An Intertextual Reading and Critical Analysis of the Discipline of Educational Psychology: Disrupting the Dominant Discourse

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LOYOLA UNIVERSITY CHICAGO

AN INTERTEXTUAL READING AND CRITICAL ANALYSIS
OF THE DISCIPLINE OF EDUCATIONAL PSYCHOLOGY:
DISRUPTING THE DOMINANT DISCOURSE

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DEPARTMENT OF
CURRICULUM, INSTRUCTION, AND EDUCATIONAL PSYCHOLOGY

BY
SUZANNE GALLAGHER, RSM

CHICAGO, ILLINOIS
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ACKNOWLEDGEMENTS

The metaphor of "conversation" has been a powerful image for me during the years I was working toward and on this dissertation. Conversations regarding questions of life and education have taken place in a variety of venues - classroom, office, telephone, over coffee, dining table, library table - and with numerous people. I can only offer a hint of the depth of my gratitude.

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teacher-learner. Conversations with Stephen have made all the difference in the way I look at the social and political implications of education. Thanks to Dr. Suzette Speight, who was willing to be a reader for the dissertation. Her serious reflection and commentary were most helpful in completing this work.

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I dedicate this dissertation to my parents, Helen and Martin Gallagher. They were my first teachers and they continue to teach me through their abiding enthusiasm for learning. Thanks, mom and dad, for life and faith, a love of questions, and great conversations.
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ABSTRACT

Using critical discourse analysis this dissertation examined the mainstream, dominant discourse of the discipline of educational psychology. This analysis included a discussion of social, political, and epistemological issues. From a position of Foucauldian skepticism regarding the human sciences assumptions of educational psychology were interrogated, and the discipline as a "regime of truth" - a nexus of power, knowledge, and social control - was critiqued. Evidence was offered showing that the discourse of the discipline produces the "truth" of the discipline.

Two textbooks nominated by members of Division 15 (Educational Psychology) of the American Psychological Association as "classic" texts were utilized as sources of the discipline's dominant discourse. These mainstream texts are presented as social artifacts and sites of social struggle embedded in political, historical, and economic contexts. An intertextual reading, i.e., reading "texts against texts", provides a way for perspectives that have been marginalized or disqualified from the mainstream disciplinary perspective to provide counter-discourses to mainstream texts. The result is the disrupting of knowledge claims and practices sanctioned by the discipline, through
which students are judged and labeled by their approximation to the "norm" established by the discipline.

The practice of intertextual reading and critical analysis is recommended as a way for educational psychologists and those being initiated into the discipline to work toward a critical literacy. Through such literacy educational psychologists may become more reflexive regarding the discipline and their own practice.
CHAPTER I
INTRODUCTION AND OVERVIEW

People know what they do; they frequently know why they do what they do; but what they don't know is what what they do does.
(Foucault in Dreyfus & Rabinow, 1982, p.187)

A Story

It was my first class as teacher of an educational psychology course.¹ My enthusiasm had been growing as I prepared for the class. I was eager to engage my students in not only learning the content of the discipline, but also helping students become conscious of their experience as we "did" educational psychology. In other words, I wanted the course to be a space where we would study educational psychology and practice it at the same time. This seemed a worthwhile goal to pursue, as I believed it would add to the relevancy of the coursework for the students, most of whom were preservice teachers.

We were reading through the syllabus with a nice amount of discussion, checking understanding, asking questions. The excitement I felt seemed matched by the students as we engaged the coursework for the first time. We had come to

¹Several works that were very helpful to me began with stories and I decided to appropriate the practice. See Apple (1996), Macedo (1994), Sawicki (1991). This story has left an enduring "mark" on me. For an interesting examination of the place stories can hold in educational research see Carter (1993).
the course requirements, and I was explaining how the grades would be determined. The giving of "grades" was an aspect of the class that I had really thought over seriously. "Grades", or the "marks" we get, had meant much to me as a student; I assumed that the grading system was equally as important to my first set of educational psychology students. I was eager that my students be successful, and understanding the grading system would help them meet the requirements of the course. It seemed fairly simple: I took the responsibility to ensure that the material was presented effectively, and that the marking system was clear and fair; the student's effort would complete the equation for success.

Then it happened. I had included a series of "pop quizzes" that would account for fifty percent of the grade. One student raised her hand. "Why 'pop' quizzes?" she inquired. I welcomed the question. It was perfect really in that it was a clear example of how we could connect the content and process of the course. I had thought about it and I was ready with an answer. My response included explanations of two concepts that we would study in the course: 1) the usefulness of a reinforcement schedule which was of the "variable-interval" type; and, 2) the

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2 My use of quotation marks here, and frequently throughout this work, indicates irony. Quotation marks are also used to express a tension in using a word with shifting meaning.
effectiveness of "spaced" over "massed" study. Because students never knew when the quiz would occur they would be "motivated" to study as the course went along. I assured the students that the material on the quiz would be nothing tricky or obscure as it would come from what they had read or what we had discussed in class; there was no need for them to become overly concerned. Actually, I explained, I was doing them a favor as "studies show" that there is much more long-term learning following study that is spread out over time rather than study that is "massed" as happens when students "cram" for tests. I didn't allow myself to entertain the remembrance of a conversation I had with a colleague while preparing the course. The associate had assured me that I had to do something to make sure the students came to class. She used pop quizzes, and I decided to do the same.

I was satisfied (secretly very pleased) with my response to the student's inquiry. "Okay?" I asked. It was not okay. The student said that she felt trapped. She described herself as a serious student, but there might be a time when she has to miss class. What if it was on a day when there was a pop quiz? I had stated in the syllabus that quizzes could not be made-up, but that I would drop the lowest mark, which could be an "F" if she had to miss a quiz. "Did that help?" Her expression revealed that it really didn't, but the student thanked me for my answer. The
rest of the students seemed to accept my rationale as there were no further questions on the topic, and the class continued.

Later that evening I reflected on the happenings of the class. It seemed as though we were off to a great start. I pictured the student who had presented me with the opportunity to explain the "pop quiz" aspect of the grading system. I had a degree of certainty both in that the answer given was grounded in the discipline under study, and in the "effectiveness" of the practice I had explained. Then gradually, the initial pleasure that I had felt gave way to embarrassment. The student had seen other dimensions in the practice of "pop quizzes". In one sense the "case was closed". I was the teacher; my decisions were well thought out and benevolent. However, the student had resisted by facing the unequal power relationship between teacher and student, and by questioning the grading practice. In the process of questioning she had exposed an example of "what we do does". The scientific knowledge was justifying the use of pop quizzes to exert control over the students to attend class and to study. Because of the student's resistance and my reflection on practice I realized that my answer was not nearly so important as the questions which had arisen in the student and in myself.

Purpose of the Story

The story serves as an appropriate introduction of this
dissertation for several reasons. First, it highlights the autobiographical aspect of research in general, and of this work in particular. Foucault (1988) has said that, "Each of my works is a part of my own biography. For one or another reason I had the occasion to feel and live those things" (p.11). Similarly, those who read this work do, in some sense, read me.

The work of this dissertation began as an uneasy reading (Apple, 1993) of mainstream educational psychology's discourse. Through a critical reading and analysis of the discipline I began to understand that much of what I had accepted as "objective", "neutral", and "stable" in the discipline was actually a product of social negotiations (Gergen, 1985) and "reflection of conventions" (Kincheloe, 1993) imbued with political interests. This dissertation is an opportunity for me to affirm my right, but more importantly, my responsibility to read, understand, and transform (Freire & Macedo, 1987; Giroux, 1987) my experience of both teaching and learning educational psychology.

Second, the story demonstrates the "relational" aspect of education. Schooling is primarily and in multiple ways relational (Apple, 1996). The relational aspects extend beyond student-teacher and student-student relationships. The work that I am presenting includes the interrogation of power relationships that exist throughout the educational
institution as well as the dynamic relationships among power, knowledge, and social control. I am interested in the relationship of the mainstream theoretical perspectives of the discipline's discourse and the everyday practices of education that both limit and make possible student agency. When these perspectives and processes are recognized it is possible to resist and contest them, to support a more emancipatory pedagogy concerned with a critical and democratic social order. I argue that the relations of what is said and done in the name of the discipline marks educational psychology as a "site of struggle" (Aronwitz & Giroux, 1991).

Third, the story highlights the significance of the act of questioning, my own and my student's. Questioning is a means of critical examination that aims to problematize the discipline, i.e., to question what has been taken-for-granted (Foucault, 1984). In particular, this dissertation questions the commonly accepted view of educational psychology as a neutral field of study. Thus, the work that follows is an interrogation of the very specialized scientific and technical discipline of educational psychology.

Fourth, the story positions this work as a postmodern critique. In modernity, theory provides the foundation supporting the logic of scientific methodology and its

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*This position is discussed in more depth in Chapter III.*
interest in prediction, explanation, and control. Yet, theory has also been stripped of its classical interest in ends and ethics (Giroux, 1981). Theory holds quite an "allure" for educationalists in general (Thomas, 1997), and educational psychologists in particular, as it is taken up and used in the interest of technical progress. A postmodern critique is "...a different way of seeing and working, rather than a fixed body of ideas, a clearly worked-out position or a set of critical methods and techniques" (Usher & Edwards, 1994, p.2). This dissertation is concerned with interrogating and thinking about the discipline's theoretical perspectives more complexly. My intention is to theorize in a way that helps in understanding the present predicament in education, to make the familiar strange (Ball, 1990; Foucault, 1984), and where possible and necessary engage in resistance that could transform it (hooks, 1994).

A postmodern critique of the discourse does not mean that the discourse of the discipline of educational psychology is not taken seriously. On the contrary, Apple (1996) insists that constructive criticism "is the mark that [a] position is taken seriously" (p. xix). In a sense, the discourse itself invites critical analysis because a discourse is a "stumbling block...a point of resistance and a starting point for an opposing strategy (Foucault, 1978/1990, p. 10). In this sense the dominant discourse of
educational psychology can even be considered useful as it provides an opportunity for interrogation and disruption. The openings that result from this disruption provide a space where re-imagining of educational psychology can take place, and ethical conversations and a language of possibilities can be engaged (Giroux, 1992; Welch, 1990).

The remainder of this chapter will present a discussion of the discipline of educational psychology as a project of modernity. The discourse expresses increasingly multiple perspectives regarding its position and potential for teacher education. The stance of this particular work as educational research within and against the discipline is introduced as a process concerned with critical educational theory and a social constructionist epistemology. This work is presented as an example of poststructuralist research that is explained in terms of key issues: meaning, language, and discourse; the formation of subjectivities; relations of power and knowledge. Before closing the chapter, two significant points regarding the researcher and APA Style are presented. Finally, an overview of the remaining chapters is presented.

**Educational Psychology as Modern Discipline**

Educational psychology is a discipline concerned with the multifaceted issues of the teaching-learning process. The discipline claims a history beginning at the end of the nineteenth century and founded by pioneers from general
psychology (Berliner & Calfee, 1996). This is mentioned not only as an interesting fact of the discipline's history, but also to draw attention to the issue of the discipline as social enterprise. Features of the history of the discipline are often left out of introductory textbooks (Glover & Ronning, 1987). Sprinthall & Sprinthall (1990, 5th ed.) is a notable exception. Anderson et al. (1995) offer the explanation that historical information is unnecessary for preservice teachers. However, ignoring history serves to make a discipline's context invisible and denotes unimportance. Such assumptions must be interrogated. Throughout this dissertation issues of historical importance are presented that have been ignored in much of the mainstream discourse.

Today the influence of the discipline is obvious as its practices, knowledge-base, research, and concepts pervade educational discussions. However, educational psychologists are currently concerned with, and embroiled in, debate over the place of their discipline in discussions of school crisis and reform, as well as the place of educational

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4See historical descriptions in: Charles (1987); Fancher (1979); Joncich (1962); Walberg & Haertel (1992); as well as Berliner & Calfee (1996).

5It should be noted that I am aware of the recent work of Berliner and Biddle (1995) who make a case that issues of the "crisis" have been "manufactured" by powerful people (e.g., the Christian right, members of the media) who are involved in a myth-making activity that seeks to dismantle the public school system. While I believe both that some of their points have merit and that their general argument is flawed, it is
psychology in teacher education programs.

Many members of the educational psychology community are optimistic regarding the status of the field and the potential of educational psychology to help improve the teaching and learning process. For example, it has been noted that the field "seems to have come of age, it has matured, it is sophisticated, it is pretty independent from other fields and areas of psychology" (Salomon, 1995, p. 105). The authors of the newly celebrated *Handbook of Educational Psychology* (Berliner & Calfee, 1996) assert that,

> It is clear that our field has been and continues to be highly productive and remarkably influential. Its findings, concepts, methods, and points of view are widely adopted by scholars in other disciplines and cross a wide range of research and evaluation activities....The field is alive and growing. (p. 1020)

The newsletter for members of the American Psychological Association (APA) Division 15, Educational Psychology (November 1996), contains some confident messages to the U.S. President and members of the Congress as they face legislative decisions on education:

> ...[Educational psychologists] have developed and tested various theories, and have come to some important decisions about what works in the classrooms....and what doesn’t work and why....We are the backbone of education, and the basis for many other important fields....Every legislator should have an

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not my purpose to engage the work directly here. Most educationalists agree that there is a crisis, although they differ around arguments of cause and means of amelioration. See Giroux & McLaren (1986). This topic will be addressed later in the chapter.
educational psychologist on staff as a consultant and resource! (Neeley, 1996, p. 1)

Wittrock (1992) is confident that:

[Educational psychology] can become recognized as a core field of psychology, responsible for contributing to the creation of psychological theory, to knowledge and research about education, and reciprocally, through research and development, to the understanding and improvement of education. (p. 140)

Anita Woolfolk (1995), eminent author of educational psychology textbooks, explains to her readers who are preservice teachers that "if you can become a more expert learner by applying the knowledge from this text...then you will be a better teacher as well" (p. 10).

Despite these waves of optimism there exists the contrasting perception of educational psychology as a "field marked by little definitional consensus, many theoretical persuasions, and diversified scholarship" (Walberg & Haertel, 1992, p.6). Furthermore, "although the diversity is interesting...the field of educational psychology does not have much of a core" (Salomon, 1995, p. 105). It has been noted that the "closing decades of the twentieth century have seen many challenges to the hegemony of educational psychology as the 'master science'" (Berliner & Calfee, 1996, p. 1020). Others have expressed a sense of "growing awareness among educational psychologists of the need to reexamine their own discipline" (Peterson, Clark, & Dickson, 1990, p.524). It has even been asked if educational psychology "as a discipline is on the verge of extinction"
Some of the discrepancy in the views presented above may be explained by recognizing that arguments vary according to audience. Educational psychologists are positive and optimistic about the discipline's potential to help ameliorate the crisis in education when policy makers (who provide funding for projects) are addressed. When talking to each other educational psychologists tend to be more forthright in discussing the problematics of the discipline's tenets, although some assume a defensive position regarding the discipline's potential and value to the field of education.  

When considering curriculum issues, especially for introductory courses, there is an escalating debate regarding the content, process, and goals of the coursework. For example, some recognized experts in the field (e.g., Woolfolk, 1995, 1996) encourage the traditional image of the field as "foundational" emphasizing mastery of the content of the discipline as helping preservice teachers be better teachers. Others assert that the discipline is more of a

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"The optimism which sweeps through claims of the effectiveness of the discipline of educational psychology exemplifies the metaphor of "promissory note" (Soyland, 1994). This is a rhetorical device frequently used in scientific discourse through which the "reader is persuaded of the factual status" (Soyland, 1994, p. 37) of the text and a proposed reward for "buying into" the particular thesis established by the text. Preservice teachers are particularly enthusiastic to reap the assurances connected to learning educational psychology."
"resource" (Blumenfeld & Anderson, 1996) assisting preservice teachers in their reflections on the teaching-learning process. Regardless of this debate educational psychology's discourse generally is presented as an authoritarian and neutral body of knowledge that can guide educational practice and facilitate better learning. This discourse forms a metanarrative that seeks modernity's transcendent principles of "rationality, linearity, progress, and control" (Cherryholms, 1988, p. 11).

Through this dissertation I join the discussion regarding the discipline of educational psychology. The position I will take is an oppositional stance; it is a critique of the discourse, presenting a kind of counter-discourse. Questions are raised concerning the discipline's mainstream "dominant discourse" as it is perceived as both authoritarian and neutral. Through a critical reading and analysis of the discourse presented in

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"Counter-discourses are considered "languages of critique, demystification, and agency capable of contesting dominant oppressive beliefs and practices" (Leistyna, Woodrum, & Sherblom, 1996, p. 297).

"I appreciate that words and expressions like "dominant discourse" may be considered jargon to some readers. I am caught in a tension here as I want my writing to be accessible to, and taken seriously by, a variety of readers; simultaneously, I need to use words that are meaningful and important in stating my case. This is one of the challenges in doing this kind of work, and the issue will be taken up in a later section of this chapter."
two textbooks nominated as "classic", I argue that the technical rationality characteristic of the discourse provides both an organizational resource and constraint to the discipline.

From a perspective of technical rationality the crisis in education is viewed as a series of technical problems, and concerns the narrow view of better preparing children to enter the workplace. The metaphor of teacher as "technician" must be contrasted with the view of teacher as transformative intellectual (Giroux & McLaren, 1986/1996) claiming "a critical view of teacher work and authority ...one consistent with the principles and practice of democracy" (p. 305). This more critical perspective allows for different types of questions. Questions regarding educational crisis and reform need to be connected to a "wider discourse of freedom and democratic struggle" (Giroux & McLaren, 1989, p.xviii).

I identify problematic issues around: (1) the assurances made by the discourse; (2) the "scientific" formulation of disciplinary principles; and, (3) more importantly, the everyday practices of schooling that are authorized by the discourse.

Research Within and Against the Discipline

The work of this research is situated within a critical

9An explanation of this category of textbooks is presented in Chapter III.
educational perspective that asserts the need to question accepted truths and assumptions about education and society (Weiler, 1992). Implicit in this approach is a commitment to and belief that society and its institutions, are historical constructions; i.e., society has changed, will change, and needs to change (Giroux, 1988/1992).

The development of a social constructionist perspective within the educational psychology community is gaining legitimacy with potential linkage to this critical perspective. The social constructionist viewpoint is espoused as the "contemporary psychological perspective" of the educational psychology community (Anderson et al., 1995). The acknowledgement of learning as socially constructed is by no means a new development as many concerned with learning have been discussing it for years (e.g., Derry, 1992; Goodenow, 1992; Mead, 1934; Mayer, 1992; Prawat & Floden, 1994; Resnick, Levine, & Teasley, 1991; Scarr, 1985). Indeed, Prawat and Floden (1994) remind us that "[c]onstructivist learning is based on the now commonplace idea that knowledge is actively constructed by the learner" (emphasis added, p. 37).

Accepting this "contemporary psychological perspective" of social constructionism has far reaching implications for the discipline’s knowledge claims. This perspective suggests a recognition of the social, cultural, ideological and political significance of what is said and done in the name
of the discipline. Social constructionism demonstrates a "disciplinary or epistemic reflexivity" (Usher & Edwards, 1994) of research. Such a focus means that

any piece of research always carries within itself an epistemology - a theory about knowing and truth and their relationship to the world or 'reality'. This epistemology is never 'innocent' because it always contains within itself a set of values - which means there is always politics in research. (Usher & Edwards, 1994, p. 149)

Reflecting this conclusion, two perspectives, critical educational theory and social constructionist epistemology, come together in this work as a formulation of poststructuralist research.

Poststructuralist Research

The particular "method"\(^\text{10}\) of this research is a critical discourse analysis, a form of poststructuralist research\(^\text{11}\). Poststructuralism is a mode of analysis, a way of looking at and asking questions about anything textual both in the "narrow conventional sense of written texts and in the much broader sense of any discourses, practices, institutions...any structure generally which is productive of signification\(^\text{12}\)" (Usher & Edwards, 1994, p. 18). The key

\(^{10}\)This method is discussed more thoroughly in Chapter III.

\(^{11}\)Poststructuralism is far from a unified field. I have appropriated elements which are helpful in my analysis. See Best & Kellner (1991), Cherryholms (1988), Sarup (1993), and Weedon (1988) for helpful examinations.

\(^{12}\)"Signification" is the process through which we make sense, how we come to make meaning or designate meaning. See Cherryholms (1988) for a more complete analysis.
aspect of poststructuralism is that it is a means of interrogating traditional understandings of: (a) meaning, language, discourse; (b) subjectivity; and (c) power relationships in knowledge production. These will be mentioned briefly here as they are key factors throughout the dissertation.

