly prodding the student to brainstorm. There is no flood of ideas pertinent to the topic. Rather, there is a painful trickle in response to the "why", "what", "when", "where", "how", and "this leads to" questions which I am asking. 2) When

it comes time to link the information together nothing happens. I can see a myriad of possibilities, but the student does not perceive the links. Finally, I begin to connect some of the elements together and categorize them into bigger blocks. Occasionally, the student is then capable of carrying on, but generally I am the one who establishes the categories and links. The student does not understand how to organize the information into particular blocks and then arrange them into oppositional or contiguous positions.

4) The *information research* element of knowledge focuses on the difficulties which students have with structuring, obtaining and organizing information in a dominant culture manner. The first category, structuring information, centres on questions such as: "What constitutes an appropriate structure for X?" (In this case essay writing.) "What constitutes an appropriate argument?" " What does structuring an argument entail?" The second category, obtaining information, concentrates at first, on a quasi-structural issue, "What are the criteria for putting particular pieces of information together?" This is followed by two other issue oriented questions more typically the focus for obtaining information:

a) "What types of questions receive information, relevant answers?" and

b) "How does one follow an idea to conclusion?" (focus). The third category, organizing information, has three question components:

1) "What forms of material organization are permitted?"

2) "How is information sectioned?" and

3) "What is considered valid information?" These three foci are not the

only ones dealing with information which pose difficulties for students, but they do represent the sorts of themes which consistently surface. These themes indicate that information follows particular rules and if unknown these rules inhibit success and in doing so function in a gatekeeping mode.

An example of how structural concerns, in this case the construction of a thesis statement, influence the development of culturally recognized and accessible argument is contained in the following case study. Structural problems are first encountered at the thesis construction stage where students are often unable to formulate an argument statement using an "if, then" format. The framing of a thesis statement involves understanding the goal of an essay, to advance a particular stance, and also that argumentation follows specific rules and forms. For example, these rules include general statements on what can and cannot be argued and what are considered faults in argumentation - the rules of rhetoric. The form used in thesis construction, "if-then" requires particular types of links amongst/between layers and pieces of information. This issue of structure, linked as it is to what constitutes acceptable information, causality and plausible information linkages, is a connecting thread throughout the analytic process. This form is retained and used not only academically but in daily life providing a cultural basis from which to interact with information and problem solve.

One of the students with whom I worked had difficulty constructing a thesis statement for an essay. The instructor for the

course had spent approximately an hour going over the development of an essay and had requested the students to write a thesis and development statement. The student wrote the following:

Capital Punishment in Canada

> Purpose: To learn about the history of capital punishment in Canada. To find out if England which was our mother land has had an effect on our judicial system. Our colonial background could or could not have had an effect on the creation of capital punishment. The control of crime by the use of capital punishment from the past to the future has it increased or decreased crime. Search the reason why it was abolished. To view when capital punishment should be applied under what conditions. Did other countries influence Canada's view on abolishing it. What procedure must be followed to change a law. Is capital punishment the answer for stopping crime. I will do a comparison on the pros and against capital punishment. Eventually proving that capital punishment under the second criminal offence should be reinstated in the country by using examples. Throughout the thesis I will prove my point with evidence that will show opinion polls and peoples' view for and against it.

We worked together for about half an hour focusing on the questions: "What to argue?" and "How to argue?". During the discussion I guided the student's responses into an approximation of the required thesis statement by modelling and asking pertinent questions. The following week the student returned with two statements; one for the previous assignment and one for another course. The student said s/he had worked on the capital punishment topic first and then proceeded to the cod fishery one:

Capital Punishment in Canada

> The thesis will take you back in history to find the roots of capital punishment in Canada. Viewing the effect that our mother land England had on our justice and judicial system. Also the effect that our colonial background has had in the creation of capital punishment. Eventual

> checking the crime control by the use of capital punishment, from past to future and its ups and downs. Finally, doing research on why it was abolished and if it should be reinstated and under what conditions. I will show how crime statistics with its up and downs with relation to capital punishment.

Fisher Industry in Canada - Cod

> The thesis will start with a history of Canada's first commers and how Newfoundland became a major territory for the beginning of the cod fishery. It will show how cod became England's major tool among others to shape a nation and become an empire (1712-63). It also will explain how the great cod fish resource escalated a competition between four nations in the struggle to monopolize the fishery. Eventually showing how until today Newfoundland has had major problems keeping its fishing ground untouched by other countries.

Further discussion about how the thesis sets the boundaries for the essay as well as the order of the points to be presented ensued. We also worked on sentence structure and general essay format. Three weeks later the student returned with the following:

Capital Punishment in Canada

> The reinstatement of capital punishment would not reduce the violence, the crime rate, government savings and society would not benefit from a safer environment. This essay will begin with a historical background of capital punishment in Canada, which will discuss the effect that our colonial background has had on the creation of capital punishment in Canada. I will do a review on the procedure of how Canada replaced capital punishment and abolished it. I will present research on why it was abolished, and the reason why it should be reinstated and under what conditions. Also, research on penitentiary life and the view of the officials that manage the penitentiary is included. As well I will research how the prisoner is introduced back into society or what could be done to introduce the prisoner back into society. Then I will do research on crime control, showing statistics of crime during 1962 to 1970. Finally, I will conclude, presenting reasons whether capital punishment should be reinstated and under what conditions.

Fishery Industry in Canada - Cod

> This essay will show how cod became England's major tool in shaping a colonial territory until the 1800s. It will also explain how the cod fish resource escalated the competition between Canada and European nation, Spain, France, and Portugal in a struggle to monopolize the cod fishery. This essay will start with a history of Canada's first comers, and their relationship to cod. It will also show Newfoundland became a major territory for the beginning of the cod fishing industry. Finally, I will show how up until today Canada's east coast has had major problems keeping its fishing grounds untouched by other countries.

This student achieved a major step in the process of essay writing, s/he can now write a thesis statement, or argument, and link it to the steps to be used in proving it. The practise for this element was concrete; the student used essay topics assigned to her/him in courses s/he was taking. The process for the student was relevant as s/he knew s/he was actually going to use this information for writing essays throughout his/her academic program. One noteworthy element evident from this process is the transferability effect. The student, as a result of understanding the structural requirements of the essay was able to duplicate the creation of thesis and development statement given new parameters - a new essay topic.

