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Critical thinking and Native pedagogy: A discussion of compatibility.

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UMI
Critical Thinking and Native Pedagogy: 
A Discussion of Compatibility

by
Michele M. Franklin

A Thesis
submitted to the
Faculty of Graduate Studies and Research
through the Department of
Philosophy in Partial Fulfillment
of the requirements for the Degree
of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada
1996
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ABSTRACT

At the onset of the process of writing this paper, it was my strong conviction that the Critical Thinking movement had a lot to offer the curriculum planners developing First Nations Pedagogy. The Examination of several Critical Thinking models, the attempt to find some kind of continuum within which to organize them, and the comparison with the needs and effective methods of Native educators, has substantially reduced my enthusiasm. The more I examined the concepts of rationality and objectivity (explicit or implied in CT models) in relation to the Native worldview, the more I became convinced that the CT model has limited value for Native curricula, and then only if the spiritocentrism of the Native view is given full logical weight, and the goal of character formation be privileged over credentializing for the workforce.
But you, who are wise, must know that different Nations have different Conceptions of things and you will therefore not take it amiss, if our Ideas of this kind of Education happen not to be the same as yours. We have had some experience of it. Several of our young People were formerly brought up at the Colleges of the Northern Provinces: they were instructed in all your sciences; but when they came back to us they were bad Runners, ignorant of every means for living in the woods ... neither fit for Hunters, Warriors or Counsellors, they were totally good for nothing. We are, however, not the less oblig'd by your kind Offer, tho' we decline accepting it; and, to show our grateful Sense of it, if the gentlemen of Virginia will send us a Dozen of their Sons, we will take Care of their Education, instruct them in all we know, and make Men of them.

Response of the People of the Six Nations to a suggestion that they send boys to an American College, Pennsylvania, 1744
ACKNOWLEDGEMENTS

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INTRODUCTION

It will be the focus of this thesis to determine the use-value of a critical thinking (CT) model for the implementation of new pedagogical approaches in First Nations schools. In order to make this determination, it must be established whether or not there is anything about CT, as it is characterised by its own internal debate, which makes it inimical to a Native centred educational strategy. By looking at the debate within the CT movement, and attempting to isolate some of its commonalities, I hope to serve two purposes. As diverse as some of the opinions of various CT theorists are, some attempt must be made to establish some clear-cut parameters to what we consider CT to consist of. Additionally, the entire CT movement must finally disabuse itself of the notion that their own understanding of rational discourse is exempt from the ideological pressures of the times. Is CT ideologically bound, and does that ideology preclude its being of more than incidental use to Native curriculum planners? This paper will argue that yes, CT is ideologically bound. Moreover, it is my contention that only when CT is practised within moral parameters is it conducive to the Native community's demands for Spirit centred, culturally specific education.

The putative necessary conditions for the practice of CT presented in the conclusion are useful guidelines for further analysis. It is readily admitted that these may turn out to be the wrong particular conditions, but there must be some attempt to systematise the debate by beginning to discuss the necessary conditions. The
conclusion of this thesis, that CT has limited applicability for Native educators, does not diminish the value of discussing this issue for the CT debate as a whole.
CHAPTER I - THE TASK

Part A - The Debate

Part of the problem with making a determination concerning the characteristics of Critical Thinking, is that the CT movement, as it has evolved over the last thirty or so years, is not a theoretical monolith. There are almost as many conceptions of CT, and its partner informal logic (IL), as there are theorists. This is not surprising in a debate which is relatively young. The fact that Plato was one of the first proponents of critical thinking, and that there have been repeated pleas from educators and social theorists throughout the course of western European intellectual history, does not seem to alter the youthful flavour of the CT debate. Centuries of attention to syllogistic logic and use of didactic teaching methods created a crisis in education theory and education practice. Students are graduating from high schools without developed literacy skills and with little or no ability to evaluate the competing claims and arguments which are part of everyday decision making. The informal logic movement in philosophy and the CT movement in language arts and education have come together in an attempt to remedy the crisis. Perhaps the lack of theoretical homogeneity results from the fact that the principal contributors to the early stages of the debate concerning the nature and definition of CT were from various, and theoretically distinct, disciplines. For instance, the idea of rationality has very different implications in the disciplines of cognitive psychology,
philosophy and English. The theoretical problems associated with disciplinaire approaches have begun to sort themselves out in the last ten years or so, as the CT movement has become more explicitly interdisciplinary and as the interpretations presented by the movement have begun to exhibit more clear-cut categories of approach.

The most straightforward approach is that of R.H. Ennis. In his 1962 paper, "A Concept of Critical Thinking", he sets out his understanding of what the ability to think critically entails. His definition of CT at this stage was the "correct assessment of statements". (Ennis, 1962, p. 83) This has been referred to as the "pure skills" approach. (Siegel, 1988, p. 6.) The catalogue of cognitive skills which Ennis gives us is not a conception of what it means to be a critical thinker. Rather, these skills are the core of a definition of the ability to think critically. The criticism was levelled at Ennis that this does not address the issue of whether or not a person will actually practice CT in a given situation or on a given argument. In a footnote based on correspondence with Ennis, Harvey Siegel states that the latter's approach was not intended to provide a comprehensive definition of the critical thinker, and that the question of the role of the tendency to practice CT definitely is a significant factor in Ennis's thought. (Siegel, 1988, p.6 and 6 ff., p.139.) At this point the proper understanding of Ennis's conception of CT is "skills plus tendencies". We can see one of the primary issues of the entire debate formulating itself here. That is, the distinction between the cognitive skills which constitute the ability to think critically
and the dispositional tendency to do so. A substantial amount of the debate concerns itself with characterisations of each and the distinctive nature of the connection between them. Are there in fact CT skills *simpliciter*? Are those skills transferable from one domain (or discipline) of knowledge to another? What role is to be given to the affective aspects of the thinker? This is by no means an exhaustive list of the questions raised within the debate, but it does give some idea of that debate’s direction.

Richard Paul

Once the basic distinction between skills and tendencies is set up, we can see how it affects the interpretation of other theorists. Richard Paul, for instance, not only accepts that there are such things as CT skills, but attributes the efficacy of their use to a) the extent to which the skills are transferable (which he thinks is substantial) and b) the reason for which they are applied (intentionality). His approach has become influential through the vehicle of the Center for Critical Thinking and Moral Critique in Sonoma, CA. It is due to no small effort on Paul’s part that the state of California has one of the most broadly implemented programs for the teaching of CT in all levels of education. It is also his insistence on a holistic understanding of persons and the circumstances in which they operate which has been instrumental in seasoning the debate with its markedly moral flavour.
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elements of thought can be isolated and transferred from one domain to another. (Paul, 1990, p. 52.) The catalogue of skills that Ennis codified has been incorporated into Paul, not as the primary feature of CT, but as one of its significant components.

The character of the tendency to actually assume a critical posture has been radically expanded from what we saw in Ennis, for whom the tendency to think critically is significant but is not the main point. Paul's system specifies the perfections of thought (again this will be examined more fully at a later point), such as clarity, precision, relevance, and consistency, and relates them to the elements of thought as both necessary in order to do CT, as well as to the outcome of doing CT. (Paul, 1990, p. 33.) The role of the perfections of thought is somewhat ambiguous for this reason. This apparent ambiguity seems to slide into outright vagueness when Paul adds 'intellectual virtues''and traits of mind''to the pot. It will be argued later that the vagueness isn't vagueness at all but an attempt to illustrate how these various terms serve to illuminate several aspects of the operation of the perfections in the complex function of the critically thinking mind. When Paul refers to 'habits of mind'' I think he is closest to characterising the connection between skills and tendencies. Repeated application of the elements or skills, for the purpose of clarifying the workings of one's own worldview and coming to understand that of others, will eventually become a habit. As a habit, thinking critically becomes a part of the person's worldview. They are still bringing their personal and social baggage,
their own worldview, to bear in a given circumstance, but that baggage now includes skills specific to CT. What can be said at this point is that the tendency to think critically in a given instance will increase as the proficiency in applying the skills increases.

Harvey Siegel

Again, if we look at Harvey Siegel, we can reapply the distinction between cognitive skills and tendencies for further insight. Siegel writes, in part, in response to McPeck's insistence that skills are specific to the kind of knowledge that generated them, wherein thinking well historically is not really the same kind of thing at all as thinking well mathematically. Siegel's claim is that there is no a priori reason for privileging either type of skill. (Siegel, 1988, p. 35.) Both general skills which are useful in looking at many kinds of situations and knowledge, and specific skills which are learned within the logical confines of a discipline, must be accounted for. By rephrasing the question from "Is there a generalised skill of CT?" to "How does CT manifest itself?", Siegel casts his net wider and makes it clear that he does not intend to neglect either type of skill. (Siegel, 1988, p.35.) Nor does he intend to neglect the tendency to practice CT. A critical thinker must have a "critical spirit" (Ibid, p. 39) This part of his reasons conception of CT is grounded in a "love of reason". Reason and emotion are connected inextricably as they both subsist in
persons, and they subsist in a particular relationship in the critical thinker. It can be said that Siegel agrees with Paul in this respect.

However, Siegel is extremely sensitive to what he sees as the relativistic implications of Paul's conception of worldviews. He proposes to offset this lurking relativism with his inclusion of "initiation into the rational traditions" and a firm commitment to "democratic living" as components in his justification of CT as an educational ideal. (Siegel, 1988, p. 59-60.) Paul also sees CT as a prerequisite for a healthy democracy, but CT itself does not require a commitment to democracy. The idea for Paul is that if one's worldview is not formulated within a democratic society, one can still utilise CT skills in order to examine it. The other difference between the two theories is that the "rational traditions" are acknowledged as being a source of skills for Siegel, whereas for Paul those skills are seen as tools to be used when working within said traditions.

I intend to show that Siegel's reaction to Paul's relativism is exaggerated. There can be no doubt that Paul insists that worldviews, as aspects of individual thinkers, are crucial to any definition of what a critical thinker is, but Paul is too thoroughly grounded in pragmatism and general semantics to be considered a die-hard relativist. Siegel raises what is essentially a straw person argument here. In the process of making his point, he presents a theory of rationality which ends up being central to his whole conception of CT. His understanding of a critical thinker is one who is "appropriately moved by reasons". (Siegel, 1988, p. 32.) In order to
determine its quality, a reason must be measured against certain rational principles which are part of the overarching theory of rationality. Siegel himself can be accused of relativism insofar as the principles which are used to establish criteria for reason assessment are subject to change over time. At any given point in history, a certain set of principles will be in vogue. The criteria are relative to time. It is Siegel's contention that even though the criteria change, they are still components of a recognisable theory of rationality. The content and implications of this theory of rationality will be explored in more depth later.

At this point I merely wish to point out the privilege which Siegel affords to rationality and the position this places him in regarding the relationship between skills and tendencies. Skills, regardless of whether they are seen as domain specific or general, are the tools appropriate to reason assessment. The tendency to use the tools is an expression of the value that the thinker places on reasons/principles. The willingness to utilise the tools of critical thought is part of the critical spirit, as is the love of reason. It is a commitment to exercise one’s love of reason. It appears that practice will instil the habit of using the skills, but in order to be inclined to develop the habit one must have a pre-existing commitment. In the instance of an individual critical thinker, this means that she must value skills and reasons without really knowing what they are, much in the same way that a child who begins music lessons commits to practice and drill, prior to actually knowing what the practices and drills are. The love of music may very well motivate such commitment, but for the student
phrases "reasoning ability" and "everyday problems" to "argument analysis" and "everyday argument". (McPeck, 1990, pp. 4-5.) McPeck also insists that the very idea of general reasoning ability is vacuous. (McPeck, 1990, p. 4.) Most of what we consider everyday argument is actually problem-solving, determining meaning, and establishing truth of putative evidence. (Ibid. p.5.) Once these kinds of things are lopped off the set of potential arenas for the exercise of CT skills, there is little left to constitute the appropriate domain of objects of critical thought. The questions toward which we are to focus our critical thought are the public issues of the sort that informed citizens must decide upon. The 'standard approach' is negligent in that it fails to give credence to the sophisticated and complex realm of information required to be informed. (Ibid. p. 9.) Within this realm we spend most of our time assessing the veracity of facts, and that process requires knowledge of the specific criteria of the discipline, and subject-specific knowledge. Teaching students to make sound civic choices is best accomplished through the existing liberal arts education, beefed up with a little more attention to the philosophy of the individual disciplines.

The second major complaint McPeck has is with any attempt to equate CT with rationality. He is adamant that CT, insofar as it can be said to exist, is a subset of rationality and not coextensive with it, which was Siegel's position. (McPeck, CT&E p. 12.) If rationality is to be considered as identified with anything, that thing is epistemology, with which it shares a common purpose, i.e., to find the best reason for holding a belief. Epistemology is defined as the analysis of good reasons for
belief. Thus McPeck asserts: "... even when the problem at issue is the rational assessment of some statement or argument, the major requirements for such assessment are epistemological, not logical in character" (McPeck, 1981, p. 23.)

CT, with its alleged focus on the logical and its equally alleged lack of regard of the semantic, cannot be coextensive with rationality or epistemology. Rationality has to do with the use of reasons, and epistemology with good reasons.