**Meaning, language, and discourse.** Traditionalists see meanings in language and discourse as fixed. Meaning in language reflects an objective reality; it emanates from the interior essence of the object; language is believed to function as "simple transmitters of information from writer to reader" (Madigan, Johnson, & Linton, 1995, p. 433).

Poststructuralists, on the other hand, stress that language/discourse constitutes reality. Meanings are never fixed, they are influenced by the multiplicity of issues which form our context. Meaning is understood as exterior to the object; it is inscribed and contingent. Concepts can be appreciated as "social artifacts" which acquire their meaning not from real world referents but from the context of their usage" (Gergen, 1985).

Meaning in a discipline's discourse is not fixed; rather meaning is "shaped contextually within institutions and by prevailing social practices" (Bensimon, 1995, p. 597). Gergen (1985) makes the claim that a certain understanding is sustained and may prevail through time not because of "the empirical validity of the perspective in
question, but on the vicissitudes of social processes (e.g., communication, negotiation, conflict, rhetoric)" (p. 268). Discourses espoused by disciplines are productive, they constitute the "reality" which they present. Discourses are never independent of history, power, and interests.

At the same time, counter-discourses arise and come into a dialogic relationship with dominant discourses; they are able to disrupt commonsense meanings and taken-for-granted assumptions, and have the potential to lead to a limited transformation.  

Subjectivity. Persons are traditionally understood as autonomous, coherent individuals with certain natural and essential characteristics. Individuals are seen as emerging through the dynamic interaction of their biological development and their self-contained social reality, and within their own history. In traditional research studies, for example, effort is exerted toward discovering some "truth" about the subject or subjects, or the human subject in general.

In contrast, poststructuralists have a very different

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13I use the word "limited" here for a particular reason. Postmodernism critiques totalizing, universal narratives. Therefore, it would be "un-postmodern" for me to suggest some total solution. Sharon Welch (1990) talks about the appeal of working for "final solutions", but she explains responsible action does not mean resolving a problem (especially someone else’s problem) once and for all. Rather, responsible action is "participation in a communal work, laying the groundwork for the creative response of people in the present and in the future....It is sustained and enabled by participation in a community of resistance" (p. 75).
understanding of "subject". Subjects are regarded as constituted, and constantly reconstituted (Usher & Edwards, 1994; Weedon, 1987) by the discursive practices to which they are subjected. "Subjectivities" are the product of society, a human reality and social construction (Sarup, 1993). Subjectification is understood as how a subject is made an "object". This represents so much of the work of educational psychology with its focus on individual differences, placement of students along the normal curve, and ever increasing categories of differentiation. The difference of one subject is often "parasitic" on the "other" as is obvious in representations. In other words, children are defined by characteristics which differentiate them from others, for example, the "normal" versus "exceptional" categorization of children. The goal of poststructuralist research is not discovering a "truth" about the subject, rather the research aims to understand the social, historical, and political contexts in which subjects are constructed as they are (Prado, 1994; Usher & Edwards, 1994).

**Power relations.** As was stated above, schooling is relational. Power relations pervade the schooling process and are discernable in a multiplicity of sites. The commonsense understanding of power is that it is a commodity that can be possessed. One "has" power, and can exercise it in relation to others. Power in this sense is a "power
over"; it flows from a centralized source, and from top to bottom (Sawicki, 1991). Power is usually considered repressive or inhibiting.

Foucault (1980a, 1988, 1995) discusses another notion of power that is especially characteristic of modern power, or modern modalities of power. Foucault's notion is that power is productive, rather than repressive. Power is not a possession, but rather exercised in relations. Power doesn't flow from a centralized location, but is "capillary" operating at the "lowest extremities of the social body in everyday social practices" (Fraser, 1989, p. 18). Foucault (1980c) explains,

What makes power hold good, what makes it accepted, is simply the fact that it doesn't only weigh on us as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse. It needs to be considered as a productive network which runs through the whole social body, much more than a negative instance whose function is repression. (p. 119)

Foucault asserts (1980c) that in the period we call "modernity" there has been a "veritable technological take-off in the productivity of power" (p.119). This is not a "power over" but a power to name as is found in the human sciences\(^\text{14}\). Power is productive in that a discipline "makes individuals; it is the specific technique of power that regards individuals both as objects and as instruments of

\(^{14}\)Foucault's understanding of "human sciences" includes what is usually considered the social sciences in this country as well as the humanities.

For Foucault (1980c) scientific disciplines are "regimes of truth" in which power and knowledge are inextricably related and implicate each other. This is the power-knowledge nexus. The "truth" or the knowledge of a discipline is not an assembly of facts and techniques that have been "discovered" and accepted by the community through which we come to know individuals (e.g., learners as "motivated" or "gifted"). But rather, the truth of educational psychology, for example, needs to be understood in terms of its technologies of power, as an "ensemble of rules (emphasis added) according to which that which is considered true or false are separated" (p. 133). Truth is seen as:

a system of ordered procedures for the production, regulation, distribution, circulation, and operation of statements....[and is] linked in a circular relation with systems of power which produce and sustain it...induce and...extend it. (1980c, p. 133)

Through its discourse educational psychology operates to provide increasingly complex categories through which learners, and teachers, are subjected to ever-increasing processes of hyper-differentiation and made objects of investigation, categorization, intervention, and regulation (Usher, 1993).

This unconventional manner of looking at how knowledge and power implicate each other presents a shift for educational psychologists who usually think of the
discipline as being "scientifically" produced. It is precisely this assurance of knowing "the world 'scientifically' and 'as it really is' which makes [knowledge claims] powerful" (Usher & Edwards, 1994, p.47). Educational psychology claims that through its ever-increasing technological ability it has the power to see students as they really are. Poststructural analysis can subvert this understanding and expose how various categories are the result of human construction and are never free of history, power, and interests. Thus, what is understood as a "will to knowledge" can mean a "will to power"; and, to interrogate this "regime" clearly is to enter a political struggle (Foucault, 1980c). Poststructuralism as a form of critique and knowledge production can be helpful in identifying areas of struggle in the discipline's discourse and ways of developing strategies for change.

The Importance of Michel Foucault

Michel Foucault's (1926-1984) ideas are central in this work. And, while this dissertation is not about Foucault, I accept his invitation to use his ideas as "little toolboxes ...[so one can] open them and make use of such and such a sentence or idea, of one analysis or another, as they would a screwdriver or a monkey wrench" (quoted in Eribon, 1991, p. 237). Drawing on Foucault I am interested in the political production of educational psychology's claims to "truth".
The time seems right for this kind of work as educational psychologists are increasingly direct in their challenge to each other to reflect on what it means to be an educational psychologist, an educator of preservice teachers (e.g., Anderson et al., 1995; Peterson, et al., 1990; Shuell, 1996), and on the legacy of the discipline.

**Locating Myself as Researcher**

A lively debate persists regarding the position of the researcher in reporting work. The traditional perspective insists that "the persona of the writer [assumes] a low profile in the text" (Madigan et al., 1995, p. 433). This allows the focus to remain on the object of the study, increasing the possibility of "creating the impression of neutrality or impersonal detachment...that is generally characteristic of the empirical disciplines" (Madigan et al., 1995, p. 433). The assumption is that "the facts speak for themselves."

This position has been challenged by many feminist and critical researchers who criticize the stance which separates the observer from the observed in the interest of "objectivity". Michelle Fine (1992) contends that this detached stance neglects "to discuss why one research question or interpretation prevailed over others...[this stance renders] oblique the ways in which we, as researchers, construct our analysis and narratives" (p. 211). Fine (1992) warns feminist researchers that if we do
not take "critical, activist, and open stances on our own work, then we collude in reproducing social silences through the social sciences" (p. 206). Josselson and Lieblich (1996) assert the importance of "allowing people to tell the real story of their work - to consider their own role" (p. 651) in their research projects.

Issues of location are key to this discussion. Locating the researcher is no simple task. Location is not a mere "listing of adjectives or labels like race, sex, and class....location is not self-evident" (Haraway, 1996, p. 440), although these aspects of context are important. Location is partial and shifting and has more to do with being for some worlds and not others (Haraway, 1996).

This work is self-consciously political, as I am for some worlds and not others. Much of this work is driven by the question: "Cui bono?" Who benefits? (Star, 1991). The question of power regarding discourse "means basically to ask whom does discourse serve" (Foucault, 1980c, p. 115). I have to ask myself the questions: Who is it who benefits from the work that I do, or the discourse I espouse or interrogate? I maintain that the discourse of educational psychology primarily supports the knowledge, beliefs, values, positions in power relations of the status quo. Van Dijk (1993b) reports that, while modest developments have occurred in multiethnic societies, learning materials, especially U. S. textbooks,
still overwhelmingly show the perspective and interests of white people...[who are] consistently portrayed in neutral or positive terms, whereas minority groups or immigrants tend to be associated at least with problems and conflicts, if not with deviance and threats. (p. 237)

The issue of any viewpoint being partial or incomplete needs further discussion. Partiality is accepted as a way I come to realize my view, and the view of others, as embodied, rather than dis-stanced. I am conscious of a particular, and shifting, location as I do this work; I have no desire to dis-locate myself from it. In other words, I have no interest in doing research about the world from a position apart from the world. Recognizing the influence of a situated view makes no promise of seeing in a neutral and objective way or of "transcendence of all limits and responsibility" (Haraway, 1988/1991) as is implied through the impersonal detachment of the positivist epistemology. Appreciation of the partial view of the researcher tends toward the possibility of community15. Rosaldo (1989/1993) explains this notion:

Each viewpoint is arguably incomplete - a mix of insight and blindness, reach and limitations, neither omniscience nor a unified master narrative but complex understandings of ever-changing, multifaceted social realities. (p.128)

This multiplicity of viewpoints and voices has an important place in educational research within a democratic society.

15"Community" is an idea with a particular humanist value. While it is attractive, the interests of "community" can be used to marginalize and exclude voices from the conversation that raise difficult questions or subaltern discourses.
The Shifting Role of the Intellectual

In *Truth and Power*, Foucault (1980c) speaks of the role of the intellectual as having shifted from understanding the intellectual as: spokesperson for the universal; having a certain mastery of truth and justice; being able to express a universal conscience. The shift explained by Foucault is toward a much more "specific" activity. Thus, the "specific intellectual" addresses problems which are particular to her own condition of life or work. These problems are recognized through the intellectual's concrete awareness of her own particular struggles and her precise location within the order of knowledge.

When one begins to question accepted views one finds oneself in a double bind (Hubbard, 1979). If our questions appear "too heterodox they disqualify us..." (p. 208) from endorsement of "the discipline," it is difficult to publish and get tenure.\(^{16}\) However, if we stifle our questions "sufficiently deep and long we may stop thinking them and emerge from our education as the monolith's true devotees" (p. 208).

Taking a critical, oppositional stance regarding the discipline of educational psychology clearly places me "against" the discipline in one sense. I have asked myself

\(^{16}\)The example of Henry Giroux at Boston University bears this out (Weiler, 1992). See the autobiography of Howard Zinn, *You Can't Be Neutral on A Moving Train* (1995) for another illustration.
the question: Why can't I just do what I am supposed to do within the accepted boundaries of educational research of educational psychology? Why not remain within what Said (1994) represents as the acceptable and "responsible mainstream". The irony is that while I may be characterized as an "outsider" in the discipline, or at least be considered as being located in that ambiguous position of both within and against the discipline, I feel particularly committed to this work.

The mode of research in which I am involved does not necessarily ingratiate me in the "profession". Said (1994) is helpful here. I appropriate his notion of the work I do as being amateurism, i.e., this work is "activity fueled by care and affection, rather then by profit and narrow specialization" (p. 82). An amateur in this sense is one who "considers that to be a thinking and concerned member of a society one is entitled to raise moral issues at the heart of even the most technical and professionalized activity..." (Said, 1994, p. 82). I regard the work I do as an attempt at "greater democratic participation" (Said, 1994, p. 83) in the educational sphere. This dissertation is taken up in the spirit of looking to "transform the merely professional routine into something much more lively and radical" (Said, 1994, p. 82).

Gestures of Displacement

The feature of language is another issue which presents
a particular dilemma. The importance of language has been mentioned above, and will be taken up in Chapter III, yet an appreciation of the tensions regarding different perspectives of language will be helpful here.

First, I am required to follow APA style in this dissertation. APA style admittedly advances the core values and epistemology of mainstream psychology; in other words, APA style is more than a writing genre, it is a model of paradigmatic thinking (Madigan et al., 1995). APA style espouses a "utilitarian view of language in which words are implicitly assumed to function as simple transmitters of information from the writer to the reader" (Madigan et al., 1995, p. 433). In this perspective words are "unimportant containers" for ideas and concepts. At the same time there are directives regarding words beyond conventions of grammar.

The Publication Manual of the American Psychological Association (4th ed. 1995) encourages writers to use "[s]hort words and short sentences [which] are easier to comprehend than long ones" (p. 26-27), although, the authors

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17I thank Murphy (1993) for the notion of "displacement". In the following discussion several indications of displacement are operative. For example, the privileging of APA style serves to disparage other forms of writing in research. By my resistance I interrogate this position and call for other writing styles to be considered germane to various research interests.

18A complete discussion of this problem is beyond the scope of the current work. For a thorough analysis see Giroux (1995).
of the manual appreciate that a technical term may be more exact than "several short words, and technical terms are inseparable from scientific reporting" (p. 27). The epistemology advanced by APA style encourages the use of words which are simple to signify very complex concepts (e.g., intelligence). It is ironic that in the interest of understanding the word, it may be robbed of complex meaning, and the historical and social contingencies of the word are ignored.

The APA style instructs users that unencumbered communication requires that technical terminology used in a paper needs to be understood by psychologists throughout the discipline otherwise it "does not sufficiently contribute to the literature" (p. 27). The use of "jargon" is discouraged. Jargon is defined as "the continuous use of technical vocabulary even in places where that vocabulary is not relevant....[or] the substitution of a euphemistic phrase for a familiar term" (p. 27). Besides ineffective communication, jargon is also reported to grate on the reader due to its obscurity.

According to Madigan et al. (1995), the paradigm of mainstream psychology has a language which is understood throughout the discipline.\(^{19}\) One could argue that it is not clarity of language or ease of communication that is really

\(^{19}\)The assumption of a unified language is problematic to many and has also been refuted. See Vipond (1996) and Gergen (1985).
the issue, but the viability of the theoretical framework such language constitutes and promotes (Usher & Edwards, 1994). Macedo (1994) expresses a similar conviction by insisting that the "call for language clarity is an ideological issue, not merely a linguistic one" (p. 7). Aronowitz & Giroux (1991) call on educators to recognize the role that the 'language of clarity' plays in a dominant culture that cleverly and powerfully uses 'clear' and 'simplistic' language to systematically undermine and prevent the conditions arising for a public culture to engage in rudimentary forms of complex and critical thinking. (p. 91)

The case has been made that different paradigms, in particular oppositional paradigms, need and do provide "new languages through which it becomes possible to deconstruct and challenge" (Giroux, 1995, p.32) the knowledge forms, relationships, and beliefs that are considered reasonable in traditional paradigms. Often the expression of an oppositional paradigm may seem unnecessarily complex to a researcher with a more traditional perspective. Parsimony and clarity are recognized as values and lauded as indicators of sophisticated scholarship in a positivist paradigm. Yet, parsimony and clarity are not valued as universal and natural values in critical perspective. Giroux (1995) describes the insistence on parsimony and clarity as a "neo-colonial" imposition.

The use of "neo-colonial" provides a useful example for this discussion. "Neo-colonial" in this instance, could be considered "jargon" from within a positivist paradigm. At
the same time, demands for simple expression of complex issues may expose a particular "neo-colonial" position within the epistemology advanced by APA style. The evidence comes from the proponents of the APA style themselves. There is the claim of a "standardizing force" found in journal articles which serve as "benchmark of acceptable writing practices for the discipline" (Madigan et al., 1995, p. 434). Failure to comply with the standard marks "writing as the work of an outsider" (Madigan et al. 1995, p. 429).

It is regarded as particularly important that neophytes within a discipline learn the distinctive language of the discipline as a way of enculturation. It is stated that perhaps newcomers may have to unlearn another language: "These students must now learn to inhibit writing practices that had previously won them admiration while acquiring new techniques" (Madigan et al., 1995, p. 434). Learning to write using APA style "is part of an initiation process [the student] must undergo to enter a scientific community" (Scholes, 1985, p. 132). The case could be made that this is an instance of technical control, a "will to power" rather than knowledge, in that the student,

seems to be learning about the subject, but what [s]he is truly learning is to give the teacher what he wants. He seems to be reporting about a real and solid world in a perfectly transparent language, but actually he is learning how to produce a specific kind of discourse, controlled by a particular scientific paradigm, which requires him to be constituted as the subject of that discourse in a particular way and to speak through that discourse of a world made visible by the same controlling paradigm. (Scholes, 1985, pp. 131-132)
Doyle and Carter (1996) raise this issue of tension regarding what is really going on as "novices become members of practitioner communities" (p. 27). Is it learning or enculturation? The question of "enculturation" through writing style, or correctness and acceptance of writing and language usage, is not easily settled, nor need it be. What is important is that the tension in these multiple perspectives be recognized and appreciated as part of the contested terrain of the significance of language and epistemology.

The aim of this dissertation is to apply a critical reading and analysis of the mainstream, dominant discourse of educational psychology. This is significant as educational psychology's mainstream discourse perpetuates powerful ways of thinking about students and everyday teaching practices; these need to be made explicit and interrogated. The chapters that follow take up a discussion of these complex issues.

**Overview of Chapters**

A brief overview of the chapters that formulate this dissertation is provided as the final section of this chapter.

**Chapter II**

Chapter II gathers examples of counter-discursive feminist scholarship. The selection of work highlights the metaphors of location, vision, and voice and helps to
situate the research that follows. Counter-discourses are presented as a way of "talking-back" to mainstream discourses of literature and science.

Chapter III

There are two aspects of "methods" in research that are articulated in Chapter III. First, methodology refers to the intellectual means utilized to conduct this research activity. I offer an explanation of why the methodologies of traditional educational research (particularly that of educational psychology), and their respective epistemologies, are inappropriate for the current research. Second, important strategies that are used in this critical discourse analysis are discussed.

Chapter IV

This chapter takes up a critical reading and analysis of the discourse of educational psychology. Educational psychology is based on the modernist ideology of technical rationality with its potential to predict and control. This rationality is often unexpressed, therefore it needs to be exposed and made problematic. There are two sections in this chapter: 1) An interrogation of disciplinary principles is presented; and, 2) several non-discursive aspects of the discipline are discussed.

Chapter V

Power, scientific knowledge, and control of bodies come together in modern disciplines and give disciplines their
productive power. Through "technologies of power" (Foucault, 1977/1995) that emanate from and support the dominant discourse of educational psychology subjects are formed and "marked" by docility and utility. These technologies of power are evident in the every-day, taken-for-granted practices of the discourse; disciplinary technologies create the "normalizing gaze" that is explicated and critiqued in this chapter.

Chapter VI

Although this chapter "concludes" this dissertation it does not provide conclusions aimed at proving a thesis or substantiating a hypothesis. Postmodern approaches eschew totalizing and final dictates. However, this chapter proposes how a more critical stance toward the discipline's discourse, a serious consideration of the social constructionist perspective, and an intertextual reading of the discipline's discourse make possible the discipline's becoming more reflexive and more socially just. This model is a call for a critical literacy regarding the discipline's knowledge claims and practices.
CHAPTER II

LITERATURE OF TRANSGRESSION

Introduction

This dissertation takes up the task of critically analyzing the canon of educational psychology found in its dominant discourse. In beginning this task feminist scholarship offers a guiding framework. My work has been influenced by a long tradition of feminist scholars involved with philosophy, sociology, and research in the natural and social sciences, as well as psychology. The choice of the material I have included can be referred to as a literature of transgression.

Texts from both science and literature are included which may seem peculiar as writing in fields like science and literature is thought to be widely disparate (Madigan et al., 1995). However, the case has been made that they are not so dissimilar as was once thought (Lyotard, 1993; Soyland, 1994). In this instance the choice has been made for the examples of counter-discourse that each provides. These texts illustrate the importance of positionality, vision, and voice in oppositional activity aimed at interrogating mainstream paradigms.

Forms of feminist literary critique, for example, have
had the expressed goal of "talking-back" to a discourse that sought to contain or silence subaltern voices. Feminist writers have claimed positions on the margins that inform their perspective. The vision that results from this distinct positionality is important to political struggles as it enables seeing things differently.