In a discussion with the instructor of the first course s/he indicated that s/he had felt overwhelmed when faced with the student's first draft of a thesis statement as there were so many ideas without a visible organizational structure. The instructor was pleased with the progress which the student displayed. From this encounter we: 1) Both recognized the importance of explaining how and why the rules for using thesis and development statements and the necessity of successive approximations. Too often we expect students to emulate form from one

attempt without realizing that this attempt only initiates more questions. 2) Both realized that for the structure to be functionally utilized adequate scaffolding in the proximal zone of development([2]) (Vygotsky) must be provided.

Brice-Heath, in, *Ways with Words*, speaks to the final element of organization information difficulties and the transformation of information. She refers to the need for students to be able to cross domains; to take information from one level or category and transform it into another one.

> The first step in the translating process was learning skills for collecting and reporting such knowledge; the second step was engaging collectively in a process of translating this knowledge into the format and categories of the unfamiliar domain. (Brice-Heath 1983: 324)

Students with whom I worked experienced difficulties in the transformation of knowledge from one domain to another. The elements which caused them the greatest complications were: 1) organizing information into appropriate categories in the new domain; 2) parsing information into appropriate sections; and 3) recognizing appropriate information sources, understanding and utilizing the information.

Organizing information into appropriate categories depends on the student's ability to perceive how information can move from category to category depending on the dominant referent. One nursing student with

---

[2]. The Vygotskian concept of the zone of proximal development refers to that area of knowledge and functions that have not matured. These abilities will mature but currently are in a pre-developmental state. (Greenfield 1984: 118)

whom I worked had difficulty discussing the relevance of an assigned article to nursing theory. The assignment required the student to name tasks s/he had performed and show how practical experience is linked to a theoretical base. The student began the task in an appropriate manner by identifying several practical experiences and categorizing them into "like" themes and looking at whether they were relevant to nursing theory. However, when the student began to validate his/her reasoning by supplying examples that showed category shifts from the practical to the theoretical the student became lost in the transfer; the practical experiences were too strongly anchored for her/him to shift them into the theoretical domain.

The student was not able to keep the practical experience linked to the theory. Instead, the parts of the practical experience controlled her/his analysis and turned it into a description. We worked for most of the two hour session on maintaining categories and not shifting from analytic essayist to narrative mode. When I explained to him/her that s/he had to stay "a step away" from the information in order to respond appropriately to the question and use just enough examples to "show" his/her point the student's response was: "oh" followed by some silence. After a short pause s/he started to rephrase his/her analysis and was able to shift information (practical experience) to the theoretical domain and back to the practical domain. But, s/he had difficulty maintaining the new boundaries and required more information about the existence of domains and categories and how to maintain them. Other students with whom I have worked have also not

been able to shift domains and assign categories.

Recognizing/utilizing suitable resources and parsing information into appropriate sections can be separate issues or a combined problem. The first example relates to recognizing suitable resources. The student in question did not realize that for each section of an essay s/he could use more than one author as a source. I discovered this by chance and was curious as to how the student had come to this conclusion. When asked, the student replied that the instructor, when demonstrating how to do a citation, had given one example and had made no generalization. From this, the student concluded that only one author could be cited per section. The organizational structure around resources was not available to this student as a result and his/her argumentation reflected this factor.

The second example relates to parsing information into appropriate sections.

> *Field notes:* X is very bright but s/he seems to be totally unaware of how to go about breaking down information or knowing how information structures work in order to assess them or break them into parts. I'm not sure as to how to get the idea across to her/him that various themes are linked to each other or that they follow from one another.

This field note entry marks for me how we assume that students will know how information is structured and along which lines it can be broken down. However, the reality is that many students to not understand how and why particular pieces of information are linked and what rules govern when and how the information can be broken down.

> *Field notes:* We started to work on the organizational process of the paper. I got her/him to write a thesis statement with grounds and claim. Then I showed him/her how

> to take the ideas s/he wants to discuss and "tree" them. After the "treeing" (which included breaking down each subcategory into points) we started to talk about developing a Y program. I also explained to her/him that the thesis statement with its subcategories established the boundaries for the essay. They marked where the essay could go and where it had to stop. This seemed to really click.

Here, the student was establishing subsets of information through the use of "treeing" major and minor categories. I did not only speak about doing this, we actually constructed a "tree" and discussed which pieces of information went where. We negotiated this construction by connecting pieces of information and ideas to major and minor categories but X gave me the authority over final category inclusion which at points did not agree with his/her categories.

> *Field notes:* X had spent time in the library and had managed to find some more information on the subject. S/he still wasn't too sure about what to do with the information or about how to put it together.

Here again we return to information linkage and inclusion; the actual parsing process. The student has not been able to maintain the "treeing" structure for the information. Again it is evident that more than one approximation is necessary for control of a new learning function.

> *Field notes:* I think we are getting into very tricky waters. X really want to learn but it is very difficult because there are so many elements which are new to her/him and which do not intrinsically make sense because they are not integrated into her/her way of knowing about information. I think there could be some difficulty in showing her/him the logic behind some of the writing stuff which is to me almost "genetic"....

> *Field notes:* Would there need to be smaller steps? Perhaps more talk and demonstration about how an essay is constructed. I get bored sometimes talking about how to put ideas together because I can't slow my own processes down

> enough to become aware of what types of jumps I'm making; or what particular categories I am using and why I picked those - they just seem to relate.

Parsing information into accurate subsections which can be reformulated into particular categories and themes is not just dependent on intellectual abilities. It is also dependent on how the student knows and organizes the world. If s/he does not know the world in the same manner portrayed by the dominant culture, then the student will have difficulties implementing successful strategies for manipulating the information in the approved manner.