The precise meaning of rationality, which he promises as the subject matter for Chapter 2 of *Critical Thinking and Education* (1988, p. 12), and which would conceivably hold his argument together, never materialises. What he does do in Chapter 2 is broaden and deepen his conception of epistemology. This conflation of rationality and epistemology leaves no room for the relation between CT and rationality, which renders the views of Siegel on this relation null and void. McPeck would not only have us deny Siegel's claim that CT and rationality are coextensive, he would not accept Siegel's account of rationality as being grounded in the criteria and principles of reason assessment. Much of McPeck's problem here is attributable to the kind of criteria Siegel is talking about. Specifically, with "... standards, taken to be universal and objective ...". (Siegel, 1988, p. 34.) Standards cannot be universal for McPeck, as this notion directly conflicts with his cherished belief that standards and criteria are peculiar to the subject area from which they emerge. There cannot be universal criteria of rationality in McPeck's universe, as the criteria may vary from discipline to discipline.
Insofar as the question of transferability applies to skills, McPeck singles out the notion among CT theorists that intra-field transferability is the same kind of process a inter-field transferability. McPeck explains intra-field as referring to the transferability of skills between, for instance, science disciplines. Certain skills learned in chemistry make it easier for students to learn certain skills of physics. But the skills of chemistry and physics are not the same, even though the two share certain assumptions. The complaint is that this in no way implies that well developed science skills are any enhancement to the learning of history. In this regard I think that McPeck is missing the point altogether. His refusal to accept the existence of CT skills per se leads him to assume that when CT theorists are talking about inter-domain transferability, they are talking about transferring skills which are field-specific. They are not. By accepting the existence of general skills, the CT movement has chosen a completely different starting point. Unfortunately for McPeck, his arguments for the field-specific knowledge are not as tight as he would have us believe, because he does not actually disprove the existence of general skills, nor does he conclusively demonstrate that all knowledge is domain specific. The reason he can't do either is that he takes the falsity of the opposing argument as his starting point rather than reaching it as a conclusion.

It is significant to note that by 1991, McPeck modified his opinion of CT qua Informal Logic in a curious manner. By this point he is willing to acknowledge the positive impact of giving some credence to the logical connections that hold
arguments together. "Such an emphasis [on parsing and connectives] provides a non-trivial insight into language, ... because students may come to appreciate that the way in which something is said has a crucial bearing on precisely what is said." (McPeck, 1991, p. 27.) But this is as far as he is willing to go. According to McPeck, his "argument substantially rests on one major premise, namely: that once deductive or analytic considerations are removed from the realm of informal logic (hence its name "informal logic"), the determination of an argument as strong vs. weak or fallacious vs. non-fallacious rests on substantial considerations (such as facts about the world, or our beliefs about facts) and not upon formal considerations ... ." (McPeck, 1991, p. 29, emphasis his.) Even if we accept his distinction between analytic and substantive arguments, it is a mere truism to say that once you take the logic out of Informal Logic, everything else is substantive. By why remove the analytic component in the first place? Again, it's presupposition that Informal Logic focuses on logic exclusively, ignoring content, and his arbitrary insistence on the privilege of atomic facts over the connection between facts.

The other curious change in McPeck's strategy is that he is now able to extend his preference for subject-specificity to "so-called 'natural argument' or 'everyday argument'". (McPeck, 1991, p. 29.) It would appear that his stance on what constitutes an appropriate application of CT has been slightly modified. Everyday arguments may very well exist, but they are to be subjected to the same criteria as the privileged subject-specific arguments were previously. The
Summary

As the discussion of these three theorists develops, the question I will raise is whether First Nations schools would be better served by adopting a more radical model (Paul's) or one which adjusts existing structures to limited goals (Siegel's or McPeck's). Moreover, are there features of the various theories which are fundamentally incompatible with the goals and viewpoints of Native educators? Much of this debate will be a function of the wants and aspirations of First Nations. How have they taught the knowledge and values which constitute their culture in the past? How are they doing so now, in a fundamentally alien system driven by an authoritarian pedagogy? More importantly, how do they wish to do so in the future? What are the political goals they seek to attain and what are the societal characteristics they want to embody?

The diction in the previous sentences may lead my readers to assume that I perceive the First Nations as some sort of monolithic entity, homogenous and undifferentiated. This is not the case. The diversity found within the Aboriginal population of North America, even within the confines of Canada, is staggering. Farmers, hunters, rural, urban, reserve dwelling, status, non-status, conservative, radical, literate, illiterate, are all terms which can be applied, either singly or severally, to Native persons and peoples. Any attempt to homogenise them would be to commit the dehumanising and reifying act of an oppressor. Nor can I fail to
keep an ear to Freire's cautionary words to those of us who have a desire to change things: "The oppressor is solidary with the oppressed only when [s]he stops regarding the oppressed as an abstract category and sees them as persons who have been unjustly dealt with, deprived of their voice, cheated in the sale of their labour—when [s]he stops making pious, sentimental, and individualistic gestures and risks an act of love." (Freire, 1970, pp. 34-5.)

In the instance of First Nations, the oppressed are not definable by many of the diverse criteria which the academic community attempts to impose. They are not unified by geography, language, socio-economic status, or mode of production. They are not religiously consistent but they are spiritually integrated, meaning that they all share certain spiritual and metaphysical assumptions. All of these generalisations are flawed by their attempt at formalising something as diverse as the Native peoples of Canada. In fact, there are not many things which can be safely said of First Nations as a whole. One thing which can be said, I believe, is that the Aboriginal population of Canada, as part of a global trend in Aboriginal societies, is in search of healing, both for the individuals wounded in the daily manifestations of oppression, and for the society as a whole. The Native community is clear on one point. They will not allow themselves to be passively assimilated by the Canadian nation-state. To this end, there have been many valiant attempts at adapting traditional native power structures to the twentieth century power struggle. Unfortunately, in order to produce a cadre of individuals who would be given a
asserts that the generalizability of CT is the antithesis of subject specificity. (Norris, 1992, p. 17.) If McPeck is correct in his claim that the skills associated with CT are differentiated by the subject area in which they are learned, and in his resultant claim that they have minimum transferability, then Norris' (as well as Ennis's and Paul's) assertion that the skills are general cannot stand.

The second problem, which item 3) highlights, is the ability of CT skills to transfer from one field of knowledge to another. This addresses the significance of pedagogical issues to the CT movement. The demand for a "fund of resources" which can be applied across domains implies a set of skills which is significantly transferable. Additionally, the manner in which these resource skills are to be taught depends on their transferability. I take Norris' point to be that once we have determined if there is such a thing as CT skills per se, then we can establish their nature (subject-specific or general) and only at this point will be able to say how best to teach for them.

I have chosen Norris' criteria for one primary reason: his classification of what kind of term CT is provides a continuum on which we can arrange the theories up for examination in this paper. Norris does this himself, and ends up with an arrangement of the various approaches according to the degree that they are able to satisfy conditions 2) and 3) of his theory of generalizability mentioned above. The end result should be that we see the emergence of 'categories of definitions.' These differentiates for the categories will be (a) the satisfaction of items 2) and 3) above,
and (b) the classification according to Norris' taxonomy of the terms Nominal Kind, Strict Natural Kind, and Non-Strict Natural kind, which will be explicated directly.

Prior to any attempt to determine the generalizability of CT, Norris begins by examining what we mean when we say "critical thinking" and "critical thinker". It is his claim that our classification of these nouns has posed considerable problems for the debates over CT thus far and that by reclassifying the terms we can clear up much of the problem about what constitutes critical thinking and thinkers.

In Norris’ view, the traditional distinction between the intension and the extension of terms is not flexible enough. (Norris, 1992, p. 6.) Simply put, this distinction functions as follows. The intension is the "concept" of a term, which contains a list of properties that determine the referents of that term. The extension of the term is the set of its referents, each of which possesses the properties stated in the intension, as severally necessary and jointly sufficient for being a member of that set. Therefore, intension determines extension. We analytically formulate the intension of a term. Then we look at a particular existent and determine whether or not it satisfies the properties set out in the intension. The properties included in the intension are determined a priori to our encounter with the particular term.

**Nominal Kind Terms**

These types of terms are referred to as Nominal Kind terms (NK). (Norris, 1992, p.5.) Norris uses the tried and true example of a 'bachelor'. The property
example, if we examine diamond and graphite, they appear to have two disjunctive sets of properties. Graphite is opaque and soft, diamond is clear and hard. No phenomenal properties of either graphite or diamond can tell us that, according to the scientific analysis of both conducted at the atomic level, they are in fact manifestations of a single substance - carbon. Once this trait is discovered, the concept of diamond and of graphite can be properly determined; atomic number 6 defines both manifestations of carbon: graphite and diamond.

**Strict Natural Kind Terms**

Discovered properties of the referent determine intension. Terms which function in this manner, i.e., for which scientifically established properties found in a potential referent determine the properties to be included in the intension, Norris refers to as Strict Natural Kind (SNK) terms. SNK terms do not give rise to concepts, such as those associated with NK terms, but to conceptions, which are based on underlying traits, that enable us to determine whether or not a referent belongs to the extension of a term. Without the empirically determined trait, the proper conception cannot be formed. If we attempted to generate a concept analytically in order to classify diamond, we would not discover that it properly belongs in the extension of carbon, but would assume, based on its phenomenal properties, that it was conceptually and categorically different from carbon. One of the drawbacks of terms of this kind is that they are descriptive. There is no room for normative input,
will. It simply means that they have an extant set of circumstances from which to craft a life. Knowing one's strengths and weakness is the bedrock of self-knowledge.

The concept of the term human contains few properties analytically. Some of the properties that have been nominated are that we are mammals, that we think, and that we use language. In order to determine which of the alleged properties is necessary for inclusion in the intension of the concept of 'human', we have to be able to say that the individual property necessarily manifests in the referent (severally necessary) and that the referent manifests all of the properties (jointly sufficient). Thus, it is necessary that I be a mammal in order to be considered for inclusion in the extension of human, but that inclusion demands that there be other necessary properties which I also manifest: those being thinking and language using, as some philosophers would say. Unless I manifest them all I am not considered human. But what if there is an underlying trait or cluster of traits which makes me human? What if there is something peculiar about my DNA that would enable someone to determine that I was human from examining five of my cells - my atomic number so to speak? This trait would not be found through any examination of my phenotype, but would emerge from scientific investigation of my genotype. Philosophy, and the attempts at an analytic characterisation of the term human, have failed to give us an adequate differentiate between us and, say, orangutans. Any attempt to include a property in the concept runs aground on the increasing
term of the first water. Ever more sophisticated scientific knowledge concerning our
genetics and biochemistry provides us with a set of underlying traits which must be
taken into account in the formulation of any conception. But humans are not just
electrochemical processes which we can describe in increasingly accurate ways.
We have hopes, aspirations and ideals which allow us to have normative input to
our concept of ourselves. The number of properties that can be related to the term
'human' analytically may remain short, but our ability to ensure that those properties
are realised/realisable in humans gets stronger every day.

This brings us to a consideration concerning where on the continuum of NK-
SNK-NSNK we should locate the term 'CT'. Unlike the term 'human', CT is not a
single term. It is an expression which brings together two different kinds of factors.
'Critical' modifies 'thinking'. Thinking, critical or otherwise, is done by humans, and is
accordingly limited by actual human properties. Norris places the term 'CT' in the
NSNK category, and does so for the following reasons: 1) NSNK terms satisfy his
minimal condition for a theory of human learning, that its terms refer. By crafting our
conception of what it means to be a thinker on the grounds of empirical data we
acknowledge the limitations of the human psyche. If the conception has a central
term which cannot be verified to subsist in humans, then the conception is
defeasible. Thus if humans are found not to possess intelligence, any conception
which uses the property intelligence is invalidated. (Norris, 1992, p.12.) 2) NSNK
terms enable us, by factoring in the concepts of "education" or "educational values",.
determine whether a referent falls into the extension requires knowing precisely when and if a difference in degree becomes a difference in kind. Norris calls for a theoretical framework for making this determination. The theory which will determine the relationship between the properties which are realised/realisable in persons and those properties which we wish to have analytically related to the term 'critical thinker' is a theory of education.

Traditionally, theories of education have been almost wholly normative. This tendency to consider education in a normative manner stems from two factors. 1) The function of education has been to socialise. At least since Plato, the activities associated with educating have been explicitly appreciated for their role in the formation of a certain kind of person who operates in a certain kind of society. Education passes along the practical skills as well as the moral habits which are valued by the society. Over time, the skills and values may change, but it has remained the task of educators to transmit them to students. 2) Our descriptive capacities have only recently reached the point where they are able to ascribe properties which are not based on superficial phenomena. Many of the underlying traits which make us what we appear to be were not even known to exist prior to this century.

The task for a theory of education at this point is to accommodate the traditional, normative content as well as the constantly changing descriptive content. In keeping with this need for a more balanced theory, the following chapter will
examine some of the theories of education that constitute the bedrock of the pedagogical practices which will be examined later.
CHAPTER II - THEORY OF EDUCATION: PAUL

This chapter will examine the theory of education of Richard Paul with the following questions in mind. "What are the features of a theory of education based on Paul's conception of CT, and how do the problems with these features affect their use value for Native educators and curriculum planners?" The argument presented is essentially that embedded at the root of all three of the CT theories discussed in this paper is a conception of rationality and of what it means to be a critical thinker, which gives consistency to the debate within critical thinking circles, but which denies the validity of the world view and the epistemology of Native people. This denial is attributable, at least in part, to an assumption of ideological neutrality on the part of Paul, Siegel, and McPeck. The assumption of ideological neutrality does not hold, as the belief in objectively grounded rationality that it rests on is no more plausible than that of ideologically determined reality.