A feminist critique of science also seeks to present a counter-discourse to mainstream science, acknowledging the "heteroglossia" that exists within the scientific community. The metaphor of location is instructive as it influences what is seen, and what may be invisible. This issue of location is discussed in terms of "feminist standpoint" epistemology (Harding, 1991).

**Feminist Criticism**

**Resisting Colonizing Discourse**

Resisting colonizing discourses presents a dilemma for feminist authors. Carol Harding (1985) explains "dilemma" as a situation that demands "a choice between conflicting outcomes" (p. 49) by a person who has the "ability to act with intention" (p. 44). Lashgari (1995) characterizes this as a "contrary imperative", that is "to be honest, and to be heard" (p. 1) while discerning that there are serious costs involved in honestly speaking out.

The predicament is clear in that there are always those within the dominant culture who wish to make their perspective normative, and who are determined to silence
and/or marginalize anyone who exposes the dominating force of their discourse, which is a form of neo-colonialism. Foucault (1981) states that discourse is violence, and feminists have declared discourse that defines them as "Other" as a particular form of discursive violence. Feminists have resisted and contested this violence while recognizing that there are "costs of breaking cultural taboos against speaking out" (Lashgari, 1995, p.1). Those who lay bare the dominant culture's blindness, contest its universalizing "truth", or refuse its judgement, i.e., those who speak out or "talk-back" (hooks, 1989), are perceived by those they offend as "dangerous", as "transgressing".

Lashgari (1995) presents four concepts which can be considered crucial in understanding such transgressive discourse: (a) decentering, (b) heteroglossia, (c) dialogics, and (d) trasversia. The first, "decentering", is a process in which those on the margins speak, contesting their objectification and claiming the position of subject. When this happens "those who are marginal to the dominant power re-place the center making the margin the new center of their own subjectivity" (p.2). In claiming this position in which subjects speak for themselves a very different narrative is articulated. Through the acting of "naming ourselves and ...telling our own stories in our own words" (Moraga & Anzaldua, 1983, p. 23) the colonizers get to hear a voice other than their own with the possibility of
releasing them (the colonizers) from their own particular blindness (Lashgari, 1995).

The effects of this decentering process evoke the second concept, "heteroglossia" (Bakhtin, 1981) which happens when a "multiplicity of voices enters the discourse, when margins talk back to the imperial or neocolonial center" (p.3). It is important for the dominant power to impose a "monologic definition of truth, and then convince its members that any deviation would risk chaos" (Lashgari, 1995, p.11). According to Lashgari, whenever this imposition takes place "there are already numerous voices, subverting, transgressing boundaries, working to disrupt" (p.11) its centralized certitude.

Third, "dialogics" is a constructive discourse that becomes possible "when polyvocal discourse interrupts the dominant monologue" (Lashgari, 1995, p. 3). Lashgari makes a very helpful point that because this discourse is often confrontational and contradictory it is often perceived as a spoiler, as though the confrontational discourse is upsetting a peaceful territory. In actuality, the divisions and discrepancy are always present although unspoken and invisible.

Fourth, "travesia" is what Lashgari (1995) refers to as a "movement toward understanding" (p.3). As we move from one narrative to another, from center to margins creating multiple centers and perspectives, we participate in a type
of transgression of borders. She says that "only by violating the boundaries of the familiar and the proper, risking conflict, can one reach toward connection" (p. 4). It is here that coalitions can be forged.

**Teaching as Transgression**

Bell hooks (1994) takes up the notion of "transgression", the other side of travesia, as the task of teaching. Hooks calls for the celebration of the kind of teaching that "enables transgression - a movement against and beyond boundaries" (p. 12). In her work, hooks (1994) is urging all of us to open our minds and hearts so that we can know beyond the boundaries of what is acceptable, so that we can think, and rethink, so that we can create new visions" (p.12). Hooks (1990) assures us that transgression can mean "pushing against oppressive boundaries set by race, sex, and class domination [and is a form of] oppositional political struggle" (p. 145). Lashgari (1995) advises that "[t]o write honestly may mean transgressing, violating the literary boundaries of the expected and accepted" (p.2).

**Teaching from the Margins**

Hooks joins Lashgari as she positions herself on/in the margins in relation to the central, dominant position. This

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Kate Lenzo (1995) refers to a researcher type who positions herself "within and against [their] field of study" (p.21) as a "transgressive self." She insists that the possibilities for this research in doing doctoral work is limited not only by the imagination, but also by "what is permissible, acceptable, and communicative in terms of the purposes we have in doing our work" (p.23).
place is not to be thought of solely as a "site of deprivation...in fact [she] is saying just the opposite, that it is also a site of radical possibility, a space of resistance" (hooks, 1990, p. 149). The claiming of positions in the margins as spaces from which heteroglossia springs makes the dialogical process possible, and makes the margins central for feminist criticism. The margin is not a place one wishes to move away from, "to lose - to give up or surrender" (p. 149), rather a marginal position is a chosen space "a site one stays in, clings to even, because it nourishes one's capacity to resist" (p. 150). Trinh T. Minh-ha (1991), likewise, claims the margins as "our sites of survival, [they] become our fighting grounds and...sites for pilgrimage" (p. 17).

A position in the margins gives teachers a unique viewpoint, as hooks (1991) says, a "radical perspective from which to see and create, to imagine alternatives, new worlds" (p. 150) with students. However, travesia can be disconcerting as we are challenged to not only engage the unknown ground of the Other but the "very ground under one's own feet" (Lashgari, 1995, p. 4). This can be particularly bewildering for those whose thinking has been developed by a monologic discourse.

Audrey Lorde (1984) claims her position on the margins also as a position which gives her a particular and powerful vantage point. She indicates some of the costs as well as
the delight in the community found in this position. Lorde encourages us to learn "how to stand alone, unpopular and sometimes reviled, and how to make common cause with those others identified as outside the structures in order to define and seek a world in which we can all flourish" (p. 112). Lorde assures us that the company we will find in our marginal experience, the community we will find, are those who have been defined as different by the dominant society. As Lorde says "outside the circle of this society's definition of acceptable women ...[are found] those of us who have been forged in the crucibles of difference" (Lorde, 1984, p. 112) including those who are "different" by virtue of economic status, "race", sexual orientation, age, and so forth.

Silence Into Voice

The metaphor of voice, or finding one's voice, has been a powerful and formative metaphor for my own work. "Voice" here does not refer to ordinary talk or everyday self-revelation. In its more radical sense it is the articulation of a perspective, an act of freedom and liberation. Bell hooks (1989) expresses finding her own voice as a way of "talking back" and the "moving from silence into speech" (p. 9). It is a way of moving from object to subject. Objects are voiceless, only spoken about, in that "our beings are defined and interpreted by others" (hooks, 1989, p. 12). Subjects are able to speak for themselves. "Talking back"
then is the activity of "the oppressed, the colonized, the
exploited, and those who stand and struggle side by side
[as] a gesture of defiance that heals, that makes new life
and new growth possible" (hooks, 1989, p. 9).

Adding one's voice to the dialogical process does have
us that she has been afraid at times; she says, "of course I
am afraid, because the transformation of silence into
language and action ... always seem fraught with danger"
(p.42). Yet, she shares with us a query regarding "what if
she had been born mute or maintained an oath of silence"
during her life for safety sake. In the realization that
pain and death are inescapable she willingly accepts the
scrutiny she has undergone by the particular way she has
entered into "a process of life that is creative and
continuing, that is growth" (p.43).

These forms of feminist literary critique have had the
expressed goal of talking back to a discourse that has
sought to define and contain counter-discourses. Among the
most deeply formative of my perspective is the work of
essays, for example, she speaks to attempts to "tame a wild
tongue" by her family, her church, and her government and
her struggle to overcome the "tradition of silence" she had
been taught so well.

Anzaldua (1987) refers to colonization, in historical
and metaphorical terms, and to the internalization of acceptable norms of the colonizers. Anzaldua explains,

"Dominant paradigms, predefined concepts that exist as unquestionable, unchallengeable, are transmitted to us by the culture...[many times] I heard mothers and mothers-in-law tell their sons to beat their wives for being hociconas (big mouths)...for expecting their husbands to help with the rearing of children... (p. 16)

More powerfully, her story is about resistance, a counter-discourse which decenters and disorients a monologic perspective of the dominant society, laying bare its violence. Anzaldua (1987) exposes a neo-colonial propensity in current U.S. social and political discourse. For example her works can address the conservative politics in the English-only movement: "Wild tongues can't be tamed, they can only be cut out" (p.54). Anzaldua's explanation of the connection of language and identity resists the assimilationist perspectives exemplified in the work of writers such as Richard Rodriguez (1983).

Critique of Science

Sandra Harding (1991) has explained that there is a building skepticism about the "benefits that the sciences and their technologies can bring to society" (p. 1). Harding (1991) is forceful in noting that these feminist critiques are not isolated voices crying in the wilderness...but are linked thematically and historically to a rising tide of critical analysis of the mental life and social relations of the modern, androcentric, imperial, bourgeois West, including its science and notions of knowledge. (p. viii)

Chris Weedon (1987) also explains that "within the official
institutions of science and research, feminists have begun to challenge the boundaries of existing knowledge" (p. 14). Understandably, the critique comes from several positions since there are multiple, and often contradictory, feminist views.\textsuperscript{21}

I want to make the point that the feminist perspective\textsuperscript{22} that I espouse, is not concerned with research which advances the cause of women only. On the contrary, feminism, as I relate to it, "encapsulates a distinctive value position, but these are truly human values, not just those of a 'women's perspective'. And so these values should be those of all people" (Stanley & Wise, 1993, p. 27). Feminists have joined this conversation not as a special interest group (Harding, 1991) who appeal a hearing for their benefit alone. Women join other feminists involved with other movements "as thinkers expressing concerns about science and society that are echoed in the other 'countercultures' of science - in antiracist and Third World movements, in anticapitalist movements, and in ecology and peace movements" (p. 50).

\textsuperscript{21}See Alison M. Jaggar's (1983) \textit{Feminist Politics and Human Nature} for a discussion of what she sees as the four major contemporary feminisms (e.g. liberal, Marxist, radical, and socialist). Chris Weedon's (1987) \textit{Feminist practice and poststructuralism} explains her thesis using explanations of liberal, radical, and socialist definitions of feminism.

\textsuperscript{22} I am referring here to a socialist perspective of feminism (Weedon, 1987) which views various oppressive structures (e.g., capitalism, patriarchy, racism) as interrelated.
Finally, before moving into the three feminist models for critiquing science, I will discuss Harding's view of the oneness of the hard and soft sciences. Harding (1991) makes the point that an "influential tendency in conventional thought" (p. 15) is that there is actually one standard for all the sciences, or what counts as science, and that is the "hard" or natural sciences with physics ranking the highest. Social sciences are lower on the scale and many are considered "soft" depending on the extent to which their methodologies are less quantitative and more qualitative. Yet, psychology has a longstanding commitment to a positivist, empiricist epistemology and method. The influence of this commitment is "so pervasive as to be unrecognized by those enmeshed in its web of meaning, [as] it informs every aspect of psychology's undertakings" (Moke & Bohan, 1992, p. 7). This is no less true for educational psychology. Harding insists that the "sciences are fundamentally 'one', and the model for that one is physics" (p. 15). Therefore, while some of the critiques offered below come out of the critiques of natural sciences, they have valid applications for the discipline of educational psychology as well.

What is needed, and what Harding (1991) attempts to do, is provide a
critical examination of [science's] origins and values...to figure out just what are the regressive and the progressive tendencies brought into play in any particular scientific or feminist project, and how to
advance the progressive and inhibit the regressive ones. (pp. 10-11)

Harding (1991) affirms the progressive themes in modern science that have yielded a high standard of living for many, "especially if we are white and middle or upper class" (p.2). Harding also points to regressive themes that have yielded the atomic bombs, industrial exploitation of water, air, land, and, more importantly whole groups of people. To take the position that science contains both progressive and regressive tendencies is not to maintain that science is inherently good, bad, or "value-neutral" and used in only progressive and regressive ways. Thus, Harding (1991) takes a skeptical position regarding science; she acknowledges that this is "a confusing moment" (p. 2) in the relationship between science and feminism.

Harding (1996) takes as an additional focus, what she refers to as a "racial economy of science" which she explains as:

The institutions, assumptions, and practices that are responsible for disproportionately distributing along 'racial' lines the benefits of Western sciences to the haves, and the bad consequences to the have nots, thereby enlarging the gap between them. (p. 2)

Harding (1996) notes the problem in using the term "racial" in this way, realizing that issues of race cannot be separated from other issues of class and gender. She states that "there is no uncontroversial shorthand to use in referring to the complicity of Western sciences in projects of racism... colonialism...imperialism" (p. 20). "Elite"
science educators are indicted as afflicted by a kind of scientific "illiteracy" through their failure to understand and teach others a "systematic analyses of social origins, traditions, meanings, practices, institutions, technologies, uses and consequences" (p. 1) of the science they practice and teach.

Three Models of Critique

Harding's (1991) models frame the contemporary critiques effectively. She acknowledges three models of critique of science, shifting from reform to revolution: (a) critique of bad-science or feminist empiricism; (b) critique of science as a social problem, in and of itself; (c) critique of science-as-usual, including what she terms feminist standpoint epistemology. The third model constitutes the most prevalent model of critique evident in the literature.

Critique of bad-science. The first model of critique maintains the general belief in the positive value of science while taking the position that science needs to be reformed. This perspective critiques "bad science" (Harding, 1991). The critique is directed toward that science which results, for example, in bias or sexist conclusions. The critique is directed toward research in science that is flawed in that it does not "follow well-understood principles of method and theory" (Harding, 1991, p. 57). Those who associate with this perspective assume an
Archimedean vantage point is possible, and "support the goal of value-neutral objectivity and impartiality for all scientific inquiry" (p. 57). Harding refers to the feminist form of this conventional theory "as applied to science and its procedures for producing knowledge, [as] 'feminist empiricism'" (p. 58).

For example, Longino and Doell (1987) contend that it is possible to subvert sexist and androcentric bias in research programs through the use of "a variety of tactical responses" (p. 186) without denouncing science as an enterprise. They claim that the structure of science allows for the presentation of alternative accounts that are more ingenious and self-conscious.

Evelyn Fox Keller, historian of science, has been offered as an exemplar of this perspective (Haraway, 1991; Restivo, 1988). Keller is one who is interested in "correct[ing] the gender inequalities in modern science" (Restivo, 1988, p. 217) while remaining within the modern science perspective.

Science as a social problem. There is another view of science that falls outside the reconstruction of a feminist science encouraged by Harding and others. Sal Restivo (1988), for example, argues that science itself is a social problem. Through his examination of the cultural roots of modern science he claims that modern science has been used
as a tool of the ruling elites... emerged and developed as an alienating and alienated mode of inquiry... [and these roots] are everywhere inseparable from military, political, and economic interests and power. (pp. 213-214)

Restivo argues that "purity" and "progress" are myths which serve only to enhance the power and privilege of modern science. What Restivo calls for is a "sociological imagination" developed by attention to new questions in the sociology of science, for example: what do scientists produce and how do they produce it; what good are the products of science; in what social context is it valued and who values it; what are the goals, visions, and values of the work?

A sociological imagination is not an abstract exercise; rather, it is a call to action which challenges prevailing social arrangements. Restivo believes that something is missing from current critiques, as well as some feminist critiques of science. He seeks a specific "blend of structural analysis, social criticism, epistemological relevance, and an activist orientation toward social change" (p. 208).

Science-as-usual. The third model, a critique of "science-as-usual", includes what Harding (1991) refers to as "feminist standpoint epistemology". This critique of science insists that no Archimedean perspective is possible as knowledge is socially situated, "grounded in particular,
historical social situations" (Harding, 1991, p.59). Views are always partial and distorted. Harding says "I always see the world through my own culture's eyes; I think with its assumptions" (p.59). Theorists from this perspective use as a resource "women's situation in a gender-stratified society" to show that research directed toward "social values and political agendas can nevertheless produce empirically and theoretically preferable results" (p.119). This position is in contrast to the critique of "bad science" which, in the interest of objectivity, seeks to rid methodology of all subjectivity, including gender.

Harding makes special comment that the unique perspective of feminist standpoint epistemology is not connected to biological differences between men and women, rather, it is the unique position of women in a stratified society that gives a particular vantage point. Harding (1991) insists that this vantage point designates an "objective" location, i.e., women's lives "as the place from which feminist research should begin" (p. 123). This is considered a particularly trustworthy position as "members of oppressed groups have fewer interests in ignorance about the social order and few reasons to invest in maintaining or justifying the status quo than do dominant groups" (p. 126).

Collins (1990) offers that situated knowledge, like Black feminist thought, "is less likely than the specialized knowledge produced by dominant groups to deny the connection
between ideas and the vested interest of their creators" (p. 234). Donna Haraway (1988) has also asserted a preference for the vantage point of members of subjugated groups saying "there is good reason to believe vision [from this position] is better" (p. 583). It is not that there is something "innocent" about subjugated knowledges. Indeed, these also need to receive a critical examination and deconstruction. Rather, subjugated standpoints are preferred "because in principle they are least likely to allow denial of the critical and interpretive core of all knowledge" (Haraway 1988, p. 581).

This model of critique is both an interrogation of "objectivity" and at the same time a call for a particular objectivity, which seems at first contradictory. Harding and others (e.g., Haraway, 1988; Smith, 1987) are calling for a program of "strong objectivity". This call comes out of a doubt that the scientific method is strong enough "to identify and eliminate distorting social interests and values" (Harding, 1996, p. 17) which intrude upon and distort the results of scientific research. What is needed is "causal analyses not just of the micro-processes in the laboratory but also the macro tendencies in the social order which shape scientific practices" (Harding 1991, p. 149). So, in other words, strong objectivity calls for a more intent focus on the values and beliefs that makes scientific practice possible in the first place:
Women - and men - cannot understand or explain the world we live in or the real choices we have as long as the sciences describe and explain the world primarily from the perspectives of the lives of dominant groups. (Harding, 1991, p. 307)

Required here, along with strong objectivity, is the complementary process of a strong reflexivity whereby a researcher examines her own cultural beliefs and values through which she views the behaviors, values, and beliefs of those who are being studied. Harding (1991) explains that this strong reflexivity would require that "objects of inquiry be conceptualized as gazing back in all their cultural particularity" (p.163); and, the researcher, likewise "stand behind them, gazing back at his [sic] own socially situated research projects in all its cultural particularity" (p. 163).

Haraway (1996) also calls for a "critical" reflexivity as she acknowledges that "[n]othing comes without its world, so trying to know these worlds is crucial" (p. 440). She believes Harding's notion of strong reflexivity is akin to a concept she calls "diffraction", "to make different patterns in a more worldly way.... diffraction patterns record the passage of difference, interaction, and interference" (Haraway, 1996, p. 429-430). Haraway instructs us that tropes are helpful in understanding diffraction. The etymological root of trope can be traced to the Greek tropos: "tropes [then] are what makes us swerve, what makes us notice what we did not already know how to see...a kind
of aerobics for academics, perhaps..." (p. 430).

This ability to "see" differently is emphasized by Haraway (1988/1991) through the metaphor of "vision". She uses this metaphor in order to foreground the idea that the "gaze" of the scientist is embodied, always from somewhere, from within someone, even as it appears in mainstream scientific writing as a "gaze from nowhere... [that claims] the power to see and not be seen, to represent while escaping representation" (p. 188). The "eye" of the one who is looking has a growing capacity to see because of "visualizing technologies". Through these technologies, vision can be "endlessly enhanced...[until] all perspective gives way to an infinitely mobile vision, which no longer seems just mythically about the god-trick of seeing everything from nowhere, but to have put the myth into ordinary practice" (p. 189).

The ability to see endlessly from nowhere is an illusion, of course. What Haraway wants to emphasize is the potency of the vision we do have. It is the recognition that our "only partial perspective promises objective vision" (p. 190). The "objectivity" that is possible from our particular and partial perspective is about a "limited location and situated knowledge, not about transcendence ...[or] omniscience." (Haraway, 1988/1991, p. 190).

What is at issue in this aspect of feminist critique of science is more than her concerns regarding particular
theories, the scientific method, scientific technologies, and the institutions in which they are constructed. Harding (1991) wants to clarify how deeply "we", "those most at home in Western societies" (p.3), are embedded in a Western, scientific world-view, so much so that it is difficult to see how scientific rationality has infiltrated our belief systems and our epistemologies. At the same time it is important to realize that "the social origins of science and the values it carries suffuse scientific projects... what science becomes in any historical era depends on what we make of it." (p.10).