What emerges from this section is that knowledge can be framed and organized in a variety of ways. The re-shaping of information to meet particular domain and category assignations is determined by which criteria are used to establish the parameters for acknowledging what is relevant and accurate information, which is then parsed and researched in an appropriate fashion. The education system provides the interpretation for what information is important and how it is organized and linked. The education system reflects not only the categories established from the prevailing academic tradition, but also establishes the method through which these categories shall be learned. The creation of domains relevant to sanctioned current information systems and structures, and the methods used to teach them produce a complex node of interaction where culture, state and individual demands form various roles and templates that attempt to encapsulate the major elements required for success.

The final picture we are left to clarify from this case study

delineates how culture influences learning. Cultural structures control the organization of information and how it is generally presented. If learners do not understand the structure used, the organization of information and its presentation and relations to other information, then it becomes unlikely they will be able to grasp, interrelate and merge information to obtain appropriate knowledge. It is not that structure controls thought - it is that structure (organization) establishes boundaries for how information, and what types of information, can be linked together and further developed. The structure merely establishes lease lines which can then be bent/broken/moulded - like the rules in painting. But they must be understood before they can be broken or the results are rote rather than generalizable. Until the rules/structures are understood and what possibilities are then created, rule breaking which occurs does so within a vacuum, without an interconnectedness which generates new genuine understanding.

CHAPTER 7 CONCLUSION

> We better understand the ethnographic context as one of cooperative storymaking which, in one of its ideal forms, would result in a polyphonic text, none of whose participants would have the final word in the form of a framing story or encompassing synthesis - a discourse on the discourse. (Tyler 1987: 203)

When I began researching the problem of non-dominant culture student failure in dominant culture post-secondary institutions, I began with the belief that the problem was a focused one. By this I mean I thought it would be possible to pinpoint a certain sector of intellectual skill development that needed to be "fixed", propose a plan of action, follow it, and the problem would be solved. This approach embodies the type of problem solving strategy that Dellarosa (1988: 1-18) describes as the dominant emergent theme from the Hobbesian based intellectual structure. It is the typical default position which "European" rooted researchers first apply. However, I soon found that this was not to be the approach that would work.

The reasons why the "best fit" approach to problem solving would not work in this instance relates to the multifaceted nature of the problem and the system to which it is connected. The problem of studying educational failure in post-secondary institutions necessitates an examination of a variety of actors, from students through teachers, administrators, to the influence of the state on the education system. Moreover, the seemingly simple recognition that the formal system of education in this country cannot be separated from its cultural

backdrop, highlights the complexity of cultural interactions in the learning matrix of the formal system of education in Canada.

By shifting my focal point to a multiperspective one, I began to be able to analyze the problem of student success and/or failure. The presentation of the problem could now be formulated in a broader format which could encompass the various themes and sub-themes which I was encountering and not just as a quasi-technical problem with a particular set of answers. The revised presentation of the problem, with education viewed from the perspective of a culture which has particular cultural practices, facilitated the investigation of the system of education itself as well as the actors within it. The cultural practices are linked to a variety of forms, systems, and institutions within the governing culture - rituals, politics, education etc. An analysis of this culture of education elucidates different themes than one which focuses on a particular part of the culture.

My recent fieldwork reinforced and expanded this perception. In working with and interviewing informants I encountered perceptions, attitudes, expectations and assumptions which indicated to me that educational failure could not be situated in one particular set of skills. This change in focus required a re-assessment of how information is transmitted in an education system. Bordieu and Passeron define part of the boundaries when they discuss how pedagogic communication functions:

> An educational system based on a traditional type of pedagogy can fulfil its function of inculcation only as long as it addresses itself to students equipped with linguistic and cultural capital - and the capacity to invest it

> profitably - which the system presupposes and consecrates without ever expressly demanding it and without methodically transmitting it. (Bordieu and Passeron 1990: 49)

The background of educational activity - that which forms the expectations and activities conducive to success within the culture of education, are to be found in what constitutes not only linguistic and cultural capital, but in the activities and technical skills which form a "good" student. The dominant indicators for this transmission are now located in various layers of cultural formation. Some of the layers are concerned with skill development, others with interactions between the student and the teacher, while yet others are concerned with the development of individual identity within a minority and majority cultural system. The complexity of the picture which emerges from this type of perspective means there is no quick fix for educational problems. However, it does facilitate the construction of a multi-thematic analysis from which response options for various problems can be developed, that can offer various solutions given the particular nature of student non-matching.

The pattern for student success which began to emerge was not located on one skill level - improve the student's reading and the student will succeed. Rather this pattern emphasized an interrelation amongst the student, teacher and dominant culture and was linked to learning expectations and how to achieve them. These patterns of expectations and means for achieving them appeared to me to form templates, or meaning bases which influenced students and teachers actions.

The production/reproduction of these templates does not require clone-like reproducibility. Rather, there are many points which form the outline of these templates - a connect the dots image - and if there are enough essential "dots" which match the requirements of the three players, student, interacts with teacher both of whom are influenced by culture, then the student will be successful. If not, then the student either does not fill his/her potential or exits the system. The points, or dots, do not just represent technical skills such as reading and writing, they also represent the more intangible areas of information integration, structures of knowledge, interpersonal relations etc. The student's grasp of the *gestalt* of the three systems facilitates or deters the student's advance in the school system.

The above description of why non-dominant culture students may fail in dominant culture institutions is not limited to non-dominant students. Dominant culture students may also fail in school as a result of a mismatch in template points. The template points which do not match may be different than those of non-dominant culture students, or they may be similar but with a different level of intensity and require more mis-matches e.g. gender and class. The end result is similar - lack of success within the system.

During the time I have spent researching the question of information transmission, three focal issues have emerged. The first one is concerned with understanding what is actually being taught in the process of teaching something - for example essay writing. The second one deals with providing information so that students can grasp the

concepts presented. The third one focuses on facilitating the operationalization of the information gained in the first and second steps.

A. What is being taught?

There are many socio-cultural, psychological and intellectual skills which are taught in classrooms regardless of the subject area. Awareness of this fact makes it easier, yet more complex, to understand that student problems are not simple surface manifestations of attitude, lack of work etc. When a structure or form of something is taught, it is not only that form or structure which is taught. Each form or structure which is presented is attached to a variety of other skills - some of the "linguistic and cultural capital" of which Bordieu and Passeron speak. It is not just that a student can state an idea but also that the student knows what types of ideas are acceptable and how they mesh with particular disciplinary themes. In effect, students are presented with intricate puzzles and sometimes there are sufficient clues for the student to unravel the puzzle and understand how all the parts fit together. Other times, the student is left with only a partial understanding, or if s/he is unfortunate, s/he is left with no understanding of what was presented. The issue of essay writing illustrates this point.