Before moving on to the more theoretical aspects of our discussion, the linguistic implications of the term 'education' must be addressed. It is of overriding interest, given that this paper seeks to clarify a choice of CT models, that we are reasonably clear about the assumptions and generalisations which will govern that choice. The question is about purposes and goals. How does our understanding of the term 'educate' affect what we do when we educate? Do we seek to transform students or credentialise them? The point is significant for the following reason. If
the object of the educative process is to bring out from within, as its root would indicate, then the process has the ability to transform and empower students by validating their personal history and lived experience. But when one looks in the dictionary the term refers to transmission from without the student to within. From teacher to the student. The assumption is that there is something of value in a student's extant knowledge, and that drawing that something out should be a goal of education. But at least since the Industrial Revolution, the focus of the education process has been to prepare students for their place in a capitalist society. Employers have specific needs, namely labour, and schools are supposed to satisfy those needs. The hierarchical nature of capitalism (many workers, few bosses) necessitates that only a certain percentage of students be trained to be bosses, and even fewer need to be trained to be the boss. The vast majority need only learn rudimentary technical skills and particular social habits geared to getting to work on time and conducting themselves appropriately while at work. Determining who fits into each category is accomplished by the application of standards and credentials. For example, of the 10 students in a high school classroom, 6 need only enough education to pass. Their credential is a high school diploma. Of the remaining 4, 3 need to be trained to fill the role of managers, and they need to continue at the post-secondary level, obtaining a B.A. or an M.A.. The remaining student, in order to satisfy the demands of being the boss, will require a PhD or its equivalent. Which students get to pursue an education aimed at being a boss, is determined by their
performance on "objective" testing. Students who do poorly on grade 9 finals are encouraged to take vocational training in high school. Students who do well on objective tests are channelled into more demanding academic courses, which in turn lead to college or university. All the employer needs to do is look at the credentials of prospective employee to determine if s/he is suitable for a given position.

This focus on credentialising, and on the power structure which does the credentialising, relates to the status of belief and knowledge in the following way. Those who are privileged within a power structure are seen to have some sort of clandestine access to the rational justification for their own beliefs. The rest of the society - the unprivileged - are seen to have mere belief. The relation between privileged and unprivileged persons or groups is a reflection of the relation between objective and subjective knowledge, insofar as objective knowledge is considered of greater value. Because the unprivileged do not have the credentials bestowed by a particular conception of rationality, with its attendant organs of education, the reasons they are assumed to hold their beliefs are not seen as having worth. That wouldn't be as much of a problem if the unprivileged gave their own justifications, their own reasons, worth. But they don't. In order to have the material advantages that accompany privilege, they seek the legitimacy bestowed by education, they seek the credentials. Because their personal beliefs are viewed by the privileged as non-rational and thereby unjustified, they have to be abandoned, not because they aren't necessarily true, but because they are not true according to the privileged.
This is a hegemonic process, which assumes that the belief territory of the unprivileged is uninhabited by anything of worth. Contributing to this hegemony of the oppressed is something which I feel should be studiously avoided by the CT movement. Not only would the tendency to do so morally undermine the entire debate, it is illogical to offer an oppressed people more oppression, unless you want them to remain oppressed. In order to begin with the best foot forward, I will turn to the discussion of what appears to be the most promising of the CT theories up for examination, that of Richard Paul.

Richard Paul

As we have noted in Chapter I, Richard Paul adopts a set of traits of mind or intellectual virtues which are both contributory to and derivative of CT. Paul places these virtues in the framework of a definition of CT that consists of "perfections", "elements" and "domains" of thought.

Critical thinking is disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thinking. It comes in two forms. If the thinking is disciplined to serve the interests of a particular individual or group, to the exclusion of other relevant persons and groups, I call it sophistic or weak sense critical thinking. If the thinking is disciplined to take into account the interests of diverse persons or groups, I call it fairminded or strong sense critical thinking. (Paul, 1990. p. 33.)

These perfections, elements and domains, when properly applied, foster critical thinking and communication. Perfections of thought are characteristics of the mind such as clarity, relevance, consistency, which are developed through practice. (Paul,
1990, p. 51.) They are applicable irrespective of domain, and are amenable to adjustment for application within specific domains. The traits of mind are part of each individual's world view, insofar as they are part of their character. They may be understood as the moral content of Paul's theory of education because in referring to these traits of mind as "perfections", Paul is saying that they are valuable, that they are good things to pursue in their own right. In the process of critically examining our own world views, we must decide to what extent they manifest the traits, as well as whether or not we believe the traits worthwhile.

The perfections of thought, and traits of mind, are a significant factor for inclusion of the term 'critical thinking' in the NSNK category. This is so because the "perfections" of thought function as both underlying traits of mind and as an analytical part of the concept of CT. When used descriptively, the term 'perfections' refer to actual capacities which are an underlying trait of mind, representing something which does in fact exist in thinkers generally but more importantly in the critical thinker. It is what is present in critical thinkers as either realised or realisable.

The concept's analytical components must be drawn from traits which are in existence, which are actually manifested in thinkers. As an analytical part of the concept of CT, the term 'perfection' is normative, expressing which of the realisable traits of human minds will be chosen and thereby realised. It also determines the manner in which we choose to realise them. "Perfection of thought" contributes to the characterisation of critical thinker as a NSNK term because any potential
'perfection' must be manifest in the way we actually think, and the contingent fact that, of the manifestations of thought, we choose to identify some as perfections.

These perfections have a pivotal role to play in the reduction of prejudice. The eradication of prejudice is necessary before any meaningful grasp of an alternative world view can be obtained. For Paul, prejudice is grounded in the way we socialise our children, in the habits we teach them at home and in school. Much of what Paul has to say about prejudice is based on the work of W.G. Sumner, an anthropologist and sociologist who wrote around the turn of the century, and who theorised that belief and sentiment were grounded in folkways and mores, not in rational choice. Beliefs are produced by "frequent repetition of petty acts" which generate "habit in the individual and custom in the group." (Sumner 1906 cited in Paul, 1990, p. 139.) Tradition becomes warrant. Persons who are not critical thinkers, those who do not exercise and manifest the intellectual virtues, contribute to the perpetuation of prejudice. "It is their [prejudiced persons'] profound involvement in prejudgment as a habitual mode of thinking and judgement that is the key problem." (Paul, 1990, p.147.) But this prejudgement is not only characteristic of pathological thought. Prejudice is part and parcel of "everyday thought". It is the "normality and universality of prejudice . . . the harm in positive prejudices, . . . the embeddedness of prejudice in egocentric minds and sociocentric societies . . . ". (Paul, 1990, p. 137.) that make it easier to detect in the thought and action of others, and so difficult to detect in our own.
mentioned, and its definition is the substratum of logic, the concepts, assumptions, values, etc., which are prior to reasoning and implied by it. (Paul, 1990, p. 70.) Background logic can be subdivided into three sub-categories of logic which Paul believes are at the root of how we think and what we think about.

At this point I should mention a potential problem with the term 'logic' in Paul's approach. Logic as a term is used not only for the broad construct of background logic but for the subsidiary logics which constitute that background. The effect is like a rope, which prima facie appears to be one large construct (manifest logic), but which, upon closer examination is revealed as composed of many parts (background logic) which in turn consists of threads (ego- and socio-centric logics and the logic of natural languages). (Paul, 1990, pp. 69-70.)

Background logic is covert. What we mean when we speak is largely implicit and is frequently wholly inaccessible to the person we are speaking to. This is what makes lying possible. Of the many threads of background logic only a small percentage become manifest in the words we choose. For instance, if someone were to ask me my opinion of the verdict in the O.J. Simpson trial, my background logic on the issue consists of a) my personal history with men and women, b) my racial attitudes, c) my assessment of the American system of jurisprudence, d) my understanding of the function of the media, e) my principles concerning the issue of spousal abuse, f) my faith in the equity of police behaviour, etc. My spoken response, on the other hand, would be that given the circus in which the trial was
say. Conversely, if I do not have a ready grasp of my own background logic and the logic of language, I could end up saying something which I didn't mean.

In many instances this utilisation falls short of its mark; we are not always able to express ourselves clearly. Full understanding of a term or expression requires some degree of insight into the sociological or psychological assumptions not explicitly stated. For example, the term 'brother' which is usually understood to refer to one of two siblings with at least one parent in common, is used in some contexts (e.g., trade unions, the African-American culture) to include all males who are members of the group. We need to know if the person using the term is a member of any of the groups, or if in fact he is related by blood to the person he is speaking to. Without the background, we can't be sure which meaning is intended, even with contextual clues.

The idea of language games is that even though the rules are codified in a grammar, the way in which the grammar is used results in various meanings. If I use the term 'brother' to refer to a sibling, it means one thing. If I use 'brother' to refer to a fellow trade unionist, it means something else, and if I use it to refer to another member of the human race, it means something else again. The point is not that we "play the game" in order to be deliberately unclear about what we mean. Granted, lying is always a possible use of language, but because we frequently don't know what's lurking in our own background logic, we are often not able to clarify what we mean. When we begin to examine our personal and social logics (the previously
mentioned egocentric and sociocentric logics) we can see what assumptions we are making, and this awareness facilitates clarity and precision of expression. According to Paul, once we become familiar with the idiosyncratic terrain of our own covert background logic, we will be able to see the same kinds of idiosyncrasies in the overtly expressed logic of others.

Background logic is also a significant contributor to the classification of Paul's critical thinker as a NSNK term, as Critical Thinking, for Paul, is operating as a underlying trait of mind. It is a powerful descriptor for the way we think. Paul goes so far as to consider background logic as endemic to the human way of thinking. All human minds possess background logic and operate according to it. It is seen to exist in all minds if we delve beneath the phenomenal level of the written and spoken word, and it is manifest in individuals to varying degrees.

There is no reason why background logic cannot be made manifest logic in a different context. (Paul, 1990, p. 78.) Background logic is the infrastructure into which we must integrate any new knowledge. Here we see the root of Paul's rejection of the "banking education" model. Banking education assumes that students do not have anything valid to bring to the educational process. "Banking educators treat students' minds as empty accounts into which they make deposits of information, through didactic lectures and from commercial texts. The material deposited in students is drawn from the central bank of knowledge. The central bank
in any society is a metaphoric repository of official knowledge." (Shor, 1992. pp. 31-2.)

Learners' minds are not empty. They contain, as we have seen above, complex logical infrastructures. In order for education to be effective, it has to take this infrastructure into account. The banking model assumes no pre-existing logical infrastructure. It attempts to impose a pre-packaged structure, supposedly inherent in the epistemological domain. It depends on where you focus your attention. If you exercise your critical traits of mind you will be less inclined merely to examine the infrastructures of others (groups or individuals) exclusively. As a matter of fact, a critical examination of one's own background logic is the best place to start. "Our own minds and experiences must become the subject of our study and learning. Indeed, only to the extent that the content of our own experiences becomes an essential part of study will the usual subject matter be truly learned." (Paul, 1990, p. 202.) By Paul's theory, we are supposed to be able, by critically examining our own infrastructure, and doing so with the development of the critical traits of mind as an overriding concern, to give equal consideration to the infrastructures of others.

This explication of Paul's approach indicates that, and is in many respects, conducive to the needs of Native educators, as it is imbued with a marked moral flavour. A critical thinker (strong sense) is a person who examines her/his own worldview and sometimes uses the insights gained to sympathetically examine the worldviews of others. Which is all well and good if the manner of that examination
isn't defined in accordance with criteria which are only valuable within our own infrastructure. I would contend that the oppressive tendencies are simply working at a deeper level for Paul. He is sincere in his insistence that the traits he has selected are universally applicable, not only across domains but across worldviews. However, if Paul's definition of CT is considered as good thinking, which the terms 'weak' and 'strong' imply, and strong sense CT is seen as an answer to the social ills associated with prejudice, other modes of thought are thereby ineffectual and "not as good". Consequently, worldviews which are based on such modes of thought are suspect. If, for instance, a direct and intuitive apprehension of the will of the Creator yields a different solution than critical thought, are we to follow the critical mode just because we think it is more rational, regardless of the value of the solution obtained by intuitive knowledge?

It could be said that what Paul is proposing is some sort of universal infrastructure, one that transcends all domains, all societies, and all individuals. His suggestion, that teachers should respond to the tendency in students to resort to epistemological relativism in response to the pervasive nature of bias, be counteracted by "...restor[ing] confidence in the search for truth..." could lead us to see his proposed infrastructure as such. (Paul, 1990, p. 171.) Additionally, his phrases further in the same chapter, "...partiality masking as absolute truth...", and his arguments for the universality of prejudice (Paul, 1990, Chapter 10.) also foster the interpretation that there is a universal truth, which is universally obscured
by the endemic nature of prejudice. However, I am not convinced that one man's
idealisim is another man's truth. What Paul seems to be saying, as far as I
understand him, and he is not alone in making this move, is: here is what the society
I come from believes a critical thinker should be. As a member of that society who
thinks about CT, I personally agree. Therefore, my ability to appreciate your
worldview is limited by the sociological and personal assumptions which I bring to
my theorising. In fact, Paul admits, "... the likelihood that some bias, particularly as
to approach or framework of assumptions, is inherent in the very process of thinking
itself. Experience teaches us again and again our limitations." (Paul, 1990, p. 173.)
My statements to the effect that Paul's concept of bias favours an idealistic
interpretation, which may or may not be valid, are debatable. I do doubt the degree
to which we can fully free ourselves from these assumptions embedded in our
background logic. This doubt stems from one primary source. Prejudice and bias are
endemic to how humans think. Each person manifests her/his own prejudices,
insofar as they know what they are, to varying degrees. Even the substitution of
different prejudices doesn't change the fact that these prejudices exist and flavour
our thought. The assumption that all persons are of equal value is just as much a
pre-judgement as is the assumption that they are not.