Thus, feminist critique of science-as-usual brings the study of scientific research to a very different site of investigation as the perspective is concerned with the process of science itself. Steve Woolgar (1988) remarks that it is "only comparatively recently that critical attention has been directed towards the 'internal' workings of science" (p. 9). Although a variety of disciplines have challenged conventional views of science "the practice of science is itself the object of critical scrutiny" (p. 9). Several members within the science community have taken up the interrogation of scientific discourse in a way that exposes a remarkable social dynamic and political agenda of the discourse where there was thought to be only objectivity, neutrality, truth, and progress, following from Harding's (1991) model of a critique of science-as-usual.
This concern for the internal workings of science, especially as it is expressed through scientific discourse, is central to my project as I believe it exposes some of science's regressive proclivities. I will now give a few examples of work exemplifying this critique of science-as-usual, primarily Hubbard (1989), Hubbard and Wald (1993), Namenwirth (1986), and Bleier (1987).

Ruth Hubbard (1989) is concerned with the "context-stripping" methodology of science whereby the scientist is invisible and the results are represented as objective, value-neutral, and apolitical. Hubbard explains that "the context-stripping that worked reasonably well for the classical physics of falling bodies has become the model for how to do every kind of science" (p. 127) even given the insight of Heisenberg's uncertainty principle. "Science is a social process" (p. 119) Hubbard insists, and "generating facts is a social enterprise" (p. 119). Yet, even the language of science reinforces the illusion of facts rendered in a vacuum as it "implicitly denies the relevance of time, place, social context, authorship, and personal responsibility" (p. 125).

Hubbard (1989) is also concerned with the homogeneity of those who do science (i.e., Western European, North American, middle/upper class males) as "public

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23 This principle states that even the act of observation by a scientist will alter the results of an experiment.
accountability is not built into the system" (p. 121). She points out that "small groups of people with similar personal and academic backgrounds" (p. 120) decide who gets to be faculty, whose work gets funded, who gets published, i.e., who gets rewarded by the system. She complains that "science is made...by the chosen for the chosen" (p. 120).

In Hubbard and Wald (1993) the focus remains on these social and political implications through a description of work performed with DNA. Hubbard and Wald's aim in writing their book is to demystify some of the language and concepts of genetics and biotechnology as they believe that it is crucial that we, as citizens, not leave this process in the hands of 'experts'. Like other people, scientists are interested in seeing their projects flourish, and their enthusiasm can blind them to the possible negative effects of their work. (p. xiii)

Hubbard (1989) highlights the political content of science and its governing role. She maintains that "Science and technology always operate in somebody's interest and serve someone or some group of people" (p. 128). Hubbard asserts that "[t]o the extent that scientists are 'neutral' that merely means that they support the existing distribution of interests and power" (p. 128). Elizabeth Fee puts this another way by characterizing "objectivity" as:

merely a code word for the political passivity of those scientists who have tacitly agreed to accept a privileged social position and freedom of inquiry within the laboratory in return for their silence in not questioning the social uses of science or the power relations that determine its direction. (quoted in Harding, 1993, p. 337)
Marion Namenwirth (1986), coming from the perspective of the biological sciences challenges her readers to make personal assessments of "whether the science we practice today has not strayed unacceptably far from the science of which we would like to take part" (p. 18). She critiques the illusion that scientists are able to remove themselves and their work from cultural and political influences, and that by "cloaking" their scientific projects in assertions of: neutrality, detachment, and objectivity, scientists augment the perceived importance of their views, absolve themselves of social responsibility for the applications of their work, and leave their (unconscious) minds wide open to political and cultural assumptions. (p. 29)

Namaenwirth wants to make the point that being unconscious of the bias or the political agenda of work does not render the work neutral or objective. Rather, these "hidden influences and biases are particularly insidious in science because the cultural heritage of the practitioners is so uniform as to make these influences difficult to detect and unlikely to be brought to light" (p. 29).

The metaphor of "cloaking" scientific activity in neutrality and objectivity so as to cover particular political and social underpinnings of science is explicitedly stated in the work of Ruth Bleier (1986). Bleir uses the image of "lab coat" to make her point that this covering of the scientist and the scientific activity denotes a kind of "innocence - of a pristine and aseptic neutrality - and gives him ...a faceless authority that his
audience can't challenge" (Bleier, 1986, p.67). Bleier's point is to connect this cloaked or coated figure with that of the "klansman," another faceless authority. Bleier does not shrink from this comparison, rather she emphasizes that she considers her work in science as a disruption and a subversion to misogynist, racist, regressive tendencies in science.

Many feminist scholars critique science from the point of male domination (e.g., Keller, 1986; Sherif, 1987; Star, 1987; Whatley, 1986). Reasons for this domination have been located in the "deep-seated dualisms of Western culture [which] have encouraged and maintained a hierarchial domination ....(Harding & O'Barr, 1987, p. 33). The notion of hierarchical dualisms was articulated in ancient Greek and Egyptian philosophies. Human persons become fragmented through the view that "reality is segmented into spirit and matter" (Speight, Myers, Cox, & Highlen, 1991, p. 31). Spirit is a "transcendent principle" and is connected with activity, autonomy, reason, the mind, the permanent, the infinite. In contrast matter is the principle signifying immanence which "shows itself in passivity, dependence, emotions, the body, the physical, nature, the transitory, the finite" (Johnson, 1993, p. 11). In the original framework these two, matter and spirit, existed in a "harmonious tension of opposites" (p. 11) which gradually was separated, graded, and eventually became portrayed as
polar opposites in which the differences were maximized. Thus, one became valued over the other; spirit is valued over matter in Western epistemologies.

Spirit is connected with the rational mind, the intellect, and the masculine, while matter is connected to the earth, the body, and the feminine. The effect was a hierarchy of mind over body, male over female. These dualisms are social constructions, and like so many dualisms in science, and psychology in particular, are not neutral constructions; rather, they have political implications, they affect power relationships. Such dualisms sanctioned women being kept out of institutions of higher learning, out of laboratories. When they were able to surmount barriers placed in their way their work and their contributions were trivialized and/or marginalized.

One of the most widely used dualisms in psychology is "nature vs. nurture". The distinction has been around for centuries originally expressed as "nature vs. culture" and expressed formally over one hundred years ago by Galton who introduced the dualism while concerned with the heritability

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I am grateful to my committee members, Suzette Speight in particular, for pointing out that the connection of spirit with the mind and the masculine is not universally accepted. It exemplifies my own embeddedness in a Roman Catholic tradition.

The case of Rosalind Franklin’s contribution to the model of DNA presented by James Watson is a perfect example. See: A. Sayer (1975), Rosalind Franklin & DNA and J. D. Watson (1980), The Double Helix A Personal Account of the Discovery of the Structure of DNA.
of "intelligence" which he was trying to measure. Historically, nature-nurture "has been used almost without exception, as a weapon to diminish the importance of groups derogated by the culture - Blacks, Irish, Jews, women, gays, the handicapped, among them" (Kessen, 1993, p. 271). Restivo (1988) explains that the "dichotomy between 'nature' and 'culture'...has fostered a dominative, exploitative orientation to nature, women, workers, and the underclass in general" (p. 219). This dualism which is taken as a commonsense notion in current educational psychology discourse has been criticized as it "divides what cannot be divided and it contrasts what cannot be contrasted" (Kessen, 1993, p. 271).

Summary

Many of the counter-discourses offered by the feminist scholarship reported in this chapter are challenging current social arrangements. Their narrative "reveals and invents disruptive images of what could be" (Fine, 1992, p. 221). This dissertation joins their work by applying a poststructural analysis to the discipline of educational psychology so embedded in mainstream science. Like so much feminist criticism it highlights the social, cultural, and political implications of positionality as it constructs what can be seen and what remains hidden in the discipline.

Research within traditional paradigms will not allow the kind of talking back which is called for by feminist
critique. New research paradigms are required. This is the discussion of the following chapter.
CHAPTER III
"METHODOLOGY"

Introduction

This chapter has a dual purpose in the dissertation. First, as I am employing a research approach that is critical I want to emphasize how this approach is different from traditional methodologies employed in educational research. By "methodology" I am referring to the "intellectual means" that focuses my research project (Stanley & Wise, 1993). Second, I will describe the particular methodology, critical discourse analysis, in the sense of strategies of analysis that will be utilized in this dissertation.

Call for Critical Educational Research

There is a growing debate regarding every aspect of educational research within the educational community. For example, Maxine Greene (1994) describes what she calls a "restiveness" that accompanies a rising skepticism regarding contemporary educational research. This uneasiness stems from interrogations regarding the "normal course of science" and "the best scientific research". Greene insists this situation has resulted in:

- a growing disenchantment with technicism and bland objectivist assumptions ... separation of research or
positive inquiry from moral considerations or ethical perplexities...[as well as] the apparent uselessness of research in overcoming 'savage inequalities' (Kozol, 1991). (1994, p. 424)

Greene purports that while many researchers do not question the uses of science, there are increasing numbers of researchers whose work flows from an uneasiness which is, in fact, a kind of rebellion against mainstream science. Educationalists are encouraged to consider "a number of fresh perspectives" (Greene, 1994, p.426) that reject "[p]ositivistic and depersonalized approaches to science" (p. 437). Thus, Greene reports a shift in research practice.

This state of educational research which troubles many educators is beyond the frequent quantitative/qualitative debate (e.g., Eisner, 1992; Erikson, 1992; Maxwell, 1992; Peshkin, 1993; Popkewitz, 1992; Schrag, 1992; Smith, 1983). Much of the dissatisfaction with current educational research is connected to the current social and political milieu which has been referred to as a "conservative restoration" (Apple, 1993, 1996). It is argued that the discourse of education is dominated by conservative tendencies regarding questions of "what education is for, what and whose knowledge is considered legitimate, and who has the right to answer these questions" (Apple, 1996, p.9).

Greene (1994) articulates a challenge for educational research that, while not completely replacing work done within the mainstream scientific model, interrogates its methods and its results, and creates a
space where emancipatory projects may be explicated. She tells us that what has become "crucial in the contemporary conversation is the contingency of language, along with the notion that truth is made rather than found" (p. 444). Greene desires that educators join together in a struggle "to go in search of those intersections where deficiencies exist, where there are calls for justice, where freedom is being awaited" (p. 459). Greene (1994) expresses a profound sense of hope for more meaningful and transformative kinds of educational research. Greene is recognizing the potential that a "critical" approach has to offer social science research. It is this critical approach to educational research that I espouse.

Employing a critical approach indicates a significant shift away from the conventional models of research; it has little to do with educational researchers utilizing positivist or interpretivist conceptual and methodological paradigms. This shift deserves at least a brief explanation because it is helpful in locating work done within a critical perspective. I will briefly explain how both the positivist (or quantitative) and interpretivist (or qualitative) approaches are connected to the project of modernity, and why these perspectives are unsuitable for many critical research interests. An explanation will be proposed regarding why a critical, poststructuralist perspective is more appropriate, and what this approach has
to offer the contemporary research scene.

Educational Research and the Project of Modernity

Modernity's project was to discover and deliver the "truth" about the world. Modernity developed as a response to a pre-modern world view in which order, emanating from nature and God, was mediated to society through voices of authority in the person of the sovereign and/or the religious leader. Modernity offered the promise of releasing people from "the bonds of ignorance associated with stagnant traditions, narrow religions, and meager educations" (Bloland, 1995, p. 2). Modernity was committed to the liberation of "the world from the chains of superstition, ignorance, and suffering" (Giroux, 1983, p. 11).

Modernity's aim was to replace pre-modern fantasy, faith, and superstition with scientific knowledge. Usher and Edwards (1994) remind us:

Science becomes the guarantor and route to truth and emancipation. The emancipation of humanity thus requires that people are given access to scientific knowledge, since the condition of their emancipation is that they live subject to the 'laws' uncovered by science. (p. 172)

This emancipation would occur as "reason" became "deified" (Kincheloe, 1993) as the authority. Reason was

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26"Modernity" is a term which allows no simple, uncontested definition. See Best and Kellner (1991); Giroux (1992); Sarup (1993); Usher and Edwards (1994) for helpful discussions. I appropriate Sarup's definition that modernity is used as "a summary term, referring to that cluster of social, economic and political systems brought into being in the West from somewhere around the eighteenth century onwards" (1993, p. 130).
hailed as the "source of progress in knowledge and society, as well as the privileged locus of truth and the foundation of systematic knowledge" (Best & Kellner, 1991, p. 2). For some philosophers, modernity marks the beginning "of a developmental process resulting from technological progress, liberated needs and the triumph of the Spirit.... [which makes] science, rather than God, central to society" (Touraine, 1995, p. 9). Modernity has been identified "with the belief in linear progress, absolute truths, the rational planning of ideal social orders, and the standardization of knowledge as production" (Sarup, 1996, p. 94). Order is established through the discovery of universal, impersonal laws; in this meaning-making system chaos seems to be the only alternative to order (Bauman, 1991).

**Positivist Educational Research**

Positivism is the modernist method, logic, and pathway to truth and order (Slife & Williams, 1997) and enjoys a privileged position among other epistemologies (Fenstermacher, 1994). Educational research has long been conceptualized as primarily a positivistic undertaking (Schrag, 1992) that appropriates the concepts and methodologies of the natural sciences to arrive at

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27 The etymology of this word is very complex beginning with Comte's doctrine that only that which is accessible through the senses is positively knowable. Contemporary understanding of positivism links coming to know something objectively and truthfully through the utilization of the scientific method (Slife & Williams, 1997). See Giroux (1981) for a thorough critique.
knowledge. Giroux (1981) refers to the "positivist culture" in which educational research is embedded. When social sciences adopt this positivist perspective there are two assumptions which are implied (Carr & Kemmis, 1986). The first being that the aims, concepts, and methods employed by the natural sciences are appropriate to social science questions. Second, the natural science model of explanation "provides the logical standards by which the explanations of the social sciences can be assessed" (Carr & Kemmis, 1986, p. 62).

Educational research from a positivist perspective exemplifies distinct characteristics. For instance, in a positivist perspective there exists a confidence in a particular methodology following from a specific epistemological orientation. A positivist perspective also maintains certain assumptions about language. There exists a particular relationship between researcher and researched as well as theory and practice. These will be discussed briefly.

Method, i.e. the hypothetico-deductive scientific method, is of critical importance because it is understood as the way to access an "accurate reflection or measurement of an independently existing object" (Smith, 1983, p. 9). Method is a pivotal aspect of any scientific undertaking as fidelity to a series of procedures from within an established program ensures the "journey to the facts"
(Smith, 1983, p. 10). To the degree that the methodology is "sound" and allows for a neutral, objective investigation of the variables under examination the results can be trusted.

The source of knowledge in a positivist perspective is events in the real world. Knowledge and truth are based on a correspondence supposition, i.e., what is true is what corresponds to reality (Gergen, 1985; Smith, 1983). Science is purported to be able to yield pure and objective knowledge, a mirror image, about this world (Gergen, 1985; Smith, 1983) through empirical investigations.

Concepts under study are considered existing a priori in the real world, apart and distinct from the researcher, and regardless of researcher interest. There is an accepted view of language used to refer to and describe these concepts that is utilitarian. In this view words are "implicitly assumed to function as simple transmitters of information from the writer to the reader....[words are a] somewhat unimportant container for information about phenomena, data, and theories..." (Madigan et al., 1995, pp. 433-434). Therefore, the meanings of the words that are used are considered transparent, unambiguous, and fixed (Popkewitz, 1992).

The definition of concepts is determined within the rules and relationships of the particular discourse community which uses them. Gage and Berliner (1991), for example, illustrate this approach in referring to the
development of the concept of "intelligence" within the educational psychology community:

A concept is the organized information we have (emphasis added) about an entity....The meaning, boundaries, and relationships connected with a concept are derived from everything we know (emphasis added) about that concept....What we mean (emphasis added) by a concept is partly a matter of definition and partly a matter of the methods of studying the concept....for example, the meaning of the concept of intelligence depends in part on how we define (emphasis added) intelligence. (emphasis original). (pp. 12-13)

It is this understanding that allows Herrnstein and Murray (1994) in their controversial book, The Bell Curve, to make the statement: "the word intelligence (emphasis original) describes something real" (p. 1). This power to define abstract concepts as actual entities is a very central function of positivist science in its construction of order.

Abstract concepts considered to have "real" material existence points to the linguistic problem of reification (Gergen, 1985). These constructs are used as "variables" in empirical investigations. Reification is a common occurrence within a positivist framework. As Smith (1983) points out:

Because the subjects studied in educational research, such as aptitude and motivation, admittedly do not have a material existence, how can it be implied that they are like physical objects?....What is important is not the nature of the objects, but how they are treated... (p. 9)

The meanings of terms in this perspective, are considered unimportant for educational researchers. However, it is the treatment of these terms which is important, i.e., abstract concepts are treated as though they exist.
The position of the researcher is a significant characteristic of this perspective. The researcher is presented as detached from that which is under study and insignificant, almost receding into the background as the importance of the data takes center stage. The language of the scientific method itself gives the "impression of... impersonal detachment [of the researcher]...keeping the focus on the phenomena under study" (Madigan et al., 1995, p. 431). The data set is allowed to "speak" for itself.

Finally, the relationship of theory and practice has a pivotal position within this viewpoint. Educationalists espousing a positivist perspective assume that the schooling process is enhanced and improved to the extent that teachers utilized the knowledge accessed through the scientific method. Practice based on scientific principles and laws are believed to be able to offer certainty and rational solutions to educational questions which are understood as "technical" in nature. Popkewitz (1992) explains that this view puts the "researcher in the position of doing the enhancing and producing the progress, and defining the individuals who would be affected" (p. 14). This particular, one-way account (Carr & Kemmis, 1986) of the relation of theory and practice indicates a metaphor of researcher as "social engineer" (Carr & Kemmis, 1986; Smith, 1983).
Educational Psychology as Expression of Positivist Science

Educational psychology has espoused a positivistic perspective from the beginning of its becoming formalized as a discipline. In the early part of this century Edward L. Thorndike contended that "[t]he profession of teaching will improve in proportion as its members direct their daily work by the scientific method" (Quoted in Carr & Kemmis 1986, p. 56). It is important to note that this movement toward a more science-based practice was simultaneously a movement away from a more traditional philosophical perspective. Professional schools began to aspire to a more prestigious position within the university. Teacher education as a field sought higher status by positioning itself as closely as possible to "the rigor of science-based knowledge" (Schon, 1987, p. 9). The belief followed that as teachers utilized an educational theory based on the methodology of the natural sciences, their practice would take on a "more rational basis.... purged of its metaphysical, ideological and normative elements" (Carr & Kemmis, p. 62).

This is a particular irony in this situation. As education became an increasingly "professionalized" field educators believed that interference by "outsiders" would be minimized through the use of the increasingly prestigious scientific method. It seems paradoxical that "science", once considered the means of "democratizing knowledge" (Gordon, Miller, & Rollock, 1990) in response to the control of the
political and religious aristocracy of premodern times, would itself become a means of elite control of knowledge through its positivist epistemology and technical language. This situation has been referred to as the "paradox of the scientific method" (Gordon et al., 1990) in that "rationalism, positivism, and logical empiricism represent major advances in humans' pursuit of knowledge and understanding ...[and at the same time] carries [sic] the potential for tyranny" (p. 15). Gergen (1994) notes the irony as well in that "'science talk' [has become] as totalizing as that of the demagogy that science has sought to replace" (p. 413). This "science talk" pervades all aspects of our lives and claims "its own monopoly on the truth" (Rosenau, 1992, p. 9).

The confidence in the relationship between positivist science and teaching is clearly evidenced in the contemporary educational scene (Berliner, 1987; Gage, 1985; Gage & Berliner, 1991; Wittrock, 1986; Woolfolk, 1995). It certainly is not the only type of knowledge utilized in teaching. Fenstermacher (1994) notes the "radically disjunctive conceptions of science" (p. 35) that are coming to the fore including the practical knowledge of teachers themselves. Yet, the resilience of the positivist paradigm is obvious today despite attacks leveled against it (Schrag, 1992). Although this epistemological perspective with its approach to research is pervasive and robust, it is also
vulnerable on several counts discussed below.

**Interpretivist Educational Research**

As quantitative methods and epistemology proved unsatisfactory or inadequate for addressing particular educational questions and issues, alternative research methodologies began to be recognized and explored. New epistemologies were recognized and appropriate methods sought. The most popular approach (Carr & Kemmis, 1986), described as a kind of countermovement (Smith, 1983), is characterized as an interpretive model utilizing qualitative methods.