When an essay is assigned to students in most first year post-secondary programs, there is an assumption the students already know *something* about writing an essay. The question is, "What do the

students actually know about the process of essay writing?" Most often, their knowledge is incomplete and faulty. Their concept of what constitutes an academic essay is based on what they learned in high school. However, what the students were generally introduced to in high school were only the larger building blocks of the essay: introduction, body, conclusion; the construction of sentences and paragraphs. The elements of what constitutes topic exploration, research, argumentation - the elements of essayist literacy were not taught (see chapter 5 and 6 for this discussion).([1])

In order to facilitate student acceptance of and competence with particular academic forms and structures, instructors have to be aware they are not only teaching surface structure elements i.e. the structure of X. Each of these surface structure elements is tied to deep structure concerns which are embedded in two levels of culture. The first level is the culture in and from which the student's everyday life is situated. The second is the culture which forms the back-drop for intellectual knowledge in our society:

> Because learning is an irreversible process, the habitus acquired within the family forms the basis of the reception and assimilation of the classroom message, and the habitus acquired at school conditions the level of reception and degree of assimilation of the messages produced and diffused by the culture industry, and, more generally, of an intellectual or semi-intellectual message. (Bordieu and Passeron 1990: 43-44)

---

[1]. I am not haranguing the public high school system. There are many issues which teachers in high schools are confronting as a result of rapid socio-cultural change and I respect the effort with which they try and address these challenges.

Unless students are instructed on the how to recognize the markers for this knowledge and how to work with the information, many students will remain on the edges rather than encountering the systems of knowledge.

B. How can information be provided to facilitate student learning?

One approach which may respond to the above issues resides in application of Vygotsky's concept of the proximal zone of development through scaffolding. The Vygotskian concept of the zone of proximal development refers to that area of knowledge and functions that have not matured. These abilities will mature but currently are in a pre-developmental state. (Greenfield 1984: 118) What this implies is that during the learning process there are places where information is played with; where learners have the opportunity to see how certain concepts or skills fit with what they already know. In other words, their cognitive maps are checked, found to need further development and pattern cognition spirals are begun which in turn initiate further concept formation. One way of moving through this zone of proximal development is through the use of scaffolding.

Scaffolding, to paraphrase Wood, Bruner and Ross (1976) [Greenfield 1984: 118] has five characteristics: it is a support and a tool; it expands the range of the worker and allow projects, otherwise impossible, to be completed; and it is used selectively. Given these attributes it could be viewed as shaping but it does not involve simplifying the task. Rather,

..it holds the task constant, while simplifying the

> learner's role through the graduated intervention of the teacher. (Greenfield 1984: 119)

Scaffolding is a means of framing the instruction for the learner. It provides a framework for the learning to occur in a step by step fashion. At each step the learner has the opportunity to test her/his previous knowledge/value/goals and then proceed. It makes new information compatible with the learner's perspective (knowledge and skills) and in doing so, the teacher is guiding the student towards making generalizations about the new problem. (Rogoff and Gardner 1984: 98) Cazden emphasizes these three important features of scaffolds:

> ..they make it possible for the novice to participate in the mature task from the very beginning; and they do this by providing support that is both adjustable and temporary. (Cazden 1988: 107)

One of the major challenges facing the education system today is to provide equal educational access and success to all students. Differences in culture, values, gender and class often preclude this from happening. Education spends a great deal of time on reconceptualizing phenomena, values and knowledge. This reconceptualization should add alternate meanings without denying the validity of meaning students bring to school. (Cazden 1988: 112) By using scaffolding as a merging technique to make other views/information comprehensible, more opportunities for educational success would be available.

C. How can the above two elements be operationalized?

The above two elements, the proximal zone of development and

scaffolding, are important for understanding how to break up knowledge into its applicable sub-parts and how to make sure that students are actually learning information. The last element, making sure that students can utilize the information they are learning, requires practice. Too often students are not given sufficient time to practice the concepts they are learning. Although we may understand how to do something conceptually, actually being able to produce an example is another step in the learning process. Students often think that when writing an essay, they have managed to produce a thesis statement when in actuality they have not - they have produced an approximation.

The quality and types of approximations produced by students are very significant as they demonstrate at what stage the student is at in terms of handling a particular structure of information or format. Each approximation informs the teacher where the student is having difficulty in producing the required product. When assignments are viewed in this light, then a series of steps can be articulated and scaffolded for the student. The difficulty arises in ascertaining which problem causing elements are technical (surface structure) and which are structurally (deep structure) based.

Technically based problems usually require minimal direction. If the student does not know how to produce a bibliography there are many references to which s/he can be pointed. However, if the student is having difficulty with topic generation, argument clarification etc. the task becomes more intricate. The task is more difficult because several types of information overlap and separating them into discrete tasks is

not easy. For example, argument clarification has at least three points involved: 1) the definition of what constitutes a valid argument; 2) the steps in linking the points when clarifying an argument; 3) the definition of what types of knowledge are considered valid to advance the argument.

Ensuring that all the points are identified is one half of the problem, the other half remains in making sure the student understands that all of these points together form a recognized response. The student needs to understand that if some of the points are not complied with, or there is deviation from the set parameters, then the result is an argument which is not "tight". For many students a teacher's critique of their work will not make sense unless these points are identified and fully discussed.

* * *

This exploration of the culture of education continues to be an approach to understanding how various elements and themes act and react, integrate and separate, with the wider concerns of local and global knowledge. The intent of this approach is to delineate the learning substructures which contribute to the fashioning of the intellectual base of the educational paradigm. In order to more fully understand the range of complex elements and their actions emphasis is placed on marking which concepts and structures are influential in the education system and how they interact and are transmitted.