The elements of thought, mentioned at the outset of our discussion of Paul,
are part of the repertoire of both strong sense and weak sense CT. They are the
tools one applies in analysing any particular instance of reasoning. They "illuminate
the logic" (Paul, 1990, p. 53.), both the explicit expressed logic and the implicit unexpressed logic, the overt and the covert. The elements of thought are the "skills" of informal logic. The ability to determine the question, to assess reasons advanced for a particular view of the answer, to evaluate interpretations, etc., are the transferable skills that we can teach. Students can be educated in the appropriate use of these elements, or as Paul puts it, these elements can be placed at the "command" of the critical thinker. Students can be taught how to exercise the skills of CT. However, the tendency to think critically, whether or not one chooses to practice it in a given instance, is supposed to develop through practice with the elements informed by a desire to foster the traits of mind and the perfections of thought.

In light of the generalizability question, the relationship between these elements is significant, and is primarily a question of whether the "elements" are generalizable. In other words, can they be considered as part of the fund of transferable resources and are they applicable in all domains? If they are, then the disposition to use them, the habit so to speak, should be considered as equally subject to the criteria for generalizability, because without the habit, the skills tend not to be manifested and become superfluous. But to what extent can Paul claim that teaching the skill constitutes teaching the habit? Only to the extent that use of the skill leads to a proficiency in the skill, which in turn leads to an increased willingness to use that skill. (Paul, 1990, p. 58.)
The question of whether the habits of mind associated with CT are generalizable across domains is relevant for the question of whether they are also generalizable across cultures, in the following way. Paul appears to be unclear concerning his intended meaning, as he uses both the terms intellectual virtues and traits of mind. (Paul, p. 54.) Is the habit part of the concept of virtue or of the conception of mind, or both? To the extent that habits of mind are empirically determined to exist as underlying traits of critically thinking human minds, then they exist independently of epistemological domain. That is, if they exist as underlying traits, as understood by Norris, they exist in all humans, to one degree or another, irrespective of worldview or culture.

My point is that Paul is not confused. He is illustrating that the two expressions, traits of mind and intellectual virtues, represent two aspects of the same thing. As virtues, they function as an ideal toward which we educate and according to which we educate. As traits of mind they are part of the substratum of human minds and are discovered empirically, they exist as part of our nature and are fostered or retarded by education. The dual understanding of the term is very much in keeping with Norris' placement of the term 'critical thinker' in the NSNK category. He places the term in this category because Non-Strict Natural Kind terms alone allow for both the description of what is realised/realisable in thinkers, and the normative content concerning what we want 'critical' to mean. The balance between the concept, which contains the virtues qua ideals, and the conception, which
contains the basic capacity of humans to satisfy those ideals, is achieved. Concept and conception are used here with Norris' distinction in mind.

One of the biggest bones of contention in the entire debate over the proper characterisation of CT is whether or not the dispositions, abilities and skills associated with most conceptions of CT are characteristics of thinkers generally, as Paul claims, or are grounded in the subject matter specifically, as McPeck asserts, or some combination of both. As far as I can see there is much less of a problem if we separate dispositions and abilities from skills. Dispositions and abilities inhere in persons. There is no such thing as a disposition which exists independently of a person, nor can dispositions be taught. If an individual has a disposition then it can be enhanced, but if the disposition is not present to begin with, no amount of education is going to cause it to be appropriated by a student. For instance, if I have a music student who comes to me for tutoring in philosophy and I determine that being analytical is simply not part of his makeup, I cannot teach him to be analytical. I can show him some analytical tools, but because he is not an analytical person his use of those tools would be sketchy at best. If I want to help him pass his philosophy course, I have to work with his intuitive approach to the universe. This is not to say that being intuitive and being analytical are mutually exclusive, but for the individual in whom it is an either/or thing, I can't force them to be analytical. Our ability to discuss dispositions in the abstract gives the illusion that they have some kind of existence in and of themselves. According to Ryle, and I agree with him on this
point, dispositional properties "... signify more or less lasting traits in ... character." and "... could be unpacked in such expressions as, 'Whenever situations of a certain sort have arisen, he has always or usually tried to ..." (Ryle, 1949, p. 85.)

Take scepticism, for example. The tendency to be sceptical would appear to be a network of predispositions which consists of at least, but is not limited to, a desire to question, a desire to determine the truth, and a willingness to withhold judgement. Scepticism is differentiated from mere intellectual curiosity by the characteristic of withholding judgement. What we choose to question, and the manner in which we go about phrasing our questions, are dispositional issues. The method we utilise for answering questions and the criteria by which we evaluate the worth of the answers to those questions is cognitive. "Skills have methods, where habits and inclinations have sources. Similarly, we ask what makes people believe or dread things but not what makes them know or achieve things." (Ryle, 1949, p. 134.)

Some people practically pop out of the womb asking" why". Others hardly ever ask it in the entire course of their existence. The tendency to ask why seems to be randomly and arbitrarily distributed throughout the human population. There are also different ways in which different people ask the question. Some will be inclined toward scientific, and therefore supposedly objective and rational, questions many of which relate to how something happens, with answers that are assumed to be facts. Others will think more philosophically, asking questions pertaining more to why
something is so, with answers that are better characterised as conceptual. This disposition to question can be encouraged to a certain extent, but for those who do not desire to ask why, there is a limit to how far it can be developed. I may be able to teach you things which have lead to an increase in my own tendency to ask why, but I cannot be sure that learning them will concomitantly increase your whyness.

Skills on the other hand, do not exist in humans in the same manner. As far as we know, it is only humans who have intellectual skills, who utilise particular skills in a broad range of circumstances, and can theorise about those skills. The tendency to utilise skills in a given instance is grounded in dispositions which are particular characteristics of persons. Skills can be taught. Once the sequence of actions (method) is mastered one has the skill. It is possible that one of the primary differentiates between skills and dispositions is that skills can be broken down into steps which when repeated will yield a reasonably consistent result, whereas we have no idea if there is a step by step process for learning dispositions, much less what the steps would be. Various methods have been tried, but there is no consistency in the results of attempting to teach for dispositions. If there were, we would probably not be trying so hard to discover how to teach for dispositions. Skills are also more readily characterised according to their field of application. It is fairly easy to differentiate between manual skills and intellectual skills; typing is a manual skill, writing an intellectual one. Paul's "elements of thought" are skills. But it is essential to his overall conception of CT that they be differentiated from the traits of
mind, or virtues, which inform their use. This is not mere logical exegesis. The two things, dispositions and skills, are different in kind, not in degree. No amount of education oriented towards skills can overcome a lack of the disposition to apply those skills.

Summary

If we consider Paul's 'elements of thought' as roughly equivalent to CT skills, skills are generalizable because they are methods which are common to CT across domains. Dispositions are generalizable insofar as they are realised in humans to one degree or another, but they are not generalizable insofar as they cannot be considered as a resource for dealing with multiple domains. Dispositions cannot be considered as part of the "fund of resources" that Norris insists on in item 3) of his criteria for CT generalizability. Because we have no sure fire method of teaching for dispositions, we can't codify the method and share it with other teachers. Teaching CT skills may or may not enhance the critical spirit, and the tendency to exercise the skill is a function of the degree of that spirit which an individual can be said to manifest. In a certain sense, we can say that the critical spirit is part of what Paul considers the personal psychological component of an individual's worldview. Absence or presence of critical spirit is one of the factors in a person's background logic which is up for examination.
How does the question of whether CT is generalizable across cultures relate to Paul's conception of worldviews? The above discussion essentially addresses the question of whether skills and dispositions are transferable from one domain to another; for instance, to what extent can it be said that my ability to think well historically will enhance my ability to think well philosophically. The conception of worldviews has an implied conception of human nature at its core, by virtue of the fact that it implies a human nature in which dispositions and cognitive skills are embedded, and characterises the distinctions within that human nature in a certain way. Suffice it to say that this conception, with its refusal to admit of skills, attitudes or knowledge which exist in any other context than the thought of humans, is not going to jibe with a conception such as McPeck's, which is equally adamant in its refusal to admit of knowledge as contingent upon the knower, and of skills and attitudes independent of knowledge.

The question of cross-cultural generalizability now becomes a question of competing conceptions of human nature. If Paul is right, and the skills and attitudes of CT are underlying traits of human nature, then they must be possessed by persons from all cultures to one degree or another. If he is wrong, however, the absence or presence of skills and attitudes about their use is culturally dependent, not just culturally derived, and cannot be adjusted without making fundamental adjustments in the society as a whole. If there is no respect for the capacities and
limits of human psychology, as Norris would insist that there be, there can be no truly effective, critically based education.
CHAPTER III - THEORY OF EDUCATION: SIEGEL AND MCPECK

Introduction

The previous chapter has examined the theory of education that I have found implied in Richard Paul, according to the generalizability criteria of Stephen Norris. I found that Paul's theory, while allowing for some relativism associated with world views and background logic, fails to free itself from the shackles of "objectivism", or allegedly objective knowledge. As I move into Chapter III, I will look at the theory of education of Siegel and McPeck in order to determine the extent to which each of their theories is generalizable. What we saw implied in the background of Paul's theory now becomes explicit in these two theories. Siegel's reasons conception of Critical Thinking is grounded in a theory of rationality which purports to be grounded in objective criteria for reason assessment.

When we move the discussion from Siegel to McPeck, the situation becomes even more pronounced in its rationalistic character. McPeck not only privileges rationality as the criterion against which all knowledge is to be assessed, he is insistent in his claim that the various logics of the disciplines are defined exclusively by the epistemology of those disciplines. McPeck's critical thinker is not defined according to how s/he actually thinks, but according to how McPeck believes s/he should think. There is no doubt in McPeck's mind that teaching CT is best accomplished through the traditional liberal arts curriculum. In fact, this reliance on extant methods poses one of the most serious challenges for applying McPeck's
subject-neutral skills. Neither is to be privileged. It is the responsibility of the critical thinker to determine which skills are appropriate in assessing a particular instance of reasoning.

This tendency to disallow the privileging of either type of skill extends to the dichotomy between knowledge that is obtained through the disciplines and the knowledge which is generated by personal experience. While Siegel accepts the premise that individuals may perceive knowledge filtered by individual worldviews, he also accepts the notion that subject domains have peculiar criteria which exist independently of the individual. Insofar as all critical thinkers are individuals with unique worldviews, the imposition of an overarching theory of rationality would seem to ensure that there is some nonrelativistic, or objective set of criteria for assessing reasons. On the other hand, these same objective criteria are to be utilised by individuals in particular instances for the assessment of specific knowledge or claims about knowledge. As such they are interpreted and adapted by individuals, each of whom has their own ideological bias, their personal amalgam of social referents. The criteria are applied relative to the particular instance and relative to the individual who is applying them.

Siegel argues that rationality is more basic than ideology. He does this insisting that "...the possibility of the (non-ideological) rational critique of ideology is basic to the very possibility of inquiry into the nature of ideology." (Siegel, p. 73.) Ideologies, however, are ascribed to by humans and many ideological type
assumptions are learned in childhood. They exist in the character of the individual in ways s/he may not be aware of. Rationality, is a characteristic which is acquired, especially given the particular character of the rationality upon which it is based.

For the purpose of this paper, there are two principal components of Siegel's theory of rationality that require closer scrutiny. The first is the insistence, expressed in the discussion of "ideological determinism", that rationality precedes ideology. Siegel sees ideological determinism as the "ideological tail wagging the rational dog". He couches his understanding of the relationship between ideological determinism and rationality in these terms: "...for whether we ought to embrace the thesis of ideological determinism - or any thesis - depends precisely on what reasons can be mustered in support of the thesis or claim in question, and on the cogent assessment of the rational force that those reasons offer for that claim. Thus it is rationality which is basic, not ideology." (Siegel, 1988, p. 73.) On the contrary, when we look at the examples he offers as part of his defence against the ideology objection to his reasons conception of CT, we see the presence of ideological bias. By ideological bias I mean the beliefs and assumptions which ground certain kinds of actions. For example, voting is an ideological action, insofar as the franchise is transferred to the official, who represents a set of principles and ideals that the voter believes are of value. Conversely, refusing or neglecting to vote are also ideological actions which represent a set of beliefs about government in general. For instance, Siegel states that, "a fascist educational ideal (if it could be called such) would have
ramifications undesirable for the democrat. . . ." (Siegel, 1988, p. 70.) Siegel isn't even sure that a fascist educational ideal should be considered as an ideal, but ask any fascist and you will find that they do in fact have expectations for their education system which function in the same manner as those same kind of expectations do in a democratic system. When a Fascist state regulates its educational system, it does so to indoctrinate students in what it considers to be the correct social beliefs and values. The conformative influence of education is not lost on the Fascist; it is usually quite overtly utilised.