The positivist perspective views society (or the teaching-learning situation in education) as "an 'independent system' maintained through the relationship of factors external to its members" (Carr & Kemmis, 1986, p. 84). Contrastingly, educational researchers espousing an interpretivist or qualitative perspective view social reality as possessing an "intrinsic meaning structure" (Carr & Kemmis, 1986) generated by social actors. Hence the term "new sociology" is often used to described this perspective. The aim of research is not empirical generalizations, the production of law-like statements, nor the establishment of functional relationships (van Manen, 1990). Rather, what is sought is understanding and meaning of situations, i.e., Verstehen. As a result the social actor is able to act more "thoughtfully and tactfully" (van Manen, 1990). When social
actions are understood more deeply, when the significance of
the actions are "enlightened or illuminated," practical
change is possible (Carr & Kemmis, 1986). This signifies a
dynamic relationship between theory and practice. Carr &
Kemmis (1986) express this dynamic cogently:

The account of the theory-practice relationship of
interpretive social science is thus two-way traffic of
ideas into action; of practice from theoretical
principles. The traffic is two way: practical
deliberation is informed not only by ideas but also by
the practical exigencies of situations; it also
requires critical appraisal and mediation by the
judgement of the actor. (p. 93)

In educational research the focus of this approach is
on "understanding" the dynamic nature of the culture of the
school organization or the classroom, rather than
"discovering" an a priori "objective" form of knowledge of
the positivist viewpoint.

The interpretivist perspective finds its source in a
distinct epistemological orientation just as the positivist
view espouses a particular model of knowledge. Gergen (1985)
refers to this model as the "endogenic" model of the
"origins of knowledge....[and] depends on processes
(sometimes viewed as innate) endemic to the organism"
(Gergen, 1985, p. 269). Humans strive to make sense of their
world cognitively, and meaning is negotiated and
renegotiated (Giroux, 1983b) in social situations. The focus
has shifted from an impersonal objectivity, an "exogenic"
model (Gergen, 1985), toward a deeper understanding of the
notion that "through the use of language and thought human
beings constantly produce meanings as well as interpret the world in which they find themselves" (Giroux, 1983, p.184). "Objectivity" and "reality" are designated by the social actors themselves "in the process of interpreting their social world, [as they] externalize and objectify it" (Carr & Kemmis, 1986, p. 84).

Qualitative research continues to be committed to the pursuit of "objective knowledge" in that the "investigator claims to achieve an accurate representation of the world" (Gergen, 1985, p. 269). Researchers continue to assume the role of generally detached observers, investigators, and descriptions of the groups or activity being researched. The results are thought to be reflections or representations of what is really there (Stanley & Wise, 1993). Thus, this research paradigm comfortably finds a place in the project of modernity as well because modernity is "characterized by a hermeneutic search for an underlying and unified truth and certainty that can render the world, experiences and events,...coherent and meaningful" (Usher & Edwards, 1994, p. 12).

There are several criticisms of this interpretivist approach. One line comes from the positivist orientation asserting that this approach is unable to make generalizations or "to provide 'objective' standards for verifying or refuting theoretical accounts" (Carr & Kemmis, 1986, p. 94). Another line of criticism asserts that "the
core of the new sociology lacks an adequate theory of social change and consciousness" (Giroux, 1988, p. 25). The focus remains at the micro-level of the school or classroom, and the social and political structures which influence what is understood and regarded as "knowledge" and meaning are never exposed. Knowledge is "treated as a specific social act with its underlying social relationships" (Giroux, 1983, p. 185). However, this epistemology is particularly problematic as it never moves beyond a relativistic view of knowledge. The negotiated meanings of social actors do affect the social structure, yet there is no consideration given to how the social structure impacts and constrains the meaning systems of the actors (Carr & Kemmis, 1986; Giroux, 1983, 1988).

The qualitative approach is gaining popularity in educational research particularly with the rise of ethnographic studies. However, it is not likely to gain prevalence in educational research. This appears to be because the positivist perspective "forms the metatheoretical basis of science itself" (Gergen, 1985, p. 269).

**A Critical Research Perspective**

A critical approach to educational research begins from the position that both the positivist and the interpretivist models are inadequate in their view of educational practice and their attempts at reform. The positivist aim of technical prediction and control, and the interpretivist aim
of practical understanding can never lead to the kind of reform and transformation that is necessary to ameliorate the injustice that provokes the current educational crisis. What is needed is a way of looking at education and educational research that allows questioning beyond the search for objective certitudes. The postmodern critique holds such a possibility.

Postmodern Critique

I am using the term "postmodernism" in the sense of critique, a kind of "oppositional attitude" as employed by Foucault (Usher & Edwards, 1994). It is a way of looking at modernity's master narratives of science with their promise and project of progress, universality, and neutrality of scientific method and knowledge claims (Usher & Edwards, 1994). Postmodernist critique rejects the notion that scientific theory can ever mirror nature; at best it is a "partial perspective" (Best & Kellner, 1991). Its "knowledge claims are themselves partial, local, and specific rather than universal and ahistorical" (Usher & Edwards, 1994, p. 10).

Just as the authority in pre-modern times held by the

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28"Postmodernism" as a term defies definition; thought to be at "once fashionable and elusive" (Sarup, 1993, p. 129), it is marked by a wide variety of interpretations (Aronowitz & Giroux, 1991). Usher and Edwards (1994) refer to postmodernism as a "loose umbrella term under whose broad cover can be encompassed at one and the same time, a condition, a set of practices, a cultural discourse, an attitude, a mode of analysis" (p. 7). See Best and Kellner (1991) for an explication of postmodern theory's historical development.
priest and king was displaced by reason's claim to truth and certainty, postmodern critique and analysis interrupts power relationships which have been so effective in establishing the "truth" of the social sciences in the modern epoch⁹. This rejection of the scientific discourse is a confrontation with authority.

Scientific activity has shown itself vulnerable on many counts. Since truth is a "thing of this world" (Foucault, 1980c, p. 131) it is made in history and culture; knowledge considered as "truth" is the result of a social activity (Gergen, 1985). That "science" does not recognize itself as a human project is the major flaw in science's discourse (Rosenau, 1992; Usher & Edwards, 1994). Science claims that its truth can be somehow separate and distant, objective, and not "encumbered" with values and ideologies. A common metaphor for these assertions is the idea that language can be wrapped in the "cloak" of objectivity and neutrality (Bleir, 1986; Namenwirth, 1986; Usher & Edwards, 1994). Thus, postmodern analysis is a critique of "logocentrism," the "possibility of knowing the world in a direct and unmediated way - as it really is" (Usher & Edwards, 1994, p. 19).

As the positivistic and interpretivistic research

⁹Foucault actually sees a postmodern critique as not contained in one epoch or another. Since power is "everywhere" so are disruptions to power-relationships. Discourse is always an incitement to discourse.
paradigms have a particular epistemological stance, so does a critical approach. Social constructionism\(^{30}\) (Gergen, 1983, 1985) challenges the concept of knowledge as mental representation. Knowledge, including scientific knowledge, is a social construction (Scarr, 1985). In other words, knowledge is what passes for knowledge, the result of "negotiated intelligibility" (Gergen, 1985). The locus of human knowing shifts from the "interior regions of the mind [to the] processes and structures of human interaction" (Gergen, 1985, p.271). Gergen (1995) stresses the "negotiated" aspect of understanding which takes place among "complex networks of writers and readers [who comprise a] discourse community" (Madigan et al., 1995, p.429), supporters of a particular paradigm (Kuhn, 1970), or "epistemic community" (Usher & Edwards, 1994). The members of these groups share a distinctive world view, beliefs, and language.

Seen from this perspective, then, the "grand narratives of science, truth, and progress are discourses - 'realities' we have created by and for ourselves. Stories we tell ourselves about the real or, more likely stories told by 'powerful' others on our behalf" (Usher & Edwards, 1994, p. 28). Critical postmodern traditions recognize the political

\(^{30}\)Gergen (1985) alerts readers to the interchangeable use of social "constructivism" and social constructionism. He points out the Piagetian origins of the former, as well as the former's use in reference to twentieth century art. In order to avoid these confusions I will use the latter form.
underpinnings of knowledge production. Those concerned with this line of research engage in visioning and revisioning relations of power within the society (Popkewitz, 1995) so as to be able to move toward action. Giroux (1988) explains:

Inherent in this [critical] perspective is an intersection of theory, ideology, and social practice .... The cutting edge of this perspective is its insistence on connecting macro forces in the larger society to micro analysis such as classroom studies. (p.27)

For example, a critical analysis of the discourse of educational psychology is aimed at understanding and explicating how the discourse of this discipline, while considered a particular discourse community’s expression of the "truth", is implicated in a larger struggle between dominant and subordinate discourses (Giroux & Aronowitz, 1991). The texts of educational psychology are part of larger social texts (Scholes, 1985). Critical research in the social sciences is a political activity and value-laden work. Research in this perspective takes as its aim not the furthering of the discipline’s discourse but, rather to make assumptions of educational psychology explicit and subvert their claims (Rosenau, 1992) which "give some groups or individuals unfair advantage to the disadvantage of other" (Thomas, 1993, p.5).

Critical Discourse Analysis and Educational Psychology

Three points will be addressed in this section: (a) the
arrival of critical discourse\textsuperscript{31} analysis (CDA) on the educational research scene; (b) relevancy of critical discourse analysis; (c) the salience of language.

**Arrival of CDA in educational research.** Critical discourse analysis has had a relatively recent arrival onto the educational research scene and has been described as a "new wave" of research (Burman & Parker, 1993). It has been noted that "educational researchers would have been hard pressed to turn up many theses, research papers, and monographs that used discourse-analytic theories and methods" (Luke, 1995, p.7) prior to the 1980's. However, the fact that CDA is gaining legitimacy is evidenced in the 1995-1996 edition of *Review of Research in Education* (Apple, 1995) in which it is reviewed in the first chapter. Apple states that the purpose of the editorial board of this publication is to "give a greater voice to "newer" forms of research methodologies and theories" (p. xi); the editors want to encourage readers to "think socially" (p. xiii).

The research reviewed in this yearbook has a common purpose, i.e. to place educational institutions in context, to make clear the importance of recognizing that "[e]ducational institutions do not stand alone, somehow distanced from the cultural, economic, and political relations and tensions of the larger society" (p. xii).

\textsuperscript{31}Issues regarding "discourse" are discussed later in this chapter.
Issues regarding education, the institutions, practices, and discourses which education employs, need to be viewed as part of a more general, social, and complex problematic. The section of the book on CDA, for example, expresses a deep concern regarding "the connections between discourse and power in education...[and the implications with] the cultural and socioeconomic transformations now going on in the larger society" (p. xvi).

Relevancy of CDA. Critical discourse analysis is particularly relevant during these times of educational "crisis" and "reform." Luke (1995) cites two demographic and socioeconomic transformations that have emphasized the need for CDA as issues of language, discourse, and difference have taken center stage on the educational agenda. One transformation is the recognition of educational entitlements, the "enfranchisement of cultural and linguistic minorities into mainstream public discourses and institutions" (p.4). Failure to address this issue and the concomitant sociocultural changes and conflicts "could pose serious limitations in the capacity of educators to address what remains a political issue of access and equity" (p. 5).

The second transformation is connected to the shift from an industrialized to a service-based and information-based economy (Luke, 1995; Usher & Edwards, 1994) which has given rise to "new forms of language and information based work" (Luke, 1995, p.5). In this environment spoken and
written language is "the principal medium of commercial exchange. Texts, images, and representations have become both the means and objects of processes of commodification" (p. 5). It is within this context that issues of representation and subjectivity are of paramount importance as schools are called upon to insure access and equity to an increasingly diverse student population. Luke (1995) emphasizes that "different kinds of children are, in turn, affiliated with differing kinds of power and capital in discourse communities and economic institutions" (p. 38). In this "educational context...the tensions between official discourses and minority discourses should be principle focuses for educational research" (p.38).

**Salience of language.** In research the salience of language is increasingly recognized within various approaches to discourse analysis (e.g., Potter & Wetherell, 1994). Luke (1995) explains three approaches frequently used in educational research: psycholinguistic, sociolinguistic, and poststructuralist analysis. Psycholinguistics understands the creative, developing child as a "language user" whose growing competence accounts for the complexity of language development. Sociolinguistics takes as its focus the social nature of language and language development as connected to socialization. The third approach, and the approach which impacts this work, is concerned with a poststructuralist analysis where the constructing character
of language is central. This approach comes out of the tradition of continental philosophy and cultural analysis especially impacted by the work of Michel Foucault.

"Method" in Critical Discourse Analysis

There is a need to be clear when talking about critical discourse analysis in terms of "method". The category of method "comes from a discourse developed for quantitative, positivist mythologies such as experiments and surveys" (Wetherell & Potter, 1992, p.101). Within the positivist framework "sound" methodology leads to a degree of "authority" with which outcomes of the research seem justified. Gergen (1985) insists that the "sciences have been enchanted by the myth that the assiduous application of rigorous method will yield sound fact" (p. 273). No such confidence in "method" exists in a critical research paradigm.

Discourse analysis is more of a "craft skill...not easy to render or describe in an explicit or codified manner" (Potter & Wetherell, 1994, p. 55). As a person becomes more skilled at the craft explaining exactly what discrete procedures are used becomes more difficult. Although there are specific "analytic considerations", the accent is on the craft, developing a skill, cultivating a "more conscious and theorized understanding of how to be a cultural member" (Wetherell & Potter, 1992, p.104). The fruitfulness of CDA is clearly on becoming a better craftsperson, or a cultural
worker in Giroux's sense, rather than performing a particular set of mechanical procedures (Potter & Wetherell, 1994).

In short, there is not a set mechanics for "doing" critical discourse analysis, and this is problematic as it may appear "as an improvisation...[I]ndeed, from a functionalist point of view it hardly appears to be a methodology at all" (Gotlieb, 1987, p. 276). The critical discourse analyst views his/her work "as an art achieved through practice. There is no determinate method... in the sense of explicit rules that are to be followed" (Bernstein, 1983, quoted in Gotlieb, 1987, p. 278). Critical discourse analysis is a way of looking at things and articulating a type of "heteroglossic expression" which brings into play "various discursive resources with which to read, interpret, and make sense..." (Luke, 1995, p. 39).

Discourse

Discourse is an important element in postmodern - poststructuralist analysis. An understanding of what is meant by discourse needs to be presented. From a positivist-empiricist perspective discourse might be interpreted as that which "refers to what is said and written and passes for more or less orderly thought and exchange of ideas" (Cherryholms, 1988, p.2). In general, discourse means the text and the talk (van Dijk, 1993) of a particular community.
Yet, discourses do not simply express or reflect ideas and paradigms; they play an active role as well. Gotlieb (1987) insists that discourse, rather than being a mere "tool for transferring meaning and intention," actively "shapes what is thought and done" (p.279). Sarup (1993) states that discourses "are perhaps best understood as practices that systematically form the objects of which they speak" (p.64). Luke (1995) explains this as the constructing character of discourse. There is a "social and ideological 'work' that language does in producing, reproducing or transforming social structures, relations and identities" (Fairclough, 1995, pp. 209-210). Marshall (1992) defines discourse as "a regulated system of statements which can be analyzed not solely in terms of its internal rules of formation, but also as a set of practices within a social milieu" (p.99). Woolgar (1988) tells us that the specific discourse of science "is to be understood as [that which] structures and sustains a particular moral order of relationships between the agents of representation, technologies of representation and their respective 'objects'" (p. 14).

Foucault (1972) makes the point that "discourse is not a slender surface of contact, or confrontation, between a reality and a language (langue), the intrication of a lexicon and an experience" (p. 48). Rather, Foucault (1972) takes as his task explicating discourse as "practices that
systematically form the objects of which they speak" (emphasis added, p.49). In examining discourse Foucault is not interested in an explication of the "objective reality" of the subject under study; rather, Foucault is interested in "how texts are constructive of social formations, communities, and individual's social identities" (Luke, 1995, p.9). As subjects become objectified through discourse a type of knowledge-power relationship is formulated. Discourse is the power/knowledge nexus. In short, discourses and the discursive practices which give voice to them are social constructions rather than transparent images of reality; as such they have an active and social function.

In addition to the constructive character of discourse Ball (1990) explains that

Discourses are about what can be said and thought, but also about who can speak, when, and with what authority. Discourses embody meaning and social relationships, they constitute both subjectivity and power relationships. (p.2)

When discourse is considered in this critical way issues of dominance emerge. Teun van Dijk (1993) defines dominance as "the exercise of social power by elites, institutions or groups, that results in social inequality, including political, cultural, class, ethnic, racial and gender inequality" (p. 249-250). It is important to note that power is not a unilateral relationship although in this definition of dominance emphasis is on a "top-down" relation (van Dijk, 1993b). There is also a "bottom-up" expression of
power in the form of resistance, complicity, and compliance. However, "our critical approach prefers to focus on the elites and their discursive strategies for the maintenance of inequality" (van Dijk, 1993b, p. 250). Broader issues of power will be handled in Chapters IV and V.

Categories and constructs found generally in discourse, and those found in educational psychology's discourse in particular, are ascribed a degree of "truth"; they are understood as a reflection of reality. Disciplines construct and are constructed by discourses which are accepted as "truth" by various communities. Indeed Foucault (1980) assures us that "[e]ach society has its regime of truth, its general politics of truth: that is the types of discourse which it accepts and makes function as true" (p. 131).

Presently, as has been the case historically, there are a multiplicity of discourses within the field of educational psychology (Ball, 1984; Constas & Ripple, 1987; Glover & Ronning, 1987; Scheurman, Heeringa, Rocklin, & Lohman, 1993; Yee, 1970) each expressing a degree of variation. Despite this disagreement, educational psychology is considered a coherent discipline "with its own goals, research agenda, and infrastructure" (Glover & Ronning, 1987 p. 3). It is the dominant discourse of the discipline that is the focus of this dissertation.

Textbooks

Since the aim of this dissertation is to apply a
critical analysis to the mainstream, dominant discourse of educational psychology textbooks are chosen as a valuable area for analysis. The choice of textbooks is based on several issues: (1) textbooks enjoy of long history of use in the discipline and form a genre of discourse; (2) they are considered an authoritarian source of the discipline's content; (3) textbooks are used to "pass on" the discipline to future generations of educational psychologists; (4) they present particular problematics; (5) they need to be recognized as social artifacts with multiple constraints. Each of these reasons for focusing on textbooks will be discussed briefly.

First, educational psychology textbooks, beginning with the publication of Edward L. Thorndike's *Educational Psychology* in 1903, are marked by a prolific history, and are part of the discourse of educational psychology in particular. Textbooks are "primary resources for many educational psychology courses" (Anderson, et al., 1995). Westbury (1990) states as "truisms" the fact that "textbooks are the central tools and the central objects of attention in all modern forms of schooling" (p. 1). DeCastell, Luke, and Luke (1989) point to the distinctive status of the textbook as the "primary medium of formal education" (p.viii). Textbooks are accepted as being "an enduring and influential part of schooling...they define much of what teachers teach and students learn" (Elliott & Woodward,
Squire and Morgan (1990) characterize textbooks as the "bed rock" tool for instruction "since they have demonstrated their convenience and cost effectiveness" (p.123). In short, textbooks form a particular genre of discourse in and of themselves.

Second, textbooks are perceived to be authoritative sources of a discipline's content. Thomas Kuhn (1970) explains that textbooks "address themselves to an already articulated body of problems, data, and theory" and explicate a particular "set of paradigms" to which a scientific community" (p. 36) is committed at a particular time and place. Apple and Christian-Smith (1991) advise that textbooks are "important artifacts" in defining whose culture is taught, whose knowledge is recognized as legitimate and "true". Textbooks signify "particular constructions of reality, particular ways of selecting and organizing that vast universe of possible knowledge" (p.3). Educational psychology textbooks have been referred to as "virtual cornucopias of knowledge bases" (Houtz & Lewis, 1994, p.5) and they "tend to be written from a consensus perspective and, therefore, serve as a valid indicator of what professionals generally regard as important for an undergraduate survey" (Scheurman et al., 1993, p.100). Olson (1989) explains that written texts "serve an important

What is actually taught or learned in introductory educational psychology courses is not the issue here. However, the potential of textbooks to define the field is the issue.
archival functioning in preserving what the society takes to be 'true' and 'valid' knowledge" and when knowledge is stored in this written form it "carries great authority because it appears to originate in a transcendental source" (p.241). A. Graham Down of the Council of Basic Education (quoted in Apple & Christian-Smith, 1991) relates that "[t]extbooks, for better or worse, dominate what students learn. They set the curriculum and often the facts learned, in most subjects....The public regards textbooks as authoritative, accurate and necessary" (p. 5).