The implementation of these elements in schooling requires an understanding of both surface and deep structure concerns. There must

also be an understanding of how the deep structure ties contribute to the representation of the culture of education in the school system. This culture of education is both partly conscious and hidden in its requirements and inter-relations. The major themes which emerge from my fieldwork concentrate in the following areas: 1) attitude towards learning - expressed by instructors and administrators; 2) expectations of learning - expressed by teachers reflecting the dominant culture's themes; and 3) how this influences the transmission of knowledge in post-secondary education between teachers and students. The final addition to this focus is an interpretation of how the teaching process and expectations can be deconstructed in order to provide a tool for analyzing how students can more ably negotiate their way through the culture of education.

The conclusions which I have drawn from my research provide a means for enhancing knowledge transmission in the education system. In order to understand the various elements which are required for knowledge transmission I have used the previous research in the fields of psychology, psycho and socio linguistics and anthropology. The hypothesis which arose from this study is the concept of a template, or meaning base, from which we interpret information, and act on it given particular circumstances. Educationally, very powerful templates exist that exert influence on what is learned in the classroom. The most influential template is held by the teacher and covers expectations about what, how and when particular curricular elements are taught. As well, expectations about how learning should be approached by students

are also included. The elements of this educational template are culturally influenced and determined. Students, as well, hold templates as to what education is about and theirs seem to be quite different from the teachers. Further research is needed to clarify the students' templates of how and what teachers should teach.

The importance of these templates for knowledge transmission in the education system rests in their influence on what is transmitted. The examples and case studies throughout the dissertation demonstrate how students who do not meet the requirements of the items in the teacher templates have difficulty understanding, performing and transferring the academic tasks from one situation to another. Teachers need to realize the existence of these templates and be more aware about the influences of these templates so they can adequately explain the steps necessary for adequate knowledge transmission to the students. These templates, influenced by a variety of previously discussed factors - state influence on curriculum, culture and identity, cognition, and teacher perceptions and expectations - are complex and therefore difficult to explain. But, in explaining these steps, teachers would open up the possibilities for student to have equal access to education.

BIBLIOGRAPHY

Acton, W. and J. Walker de Felix. "Acculturation and mind" in Culture Bound: Bridging the cultural gap in language teaching. Ed. J. Valdes. Cambridge University Press, Cambridge, 1986: 20-32.

Anderson, G. "Critical ethnography in education: origins, current status, and new directions" in Review of Educational Research 59, fall, 1989: 249-70.

Ball, T. "New faces of power" in Rethinking Power. Ed. T. Wartenberg. State University of New York Press, New York, 1992: 14-31.

Bellah, R. et al. Habits of the Heart: Individualism and commitment in American life. University of California Press, Berkely: 1985.

Bernstein, B. Class, Codes and Control, Vol 1: Theoretical studies towards a sociology of language. Routledge and Kegan Paul, London: 1971.

____.Class, Codes and Control 3: Towards a theory of educational transmission: Primary socialization, language and education. Routledge and Kegan Paul, London: 1975.

Bloch, M. "From cognition to ideology" in Power and Knowledge: Anthropological and sociological approaches. Ed. R. Fardon. Scottish Academic Press, Edinburgh, 1985: 21-48.

Bocock, Robert. Hegemony. Ellis Horwood, Chichester and Tavestock, London: 1986.

Bossman, D. "Cross-cultural values for a pluralistic core curriculum" in The Journal of Higher Education 62, Nov./Dec 1991: 661-81.

Bourdieu, P. and J.C. Passeron. Reproduction in Education, Society and Culture. Sage Publications in association with Theory, Culture and Society, London: 1990.

Brice-Heath, S. Ways with Words: Language, life and work in communities and classrooms. Cambridge University Press, Cambridge: 1983.

Briggs, Jean. "The origins of non-violence: aggression in two Canadian Eskimo groups" in, The Psychoanalytic Study of Society, Vol. 6. Ed. W. Muensterburger 1975: 134-203.

Brown, D. "Learning a Second Culture" in Culture Bound: Bridging the cultural gap in language teaching. Ed. J. Valdes. Cambridge University Press, Cambridge, 1986: 33-48.

Brown, H. D. Principles of Language Learning and Teaching. Prentice-Hall, New Jersey: 1980.

Bruner, J. "On cognitive growth" in Studies in Cognitive Growth. Eds. J. Bruner, et al. Wiley, New York, 1966: 1-29.

____."The language of education" in Social Research, Winter 1982: 835-853.

Burridge, Kenelm. Someone, No One: An essay on individuality. Princeton University Press, New Jersey: 1979.

Cazden, Courtney. Classroom Discourse: The language of teaching and learning. Heinemann,Portsmouth: 1988. Cazden, Courtney and V. John.

____.Functions of Language in the Classroom. Teachers College Press, New York: 1972.

Cazden, Courtney and J. Kleinfeld. "Dialogue: further comments" in Anthropology and Education Quarterly 15, summer, 1984: 167-87.

Chance, N. "Alaska Eskimo modernization" in Handbook of North American Indians, Vol. 5, 1984: 646-656.

Chatterjee, Partha. "Colonialism, nationalism and colonized women: the contest in India" in American Ethnologist 16, 1989: 622-633.

Clifford, James. "Partial truths" in Writing Culture: The poetics and politics of ethnography. Eds. J. Clifford and G. Marcus. University of California Press, Berkeley, 1986: 1-26.

____."On ethnographic allegory" in Writing Culture: The poetics and politics of ethnography. Eds. J. Clifford and G. Marcus. University of California Press, Berkeley, 1986: 98-121.

Cole, M. "An ethnographic psychology of cognition" in Cross-Cultural Perspectives on Learning. Eds. R. Brislin, S. Bochner and N. Lonner. John Wiley and Sons, New York, 1975: 157-177.

Cole, M. and B. Means. Comparative Studies of How People Think: An introduction. Harvard University Press, Cambridge: 1981.

Cole, M. and S. Scribner. Culture and Thought: A psychological introduction. Wiley and Sons, Inc., Toronto: 1974.

College Standards and Accreditation Council of Ontario. Draft Generic Skills Learning Outcomes. March, 1994.

Comaroff, J. and J. Comaroff. Of Revelation and Revolution: Christiantiy, colonialsm and consciousness in South Africa, Vol. 1. University of Chicago Press, Chicago: 1991.