Siegel attempts to separate ideology from indoctrination, going so far as to treat them as two distinct objections to his argument, rather than as two facets of the same objection. The ideology objection he attempts to defeat by examining the allegedly question-begging nature of the very effort to address the issue. He states the objection as a rejection of "... the idea that fundamental educational ideals, like critical thinking or rationality, can be justified without reference to some prior ideological commitment." (Siegel, 1988, p. 65.) The effort to assess the ideology objection itself begs the question... by presupposing prior standards of argument appraisal." (Siegel, 1988, p. 63.) This begging the question is also supposedly the reason that the belief in ideological determinism doesn't hold water for him: "... if there can be good reason for embracing the thesis, then the thesis is undercut, for asserting that there can be good reason to embrace it is tantamount to asserting that such good reason can be independent of prior ideological commitment - which is just
what the thesis denies" (Siegel, 1988, p. 72.). The idea that the only good reasons are non-ideological reasons presupposes that there are such a thing as non-ideological reasons. In spite of what Siegel says, the existence of ideologically neutral reasons is debatable. Siegel apparently does not see his own worldview, in which there are reasons, as having developed within an ideological framework.

After outlining the more Marxist interpretation of ideology, Siegel himself subscribes to the generalised understanding of the term ideology which is, "... a general framework that shapes individual consciousness, guides and legitimates belief and action, and renders experience meaningful" (Siegel, 1988, p. 65.) Indoctrination is discussed in three of its manifestations, but Siegel claims that the common element between the three is that they are "non-evidentiary forms of belief" (Siegel, 1988, p. 80.) The purpose of this non-evidentiary process is to "inculcate" ideologies which cannot stand on their own rational pegs. Ideology is non-rational if it is not subject to the privileged position of rationality Siegel insists on.

It is also debatable whether Siegel's use of the term 'initiation', when discussing the goals of education (Siegel, 1988, p. 59.), actually avoids the problems associated with the term 'indoctrination' as it is commonly used to describe the teaching of a specific ideology. I don't think that the terms are semantically distinct enough to back up his defence against the ideology objection. The term 'indoctrination' explicitly refers to teaching and instructing a person in doctrine, idea, or opinion. 'Initiation' refers to admitting or introducing a person to society, office,
science, or mysteries. (OED) What is implicit in the term 'initiation' is that the introduction requires teaching. One is not initiated as a member of a group unless one has been taught, at least at a rudimentary level, what being a member of that group entails. For example, initiation to the Ku Klux Klan presupposes that the individual has been indoctrinated and has learned what it means to be a Klan member. S/he has been taught the basic tenets of Protestant white supremacy to the extent that s/he can claim to support those tenets and to manifest them in daily life. Once the individual has been indoctrinated (knows) concerning Klan principles and has accepted those principles, then that person is initiated into the Klan. Initiation rites are usually actions which embody the principles which the indoctrination process has taught. Initiation implies that one has been indoctrinated, and constitutes a ritual step in an educative process. For Siegel, "... however one parses 'indoctrinate,' it nevertheless remains that indoctrination is not unavoidable in any sense in which it prevents the development of rationality." (Siegel, 1988, p. 85.) Inculcation in the name of rationality, defined in Siegel's terms, is just that. Inculcation in suppressive governments is indoctrination. By making rationality the linchpin, insofar as it is the arbiter of what is to be considered as initiation and indoctrination, rationality is privileged over both.

It might seem that I am not clear on the distinction between the terms 'ideological' and 'cultural'. This is not the case. The problem seems to be that to the extent which one admits of epistemological relativism, that is the extent to which the
rationality and define and assess reasons in a tradition at a time. As the tradition evolves, so do the principles that define and assess reasons. (Ibid. p. 135.)

Perhaps even more telling is the supposed justification which he presents: "...we meet the demand by seeing that rationality is self-justifying". (Siegel, 1988, p. 132.) By this he means that, in order seriously to question the worth of rationality, "one must already be committed to it." So what, precisely, is it about rationality that warrants the status which Siegel accords to it?

Let me see if I have this right. According to Siegel, rationality is coextensive with the relevance of reasons, relevance in this instance to mean relevance as determined by some criteria. Criteria are agreed upon based on accepted principles. Principles change over time, therefore criteria change over time. So far, so good. But if the relevance of reasons changes in accordance with time, then it is relative to time. The analytical content of our concept of CT is forced to change in accordance with the scientifically obtained content of our changing conception.

Can Siegel's reasons conception of CT accommodate epistemologies which are not grounded in the privilege of a stringently defined rationality? For example, what about a student who has grown up in a culture where the knowledge which is most valued is that which is revealed to a shaman in trance states? Should this student, who believes in a profound way that such knowledge is privileged, be expected to reject one of the most fundamental of his beliefs because it cannot be considered rational by Siegel's standards due to differing criteria for reason
assessment? The flip side of this question is, can an individual's dream content be considered a good reason for an action or for holding a belief? It is my claim that what is revealed to the shaman cannot be considered 'true knowledge' in Siegel's universe because it cannot satisfy his demand for objectivity. Dream content is wholly subjective in nature, relying on one person's experience, which is impossible to corroborate, verify or reproduce.

Siegel's complaint regarding relativism becomes explicit in his criticism of Paul's conception of world views. The rub, as he sees it is that "... we are left with a vicious form of relativism in which all 'rational' disputes boil down to unanalysable differences in world view." (Siegel, 1988. p. 14.) But is there a problem when we extract the privileged terms 'rationality' and 'unanalysable' from this sentence? His assumption that disputes have some kind of context-free rational basis, that they pertain to choices about things or ideas which are not culturally or ideologically embedded, if not generated does not necessarily convince this reader. Yes, given his definition of rationality, there should be some such rational disputes. And yes, if there are rational disputes, they should be analysable by rational criteria. But if the disputes are not rational, nor even irrational, but arational (having nothing to do with rationality), then what purpose is served by analysing them according to rational criteria? The role of synthesis (understood as the search for similarity, as opposed to analysis, which searches for difference) is completely ignored here. There is an implicit notion that any similarities are going to be "rational". The notion becomes
almost explicit when he uses language such as "central human traditions" when discussing the purpose of education as an initiation into the rational traditions. (Siegel, 1988. p. 59.)

McPeck

At this juncture, I will turn to an examination of McPeck and attempt to determine a) what kind of term 'critical thinker' is for him (NK, SK, NSK) and b) how he satisfies the requirements which Norris has outlined concerning generalizability. Requirement a), is difficult to pin down with McPeck as he directs most of his attention to what critical thinking is not in Teaching Critical Thinking, but some time is spent Critical Thinking and Education and Education describing who the critical thinker, qua person, is. We know that in order to obtain the level of proficiency in domain-specific knowledge that McPeck demands, plenty of education is needed. This "education" is a normative concept and gives us reason to categorise the term 'critical thinker' as a Nominal Kind term. Education is the indoctrination into the rational traditions, the standard liberal arts disciplines. This preoccupation with the independent logical force of the disciplines distracts the critical thinker from examination of lived experience. Consequently, lived experience is not clearly understood, and what is actually going on is not realised. McPeck's critical thinker is not constituted by the underlying traits of thought and action, as discovered through productive analysis of what is actually the case. 'Critical thinker'
possesses none of the descriptive value of a Non-Strict Natural Kind term. McPeck's term 'critical thinker' does not tell us enough about what actually takes place in humans when we think critically. Rather it is solidly grounded in McPeck's personal understanding of what we should be doing. On this basis, that McPeck's 'critical thinker' is not only directly classified as an NK term on its normative content, but is also excluded from inclusion in the NSNK category by its lack of emphasis on what is actually happening when critical thinking is going on, his term can be safely considered as NK.

The ability of McPeck's term to satisfy Norris' criteria 2) and 3) mentioned earlier now becomes an issue, the nub of which is this. Insofar as Norris is demanding that there be some contribution to the fund of teaching resources, McPeck has nothing new to offer. More importantly, he probably would not want to. While he may admit to a certain amount of commonality between science disciplines for instance, McPeck would consider the contents of Norris' fund to be spurious. CT is the purview of educated persons, and as such is not meant to be generalizable to the population as a whole. As an NK term, it cannot be an attribute of all persons, regardless of degree, but only of those persons who satisfy criteria which are not chosen from what actually happens when persons thinking critically. It is therefore not generalizable across domains or to all persons and consequently across cultures.
McPeck's view has been given short shrift here for three reasons. First, as an adamant proponent of epistemological atomism, it results in a conception of what critical thinking is which leaves little or no room for the relative differences observable in thinkers, critical or otherwise. Second, the term 'critical thinker' is preponderantly normative, allowing for no descriptive content in the meaning of the term. Third, McPeck has no ability to satisfy the demand of generalizability qua Norris, and consequently can have no use for Native educators. In fact, McPeck's approach, and the assumption of objectivity associated with a normative understanding of atomism (this is how it is and this is also how it should be) is part of the problem. The existing structure does not work for Native students unless they have adopted many of the assumptions which underscore it. This adoption requires jettisoning beliefs which may be equally or more functional than the ones to be adopted. It is also called assimilation, and it is decidedly not the objective of Native educators.

Summary

Overall, this chapter has shown that the further one moves from the position of relativism towards one of epistemological atomism, the further one gets from CT theories that are applicable across cultures and which give credence to the logic of individuals. Paul comes closest to giving us a useful structure, as we saw in the previous chapter. Siegel struggles valiantly with the middle ground, attempting to
give credence to individual thinkers and their experiences without relinquishing his abhorrence of relativism. Paul tries to keep a balance between individual knowledge and any abstract theory of rationality. Siegel makes the move to privileging rationality which destroys any attempt at a balance. There is no way to reconcile a self-justifying rationality with other forms of rationality which may be found in other cultures. If knowledge doesn't conform to the principles and standards of reason assessment, as Siegel has defined them, it cannot be true knowledge.

His understanding of the relationship between ideology and rationality is also problematic as it assumes that ideology is categorically a subset of rationality. This lends to the argument that there is such a thing as objective knowledge, which I will argue in the next chapter is not necessarily the case. It also means that ideology, and all of the factors of worldviews, as well as those worldviews themselves, are valid only insofar as they conform to this notion of rationality. This insistence on conformity to allegedly objective principles denies both individual experience and cultural variance.

McPeck is even more adamant about the objectivity of knowledge than Siegel, whose approach could possibly be tinkered with in order to accommodate different standards and criteria of rationality. For McPeck, what constitutes a good reason for a belief or action is totally dependent on the discrete logic of the discipline in question. Knowledge is knowledge of disciplines, period. Any knowledge which is not generated by the disciplines in accordance with their logics
is not knowledge. The example of shamanism, or any revealed knowledge for that matter, shows that culturally valid systems for interpreting the world cannot be considered as knowledge-based, because their claims are not grounded in the knowledge of the disciplines. This renders McPeck practically useless for the purposes of this paper. If he won't admit that valid knowledge can be obtained in any other manner than the one which he prescribes, then he also cannot admit to the validity of cultures whose knowledge is not disciplinaire. The McPeckian critical thinker is a sophist. There is no questioning of the fundamental assumptions which ground the status quo. This thinker assumes that his knowledge is obtained objectively and is therefore somehow beyond scrutiny. CT is not practised for self examination but for the critical examination of others.
CHAPTER IV - PEDAGOGIES IMPLIED BY CT THEORIES

In order to determine the precise manner in which the assumptions about knowledge and rationality affect the what happens in classrooms, this chapter will examine Paul, Siegel and McPeck by comparing them to the demands of Critical Pedagogy concerning the power relationships which each states or implies. The degree to which these power relations inhibit truly emancipatory education will be discussed with two frameworks in mind. First, Henry Giroux's understanding of the relations between ideology, knowledge and power, as it is seen to operate in problematics such as a preoccupation with the administration of knowledge and the operation of the "hidden curriculum". Second, Ira Shor's emphasis on the discourse of the classroom and his resulting concept of the third idiom. It will be argued that all three CT models fail to offer a truly emancipatory education to one degree or another.

At this point the best approach is to begin with a statement concerning the presuppositions I will use. First and foremost, is the notion that the status quo in education is not adequate; not for the needs of students in general, and certainly not for the needs of Native students. If the current system were capable of doing the job, the entire "crisis in education" wouldn't exist. The superficial tinkering with extant curricula espoused by theorists like McPeck will not do. Nor will the benign use of the term 'critical', as it is understood by the CT movement, provide us with the tools needed to dig deeply enough to root out the problems. In short, I find that I am
persuaded by the insights of the Critical Pedagogy movement and I think they will suit the needs of Native education admirably. At any rate, I will proceed on that basis.

**Part A - Critical Pedagogy**

In order to explain what I mean the by the term 'radical', this chapter will examine the three critical thinking theorists discussed in the previous chapters in light of the critical pedagogy of Henry A. Giroux, whose presentation of the various threads of the argument over critical pedagogy is indispensable, and Ira Shor, whose work is so exemplary a union of theory and practice. Each of the Critical Thinking theories satisfies the requirements of Critical Pedagogy to one degree or another. As has already been argued, each theory is possessed of features which help to classify it on the criteria of the kind of term 'critical thinker' is meant to be. The implications that has for the student teacher relationship will be examined here in a more practical manner. Both of the Critical Pedagogy theories are solidly grounded in what happens in classrooms. Additionally, they bring to their activities in classrooms an interpretive framework, a world view, that is both contributory to and derivative of emancipatory education. For Native students, and for the purposes of this paper emancipation is crucial. In attempting to determine if CT has any potential value for resolving Native curricular issues, it must offer (a) emancipatory education, since Natives are clearly oppressed, and (b) educated persons who are what the
Native community believes people should be. The Native community must be able to produce their own definition of a "good citizen".