Third, textbooks are the principal means by which the science is transmitted to future generations and, as such, may be considered "pedagogic vehicles" (Kuhn, 1970, p.137). Textbooks fulfill a need to "acquaint the student with what the contemporary scientific community thinks it knows" (p.140). Apple (1989) asserts that it is the textbook that "often defines what is elite and legitimate culture to pass on" (p. 81). Van Dijk (1993a) suggests that both textbooks and the introductory classes in which they are used be regarded as the initial encounter students have with the "goals, concepts, ideas and theories of their discipline... therefore, textbooks not only express the scholarly views of their authors, but obviously shape those of their student-readers" (van Dijk, 1993a, p. 165). Thus, introductory textbooks in education have been characterized as providing a kind of "grammar" (Luke, 1995) for introducing preservice
teachers into the profession of teaching.

Fourth, there is a need to investigate textbooks because they are problematic in several areas. Textbooks are critiqued on the level of genre for becoming "increasingly bland, simplistic, inaccurate, and obsolete" (Webb, 1995, p.1). They have been characterized as "slow in responding to paradigm shifts, changes in research foci, and challenges to time-honored theories" (Scheurman, et al., 1993 p. 100). Yet because of their ubiquity and longevity in the American educational system they are perceived to be a basic, fundamental, necessary, and neutral element in the teaching-learning process. However, this view is flawed as textbooks despite their blandness are powerful. They carry the discourse of the discipline and, therefore, play a social role. This social role is significant and complex. Herein lies the deeper need to examine and interrogate the specific sort of discourse found in textbooks, particularly introductory educational psychology textbooks.

Fifth, the issue of constraints needs to be addressed. While textbooks can be thought of as "collections of statements that make authoritative knowledge claims" (emphasis added, Cherryholms, 1988, p. 52), textbooks need to be appreciated as not just a compilation and articulation of "facts". Textbooks are "conceived, designed, and adhered to by real people with real interests" (Apple, 1991, p.2) who contend with real constraints, and who participate in
real relations of power. Even when we appreciate the "evolution" of textbooks as developed and adopted by members of the educational psychology community, it is naive to think of them in their origin, production, or use as neutral. Cherryholms (1989) has insisted that "Foucault shows textbooks to be political, material products that represent a privileged way of seeing things, privileged by means of power, position, tradition, and so forth" (p.61). At the heart of Foucault's insight regarding truth as "relational" are the constraints related to the production, sale, and use of textbooks.

Constraints experienced by authors, manufacturers, and consumers are multiple; these constraints are economical, political, ideological, and personal. The witness of Naomi Silverman (1991), who has worked for years as an acquiring editor for a textbook publishing company, can assist our understanding. Silverman states that "textbooks are products that are manufactured and sold for the purpose of making a profit" (p.163). While other factors play a constraining role, such as interests of the author (Spring, 1991), research advances (Chall & Conard, 1990), course curricula, and trends. The "bottom line remains constant: Will the book make a profit for the company?" (Silverman, 1991, p.163).

Silverman further argues that differences of opinion arise between author and editor over issues impacting marketability. This is not a new phenomenon rather it is a
recurring dilemma. She quotes from a 1936 book *Are Teachers Free?* to make her point regarding the continuing tension, "'He [sic] wants to tell the truth, and have his authors do the same. Yet he must sell books'" (quoted in Silverman, 1991, p. 174). Young (1990) has the same focal point regarding economic constraints of textbooks when she asks, "How can you trust a profit-making industry to do what is best to create textbooks" (p. 72). Joel Spring (1991) recounts his experience of the "political and economic forces shaping textbooks" which he refers to as an aspect of "ideological management" (p. 186). Profit-making is not the only concern of textbook publishers, but it certainly is a major driving concern.

The application of a critical analysis to the dominant discourse of educational psychology found in its textbooks springs not only from the fact that textbooks are important "pedagogic vehicles," but also that textbooks supply a succinct compilation of what the discipline considers to be its "heart". More importantly, critical discourse analysis must be applied because of the political, economic, and ideological nature of textbooks. Without this analysis the societal role of textbooks could remain invisible, and therefore, considered normative, neutral, objective, and "true" in the absolute sense.

Critical Literacy and Intertextual Reading

Literacy occupies a position of central importance in
this dissertation. Literacy is connected to reading and writing. However, there are several ways to look at these activities. Reading is sometimes understood in the mechanical sense of decoding sounds and words as one develops a skill that facilitates finding meaning in the text. The image of consumption is frequently connected with reading (Freire & Macedo, 1987). Readers are assigned the position of consumers of the text: readers "chew" and "swallow" (sometimes whole) the words and ideas of the textbooks; they struggle to digest the ideas; readers are encouraged to internalize what they have read, to make it part of them (Woolfolk, 1995). This is what is understood as functional literacy. Literacy in this view "very often becomes a matter of mastering technical skills, information or an elite notion of high-status knowledge" (Aronowitz & Giroux, 1991, p. 98).

Teachers, from this perspective, simply serve as guides to students toward the proper interpretation and implementation of the text, as Scholes (1985) says, "so that the truth might stand revealed" (p. 13). If this is what it means to "read" then the text is given a reverential position as though it were "a vehicle for eternal truth" (Scholes, 1985, p. 13).

This is a limited sense of reading and text, one that fits easily into a transmission model or banking notion of education (Freire, 1970/1995). This type of reading has been
implicated in educational psychology textbooks as they are presented as authoritative texts, regarded as containing the paradigms around which the discipline is organized. There is a promise extended to students of the discipline that by learning, internalizing, and utilizing the material therein, they can become better teachers. However, Scholes insists that the worst thing teachers can do is to foster an attitude of reverence before texts as if the text were a vehicle for abiding truth.

A critical discourse analysis takes up another sense of literacy. Textbooks are understood as social artifacts (Apple, 1991, 1993; Giroux & Aronowitz, 1991) connected to political, historical, economic, social contexts in which they are located. In other words any text is involved in a web of other texts. Scholes (1985) expresses this view as intertextuality. There must be an examination of these other texts, of intertextuality. If the intertextuality is ignored or suppressed than the power of the text as a final authority is magnified. What results is a form of illiteracy. 33

The perspective of this dissertation is that as

33 Harding (1996) makes a similar point in charging that if scientists and members of the dominant groups fail to read even natural science intertextually, as a text within contexts (e.g., racist and imperialist discourses) than a scientific illiteracy will continue to pervade the social order. Harding's (1996) volume is an example of counter-text exposing, contesting, recasting the mainstream scientific discourse.
educational psychologists we have to change the way we consider our work, i.e., teaching educational psychology. What this dissertation reflects is considering the teacher's work as analyzing and helping students to analyze the intertextuality of educational psychology. The focus needs to shift from the power of the text in isolation to recognizing that the discourses contained in educational psychology texts are connected to other texts, e.g., contexts, pre-texts. Necessarily then, the discourse presented by the text is a site of social struggle. Texts are meant to be engaged and criticized rather than consumed.

Therefore, I am using reading as it has been identified as an active process (Freire, 1985, 1987; Scholes, 1985) of textual power. It is "a productive activity, the making of meaning, in which one is guided by the text one reads... but not simply manipulated by it (Scholes, 1985, p. 8). The position of the reader is understood as the one who makes meaning (Freire, 1985) of the word through a critical reading of the world.

There is a pedagogy of textual power explained by Scholes (1985) that impacts what I learn and teach. Textual power has three forms of process. Initially, texts have power over students (and teachers), a power that is palpable. In the story that opens Chapter I the text we studied contained the discursive practice around which my student felt such constraint; she was limited by that which
empowered me. There is a stage of submission to the power of the text; this is obvious in my use of the text. I located myself within the text; I shared a semantic and syntactic field with the text; I understood and accepted the particular codes of the text (Scholes, 1985). These were what I was intent on introducing my students to throughout the course of educational psychology.

The process of interpretation follows. This entails reading a text along with possible explanations. For example, the student who questioned the practice of pop-quizzes subverted the surface power of the text by offering another interpretation. It could be argued that she did not know the codes; I tried to explain them to her. Another interpretation on what was happening in the exchange is available; i.e., she was exposing a "division of purpose...the return of the repressed" (Scholes, 1985, p.40). The "student" was responding to the text from her own context, a beginning of intertextuality. The reader's own position forms an important context for reading.

What I was learning was that there are many texts contained in and connected to the particular disciplinary text I was teaching, e.g., political, economic, historical contexts; these produce various interpretations. They become obvious in the codes presented by the text. And this

34 Again, the use of quotes indicates my understanding of irony. Clear definitions of "student" and "teacher" are often blurred.
is the point of the dissertation and my teaching, i.e., "to study the intertextual system of relations that connects one text to others" (Scholes, 1985, p. 31).

The third phase of textual power is criticism. Scholes (1985) explains criticism as text against text; criticism "provides important opportunities to break with dominant readings and interpretations" (Cherryholms, 1988, p. 158). Criticism is possible with the differentiation of "the subjectivity of the critic from that of the author, [it is] an assertion of another textual power against that of the primary text" (Scholes, 1985, p. 40). Through the act of writing criticism presents a counter-text, a talking-back discussed in Chapter II. Scholes notes that criticism "begins with the recognition of textual power and ends in the attempt to exercise it" (p. 41) through writing.

Teaching students how to recognize the codes of a particular text, to analyze them intertextually and present criticism, seems a more appropriate task for teachers. A more complex understanding of learning entails the ability to break with oppressive and unjust systems, and a language of hope and possibility becomes a critical aspect of the learning situation. Teachers can help students access the skills "they will need in order to define and shape the modern world, rather than simply serve in it" (Aronwitz & Giroux, 1991, p. 108).
Choice of "Classic" Textbooks

In order to perform the process of critical discourse analysis it is important to read the dominant or mainstream discourse of the discipline. This dominant discourse is found in mainstream texts, those held in high regard and used frequently by those who are involved in teaching the discipline.

In the Spring of 1995 a survey (see Appendix A) was sent to a random sample of 210 members of the American Psychological Association - Division 15, Educational Psychology. The purpose of the survey was to have members of the educational psychology community nominate textbooks used in introductory classes considered to contain the mainstream discourse of the field. The intention in asking this particular group for information was to gather an "emic" perspective, an insider's view (Foster, 1994), of the field.

A return rate of 63% of the surveys was realized. The two textbooks receiving the most nominations were chosen for the critical discourse analysis. They are: Educational Psychology (1995, 6th ed.) by Anita Woolfolk and Educational Psychology (1991, 5th ed.) by Nathan L. Gage and David L. Berliner. The complete survey results appear in Appendix B.
CHAPTER IV

TOWARD A POSTSTRUCTURALIST ANALYSIS

Introduction

The work of this dissertation began with a questioning of the discipline of educational psychology as I encountered it in teaching introductory courses to preservice teachers. What I had accepted as "real", "stable", "true", and "neutral" within the discipline's knowledge-base I gradually began to read as a "reflection of conventions" (Kincheloe, 1993) imbued with political interests. As I became more aware of the way power and knowledge implicate each other I began to critique educational psychology's mainstream discourse as a "regime of truth" (Foucault, 1980c).

This chapter describes a critical reading and analysis of the mainstream discourse of the discipline of educational psychology. Through the survey described in Chapter III two educational psychology textbooks, *Educational Psychology* by Gage and Berliner (1991, 5th edition) and *Educational Psychology* by Woolfolk (1995, 6th edition), were nominated by the educational psychology community as the "classic" texts of the field. These texts supplied the dominant discourse analyzed in this chapter and the next.

Two aspects of the discipline of educational psychology
were examined in the course of the critical discourse analysis: (1) the disciplinary principles that form the internal features and particular rationality of educational psychology's discourse; and, (2) the non-discursive aspects of the discipline including the political and social networks in which the discourse is embedded (Welch, 1985). These aspects are described briefly in this introduction.

**Disciplinary Principles**

Disciplinary principles are apparent in the particular rationality, i.e., *technical rationality*, of the discipline. Technical rationality is evident in the rules, relations, and regularities which lie just below the surface of the discourse. Technical rationality provides the meaning-making system, a kind of internal regulation (Foucault, 1972), of the discipline of educational psychology. This internal regulation is generally considered a resource of the discipline as it provides a "grounding" for the discipline's perspective. It is powerful in that it influences thought and by extension the knowledge and practice of the discipline itself.

However, while the internal system of the discourse may be considered a resource from a particular standpoint, it also presents *problematics* when read critically. Problematics can remain invisible if the technical rationality of the discipline is "taken-for-granted" and becomes transparent or invisible, or is considered
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"natural". Usher (1993) aptly describes educational
psychologists as "enfolded (emphasis added) in an implicit
conception of disciplines as neutral bodies of knowledge"
(p. 17). It is possible that educational psychologists are
caught in our own unself-reflexive scientism. Educational
psychologists remain prisoners of the discourse unless we
gain access to its constitutive forces.
Through a critical reading and analysis disciplinary
principles and problematics can be made explicit and
interrogated. Viewed from a critical perspective the science
of the discipline in general as well as its truth claims do
not cease to exist; instead, "they become representations
that need to be problematized rather than accepted as
received truths" (Aronowitz & Giroux, 1991, p. 75).
This section of the chapter is an appropriation of
Foucault's (1972) notion of archeology, i.e., an
investigation of the human sciences as systems of knowledge.
Archaeology has been described as a "critical investigation
of disciplinary systems of knowledge with the goal of
understanding the discursive practices that produce those
systems of knowledge" (Prado, 1995, p. 25). Dreyfus and
Rabinow (1983) emphasize that Foucault's aim was "to
rediscover on what basis knowledge and theory became
possible" (p. 17). Once this is understood it is possible to
begin to think differently, and to understand "what what we
do does" (Foucault, quoted in Dreyfus and Rabinow, 1983, p.


Non-Discursive Aspects

The non-discursive aspects of the discipline are discussed in the second section of the chapter. Non-discursive aspects pertain to the "background practices" (Dreyfus & Rabinow, 1983), the human activity and institutional processes operating within the discipline (Foucault, 1972) as well as those within which the discipline operates. These include the social, political, economic, and historical contexts and contingencies of the discipline that are prior to the "truth" of the discipline and are potent in the hegemonic construction of the discourse. For example, educational psychologists persevere in the belief that the discourse is developed and controlled through rigorous scientific activity (Cherryholms, 1988) that yields a body of knowledge able to be put to progressive use in education. Yet this commonsense assumption can "work behind our backs in powerful and

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35This term has a complex etymology. It is used here in the sense of Antonio Gramsci (1971) to explain the dynamic of how some groups come to rule over other groups. Static and passive subordination is not the form of domination implied by this term. Rather, it "presupposes an active and practical involvement of the hegemonized groups" (Forgacis, 1988, p.424). In other words, an important aspect of dominant groups maintaining their control and privilege is through the consent and support of other members of the society (Leistyna, et al., 1996). Van Dijk (1993) defines the term thus: "If the minds of the dominated can be influenced in such a way that they accept dominance, and act in the interest of the powerful out of their own free will, we use the term hegemony" (emphasis original, p. 255).
constraining ways" (Gitlin, 1990, p. 444). By ignoring the various power relationships in which the discipline is embedded, the relationships that enable and facilitate the discipline's discourse and practices (Cherryholms, 1988), it is possible to take as natural and necessary, as transcendental truth, that which is actually of our own making. As Gergen (1985) insists, "a given understanding that prevails...is not fundamentally dependent on the empirical validity of the perspective in question, but on the viscidities of social processes" (p. 268). All the things that are said through the discipline's dominant discourse, what metaphors and values are endorsed, what remains unsaid, and what is marginalized are actually the result of social negotiations and power relationships more than rigorous scientific activity. As Thomas (1997) points out what is considered knowledge is "what is agreed to be correct rather than the product of compelling justifications" (p. 92).

The analysis presented in this chapter and the next is meant to be illustrative of a critical poststructuralist analysis. As reflected in discussions in the preceding chapters this analysis is facilitated by an oppositional reading, necessarily partial, and coming from a particular social and political location, i.e., it assumes and acknowledges a situated knowledge (Haraway, 1991/1988; Harding, 1991; Collins, 1990). It is by no means exhaustive.
It is meant as a counter-discourse, and serves to "talk-back" to and de-naturalize the dominant discourse of educational psychology. It represents a sample, not a synopsis of all possible critiques (Murphy, 1993).

**Disciplinary Principles**

What Is A "Discipline"?

"Disciplines" are generally considered "neutral, scientifically validated bodies of knowledge whose...effects are enlightening and empowering and which thus enable effective action" (Usher & Edwards, 1994, p. 48). David Berliner (Berliner & Rosenshine, 1987) a preeminent educational psychologist and co-author of a "classic" textbook, expresses confidence in the discourse of the discipline as a body of knowledge marked with an empowering character. He asserts:

I think that in the past few years we have come closer than ever before to providing direct scientific underpinnings for the art of teaching. In some cases, the need for highly inventive, creative minds has been lessened, as research provides ideas and technology that are almost directly applicable to classroom life. (emphasis original, 1987, p. 3)

He continues:

We now have something that an ordinary person does not have - a knowledge-base consisting of facts, concepts, and technology that can transform our profession.... Knowledge is clearly power, a kind of social power.

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36 This is one sense of the word "discipline", another understanding of the word is addressed in Chapter V.

37 Reference to a "classic" text indicates one of the two texts introduced in Chapter III, Gage & Berliner, 1991 or Woolfolk, 1995.
These quotations of Berliner represent the discipline as producing a body of systematized knowledge which is cumulative, is produced through the scientific practice of a specific group of persons, and is marked by a faith that it is able to be applied in positive ways to the practice of teaching. These tenets are implicated throughout the classic texts of the discipline of educational psychology.

Gage and Berliner (1991) have stated in the preface that the purpose of the textbook is:

to give prospective and practicing educators...an introduction to what educational psychology can provide by way of facts, concepts, principles, and research methods that will be both theoretically enlightening and practically useful. We want our students to take what we present as theory and put it into use in their classrooms. (p. xvii)

Woolfolk (1995) similarly tells readers that:

the major goal of this book is to provide you with the best and the most useful theories for teaching - those that have solid evidence behind them....[these theories] are ways of understanding the challenges that teachers face. (pp. 16-17)

Discourses As Sites of Struggle

Textbooks typically present the mainstream discourse of disciplines (explained in Chapter III). A discourse is important in poststructuralist research but for reasons other than those traditionally stated. Poststructuralists are skeptical that knowledge can be systematized as knowledge claims are considered local, partial, and always permeated with power and normative interests (Usher &
Edwards, 1994); claims of neutrality are always suspect as discourses, even scientific ones, act in the interests of some over others. Therefore, the work of discourse analysis is undertaken not because discourses are understood as delivering "truth"; rather, they are engaged because their "truth" is seen as relational, situated, and partial (Gore & Luke, 1992), and needs to be exposed and critiqued as such.

Thus, discourses are sites of encounter and struggle. McNay (1994) explains:

Discourses and meaning are the site of social struggle. The process through which hegemonic social relations are achieved and maintained often involves the stabilization of discursive relations and the fixation of meaning....Similarly, resistance to hegemonic meaning entails the contestation and disruption of naturalized forms of discourse. (emphasis added, p. 75)

The discourse of educational psychology is recognized as a site of social struggle; it is with this recognition that one is able to enter the dialogue,38 to debate, and offer criticism which "provides important opportunities to break with dominant readings and interpretations" (Cherryholms, 1988, p. 158).

38Freire (1970/1992) insists that education that is liberatory must also be dialogic, thus "dialogue becomes a continuing aspect of liberating acting" (p. 134). The dialogue he is referring to is very different from everyday talk or conversation; it is "a process of learning and knowing [that] must always involve a political project with the objective of dismantling oppressive structures and mechanisms prevalent both in education and society" (Freire & Macedo, 1995/1996, p. 203).
Rationality of a Discipline: Ideology

Chapter III states that a hallmark of modernity is entrusting "reason" as the way to know the "truth", ascertaining universal laws through which order may be maintained. Reason was/is understood as "the source of progress in knowledge and society, as well as the privileged locus of truth and the foundation of systematic knowledge" (Best & Kellner, 1991, p. 2). **Rationality** is evident in the particular views of knowledge, set of interests, beliefs, expectations, meanings, and methodological forms of inquiry that are held by a person or group (Giroux, 1983a). Rationality is the means by which a person or group puts the world in order. In other words, rationality is the sense-making activity of a particular community evidenced in the community's discursive formation. The dominant discourse of educational psychology has a particular rationality as do other examples of discourse.