Cooper, F. and A. Stoler. "Introduction, tensions of Empire: colonial control and visions of rule" in American Ethnologist 16 (4), 1989: 609-621.

D'Andrade, Roy. "Some propositions about the relations between culture and human cognition." in Cultural Psychology: Essays on comparative human development. Eds. J. Stigler, R.Shweder and G. Herdt. Cambridge University Press, Cambridge, 1990: 65-129.

De Waal Malefijt, Annemarie. Images of Man: A history of anthropological thought. Knopf, New York: 1979.

Dellarosa, D. "A history of thinking" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 1-18.

DeVos, George. "Dimensions of the Self in Japanese culture" in Culture and Self: Asian and Western perspectives. Eds. A. Marsella, G. DeVos and F. Hsu. Tavistock Publications, New York, 1985: 141-184.

Dumont, Louis. Essays on Individualism: Modern ideology in anthropological perspective. University of Chicago Press, Chicago: 1986.

Eckstein, S. "Power and popular protest in Latin America" in Power and Popular Protest". Ed. S. Eckstein. University of California Press, Berkeley, 1989: 1-60.

Edwards, D. "Mad Mullahs and Englishmen: discourse in the colonial encounter" in Comparative Studies in Society and History 31 (4), 1989: 646-670.

Erickson, F. "School literacy, reasoning, and civility: an anthropologist's perspective" in Review of Educational Research 54, winter, 1984: 525-46.

Foley, Douglas. "Reconsidering anthropological explanations of ethnic school failure. (With discussion)" in Anthropology and Education

Quarterly 22, March, 1991: 60-94.

Foucault, M. The Archeology of Knowledge and the Discourse of Language. Pantheon Books, New York: 1972.

Freire, Paulo. Pedagogy of the Oppressed. Herder and Herder, New York: 1970.

Geertz, C. "From the native's point of view": the nature of anthropological understanding" in Cultural Conceptions of Mental Health and Therapy. Eds. A. Marsella and G. White. D. Reidel Publishing, Dordrecht, 1982: 123-136.

____."Ideology as a cultural system" in The Interpretations of Cultures: selected essays. Basic Books, New York, 1973: 193-233.

Gerrig, R. "Text comprehension" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 242-266.

Giddens, A. "Capitalism, industrialism and social transformation" in The Nation-State and Violence: A contemporary critique of historical materialism. Polity press, Cambridge, 1981: 122-147.

____."Nation-States in the global state system" in The Nation-State and Violence: A contemporary critique of historical materialism. Polity press, Cambridge, 1981: 255-293.

____."Modernity, totalitarianism and critical theory" in The Nation-State and Violence: A contemporary critique of historical materialism. Polity press, Cambridge, 1981: 295-341.

Giroux, Henry. Border Crossings: Cultural workers and the politics of education. Routledge, New York: 1992.

Gleick, James. Chaos: Making a new science. Viking, New York: 1987.

Glucksberg, S. "Language and thought" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 214-241.

Goodman, K. "Reading: a psycholinguistic guessing game" in Current Topics in Language: Introductory readings. Ed. N. Ainsworth Johnson. Winthrop Publishers, Cambridge, 1976: 370-383.

Goody, J. and Watt, I. "The consequences of literacy" in Literacy in Traditional Societies. Ed. J. Goody. Cambridge University Press, Cambridge, 1968: 27-68.

Graff, Harvey. The Literacy Myth: Literacy and social structure in the nineteenth-century city. Academic Press, New York: 1979.

Greenfield, P. "A theory of the teacher in the learning activities of everyday life" in Everyday Cognition: Its development in social context. Eds. B. Rogoff and J. Lave. Harvard University Press, Cambridge, 1984: 117 - 138.

Gudykunst, W. and Ting-Toomey, S. with Chua, E. Culture and Interpersonal Communication. Sage Publications, Newbury Park: 1988.

Guemple, Lee. "Inuit socialization" in Childhood and Adolescence in Canada. Ed. K. Ishwarin. McGraw Hill, Toronto, 1979: 39-52.

Habermas, Jurgen. "The entry into post-modernity:Nietzsche as a turning point" in Philosophical Discourse on Modernity: Twelve lectures. MIT Press, Cambridge, 1987: 83-105.

____."An alternative way out of the philosophy of the subject: communicative vs subject centred reason" in Philosophical Discourse on Modernity: Twelve lectures. MIT Press, Cambrdige, 1987: 294-326.

Halliday, M.A.K. Language as Social Semiotic: The social interpretation of language and meaning. Edward Arnold, London: 1978.

Hannerz, Ulf. Cultural Complexity: Studies in the social organization of meaning. Columbia University Press, New York: 1992.

Hendriks, J. "Symbolic counterhegemony among the Ecuadorian Shuar" in Nation States and Indians in Latin America. Eds. J. Sherzer and G. Urban. University of Texas Press, Austin, 1991: 53-71.

Hill, J. "In Neca Gobierno de Puebla: Mexicano penetrations of the Mexican State" in Nation States and Indians in Latin America. Eds. J. Sherzer and G. Urban. University of Texas Press, Austin, 1991: 72-94.

Holub, R. "Ideology and interpretation: the debate with Gadamer" in Jurgen Habermas: The critic in the public sphere. Routledge, London, 1991: 49-77.

hooks, bell. "Culture to Culture: Ethnography and cultural studies as critical intervention" in Yearning: Race, gender, and cultural politics. South End Press, Boston, 1990: 123-134.

Howe, J. "An ideological triangle: the struggle over San Blas Kuna culture, 1915-1925" in Nation States and Indians in Latin America. Eds. J. Sherzer and G. Urban. University of Texas Press, Austin, 1991: 19-51.

Hsu, Francis. "The Self in cross-cultural perspective" in Culture and Self: Asian and Western perspectives. Eds. A. Marsella, G. DeVos and F. Hsu. Tavistock Publications, New York, 1985: 24-55.

Hunt, K.W. Syntactic Maturity in School Children and Adults. Monographs of the Society for Research in Child Development, #35: 1970.

Jackson, M. "Introduction" in Paths Toward a Clearing. Indiana University Press, Bloomington, 1988: 1-19.