**Henry A. Giroux**

Giroux's primary criticism of traditional education theory is that it ignores the relationship between ideology, knowledge and power. (Giroux, 1983, p.73.) The relation is obscured through the illusion of objectivity and the selection of what counts as real knowledge (the relation between ideology and knowledge), the emphasis on the management and administration of knowledge (the relation between ideology and power), and the reduction of epistemology to a mode of thinking that is a mere celebration of methodological refinement (the relation between knowledge and power). (Giroux, 1983, p. 73.) As a result, first, ideology is dissolved within the concept of objective knowledge. Ideology is of primary concern to critical pedagogy theory because it is the identifier of whose knowledge is whose. All allegedly objective knowledge represents somebody's choice of knowledge. Remember that neither Siegel nor McPeck was able successfully to defend himself from the ideology objection. Second, the preoccupation with designing objectives within this allegedly objective body of knowledge takes attention away from the relation between the "hidden curriculum' and the way in which it operates as a form of social control. Third, the largely predefined knowledge upon which instructors focus their teaching efforts distracts them from the manner in which such pre-
packaged content obscures the relation and the reproduction of inequalities. The point here is not that schools socialise students; they all admit that they do and most see this as a virtue and a duty. What is at issue is the kind of person we are socialising the student to be.

The first of these problematics, as Giroux would call them, is the relation between ideology and knowledge. "The complexity of the concept [of ideology] is captured in the notion that while ideology is an active process involving the production, consumption and representation of meaning and behaviour, it cannot be reduced to either consciousness or a system of practices, or to a mode of intelligibility or a mode of mystification." (Giroux, 1983, p. 143.) Every person is a member of a class, gender, or race which has its unique ideological flavour. The dominant ideology in a given state has control over much of the apparatus for determining meaning. The control of meaning and behaviour empowers the dominant class in its efforts at maintaining power by deciding what constitutes legitimate knowledge and what constitutes acceptable behaviour. Knowledge which is not sanctioned by the "legitimate" and "appropriate" authorities simply isn't knowledge, it is opinion (and unjustified at that). When students' personal histories and lived experience are not in keeping with the "truth", as defined by the dominant group, then those experiences are somehow not real.

Students have their own ideological voices, which they can use either to resist the dominant definition of truth or to abet the production of it. In order to resist,
students must discover for themselves that the so-called objective knowledge is nothing of the sort. They must see that even scientific knowledge is not objective, insofar as the objects it studies and the methods it uses are chosen in accordance with certain presuppositions. For example, a great deal of scientific work has gone into the nuclear energy program thus far. This focus on nuclear energy has left research into alternative energy sources underfunded and marginalised. The reason is that science, and its patron, government, decided that nuclear energy was good; but the decision on whether or not it was good was made according to some interesting criteria. It certainly was not made after equal evaluation of alternatives and a fairly thorough grasp of the impact on people and the planet. The point is, however, that having made the decision that nuclear is good, any development which conflicted with it was frozen out, classified as fringe research with its results not utilised. Any work which supported "nuclear is good" got lots of tax dollars with which to conduct "state of the art" projects. We are supposed to believe that nuclear is good for everyone and that the governments which fund it and the industries associated with it have no vested interest in the truth (the allegedly objective and scientific truth) that "nuclear is good". But refusing to admit the ideological bias associated with "nuclear is good" does not make that ideological value go away. By subordinating ideology to knowledge, it is possible to disavow the manner in which ideology structures the acquisition and the dissemination of knowledge. Knowledge is privileged over ideology because it is objective. Ideology is subjective in its explicit
claim that all knowledge is someone's knowledge. Ideology, as a sub-category of
knowledge becomes a distortion of true knowledge. By "distortion" I mean objective
knowledge which is actually being manipulated by ideological interest groups. If the
dominant group can maintain the illusion that it transcends ideological interests, then
any concept which accepts the embeddedness of ideology, as do Giroux and
friends, is transcended also.

The pedagogical implications of this problematic are fairly straightforward. In
many classrooms the majority of students do not belong to our society's dominant
class. The values of the dominant class and the ideology which enforces those
values are not theirs. These students are fed a steady diet of "knowledge" which is
considered objective, and therefore true, by curriculum planners. But for some
reason these students don't believe that it's true. It certainly doesn't look very true in
comparison with what actually happens in their lives. For example, it is widely held
that democracy as it is practised by Western European and North American
governments constitutes the "best of all possible worlds". It supposedly allows the
optimum balance between the rights of individuals and the security of the state. It
also claims to offer its citizens maximum opportunity for personal growth and
freedom. But to any Native students sitting in the classroom, this pollyanna view of
democracy seems a bit off the mark. As members of an oppressed group they may
not accept that there is adequate protection of their rights. They might even be
aware of the extent to which their rights, both as individuals and as members of a
community, are circumscribed by structures such as the Department of Indian and Northern Affairs. If these students have been brought up with a strong sense of traditional Native community, then they may even be aware of alternatives which may function better, at least in certain respects. For instance, Native students could be aware that their political structures functioned at one point in history without benefit of either a police force or a penal structure. Such a student might wonder in what way Western democracy is superior when it takes such huge coercive structures to enforce compliance with its rules. Unfortunately, and this is the main problem with "objective knowledge", the history which would offer these comparisons is not taught. It is only recently that schools have begun to include history from the point of view of the side that lost the war. Most schools still teach "white man's history" and rarely are the Native political and social structures which that history superseded examined in any depth. For Native students this means that their history isn't true or real. History books which purport to tell "what really happened" send a clarion message to those whose histories are not included. If what you perceive isn't what is objectively perceived, then there must be something wrong with your perception.

The second problematic pertains to the relation between ideology and power, and the way in which that relation is obscured by emphasis on designing curriculum objectives and the management of knowledge, which in turn obscures the "hidden curriculum" and the way in which it is a force for social control. Giroux acknowledges
that there is some disagreement about the manner in which the hidden curriculum operates, devoting an entire chapter to the debate and to his own understanding of how it functions. One of the major theoretical concerns with this debate as been over the precise nature of the relation between social structures and human agency. Giroux's theory defines the hidden curriculum as "those unstated norms, values and beliefs embedded in and transmitted to students through the underlying rules that structure the routines and social relationships in school and classroom life." (Giroux, 1983, p. 47.)

Giroux's third problematic stems from the reduction of epistemology to the status of glorified methodological refinement. This reduction inverts what Giroux sees as the proper relation between epistemology and ideology, rendering ideology a mere appendage of epistemology. The connection between the first problematic and this one is close. As I discussed with regard to the first problematic, the illusion of objectivity is a tool for defining what constitutes real knowledge, and any insistence on interpreting epistemology as "... a preoccupation with control, production and observation" dictates the manner in which we are to operate within that objective knowledge. (Aronowitz, 1980, in Giroux, 1983, p. 74.) Thus, not only the so-called knowledge, but the behaviours associated with it, are given sanction by authorities whose claim to objectivity is illusory. For the classroom, the process tends to erode the skill levels required of teachers, reducing their function to a supervisory one.
Shor's ideas are solidly grounded in the liberatory education approach of Paulo Freire. Although Freire's techniques were developed in the political and economic turmoil of a poverty-stricken developing nation (Brazil), and Shor's applications of them took place in a prosperous and intensely urbanised area of a super-power (U.S.A), the similarities in the attitudes of students in the two contexts was remarkable. Granted, Shor was not teaching in an Ivy League school. The City University of New York, Brooklyn drew the majority of its student body from the economically disadvantaged working classes and minorities. There the levels of educational apathy were comparable to the levels of political apathy which Freire had encountered in Brazil. Student perceptions of their own power to contribute to, and demand relevance from, their educational process had been seriously undermined. Didactic teaching methods had instilled in them the belief that education is done to students, not with them or for them. That the principles of liberatory education were useful in two such superficially different sets of circumstances speaks to their broad applicability, and perhaps their generalizability.

Shor proposes a radical shift in perspective away from extant pedagogical models and the traditional banking education approach. By grounding the classroom discourse in student language and existential data, he enables students to see themselves as sources of, rather than receptacles for, knowledge. His methods are in keeping with Freire's critical stance toward "banking education". The banking education approach is problematic for Shor, as it was for his predecessor Freire,
because it assumes that there is such a thing as neutral knowledge. Knowledge becomes atomised into units like dollars, virtually indistinguishable and having equal and undifferentiated value. Shor subscribes to a strong ideological determinist role. Knowledge is always somebody's knowledge. The choices which are made in the course of constructing a curriculum are made by persons who are operating within an ideological framework. The transmission of knowledge has a socialising function, focusing on the intellectual and moral content which the educators believe is important. Curricula which do not conform to the prevailing ideology are not funded; the majority of the voters in a given community express their ideological bias when they elect members of the school board. The duly elected school board dictates the content and method of teaching, which establishes a power relationship between administrators and teachers that is reflected in the power relationship between teachers and students. Shor, by focusing on students' own knowledge and cultural framework, alters the entire power relationship. The items for discussion in class are not drawn from the "central repository". The interaction between students and teachers is completely different from standard classroom approaches.

Because classroom dynamics are dialogical (grounded in the logical movement between two speakers or arguments) and dialectical (grounded in the tension between logical opposites) the teacher is no longer in an authoritarian posture. The dialogue is between students and is about the logical inherent in student lives. The students are encouraged to participate more, and this means that
has years of training in academic discourse, or not at all, is oppressive. There is an implication that your language is of value and mine is not, and because you are the teacher (who has authority over me) you can force me to use your language. If I can't use it, I will remain silent, which you will assume to be some form of consent. The Third Idiom defuses this situation by (a) enabling me to speak in my own language, which legitimizes my voice, (b) enabling my access to your language, which empowers my intellectual growth, and (c) validating the content of my existence by making it both a subject for, and a mode of, intellectual discourse.

Once students realise that the material of their life is valuable for study, they are able to put forth considerable intellectual effort in studying it. This proactive intellectual posture is empowering. Students find that they are capable of functioning well within the intellectual realm and that doing so changes something. Sometimes the change is a clarification of the problem and an articulation of their own views concerning it. Sometimes the change extends into the realm of action and the changes become "real" in the society. Either way, students are transformed, not in accordance with the authoritarian dictates of society, but in accordance with their own lights and by their own actions; by their own praxis.

Part B - Critical Thinking Pedagogy

The task is now to compare the three Critical Thinking theories outlined above with the Critical Pedagogy insights of Giroux and Shor. It will be argued that
logic of the categorising structure of the disciplines, wherein each discipline is
discrete and contains its own discrete logic, leaves no room for the individual and
personal logic of the thinker, much less the student thinker. This lack of descriptive
content concerning who students are, can be seen in the classification of the terms
'critical thinking' and 'critical thinker' as a Nominal Kind terms, as we saw in Chapter
I. It will be remembered that this categorisation was, in part, based on the fact that
McPeck's terms are totally normative, giving little or no credence to the descriptive
input about how we actually think.

When we make a thought experiment of actually McPeck's theory into
practice in classrooms, there is little or no input required of students, other than the
correct response. (McPeck, 1990, p. 44.) The hidden curriculum is left to operate
unimpeded by any attempt to examine the ways in which it perpetuates inequality.
Students who have the correct answer and who thereby have the correct language,
are successful and do well on tests. Their social activities are different from those
who do not have access to the logic and language of classroom discourse. The
successful students go on to college or university, the unsuccessful go to work. The
teacher remains in a totally authoritarian posture, dictating what is correct, and
functioning as sole arbiter of who is correct. There is no potential for any
restructuring of this power relation, because to do so would mean a risk that the
take-home message will not be the correct one. Discourse that is free to follow the
logic which emerges from the dialectic of the issue or circumstances in question will not necessarily end where McPeck wants it to.

McPeck also looks weak from a Critical Pedagogy standpoint when we try to understand the implications of his status quo approach for the overall administration of knowledge. Recall that with Giroux it is a preoccupation with the management and the administration of knowledge that constitutes his second problematic. The attention given to the structure of the overt curriculum is what hides the hidden curriculum. For McPeck there is a vast body of knowledge which is being generated by advanced study within disciplines. There is a certain amount of data to get through in a certain amount of time and up to a certain objective standard of competency. In order to transmit this huge body of knowledge to students, there can be no allowance for divergent viewpoints, as there simply isn't time for them. This fundamental intolerance for diversity extends itself into an intolerance for those who express that diversity. The pressure to conform to both the style and the rate of knowledge acquisition established by the demands of the disciplines, leaves both students and teachers little opportunity to satisfy the needs of individuals, and when those needs are not met the communities of which they are members suffer.

Those students whose needs are not met by the traditional disciplinaire approach are marginalised, at least to the extent that they are considered disruptive to the classroom and to the educative process as a whole. McPeck's construct rejects the lived experience of students and teachers in classrooms, due to his
theoretical predisposition to defend the extant curriculum. Theoretically, the existing system should work, and therefore what is wrong with it must be the fault of students and teachers. The result is that students feeling that they are part of the problem, and in our either/or world that means that they can’t be part of the solution. But teachers and students do bring individual background logic into the classroom and most would attribute their personal logic to the sum of their lived experiences. Moreover, many teachers and students do have valuable insights into the solution of certain problems, but because these solutions are not grounded in objective knowledge, but in the subjective experience of the classroom, they are dismissed as interesting anecdotes. They are not considered real solutions because they aren’t based on real knowledge. Insofar as McPeck denies the educative value of multiple and diverse worldviews by insisting that good education is obtainable through a disciplinary approach, he denies the experiences and value of people whose views do not coincide with the objectively true knowledge gained by the standard approach to the knowledge of the disciplines.