**Ideology as sense-making activity.** This sense-making function of rationality is akin to a meaning of "ideology". Yet, words like "ideology" are seldom part of the discussions regarding disciplines in the social sciences such as educational psychology. The assumed neutrality of the science eschews words like ideology often considered in a pejorative sense; it is something another group subscribes

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39 The feminist standpoint epistemology discussed in Chapter II provides a helpful example.
to, while "we" have, or at least search objectively for, the truth (Burbules, 1995). The way it forms specific perspectives, influences work and relationships, or its usefulness is easily overlooked. As mentioned in the introduction of this chapter, another possible reason educational psychologists rarely consider the ideology of the discipline is that we are so embedded in it that we take the sense-making activity of the discipline as "natural".

The ideology to which I am referring is that which permeates social life, it is something in which we all participate (Giroux, 1983a). It is evidenced in "the production and representation of ideas, values, and beliefs and the manner in which they are expressed and lived out by both individuals and groups" (McLaren, 1989, p.176). Van Dijk (1993) explains ideologies as "the fundamental social cognitions that reflect the basic aims, interests and values of groups" (p. 258). This "sense making" characteristic of ideology is important as it is involved in the "production, consumption, and representation of meaning" (Giroux, 1983b, p.16). This is the sense of "ideology" I am concerned with here, rather than with specific political ideologies, such as of socialism, communism, or conservatism (Giroux, 1983b).

**Ideology and struggle.** There is another characteristic of ideology that gives it significance as well; ideology's potency only "becomes clear when it is linked to the concepts of struggle" (Giroux, 1983b, p. 16). A critique of
ideology, therefore, serves to present the interests of some persons in dialectical relationship to the advantage of others. This is why a critique is "useful and necessary... because it helps identify the struggles that are central" (Sarup, 1996, p. 70).

The dynamic of the struggle to be considered along with rationality is expressed through the "problematic" (Giroux, 1981, 1983a). The problematic represents a questioning of an assumption or belief communicated in the discourse. Problematics have the added dimension in that they also raise questions regarding what is not expressed in the discourse, or what has been silenced by the discourse. In this way problematics reveal "the ideological source that lies beneath the choice of what is considered important and unimportant in a mode of thinking" (Giroux, 1981, p. 9). That is, the way things are understood impacts the kind of questions that seem intelligible or important, and, at the same time, puts other questions outside the realm of comprehension or reasonableness. These unfathomable questions if taken seriously could transform our basic assumptions (Giroux, 1983a); they form a counter-discourse to the dominant ideology. Therefore, problematics are raised and seriously considered in this dissertation.

**The Rationality of Educational Psychology**

A particular rationality "grounds" the dominant discourse of the discipline of educational psychology found
in the classic texts. This can be explained as a technical rationality that is obvious from a close reading of the codes found in the texts of the discourse. Technical rationality is understood as "an epistemology of practice derived from positivist philosophy" (Schon, 1987, p. 3). It has been described as indicative of embeddedness in a "culture of positivism" by Giroux (1981) as it is based "upon the logic of scientific methodology with its interest in explanation, prediction, and technical control..." (p. 42). As the natural sciences provide the model for its theoretical development (Giroux, 1983a), it is understandably explained as a "normal-science version of social science" (Schon, 1995); it allows for a kind of "scientific management" (Kincheloe, 1993) of education.

Technical rationality rests in modernist need to control and bring order to an objective world. It operates through interrelated assumptions expressed by Giroux (1983a): (1) Control is the goal of technical rationality (and therefore, educational psychology's goal), and is made possible through the application of educational theory, or law-like propositions, derived from empirical research; (2) discovery of causation is possible and makes credible the possibility of prediction and control; (3) the knowledge derived from this inquiry is value-free and represents neutral, objective reality; (4) since knowledge is reduced from data that are value-free, educators using its knowledge
act in a value-free manner.

Technical rationality is evidenced not only in the discourse of the texts; it is built into the structures and practices of modern educational activity, and educational institutions themselves (Boland, 1995; Schon, 1995; Usher & Edwards, 1994). In the following discussion: 1) evidence will be presented to show how technical rationality pervades the discourse of educational psychology (Giroux, 1981) as expressed in its classic texts; and 2) the problematics provoked by this perspective will be presented.

Control and the Possibility of Causation

The purpose of gaining control of the educational experience is central to educational psychology's discourse found in classic textbooks (i.e., Gage & Berliner, 1991; Woolfolk, 1995). Gage and Berliner (1991) explain that the "objectives of educational psychology, like those of any science, are to explain, predict, and control the phenomena with which it is concerned" (p. 16). Hence, educational psychology is intent on controlling the processes of teaching and learning. Scientific research is the means by which control of educational settings is thought possible.

The primacy of scientific research. The fundamental position of scientific research and theory building is clear throughout both classic texts; several examples are presented.

Both texts provide a defense against the position that
educational psychology is merely an exercise in "commonsense". This defense operates to answer the historical critique that educational psychology is "putting what everybody knows in language which nobody can understand" (Welton, 1912, quoted in Grinder, 1970, p. 4). Gage and Berliner (1991) assert that research in educational psychology, like research in the social sciences in general, is of high quality. Despite popular belief to the contrary, the consistency of results compares favorably with that of the physical sciences....The relationship between variables often are even stronger than those on which some medical practice is based. (p. 28)

In a similar manner, Woolfolk (1995) highlights the research of educational psychology in contrast to commonsense. She comments that "frequently the principles set forth by educational psychologists - after spending much thought, research, and money - sound pathetically obvious. People are tempted to say...'Everyone knows that!'" (p. 11). She alerts readers that there is a "danger" in thinking that "educational psychologists spend a lot of time discovering the obvious....When a principle is stated in simple terms it can sound simplistic" (p.13). Readers are warned that it is not a case of what "sounds sensible" but "what is demonstrated when the principle is put to the test" (Gage, 1991, quoted in Woolfolk, 1995, p. 13).

It is interesting to note that despite the attempt to differentiate and privilege "scientific research" over commonsense theorizing there appears a contradiction in that
commonsense is called upon frequently to witness to a shared understanding: e.g., "Everyone knows what intelligence is." (Gage & Berliner, 1991, p. 51); "Everyone knows what motivation is, how it makes a difference between resentful boredom at one extreme and ravenous interest at the other" (p.326). Commonsense understandings are an important characteristic of hegemony. Even as the scientific basis of the discipline is defended, it is imperative that at some point the knowledge claims of educational psychology appear "so correct that to reject them would be unnatural, a violation of commonsense" (McLaren, 1989, p.175). Hegemony takes hold when that which appeals to commonsense is accepted as universal truth (Giroux & Purpel, 1983).

Woolfolk (1995) notes that "research is the primary tool" (p. 16) for understanding teaching and learning. Toward this end descriptive studies and experimental research can provide valuable information to teachers. Correlations allow you to predict events that are likely to occur in the classroom; experimental studies can help indicate cause-and-effect relationships and should help you to implement useful changes. (p. 20)

This confidence in scientific method is reiterated in an appendix titled "Research in Educational Psychology" which is provided because students "must know how information in the field is created" (Woolfolk, 1995, p. 588).

There are limitations placed on what may be said and not said through the discipline by privileging scientific research over other forms of knowledge. For example, the
possibility of a complaint by some "parents in low-income areas, whose children often tend to do poorly on intelligence tests" (Gage & Berliner, 1991, p. 72) is recognized. Gage and Berliner (1991) explain that these parents may "believe that teachers and school systems hold hereditarian views [regarding intelligence]. And they [the parents] believe these views lead educators to stop trying to help their children" (p. 72).

The perspective that parents offer as the result of their own personal knowledge is discounted by citing a 1967 survey reporting that only "6% of American adults, and only 1 and 2 percent of students and teachers believed that intelligence tests measure only inborn intelligence" (Gage & Berliner, 1991, p. 72). The evidence of this 1967 research study is used to nullify the possibility of merit in an argument coming from personal knowledge of a group. The issue of a twenty-five year old piece of research used to quell contemporary dissatisfaction is but one issue of critique and will be addressed in the problematics section.

"Neutral" Knowledge

In a discourse based on technical rationality, knowledge is treated as value-free, representing neutral, objective reality. This is an indispensable tenet of the scientific method. Understandably, then it follows that teachers using the discipline’s knowledge are judged as acting in neutral and objective ways.
Gage and Berliner (1991) are clear in stating that the act of teaching, in general, is not value-free as "teachers must combine insights from educational psychology with ethical thinking about what is good for their students and for society" (p. 7). However, they also emphasize that ethical discussions are not the concern of their text:

But educational psychology, and hence this book, is most concerned with the teaching and learning processes in classrooms. More precisely, we deal primarily with the problems that arise in carrying out the tasks of teaching. (p. 7)

They explain that the style of writing found in this textbook, "like most textbooks is...neutral and dispassionate" (Gage & Berliner, 1991, p. 7).

Similarly, Woolfolk (1996) reflecting on her purpose in writing textbooks, contends that while other educational psychologists have course goals which include deepening students' "social and ethical understandings...[or] capacity to be planful and reflective" (p.41) she has other goals which she considers the "heart" of the course. For Woolfolk the "main goal...is to help perspective teachers understand, value, and use the knowledge and processes of educational psychology" (p. 41).

An assurance is expressed that better teaching can result through learning and applying educational psychology. Woolfolk (1995) states: "If you can become a more expert learner by applying the knowledge from this text...then you will be a better teacher as well" (p. 10). Woolfolk (1995)
explains that expert teachers, "like expert dancers or gymnasts, have mastered a number of moves or routines that they can perform easily, almost without thinking (emphasis added, p. 5). Consider Berliner's quote at the beginning of this section, "In some cases, the need for highly inventive, creative minds has been lessened..." (Berliner, 1987, p. 3). The teacher's role is to "orchestrate (emphasis added) materials, tasks, environments, conversations, and explorations..." (Woolfolk, 1995, p. 17).

**Problematics**

The discussion of technical rationality has the purpose of exposing the sense-making activity of the discourse of the discipline, understood as its particular rationality. Because discourses are recognized as sites of social struggle they need to be interrogated. This interrogation is necessary not just to argue or clarify on the level of ideas, but because theoretical choice has implications for practice⁴⁰ (Luke & Gore, 1992). Problematics will now be posed regarding: (1) the relationship of theory and practice; (2) a reductionist focus of the discipline; (3) teachers' role; (4) the limitation of questions and behaviorism; (5) the possibility of neutral, value-free knowledge.

⁴⁰A direct analysis and critique of educational psychology's practices is the theme of Chapter V.
Relationship of Theory and Practice

There is an implicit understanding that the theory generated in the name of educational research is able to be applied directly to the practice of education. This is especially clear in each of the classic textbooks in that disciplinary knowledge is placed in a foundational position to the practice of teaching. "We have presented a view of educational psychology as a foundation discipline that helps to accomplish the tasks of teaching" (Gage & Berliner, 1991, P. 47); "My goal in writing this book....so you will have the foundation for becoming an expert" (Wookfolk, 1995, p.18). Thus, both the vital role that disciplinary knowledge plays (Giroux, 1981), and the one-way relationship of theory-to-practice (Carr & Kemmis, 1986) are highlighted in these classic textbooks.

Many of the criticisms of the foundational understanding of the relationship of theory and practice regard the decontextualized learning of theories and concepts applying them directly to practice (Anderson, et al., 1995). The theoretical knowledge is sometimes judged to be inaccessible and too "scientific" for practitioners. Yet, the foundational model has proved to be resistant to arguments leveled against it.41 Despite criticisms it has

41This understanding of educational psychology as "foundational" has been the subject of much debate with the educational psychological community. See, for example, Doyle (1990). From outside educational psychology Schon (1983, 1987) has presented an interrogation of the foundational model.
been difficult to disassociate from the "formative power" psychology has had on education (Usher & Edwards, 1994). What is it that the foundational model provides that keeps it viable in the midst of so much criticism?

The foundational metaphor is meant to convey a sense of security in that "grounding our thinking about practice on a simplified and scientifically accurate foundation should make it more comprehensible and reliable" (Doyle & Carter, 1996, p. 24). The need for security is heightened as the practice of teaching is recognized as a serious and complex enterprise. This is the optimistic message expressed in both classic textbooks and the dominant discourse of the discipline in general.

The foundational way of thinking about the knowledge of the discipline also serves to establish a certain hierarchial order within the discipline. A foundational approach distances those who do research from those who teach it and from those who learn it and eventually apply it to practice. By privileging theoretical knowledge over the practical knowledge of teachers, students, and parents the conventional power arrangements within the educational process are supported (Cherryholms, 1988). Also supported are the inequalities constructed by its knowledge claims in a way "so powerful it is almost invisible" (Cherryholms, 1988, p. 98). These issues will be taken up in Chapter V.
Reductionist Focus

Technical rationality's objective to gain control through mastery of theory is advanced when variables are understood as being able to be manipulated in the interest of bringing about "a certain state of affairs or to prevent its occurrence" (Giroux, 1981, p. 43). In order to complete experimental activities through which theories and principles can be formulated, variables needed to be reduced to simplest terms. Reductionism is to "simplify a particular phenomenon so as to mask its complexity" (Leistyna et al., 1996, p. 36). Necessarily, this directs attention toward the "trivial - on that which can be easily measured by empirical instruments" (Kinzeloe, 1993, p. 129). The "illusion" of certainty in practice is supported, but as Kinzeloe (1993) remarks, "[r]arely do the most significant questions of human affairs lend themselves to empirical quantification and the pseudocertainty that often accompanies numbers" (p. 129).

A plain example of reductionist thinking is found in the material regarding writing objectives that are categorized as cognitive, affective, or psychomotor. Both texts recognize the impossibility of separating these areas from each other: "none of these kinds of activities is isolated from the others....the three types of objectives are intertwined" (Gage & Berliner, 1991, pp. 42-43); "In real life, of course, behaviors from these three domains
occur simultaneously" (Woolfolk, 1995, p. 447). However, they are separated in these texts, because "it often is useful to focus on one at a time" (Gage & Berliner, 1991, p. 43). Useful? For whom? This distinction, "devised by a group of educational measurement experts" (Gage & Berliner, 1991, p. 43), is a "fiction that we tell to make our lives as educators simpler" (Apple, 1994, p. x). These distinct categories have made their way into the realm of commonsense understanding of educational psychology, and they are examples of simplistic ways to understand very complex phenomena.

An important issue in this criticism is the emphasis on the efficiency of action, or the "means", by which the control is produced, not on the value of the goal of the practice itself. This implies a separation of factual information intended to facilitate teaching from questions of values that is indicative of technical rationality’s objective in gaining control through mastery of theory. The concern is with how to do things, and how to do them more efficiently, not with what should be done (Sarup, 1993) as teachers internalize the logic of efficiency.

**Teachers As Functional Problem-Solvers**

Teachers-as-problem-solvers is a favorite role of teachers expressed in classic texts:

Whatever your situation, the tasks you must accomplish raise problems that teachers have always had to face. And these problems arise in some form from the first day and every day you teach.... Educational psychology
serves teachers...by helping them deal with these problems. (Gage & Berliner, 1991, p.7)

Woolfolk (1995) highlights this bias by playing off Schon's (1983) call for a more "reflective practitioner". As Woolfolk is discussing the "artistry" of teaching and the need of teachers to be reflective, inventive, and creative she suggests that her readers might find this discussion "a bit idealistic and abstract" (p. 9). She then submits that "[r]ight now, you may have other, more down to earth, concerns about becoming a teacher. You are not alone!" (p. 9). The more pertinent concerns of beginning teachers include: "maintaining classroom discipline, motivating students, accommodating differences among students, evaluating students' work, dealing with parents" (p. 10). And these are the issues of educational psychology. Students of the discipline are told that "by applying the knowledge from this text...you will be a better teacher" (p. 10). Anything that keeps teachers from their task of efficiently solving technical problems is apparently considered superfluous.

Two important themes can be inferred from Woolfolk's (1995) discussion. First, the "real" concerns of teachers are defined and delimited by those who write the texts. These are the issues in which educational psychology can be useful to teachers; these are the problems and solutions addressed in the text that are to be learned and internalized by readers. Second, focus is directed away from
the need of teachers to be reflective about the work that they do and the ends for which teachers teach. The focus becomes the means of problem solving.

Kincheloe (1993) refers to the "how-to" emphasis as an example of "crude practicality" that characterizes so many technically oriented teacher education programs. Cherryholms (1988) alerts us to a "vulgar pragmatism" which is "instrumentally and functionally reproducing accepted meanings and conventional organizations, institutions, and ways of doing things for good or ill" (p. 151). Teachers in this perspective are seen primarily as instrumental problem-solvers (Schon, 1987) who "select technical means best suited to a particular purpose" (p. 3). This image of teachers constructs a specific view by which a "technical ethos is created which eventuates in...a constricted view of teacher cognition, which reduces the act of teaching to merely a technique" (Kincheloe, 1993, p. 10).

It is ironic (outrageous) that through an enculturation into the discipline, through internalizing the mindset of educational psychology, teachers could become complicitous in their own de-skilling (Apple, 1993; Giroux, 1983a; Kincheloe, 1993; Macedo, 1994). Teachers do not have to become so "malleable and powerless that they submit to their own victimization" (Giroux & Purpel, 1983). People do have and can be encouraged to develop a sense of the social, political, and historical contexts in considering the
mainstream discourse of this discipline. Teachers can be self-reflexive and realize that there are multiple texts that support and facilitate (or contest and interrogate) particular meaning-making systems.

Limiting of Questions

Technical rationality limits the kind of questions that may be considered legitimate within the discipline. Questions are confined to those that have a specifically technical solution, those that can be addressed through scientific research. Questions about these "problems" that teachers face have to be handled within an empiricist tradition and, therefore, need to be reduced to variables that are treated in isolation. This manner of thinking "creates a form of tunnel vision in which only a small segment of social reality is open to examination" (Giroux, 1981, p. 46). Ignoring complexities is in sync with Edward L. Thorndike’s (1910) recommendation in an early educational psychology textbook. He stated in a discussion of laws of learning that, "The complexities of human learning will in the end be best understood if at first we avoid them" (p. 6).

Beside limiting questions to those that can have technical solutions, questions are also transformed or recast as problems with technical solutions. Thus, issues regarding the social, cultural, and political situations that arise in educational institutions and classroom life
are explained through "neutral" scientific means. This allows for a very subtle entrenchment of hegemony as scientific justification provides for the ideal solution to ideological problems (Apple, 1990).

Problems dealing with diversity in tracking, for example, are managed as scientific issues. Through the use of scientific technologies of testing of "intelligence" the differential control of access to high status knowledge is not seen as a power play of agents of the dominant culture, but rather rationalized as the commonsense dealing with the varying abilities of students. Some of these points will be discussed later in the chapter.

Behaviorism as exemplar. Behaviorism is so effective in advancing the empiricist perspective of technical rationality in that it is concerned with efficiently controlling the environment through the manipulation of discrete (and often minute) variables. A commitment to a behavioral perspective is presented as a commitment to efficiency and effectiveness, but it can also express a commitment to control, manipulation, and vulgar pragmatism (Cherryholms, 1988).

Classic texts manifest their behavioral proclivities in the perspective they present in several areas. Although theories other than behavioral ones are covered to some
extent, the preponderance of space and endorsement is afforded to the behavioral perspective. A small sampling communicates this bias.

Gage and Berliner (1991) provide a good illustration in their definition of "learning", "a process whereby an organism changes behavior as a result of experience" (p. 225). They go on to state that

it is the overt behaviors of talking, writing, moving and the like that allow us to study the cognitive behaviors that interest us - thinking, feeling, wanting, remembering.... The overt behaviors of the organism - pigeon or school-age child, dog or teacher are always our starting point. (p.225)

Social interactions between teacher and students are described as "two or more people stimulating and responding to one another" (p. 503). The handling of a category of behavior described simply as "too much", "calls for extinction or punishment" (p. 511); behavior of the "too little" variety "calls for reinforcement, which strengthens behavior" (p. 512).

Personality is described as "a concept derived from behavior. We see only behavior. But we create names for that behavior to talk about the different kinds of behavior

42 Most textbooks prepared for introductory courses do try to present a review of the various perspectives in the field. The bias of the author/s is sometimes stated explicitly, i.e., Sprinthall and Sprinthall (1990) present "a developmental approach". Other textbooks have a more implicit bias.