____."Thinking through the body" in Paths Toward a Clearing. Indiana University Press, Bloomington, 1988: 137-155.

____."On ethnographic truth" in Paths Toward a Clearing. Indiana University Press, Bloomington, 1988: 170-187.

Keesing, R. "Creating the past: custom and identity in the contemporary Pacific" in The Contemporary Pacific (1), 1989: 19-42.

Kleinfeld, J. "Doing research on effective cross-cultural teaching: the teacher tale" in Peabody Journal of Education 61, fall, 1983: 86-106.

____."First do no harm: a reply to Courtney Cazden" in Anthropology and Education Quarterly 14, winter, 1983: 282-287.

____.Eskimo School on the Andreafsky: A study of effective bicultural education. Praeger Publishers, New York: 1979.

Kleinfeld, J., J. Kruse, R. Travis. "Inupiat participation in the wage economy: effects of culturally adapted local jobs" in Arctic Anthropology Vol. 20, No. 1, 1983: 1-22.

Labov, W. The Social Stratification of English in New York City. Center for Applied Linguistics, Washington: 1966.

Lasswell, H. Politics: Who gets what, when, how. World Publishing Company, Cleveland: 1958.

Lave, J., M. Murtaugh, and O. de la Rocha. "The dialectic of arithmetic in grocery shopping" in Everyday Cognition: Its Development in Social Context. Eds. B. Rogoff and J. Lave. Harvard University Press, Cambridge, 1984: 67-94.

Levi-Strauss, C. The Elementary Structures of Kinship. Beacon Hill Press, Boston: 1969.

Limon, J. "Representation, ethnicity, and the precursory ethnography: notes of a native anthropologist" in Recapturing Anthropology. Ed. R. Fox. School of American Research Press, New Mexico, 1991: 115-136.

Linnekin, J. "Culture/Kastom/Tradition: theory and politics in cultural representation" in American Anthropologist, June, 1991: 446-449.

Long, N. "From paradigm lost to paradigm regained? The case for an actor-oriented sociology of development" in Social Research and Development. Eds. N. Long and A. Long. Routledge, London, 1992: 16-46.

Maccoby, M. and N. Modiano. "On culture and equivalence: I" in Studies in Cognitive Growth. Ed. J. Bruner, et al. Wiley, New York, 1966: 257-269.

Mason, P. Deconstructing America: Representations of the Other. Routledge, New York: 1990.

Margolis, H. Patterns, Thinking, and Cognition: A theory of judgement. University of Chicago, Chicago: 1987.

Martin, K. and B. Voorhies. Female of the Species. Methuen, Toronto: 1975.

Matthiasson, John. S. "But Teacher, why can't I be a hunter: Inuit adolescence as a double-bind situation" in Childhood and Adolescence in Canada. Ed. K. Ishwarin. McGraw Hill, Toronto, 1979: 72-82.

McCarthy, T. "Introduction" in The Philosophical Discourse of Modernity: Twelve lectures. MIT Press, Cambridge, 1987: vii-xvii.

McElroy, Ann. "The assessment of role identity" in Childhood and Adolescence in Canada. Ed. K. Ishwarin. McGraw Hill, Toronto, 1979: 54-71.

McLaren, Peter. Schooling as Ritual Performance: Towards a political economy of educational symbols and gestures. Routledge and Kegan Paul, London: 1986.

McNabb, S. "Elders, Inupiat Ilitqusiat and cultural goals in NW Alaska" in Arctic Anthropology Vol. 28, No.2, 1991: 63-76.

Mifflen, F. and S. Mifflen. The Sociology of Education: Canada and beyond. Detselig Enterprises, Calgary: 1982.

Miller, G. "The magical number seven, plus or minus two: some limits on our capacity for processing information" in Psychological Review, 63, 1956: 81-97.

Mohan, Bernard. Language and Content. Addison-Wesley Publishing, Reading: 1986.

Mohanty, C. "Under Western eyes: feminist scholarship and colonial discourses" in Third World Women and the Politics of Feminism. Eds. C. Mohanty, A. Russo, and L. Torres. Indiana University Press, Bloomington, 1989: 1-50.

____."Cartographies of struggle: third world women and the politics of feminism" in Third World Women and the Politics of Feminism. Eds. C. Mohanty, A. Russo, and L. Torres. Indiana University Press, Bloomington, 1989: 51-80.

Moore, H. "Feminism and anthropology: the story of a relationship" in Feminism and Anthropology. Indiana University Press, Bloomington, 1988: 1-11.

____."Feminist anthropology: What difference does it make?" in Feminism and Anthropology. Indiana University Press, Bloomington, 1988: 187-198.

Murdoch, J. The Legacy of Dress-Up Creek: Formal education for Northern Algonquian hunters. PhD Dissertation, University of Manitoba: 1986.

Murray, D. "Introduction" in Forked Tongues: Speech, writing and representation in North American Indian texts. Indiana University Press, Bloomington, 1991: 1-4.

____."Grizzly Woman and her interpreters" in Forked Tongues: Speech, writing and representation in North American Indian texts. Indiana University Press, Bloomington, 1991: 98-125.

____."Dialogues and dialogics" in Forked Tongues: Speech, writing and representation in North American Indian texts. Indiana University Press, Bloomington, 1991: 126-157.

Nakonechny, C. and S. Anderson. Nax"Nilh Algax Ha"m (Listen to Us Speak): Considerations for teaching language arts to Native students in secondary classrooms. Ministry of Education and

Vancouver School Board, British Columbia: 1982.

Nakonechny, J. Cross-Cultural Learning Systems: A case study of Native Indian Teacher Education Programme students in the Summer University Preparation Programme - English composition. M. Ed. Major paper, University of British Columbia: 1983.

Nash, J. "Cultural resistance and class consciousness in Bolivian tin-mining communities" in Power and Popular Protest. Ed. S. Eckstein. University of California Press, Berkeley, 1989: 182-202.

Ontario Ministry of Education. Curriculum Guideline: History and Contemporary Studies. Part A: policy and program considerations. Queen's Printer, Toronto: 1986.