**Harvey Siegel**

With regard to objective knowledge, this also becomes a major concern when looking at Siegel’s concept of a critical thinker in light of the Critical Pedagogy concerns of Giroux and Shor. One of the main stumbling blocks to relating pedagogical practices to the work of Siegel is that he operates, expressly and
exclusively, in the theoretical realm. Any statements on my part have to be inferred from his theoretical statements. Still, it seems to me that with Siegel we begin to drift further away from emancipatory education. This movement occurs for several reasons, not least of which are the just-mentioned privilege of theory, an equal privilege of rationality, and the complete lack of attention given to the idiom of student discourse and student experience. It has already been argued that Siegel fails adequately to defend himself from the ideology objection. The problem is that for Giroux and Shor, ideology is not an objection which undermines a thesis, it is a prerequisite of any thesis. Siegel's attempt to defend himself on this count fails, and this leaves him operating ideologically while claiming he isn't.

It is this obfuscation that puts him at odds with the demands of Critical Pedagogy. The relation between ideology, knowledge and power is characterised in such a way that the adherence to objective criteria for reason assessment becomes a major plank in Siegel's rationally constructed platform, supporting not only the illusion of objective reality, but also the reliance on the external authority that legitimates the illusion.

Another weakness of Siegel's system is also partly attributable to the emphasis on theoretical rather than practical concerns, specifically, the lack of attention given to the language of classroom discourse. The overemphasis on theory is compounded by focusing the discourse on issues and experiences that are grounded in the rational tradition of the disciplines.
Because Siegel does not address himself to what actually transpires in the classroom, he has little to offer as far as truly emancipatory education is concerned. The teacher is still the one who decides what the topics for discussion will be, the general direction that the discussion will take (conforming to rational principles), and the level of discourse on which the discussions will be conducted. Student discourse is assumed to be irrational, with the object of teaching to make it more rational. The teacher must impose the structure of rationality on the participants and their discourse. The teacher also becomes the final arbiter as to what is or is not rational, and consequently of what is or is not acceptable. Consequently, students for whom Siegel's particular flavour of rationality seems irrelevant are excluded from the discourse. This exclusion reinforces the hidden curriculum by emphasising the differences between members of classes or ethnic groups in their relation and access to knowledge, objectively defined. These students will not readily acquire the language of academic, rational discourse, since they will not see any "good reason" for doing so. They do not see the purpose of learning the language associated with a logic that is alien to their lived experience and therefore to themselves. Education becomes transformative and emancipatory only for those who have social and linguistic access to the logic and language of authority.
students. That result is necessary in order to satisfy the requirement of Paul's strong sense CT, and begin with an examination of one's own worldview, that it not be restricted to others in its application. Once students become comfortable in the discourse associated with the "... the motivated nature of argument flaws ... [they] become better able to anticipate them." (Paul, 1988, p. 377.)

Paul also stands up well with regard to the effect that strong sense CT has on the hidden curriculum. As far as the covert curriculum is concerned, the changes which take place in the authority posture of the teacher necessitate a more egalitarian distribution of power in the classroom. Teachers must lower their profile in discussion, which means that they are no longer actively managing and controlling student discourse. Students are all valid contributors to the discourse. One of Paul's basic assumptions is that no one statement can totally characterise a situation, nor can one argument elucidate all implications of a system. (Paul, 1988, p. 372.) Shared multiple world views are necessary for a full understanding of any argument or situation. Each student's worldview offers a valid and significant contribution to a collective understanding. Students become co-operative participants in their own education, and as such they are not passive but active. Once they begin to see themselves as active, they will realise that they can become active participants in their lives. The object of Paul's entire project is to educate proactive citizens who choose rationally.
ideas about their own experience in their own language. As the level of interaction between students increases, the role of the teacher becomes increasingly one of guide. The long term result of the teacher in this more subdued role is twofold. First, there is the increased tendency in students to express their views. They become more confident in the use of their own idiom, which had previously been relegated to the schoolyard and the cafeteria. Having studied their own experiences on their own terms they know that their opinions have weight. Second, the students' idiom takes on some of the attributes of academic discourse. The terms and methods the teacher applies in the process of guiding students through knowledge, are more likely to be adopted by students, and applied to both egocentric and sociocentric cases, if they are seen to work well in the dialectic process.

Paul's understanding of the role of the teacher, however, is not as radically different from conventional models as Shor and Giroux would want it to be. The consideration Paul gives to the search for truth and the Socratic Ideal is part of the problem. Insofar as these factors can be said to be part of the attempt to endorse "objective knowledge", they counteract the emancipatory quality of the emphasis on dialectic and dialogic. Paul's classroom is one where there is active participation in dialogue, but the dialogue is regulated by a teacher who is committed to a particular flavour of rationality. This commitment is somewhat diluted if the teacher makes it explicit, but it can still obscure the students' perception of knowledge, leaving the illusion of objective knowledge fundamentally intact.
of the quest, the ultimate objectively extant truth, at least may not, and probably does not, exist.
CHAPTER V - NATIVE PEDAGOGY

As the previous chapters have indicated, there are some interesting assumptions and/or presuppositions at work in the critical thinking debate. By submitting CT theories to the demands of Critical Pedagogy, I have shown the capacity for three of the CT theories presented to empower and emancipate oppressed peoples. In this chapter, I will examine the circumstances associated with the emergence of a modern, distinctively Native pedagogical approach. The structure of the chapter will be as follows. First, a discussion of what constitutes Native cultural capital, beginning with a definition of cultural capital and ending with some specific characteristics of the Native worldview which I believe must be taken into account if there is any hope of determining the possibility of utilising critical thinking in Native curricula. Second will be a short selection of Native curricula that work. After looking at a few of these approaches, the third section will attempt to extract some implications for the formulation of a theoretical expression of a Native pedagogy. Factors here will be (a) who the Native student is, (b) the function of the educational process, and (c) how the pedagogy addresses the need for empowerment. Discussion in previous chapters has moved from the theoretical to the practical, but for the nature of the material in this chapter I think it is more appropriate to move from what is to be taught, through how it is effectively taught, and concluding with the theory concerning the why and how such teaching works.
to the understanding of the beliefs of others, that is the degree to which we can compensate for and eventually eliminate that bias.

Curricula which give credence to these metaphysical considerations appear to be able to evoke the best responses from Native students. Failure to take the fundamental differences between European and Native worldviews into account has resulted in an approach to Native education which is not only paternalistic but abusive. The imposition of a Eurocentric understanding of rationality and objectivity on Native people has resulted in the erosion of their cultural capital. Can CT offer anything to the Native community? I believe the answer lies in the degree to which CT can be considered as contributing to or inhibiting this erosion. Moreover, the point of interface between the rock and the water is the dialectical tension between two different worldviews. We have seen what the Eurocentric worldview has to offer. At this point I will turn to the discussion of what the Native worldview yields, and by studying both the problem and the solutions that work, try to find out what the implications are for a Native philosophy of education.

Native Cultural Capital

The content of this section is difficult to document. Much of it comes from dialogue with Native people over the past 26 years. In the course of researching this thesis, I had intensive conversations with several people. Notable among them are Geraldine General, a Native woman and graduate student in sociology, Gus Tobias,
the dominant Eurocentric worldview and the subordinate Native one are substantive. In order to understand the nature of the difference, I would like to turn now to the examination of a few concepts at work in the Native worldview.

One of the most fundamental differences between Euro and Native worldviews can be seen in the two different conceptions of personhood. In Eurocentric terms this would be considered as competing conceptions of human nature, which is precisely where the difference lies. Person and human are not synonymous terms in the Native worldview. Admittedly, there are human persons (seen as a balanced relation of body, mind, emotion and spirit), but there are also "other-than-human persons". (Hallowell, 1975, p. 154.) This expression includes animal beings, spirit beings, dream visitors, natural beings and being-objects. Humans do not exist isolated from the world around them by their personhood.

The European tradition grounds much of its understanding of the term 'person' in the possession of traits which are particularly human. Even Kant, who in a moment of what appears to be whimsy admitted that there might be persons who were not necessarily human, pinned his arguments concerning the definition of 'person' on intellectual and moral traits which, at least till now, remain exclusively human. As Hallowell has argued, persons in the Ojibwa worldview are in part connected to their environment by shared personhood. Because there are aspects of nature and the spirit world who are also persons, humans need not feel isolated
Human purpose is motivated and guided by Spirit. The experiences which give ritual access to the spirit world are necessary to a full understanding of one's own purpose. This is why at puberty, fasting, cleansing and a Vision Quest are undergone. At the point where a youth must decide what kind of man he wants to be, he is given an experience which lets him know what he could/should be, if he walks his true path. In his vision, he is visited by diverse kinds of spirits, who offer wisdom and true knowledge. It is here in the vision that he begins to understand his purpose.

One of the most profound differences between Native and European worldviews is seen in the circular and linear conceptions of human purpose. The European worldview focuses on a 180 degree forward range of vision through which we move in a linear and conflict generating manner. Movement is directed toward a perceived goal which is forever retreating and which we therefore cannot reach. Our purpose on this earth is defined either in relation to some perfect afterlife, or in relation to the dubious notion of perfection within this life. Our way of striving for this perfection is defined very much in terms conflict, be it within the self or between the self and nature.

The Ojibwa, on the other hand, see in a 360 degree range of vision through which they move in a circular and co-operative manner. Circularity is a profound concept in Native ontology. The circle was the first sign the Creator drew on the darkness at the beginning of creation. It is also the pattern of beginning, growing
and changing, fulfilment, and beginning again. Birth, life, death and rebirth are waystations around the circle. In order to understand the profound significance of circularity, we should look at both the concept of seeing, and the symbolism of the medicine wheel.

To the Eurocentric worldview, there are sharp distinctions to be drawn between objective and subjective realities. When we are awake we see, and what we see when awake is objective and therefore real and true. Just ask Descartes. It is real because it has existence outside ourselves, independent of ourselves. Berkeley lost. One popular view in the twentieth century is that if something is not at least quantifiable and predictable it is not real. There seems to be some pressing need to prove the validity of our perceptions to others. This proof constitutes data and logic joined in a specific combination which many are able to agree on. Moreover, what constitutes acceptable data is selected according to criteria which have been proven themselves.

The vision of the Native person is not plagued by such distinctions. Seeing is not exclusive to wakefulness. Proper vision sees truth in all data. To claim that truth can only be found in one state of being, when clearly there are two states of being to be considered, is like covering one eye and expecting to retain three-dimensional vision. What we see in our dreams and trance states is just as important as, if not more important than, what we see when awake. Part of the reason this is so is that time is conceived of differently. This is not about clocks and schedules, it is about
the significance of the moment, about the relation between past, present and future. Because each moment contains within it all of the past, talking to a Grandfather long since physically dead holds no contradiction. The dreaming individual knows the Grandfather is present because he "sees" him. There is also no confusion between the two kinds of seeing, that which sees the spirit realm and that which sees a rock in its path. Each is readily distinguished in language as well as conceptually. The vision is circular insofar as it encompasses before and behind.

When we look at the symbol of the medicine wheel, we see the same pattern of circularity working at many levels. It is a representation of the journey of the individual spirit, a map of the physical world, and a key to the human psyche. The medicine wheel is a circle which is touched by the four points of an equilateral cross. These four points are used to fix the relations of the four symbolic races, the four Grandfathers, the four directions, the four elements, the four aspects of human nature, etc..

The great lesson of the medicine wheel is always that separate entities, when seen in the light of the universe, are equal and necessary parts of the larger whole. It brings out the ancient teaching of the inter-connectedness of all things and the principle that each part must give up considering itself as the center of the universe in order to achieve harmony with the other parts. (Sacred Tree, p. 62.)

Circularity is not only significant to the universe, it is significant to the individual. It is a vital principle for the ordering of life and comprehending the world.
Vision. When we look at Paul's construct of worldviews, the issue of spirit is relegated to sub-categories of egocentric and sociocentric logics. While there is no argument that in a certain limited sense spirit is a factor of both ego- and sociocentric logics, there is some question regarding whether or not Paul's schema can accommodate the primacy and the scope of the Native conception of Spirit. This is, at least in part, due to the fact that Spirit functions outside of the of the logical parameters associated with Eurocentric metaphysics. In the Eurocentric worldview, and in Paul's conception of CT, the rational thinkers are ones who test the content of their own knowledge by comparing it to the knowledge of others. It is the dialectical process itself which yields true knowledge. Any putative knowledge which is accessible only through the interior and wholly subjective process of a Vision quest, is not going to satisfy Paul's demand for dialectical process. In a worldview in which the most profound kinds of knowledge are to be found in the direct relation between an individual and Spirit, there can be no external arbiter of the truth. There cannot be some process or set of criteria which can be used to determine if an individual has accessed true knowledge. What is experienced in a Vision is true for the person who experiences it. It is also accepted as true by the members of the community. The dialectical process becomes useful when attempting to interface Vision content with physical reality, but that process is not related to the truth or falsity of the Vision content itself.
Of the Native pedagogy that works, all of the instances examined explicitly place spiritocentrism at the core of their method. The ability to view past and present in the same moment alters what can be perceived within any given moment. Consequently, the set of acceptable data for choice making is larger, and it is composed of a greater variety of kinds of things. The Native worldview relies heavily on knowledge which is considered by some to be no such thing. For those who deny the existence of the Creator because it can't be proven, His existence cannot be used as a logical presupposition, or as a good reason. If one follows Native precepts, the circular motion of Spirit is axiomatic. But the axiom is obvious when you see all that you are shown. It is only when you choose not to see that you don't know.