Ortner, S. "Reading America: preliminary notes on class and culture" in Recapturing Anthropology. Ed. R. Fox. School of American Research Press, New Mexico, 1991: 163-190.

Perry, H. S. Language and Content (Book Review) [Mohan] in TESOL Quarterly 21, March, 1987: 137-43.

____.Psychiatrist of America: The life of Harry Stack Sullivan. Harvard University Press, Cambridge: 1982.

Philips, S. The Invisible Culture: Communication in classroom and community on the Warm Springs reservation. PhD Dissertation, University of Pennsylvania: 1974.

Pines, A.L. "Toward a taxonomy of conceptual relations and the implications for the evaluation of cognitive structures" in Cognitive Structure and Conceptual Change. Eds. L. West and A.L. Pines. Academic Press, Orlando, 1985: 101-116.

Rogoff, B. "Introduction: thinking and learning in social context" in Everyday Cognition: Its development in social context. Eds. B. Rogoff and J. Lave. Harvard University Press, Cambridge, 1984: 1-8.

Rogoff, B. and Gardner. "Adult guidance of cognitive development" in Everyday Cognition: Its development in social context. Eds. B. Rogoff and J. Lave. Harvard University Press, Cambridge, 1984: 95-116.

Root, Robert. The Rhetorics of Popular Culture: Advertising, advocacy, and entertainment. Greenwood Press, Westport: 1987.

Rorty, A. "Power and powers: a dialogue between Buff and Rebuff" in Rethinking Power. Ed. T. Wartenberg. State University of New York Press, New York, 1992: 1-12.

Rosch, Eleaner. "Universals and cultural specifics in human categorization" in Cross-Cultural Perspectives on Learning. Eds. R. Brislin, S. Bochner and W. Lonner. John Wiley and Sons, New York, 1975: 177-206.

Sarup, Madan. An Introductory Guide to Post-Structuralism and Post-Modernism. Second Edition. University of Georgia Press, Athens: 1993.

Said, E. "Representing the colonized: anthropology's interlocutors" in Critical Inquiry(15), 1989: 89-107.

____.Culture and Imperialism. Vintage Books, New York: 1993.

Salzman, L. "Harry Stack Sullivan" in Comprehensive Textbook of Psychiatry. Eds. A. Freedman and H. Kaplan. Williams and Wilkins, Baltimore, 1967: 338-351.

Sapir, Edward. "The unconscious patterning of behaviour in society" in Selected Writings of Edward Sapir in Language, Culture and Personality. Ed. D. Mandelbaum. University of California Press, Berkeley, (1949) 1985: 544-559.

____."Cultural anthropology and psychiatry" in Selected Writings of Edward Sapir in Language, Culture and Personality. Ed. D. Mandelbaum. University of California Press, Berkeley, (1949) 1985: 509-521.

Scollon, R. and S. Scollon. Narrative, Literacy and Face in Interethnic Communication. Ablex Publishing Co., New Jersey: 1981.

Scott, J. Domination and the Arts of Resistance. Yale University Press, New Haven: 1990.

Scribner, S. and M. Cole. "Literacy without schooling: testing for intellectual effects" in Literacy Research in Developing Countries: Report of the Bellagic IV Workshop on educational research with special reference to research on literacy. Ed. International Development Research Centre Ottawa/Canada and German Foundation for International Development, Centre for Education, Science and Documentation, Bonn, 1978: p. 17-44.

____.Comparative Studies of How People think: An introduction. Harvard University Press, Cambridge: 1981.

Shweder, R. and R. LeVine (Eds.). Culture Theory: Essays on mind, self, and emotion. Cambridge University Press, Cambridge: 1984.

Simon, R. "On critical ethnographic work" Anthropology and Education Quarterly 17, December, 1986: 195-202.

____.Teaching Against the Grain: Texts for a pedagogy of possibility. Bergin and Harvey, New York: 1992.

Smith, E. "Concepts and thought" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 19-49.

Smith, L., M. Sera, and B. Gattuso. "The development of thinking" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 366-391.

Stairs, A. "Learning processes and teaching roles in native education: cultural base and cultural brokerage" in Canadian Modern Language Review 47, January, 1991: 280-94.

Sternberg, R. "Intelligence" in The Psychology of Human Thought. Eds. R. Sternberg and E. Smith. Cambridge University Press, Cambridge, 1988: 267-308.

Stewart, K., S. Bulloch, and M. Allen. Essay Writing for Canadian Students with readings. Prentice Hall Canada, Scarborough: 1994.

Street, Brian. Literacy in Theory and Practice. Cambridge University Press, Cambridge: 1984.

Taussig, M. "Terror as usual" in Social Text 8(2), 1989: 3-20.

Trask, H. "Natives and anthropologists: the colonial struggle" in Contemporary Pacific 3, 1991: 159-171.

Triandis, H. "Culture training, cognitive complexity and interpersonal attitudes" in Cross-Cultural Perspectives on Learning. Eds. R. Brislin, S. Bochner and W. Lonner. John Wiley and Sons, New York, 1975: 39-77.

Trihn, T. "The language of nativism: anthropology as the scientific conversation of man with man" in Woman Native Other: Writing postcoloniality and feminism. Indiana University Press, Bloomington, 1989: 47-78.

Tyler, Stephen. The Unspekable: discourse, dialogue, and rhetoric in

the post-modern world. University of Wisconsin Press, Madison: 1987.

Wartenberg, T. "Situated social power" in Rethinking Power. Ed. Wartenberg, T. State University of New York Press, New York, 1992: 79-101.

Watson, G. "Rewriting culture" in Recapturing Anthropology. Ed. R. Fox. School of American Research Press, New Mexico, 1991: 73-92.

Weeks, P. "Post-colonial challenges to grand theory" in Human Organization 49, 1990: 236-244.

Wertheimer, M. A Brief History of Psychology. Holt, Rinehart and Winston, New York: 1970.

Wilson, Reginald. "Ethnic diversity and differing value systems: a theoretical analysis of educational alienation" in Peabody Journal of Education 66, summer, 1989: 42-50.

Wood, D. The McMaster Problem Solving Program. Department of Chemical Engineering, McMaster University, Hamilton: n.d.