This exposition of some of the particular contents of Native cultural capital has highlighted some of the more embedded points of difference between Native and European worldviews. The points are significant, and relate to the broader discussion in the following way. Because the Native beliefs admit of more than one way of seeing reality, knowledge obtained by contact with spirit reality has the same epistemological weight as that obtained through scientific reality. Scientific reality grounds what is considered rational, as well as what is considered a good reason within the Critical Thinking debate.

Critical thinking, with its focus on objective and rational bases for data assessment and argument construction, must be able to include spiritocentric as a
situation on Walpole Island, where the Native community is struggling to ensure the survival of its Native studies program from being eroded by Christian fundamentalist cultural capital. The belief that spirituality, or its cousin religion, can be imposed on Native communities is a Eurocentric one, and is not necessarily in the best interests of Native students.

Wandering Spirit

The Wandering Spirit Survival School, where "[s]tudents are taught basic academic skills but the heritage, spiritual and cultural aspects of native life are stressed", privileges Native cultural capital without neglecting the demands of Ministries and school boards. (Tanguay, 1984, p. 55.) The school states explicitly, as its first objective, "To establish standards of behaviour as taught by the spiritual leaders of the community". (Ibid., p. 55.) The goal of character formation is primary, and the desired character is defined by the spiritual leadership. This is the "survival" part of a school that services urban Native students, who must survive in a society where they are a small minority, often detached from family.

Substantial programs within their curriculum are creative arts with strong Native content. The process of learning one's purpose is emphasised, and is given ready expression, while the academic necessities are not neglected. Self-knowledge and knowledge of the world are properly apportioned. Balance and harmony become realisable goals for students and faculty. One of the reasons the school is successful is that the "... whole year's curriculum is centred on the four seasons of
the year". (Tanguay, 1984, p. 56.) There is a circular motion to following the seasons which is readily translatable in terms of the medicine wheel, and which aids in helping find one's proper place on a circular path.

Another substantial reason for success is that the school is run by an all-Native council, with student and parental participation. The autonomy of the school ensures that decisions are made with the interests of the students foremost, and students who are exposed to highly competent role models are more likely to perceive their personal success as a possibility. Tanguay concludes that performance of the students is directly influenced by the quantity and quality of Native cultural capital in the curriculum and by the level of involvement of the Native community. (Tanguay, 1984, p. 82.) It should come as no surprise that when Natives are given effective control over their curriculum structure and content, Native students respond.

The Sacred Tree

The next curriculum that I would like to discuss is The Sacred Tree. This program has a somewhat different slant, as it is geared toward emotional rehabilitation. The task is to teach Native students about their cultural and spiritual heritage, as well as to incorporate modern strategies for coping with substance abuse. The primary focus is on personal development in accordance with Native tenets. "The path to personal development suggested in The Sacred Tree is one of reflection, discipline and service inspired by the traditional Native teachings about
for whom chronic absenteeism is a problem, there are no gaps in the knowledge which is being transmitted.

Another area where Project Excellence has made a substantial change is in the entire nature of classroom authority relations. Teachers do not give structured lecture style classes, because there are students at many different progress points in the module sets. At certain intervals, there are workshops and other activities which are related to the study materials but which are frequently oriented more toward cultural topics. The overall effect is self-paced learning punctuated by more formal and broadly applicable cultural events. This reflects the pace of life in a community, where individuals live their own lives at their own pace and directed by their own interests, and still participate in the community for particular events. Consequently, the teacher's role is drastically different. While much of the teacher's time is spent in preparing modules and events, they are constantly available to students to answer questions and offer direction. Teachers in this program function more as resource persons. The role is supportive and co-operative rather than didactic and authoritarian. Apparently, this has had a positive effect on the classroom environment. Because students do not feel that teachers are imposing their authority, the classroom does not become an arena for power struggles which are both disruptive for other students and, given the standard student/teacher power relation, disadvantageous to the particular student who engages in them. Rebellious
education. The more students who do continue, the more younger Native students have positive role models for their own success in a modern world. Additionally, the process of Native education, understood as spiritocentric, may very well have some positive affect on philosophy of education as a whole. The focus on co-operative and supportive learning environments, which radically alter the power relations between students and teachers in classrooms, may be one which should be given more consideration in philosophy of education in general.

When we look at Native pedagogy from the point of view offered by Critical Pedagogy, there is a more satisfactory correlation. The emphasis on empowerment is expressed in the focus on a spiritocentric approach which we see at work in the Native pedagogical models. Individual students are empowered by having their lived experience and cultural capital made valid, both as subject matter and as mode of understanding. As Shor would also have it, there is an approach to language which helps to bridge the gap between teacher talk and student discourse - Native language. Instruction offered in a language which is symbolically grounded in an alien metaphysic worsens the problems inherent in establishing Shor’s Third Idiom. The emphasis on instruction in Native languages provides a counterpoint to the problems by facilitating access to the Third Idiom.

The extent to which students' lived experiences are considered valid objects of study also shows affinity with the Frierian insistence on experience as the primary source of knowledge. The affinity is at work at a very fundamental level in both
CHAPTER VI - CONCLUSION: PROSPECTS FOR CRITICAL THINKING IN NATIVE PEDAGOGY

In order to assess the value of Critical Thinking to formulators of Native pedagogy, it would appear that one approach is to determine whether or not there are any conditions necessary to the practice of CT which are opposed to necessary conditions for effective Native pedagogy. The formula I will attempt to satisfy is, CT requires X: Native pedagogy requires Not X. It is hoped that by determining if this level of contradiction in requirements exists, I can determine if CT is in fact applicable in this given instance, as well as address the more generalised question of CT's applicability across cultures. The first of the necessary conditions I will posit is that there be "rational and objective" criteria for assessing the veracity of propositions and the soundness of arguments. Individual arguments, beliefs, and actions must satisfy these criteria in order to claim that CT is being practised. The second is that CT be grounded in a particular purpose, i.e., that it is ideologically driven, irrespective of whether or not that ideology is admitted to. The third is that in practising CT, one is fundamentally guided by principles of respect for persons. This condition needs to be in place in order to avoid one of the major potential abuses of CT, namely that we do not assume that the Eurocentric way of doing things is superior. CT must not become a rational stick with which to beat non-rational worldviews into submission. Each of these putative necessary conditions can be
admit it, the understanding of rationality and objectivity espoused is a markedly Eurocentric, Enlightenment understanding. Whether it is ideologically driven is a much more open-ended question, the answer to which is more closely bound to the resolution of the question concerning the relation between ideology and knowledge. Each individual's answer to the question depends on whether one sees ideology as operating only if it is acknowledged as operating, or whether one sees it as operating in spite of our acknowledgement of it.

If one is a follower of the first approach, who sees the operation of ideology as contingent upon acknowledgement, then one may conclude that ideology is not a driving force of the CT movement. Paul admits that ideology is a definite force in the category of sociocentric logic, but the idea that the entire system suffers from its universal acceptance, at least in principle, of definitions of 'rational' and 'objective' which limit the potential field for knowledge acquisition does not come into serious play. If, however, one accepts that ideology is at work irrespective of our acknowledgement of it, the problem of ideological bias can be more readily dealt with.

The problems associated with unacknowledged ideological bias can be seen most acutely with McPeck, who restricts his definition of knowledge to tightly defined and logically self-consistent disciplines. He does give credence to emotional states, but he is dubious of the knowledge that comes from there. True knowledge is a product of disciplinary activity, conducted according to criteria which are
themselves products of the disciplines. Consequently, I don't see him being able to
give the knowledge obtained in trance or dream states sufficient credence to satisfy
the Native worldview.

McPeck can be interpreted as manifesting the three necessary conditions in
the following way. His definitions of rational and objective are wedded to the logical
structure of the disciplines. McPeck insists that most of what CT is about is the
assessment of putative facts, so a rational proposition is one which is arrived at
through the consensus of the discipline which has domain over the fact in question.
Objectivity is obtained when multiple rational opinions coincide.

The more people who reach the same conclusion the more objective that
conclusion is seen to be. The ideologically requirement is met completely against
McPeck's will. The ideology expressed is authoritarian and assumes that a slightly
more in-depth grasp of the extant liberal arts curriculum is sufficient to the
pedagogical task at hand. Other kinds of logic, such as that of Spirit, must either
conform to the existing structure or be placed outside the pale. McPeck may not
want to admit it, but his is the ideology of the status quo. This particular ideological
bias heralds McPeck's failure to be fully embraced into the CT fold. He remains on
the critical fringe of the movement because he fundamentally accepts that there
need be no radical or fundamental change, while the rest of the CT theorists agree
that substantial pedagogical changes are required. The validity of knowledge
predicated on any logic not inherent in the disciplines, which are in turn a
Eurocentric logical construct, is cast into serious question. Essentially, it is by not satisfying the third condition that McPeck makes that condition necessary for the practice of CT.

With McPeck we see the worst case scenario for comparing the necessary conditions for CT and the necessary conditions for Native pedagogy mentioned earlier. As far as the demands for spiritocentrism and administrative autonomy are concerned there is little McPeck can offer. Knowledge obtained through direct access to Spirit would not be considered true knowledge because it is not the rational and objective result of a particular discipline. Spiritocentrism, as a logic unto itself, permeates all other logics, and cannot be reduced to the confines of psychology or sociology. Nor will McPeck's understanding of what CT is allow administrative autonomy and credibility to be granted to institutions that do not utilise traditional Eurocentric structures. While the case with McPeck is extremely negative for CT applicability across cultures, the situation is ameliorated when we look at those CT theorists who satisfy all three of the necessary conditions.

As far as the presence of the necessary conditions for CT is concerned, Paul contains all three. His definitions of rational and objective arguments are explicitly Socratic and idealistic. Rational beliefs are those which are held after they have been dialectically related to other beliefs. The process requires that one critically examine one's own beliefs and then seek some ultimate truth through the logical tension between your own and the beliefs of others. Rational beliefs are beliefs
without prejudice. The reduction of prejudice is an expressed goal of Paul's entire conception of CT. By critically examining my own prejudices, I will be able to critically assess the prejudice of others. Moreover, that assessment will satisfy the third necessary condition, that of respect for the beliefs and arguments of others.

Siegell attempts to marry Critical Thinking and rationality. Rationality is defined as adherence to principles, but these principles are admittedly defined according to the culture which generates them in historical time and place. It is the prevailing ideology which defines the principles for rational reason assessment. Siegel argues strongly against an ideological interpretation of his argument, spending two full chapters attempting to refute an ideologically driven potential criticism. Although the role of ideology is not admitted, this does not necessitate that it is not, in fact, being played out.

Current Eurocentric principles for reason assessment do not classify dream and trance states as rational. Rationality, if it is grounded in principles, requires consensus. The principles for reason assessment are not only a product of prevailing ideology, they must be accepted by society at large. The content of a Vision Quest is extremely subjective and is supposed to guide the individual on his or her own path, regardless of what others believe. The veracity of the knowledge obtained therein is not contingent on the consensus of the community. It is more than curious to note that the community at large aids the individual in relating Vision content to lived experience. The difference is that the individual is not expected to
prove that the knowledge obtained in Vision is valid. It is assumed to be so and that the interpretation of it is profound for the individual as well as for the community. As current principles of reason assessment stand, the complete inability to verify the content of a given Vision would indicate that knowledge obtained therein is suspect, if not outright rejected.

Each of the three theories manifests the three necessary conditions to varying degrees. McPeck's position on the critical fringe of the CT debate has already been mentioned. Siegel, who does the most to accommodate McPeck's criticisms of and proposals for CT, does satisfy all three of the conditions, but his privilege of a particular and narrowly defined rationality leaves him open to ideological interpretation, even though he argues strongly against it. It should be noted that these two theories are rooted in a more abstract and theoretical understanding of CT. When we look at Paul, the picture is different. Not only is he satisfying all three conditions, he does so explicitly. The vast majority of his focus is on the reduction of prejudice. Paul's entire set of background logics is geared towards at least identifying and examining the workings of prejudice. The acknowledgement of his own bias, and his fundamental respect for the integrity of world views, gives Paul's scheme a strong moral flavour.

This moral disposition is necessary if we are to avoid the situation wherein CT becomes an instrument of oppression. If conformity to its Eurocentric, rationalistic mode of reasoning is a requirement in a given educational structure,
students, whose understanding of who they are may very well be grounded in what CT classifies as non-rational states, may become marginalised. As long as CT keeps fundamental respect for the logics of other cultures, it may have some use in the Native community. Because there is some limited attempt to adjust the power relations in classrooms, there is some possibility that CT methods could be useful for communication on certain kinds of issues. But when CT is viewed as a universally applicable solution to all manner of intellectual and academic ills, there will be problems. The Native community has made itself clear on this point. Their approach to the social ills which plague their communities will be spiritual, and their goal is healing and balance. Privileging rationalistic thought as it does restricts the applicability of CT for Native curriculum developers, as well as establishing a parameter for the Critical Thinking debate itself.
LITERATURE CITED


_____. (1991). What is Learned in Informal Logic Courses? Teaching Philosophy, 14;1, 25 - 34.


Vita Auctoris

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