43 The reification of social constructs will be addressed below.
we notice" (p. 147). Gage and Berliner (1991) go on to explain that "we need to emphasize more that behavior is controlled, to a large degree, by the way rewards and punishments occur in the environment" (p. 148).

In the discussion of "motivation" the authors explain that their text explores "the operant-conditioning approach to the understanding and improvement. This approach concentrates on the environment - particularly the reinforcement contingencies in the environment" (p. 327). Despite a reliance on behaviorist psychology, Skinner is mentioned only in citations in Gage and Berliner (1991). The knowledge claims and practices of this perspective appear ahistorical or transhistorical with no mention of the social or political context that influenced its popularity in the 40's and 50's in the United States. The role of teacher as "social engineer", which characterizes Skinner's theoretical perspective (Sprinthall & Sprinthall, 1990), might be unpalatable to teachers yet that is the implication of the behavioral approach. Although teachers should be able to evaluate and question theories, this is difficult to do because of the assumption of neutrality and objectivity, the authoritative tenor of the text, the limiting of questions, and the emphasis on problem-solving.

The Question of Texts as Neutral and Value-Free

Giroux (1981) comments that generally, values are dismissed as inappropriate for discussion from a perspective
of technical rationality. Questions of value must be eschewed within a technocratic worldview as values are thought to weaken the scientific process. Giroux (1981) explains:

Information or 'data' taken from the subjective world of intuition, insight, philosophy and nonscientific theoretical frameworks is not acknowledged as being relevant. Values, then, appear as the nemeses of 'facts', and are viewed at best, as interesting, and at worst, as irrational and subjective emotional responses. (p. 44)

Although classic texts claim a stance of value-free neutrality they can be read as expressing very clear values, i.e., the values of the dominant culture. These values are presented as normative and natural. Value statements appear so frequently that their authors subvert their own claim (Cherryholms, 1988) to neutrality. Two examples are discussed below.

Cost-effectiveness as value. Values are revealed in what is included and what is excluded from texts, and the type of rhetoric connected with issues. For example, Gage and Berliner (1991) expound on the effectiveness of small class size and cite studies supporting this assertion. They proceed to add another value factor, cost-effectiveness, to the discussion. They conclude: "Knowing that smaller classes are more effective and creating them are two different things. A major problem is cost" (p. 502). They report that it would cost $34.5 million to reduce class size by one, from 30 to 29. Readers are presented with the conclusion
that "reducing class size at all grade levels from 30 to 15, to obtain substantial improvement in education, would increase the cost even more" (p. 502). The unreported message is that this cost is more than "we" would want to pay. This position displays a stark comparison to the critique of the "savage inequalities" in funding educational resources exposed by Kozol (1991). It also assigns cost-effectiveness as a premier value in education, over quality and equality. This value-laden assertion ignores the political issues related to the fact that some school districts can and some cannot "afford" small class size. In accepting as a matter of course that small class size is just not "feasible" inequality becomes "naturalized". The issue of how discourse can naturalize situations and qualities will be returned to later in the chapter.

Differential treatment of students. Another example of values being very much an aspect of purportedly neutral texts is obvious in the discourse expressing the differential treatment of students. It is the discourse of scientifically solving problems, so characteristic of technical rationality, that allows discussions like the following to be viewed as acceptable within "neutral" discourses.

Woolfolk (1995), for example, presents a discussion of between-class ability grouping as a way to make teaching "more appropriate for students" (emphasis added, p. 118).
However, the text states that there are several "problems" with the practice of ability grouping. Problems include:

Lower ability classes seem to receive lower-quality instruction in general. Teachers tend to focus on lower-level objectives and routine procedures. There are more management problems. Teacher enthusiasm and enjoyment are less in the lower-ability classes.... [therefore] lower expectations are communicated to students. Student self-esteem suffers almost as soon as the assignment to 'dummy' English or math is made. Attendance may drop along with self-esteem. The lower-tracks often have a disproportionate number of minority-group and economically disadvantaged students, so ability grouping, in effect, becomes resegregation in school. (pp. 118-119)

The problems connected with ability grouping are attributed to "difference in instruction and/or the teachers' negative attitudes" (p. 119). These problems are attributed to technical difficulties. Even with the listing of problems of such a profound nature, the practice of ability grouping itself is represented as neutral and remains unproblematic. The real violence done to students seems invisible or trivialized as this method of instruction is conceptualized as more appropriate.

The importance of this issue is further minimized by lack of attention (it takes a single paragraph to report these negative effects) in examining the consequences of this grouping on students' daily lived experience of schooling. The complexities of the social struggles that produced the current configuration of practices and how these practices fit relations of ruling in the wider society (Rizvi, 1993) remains obscured.
Only if the instructor chooses to present the information in the background section located in the margins and printed in light blue (available only in the teacher’s edition), is the educational psychology class offered a brief summary of a well known and important research program, *Keeping Track: How Schools Structure Inequality*. Originally published in 1985 by Jeannie Oakes⁴⁴, this research discusses the deleterious effects of ability-grouping and tracking, and, more importantly, places the issue within its historical and social context.

Gage and Berliner (1991) address the issue of ability grouping in a section titled "Coping with Individual Differences" (emphasis added, p. 449). The situation of individual differences among students is reported to have "complicated" the teacher’s task (Gage & Berliner, 1991). The discourse presents certain individual differences as a "problem" to students of educational psychology, something that will need coping with and an issue that will complicate their life as a teacher.

Again, a technical solution to the "problem" of individual differences is presented, and it is based on the

⁴⁴This work (Oakes, 1985) is itself problematic in that it uncritically theorizes from within a social reproductionist framework (see the discussion in Giroux & McLaren, 1988); still, it has the potential of opening the debate regarding tracking. The example is presented here to illustrate how research that voices objections to mainstream perspectives can be marginalized and/or used in unintended ways, yet at the same time included in the text.
assumption of innate ability: "to set each student to work on tasks appropriate to his or her particular abilities and interests....appropriate to the student's temperament.... to move each individual ahead at his or her own rate" (pp. 449-450). Ability-grouping is presented as a step toward individualized instruction. The idea behind this method of instruction is that "teaching is more effective with students of similar ability" (emphasis added, p. 450); yet, it is noted that conflicting results have been reported regarding "achievement, self-concept, attitudes toward others, and behavior" (p. 450) in employing this teaching strategy.

Gage and Berliner (1991) refer to the findings of the Oakes (1985) research (mentioned above). The text states in reference to this study that "ability grouping has been suspected, and often found guilty, of fostering social-class discrimination: Lower-income students wind up in one group; higher-income students in another" (p. 450). The assignment to low-track is even characterized as a "life sentence" (Gage & Berliner, 1991). Yet again, the procedure of ability-grouping of students itself remains unproblematic; it is characterized as a "plausible" way of coping "with individual differences in stable characteristics...([e.g.,] scholastic abilities, interests)" (emphasis original, p.
450). "How is it that the discourse can reconcile this admission of negative effects as more effective?"

Contrastingly, another group of students receives quite a different presentation:

Gifted and talented students contribute greatly to society and should be considered a precious human resource. Our investment in identifying and developing these students should at least rival—in interest, time, and money—the investment we make in gifted athletes. (Gage & Berliner, 1991, p. 217)

Woolfolk (1995), like Gage and Berliner (1991), asserts the importance of providing for the special educational needs of "gifted" children. The characterization of gifted students by a former secretary of education as "our most neglected students" is repeated. Gifted programs formulate yet another "track" allocated for students who "contribute greatly to society and should be considered a precious human resource" (Gage & Berliner, 1991, p. 217). These "remarkable individuals" (Woolfolk, 1995) are represented as a scarce commodity which must be developed for our national security and well-being (Sapon-Shevin, 1991).

Through the discourse of educational psychology such differential treatment and valuing of children is authorized

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45Gage and Berliner (1991) provide research studies that they interpret as meaning: "for most people intelligence begins to be stable by age 7. By age 12, intelligence is very stable. The rank order of individuals in intelligence at age 12 is much the same as their rank order at any subsequent age" (p. 58).

46See Sapon-Shevin (1993) for a critical analysis of the educational, political, and justice issues in which the category "gifted student" is embedded.
and perpetuated despite conflicting scientific results: i.e., ability-grouping does not work (Slavin, 1987), is not fair (Oakes, 1985), and is undemocratic (Giroux & McLaren, 1988). Yet, the practice of ability grouping continues to appear reasonable and is accepted as tolerable from within the meaning-making system of the discipline. General acceptance of this practice as a commonsense way to organize schooling experiences is achieved through the work of the discourse.

The discourse must construct the situation in such a way that the semblance of neutrality and meritocracy is upheld." This understanding is promoted by assigning children to ability groups on the basis of the assumption of the biological reality "of innate ability, i.e., "intelligence". Since innate ability can be determined through the use of "neutral" standardized tests the social stratification that results from this differential access to curriculums appears efficient, reasonable, and becomes "naturalized". The historical, social, and political

47Deevers (1995) has made the point of the necessity of turning to an examination of the discourse in order to understand why tracking procedures persist despite their harmful effects to students.

48See Haymes (1996) for a helpful discussion of how psychology and biology are conflated so that regressive social cognitions can be perpetuated.

49"Intelligence" as a social construct that has been reified, and thus treated as an entity that exists a priori, is discussed later in this chapter and in Chapter V.
contexts in which students' access to curriculums is sorted and selected is cast as scientific and value-free.

An uncritical reading of the dominant discourse contained in classic texts does not engage the complexity of meaning or examine the value-laden aspects of issues that are seen, at first glance, as "neutral" and acceptable. In contrast to the traditional understanding of the discipline's discourse as a neutral body of information a critical reading presents the discourse of educational psychology as a site of struggle. Meanings in the discourse can be contested and struggled over, and they are. Yet, the dominant discourse prevails. To more fully understand why the discourse exists as it does it is necessary to look beyond disciplinary principles to the "effects of power [that] shape a discursive practice" (Cherryholms, 1988, p. 59). The effects of power are infused in the non-discursive background practices, that precede the text and talk of educational psychology. They are the human, social, institutional activities that make the discipline possible in the first place (Dreyfus & Rabinow, 1983). These non-discursive practices are presented in the remainder of the chapter.

Non-Discursive Practices of Educational Psychology

Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its regime of truth, its 'general politics' of truth: that is, the types of discourse it accepts and makes function as true... (Foucault, 1980c, p. 131)
Understanding the discipline of educational psychology as a "regime of truth" contrasts the view of the discourse of the discipline as a neutral body of scientifically validated knowledge. In discussing the discourse as a "regime of truth" it is important to foreground and interrogate those social, political, economic, and institutional networks in which the discipline is embedded. Discussions need to be taken up concerning: (1) the relationship of power and knowledge; (2) the social construction of knowledge; (3) the impossibility of neutrality of knowledge; (4) the division of labor in knowledge production highlighting a power hierarchy regarding who controls knowledge production and whose meanings are legitimated.

**Power/Knowledge**

Understanding that "knowledge is power" is very different from within a traditional perspective of educational psychology and what Foucault means in the quote above. The traditional contention is that the development of the knowledge of the discipline (i.e., the discipline's "truth") has given educational psychologists power. The relationship is understood as causal: knowledge causes power. The "direct scientific underpinnings....the knowledge base consisting of facts, concepts, and technology" (Berliner, 1987, p. xvii) give educational psychologists power. Power follows from the technical knowledge of the
For Foucault (1977/1995) the relationship of power and knowledge is correlative:

...power and knowledge directly imply one another:... there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. (p. 27)

Foucault, therefore, always refers to power and knowledge together, i.e., power/knowledge, a "solidus [suggesting] that for his purposes power and knowledge are not to be studied separately" (Sarup, 1996, p. 72). They are "immanent in one another, each a condition for the possibility of the other" (Usher & Edwards 1994, p. 87).

Power relations pervade the knowledge-making activity, affecting the one who knows, that which is known, and the mode and practice of knowing (Foucault, 1977/1995). The implication of this relationship of power/knowledge for the human sciences is that the "truth" expressed by the discipline is both produced and confined by the power relationships of the discipline. In other words, "truth" is what the discipline says is "truth". As Usher and Edwards (1994) point out, knowledge "does not simply represent the truth of what is, but, rather, constitutes what is taken to be true....it's what counts as true that is important" (emphasis added, p. 87).

Aronowitz (1988) pushes this power/knowledge dynamic a step farther in insisting that: "The power of science
consists, in the first place, in its conflation of knowledge and truth" (p. vii). The truth that is being produced by the specific scientific manipulations of the discipline is a specialized knowledge that has been conflated with truth.

When the understanding of how power and knowledge implicate each other is recognized a radically different perception of knowledge follows. What counts as knowledge is considered the "truth" of the discipline. However, this truth is also understood as the product of social activity imbued with power relations. There is always a political struggle over knowledge, and it is not something that resides solely in the realm of ideas. Rather it is a matter of mechanisms of power which are prior to discourse and often unspoken. These mechanisms decide who may speak, when, and what may be said; this is a "general politics of truth" (Foucault, 1980, p. 131) that pervades the discipline. Thus, the knowledge of any discipline can never be received as neutral; it is always situated, contingent, and partial and the result of social struggle.

The Social Construction of Knowledge

The way the world is known and explained is the result of "historically situated interchanges among people"

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50 Perspectives outside the discipline do provide helpful segues into such questions through their models of critique. Feminist intellectuals were among the first to expose the power dimensions in science (Gergen, 1985). Several of these significant scholars were presented in Chapter II. Critical educational theorists also insist that the implication of power/knowledge be interrogated.
(Gergen, 1985, p. 267). This pertains to scientific knowledge. Scarr (1985) insists that "[w]e should not be disturbed that science is constructed knowledge. Rather, the recognition of our own role in scientific knowledge should make more modest our claim to truth" (p. 500). Yet, those who do science have consistently failed to examine the social practice of producing knowledge and the historical, economic, and political context which give it meaning in the first place (Giroux, 1981; Usher & Edwards, 1994). It seems as though at times educational psychologists have forgotten that they have "invented the knowledge they apply....they do not discover, they invent" (Caputo & Yount, 1993, p. 7).

The dominant discourse contained in classic texts may not be recognize by the mainstream educational psychology community as being socially constructed. A textual style of narrative realism and the appearance of consensus lend the discourse the ambience of objective knowledge.

Narrative realism. Textbooks are usually written through a textual strategy of narrative realism (Usher & Edwards, 1994) that accentuates the "reporting of already existing ready-made reality" (p. 150). Using this genre the text is understood as a "neutral medium for conveying pre-existing facts about the world....[its] neutrality exempts it from consideration as a species of social/cultural activity (Woolgar, 1991, p. 28, quoted in Usher & Edwards, 1994). This strategy also allows the text to appear as an
authoritarian source of what the discursive community considers the truth of the discipline (Kuhn, 1970). Rizvi (1993) describes this as a type of "rhetorical appeal that is by its very nature uncritical" (p. 137).

Narrative realism is effected frequently by statements made in a matter-of-fact style. Gage and Berliner (1991), for example, state "It became possible during the twentieth century to measure individual differences in intelligence" (p. 50). This simple statement masks the historical and political context and struggle in which the statement is made (see, for example, Gould, 1981; Mensh & Mensh, 1991).

Ambience of consensus. The argument might be made that there is some evidence in the mainstream discourse that the knowledge of the discipline is recognized as the result of negotiated understandings within the educational psychology community. This is because the pronoun "we" is used throughout both textbooks. For example, Gage and Berliner (1991) explain that:

A concept is the organized information we have (emphasis added) about an entity....The meaning, boundaries, and relationships connected with a concept are derived from everything we know (emphasis added) about that concept....What we mean (emphasis added) by a concept is partly a matter of definition and partly a matter of the methods of studying the concept....for example, the meaning of the concept of intelligence depends in part how we define (emphasis added) intelligence (emphasis original). (p. 12-13)

The "we" of this discussion could be referring to the educational psychology community, Gage and Berliner being "author-ized" (Usher & Edwards, 1994) to speak in its name.
However, it is more likely that it is the editorial "we" that is reflected here and throughout the text. This makes it difficult to know to whom the text is referring. Contrary to Gage and Berliner's assertion, there is not universal agreement among educational psychologists about a construct as complex and politically charged as "intelligence" let alone other educationalists or the general public. Yet, their use of the pronoun "we" builds the impression that there is universal agreement. Apple (1993) remarks "the very use of the pronoun 'we' simplifies matters all too much" (p. 49).

The continual use of "we" serves to create the illusion of consensus around an "objective" discourse of educational psychology. There is an attempt to build what Rizvi (1993) calls a "collective phenomenon". Van Dijk (1993b) points out that consensus building is a major function of any dominant discourse. In a climate of consensus acceptance and legitimacy of knowledge allows a particular discourse to dominate and achieve hegemonic control.

*A complete critique of how the construct of "intelligence" is developed in the mainstream discourse is important yet beyond the scope of this dissertation. Many of the arguments regarding intelligence (i.e., able to be expressed as a single trait or "g", highly heritable, fixed, individuals can be ranked numerically) support the material in The Bell Curve (Herrnstein & Murray, 1994), including a defense of the fraudulent research practices of Cyril Burt. For a critique applicable to both texts see Fraser, 1995; Gould, 1981, 1995; Kincheloe, Steinberg, and Gresson, 1996; and Mensh & Mensh, 1991.*
Textbooks and the discourse they support need to be understood as important artifacts of culture (Gergen, 1985) that "signify through their content and form, particular constructions of reality, particular ways of selecting and organizing the vast universe of possible knowledge" (emphasis added, Apple, 1993, p. 49). At any time there are competing discourses, competing paradigms (Kuhn, 1970), and their respective proponents can be imagined as "practic[ing] their trades in different worlds....[they] see different things when they look at the same point in the same direction" (Kuhn, 1970, p. 150).

Gage and Berliner (1991), for example, recognize that deliberations related to the construct of intelligence are connected with "different social and political ideologies" (p. 51). They are clear in presenting the definition that they support, characterized as "traditional", i.e., "Intelligence = what tests measure" (p. 51). Readers are told that this definition stems from "the intellectual tradition of the developed nations" (p. 53). Gage and Berliner (1991) explain that this tradition is only one approach to human learning and instruction — namely, that appropriate to a middle-class segment of an industrialized society in which learning takes place in a certain kind of classroom in an institution called school. If our society were different...we would probably have to redefine intelligence. (emphasis added, p. 53)

Even while both texts acknowledge that there is no agreement on what intelligence really is (Gage & Berliner, 1991, p.
This traditional psychometric perspective is privileged as it is presented as neutral, normative, and unproblematic. There seems to be no recognition of the psychometric perspective's alignment with any social and political ideology through which students are included, excluded, or marginalized in schools and in society on the basis of such measurements.

In summary, although there is a growing acceptance of knowledge as a social construction (e.g., Gergen 1985; Kincheloe, 1993; Scarr, 1985) it is questionable whether traditionally educational psychologists have recognized the knowledge claims of the discipline as socially constructed. The genre of narrative realism generates the appearance of consensus and neutrality in textbooks. These can be considered a "pre-text" (Usher & Edwards, 1994) that needs to be interrogated and subverted as there is a "hidden politics of neutrality" (Kincheloe, 1993, p. 42). It is the impossibility of neutrality of knowledge that is discussed next.

The Impossibility of the Neutrality of Knowledge

The claim of neutrality of knowledge needs to be

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52 For example, both texts present Gardner's (1983) "multiple intelligences" and Sternberg's (1990) "triarchic theory."
Neutrality can be used as a "cloak" (Bleier, 1986; Namewirth, 1986) covering scientific research. As long as knowledge is considered neutral it can claim a place separate from human interests, biases, and power.

That knowledge can never be neutral is an assertion that crosses disciplinary lines and epistemological stances. Those who offer a feminist critique of science (e.g., Bleier, 1987; Harding, 1991; Hubbard, 1989; Namenwirth, 1986) join critical educational theorists (e.g., Apple, 1993; Freire, 1970; Giroux, 1981, 1983; Kincheloe, 1993; McLaren, 1989), and feminist poststructuralists (Luke & Gore, 1992) in this assertion. McLaren (1989), for example, challenges traditional ideas regarding the neutrality of knowledge:

Knowledge acquired in school - or anywhere, for that matter - is never neutral or objective but is ordered and structured in particular ways; its emphasis and exclusions partake of a silent logic. Knowledge is a social construction (emphasis original) deeply rooted in a nexus of power relations. (p. 169)

Yet, the claim of "neutrality" is a strong and important condition for the human sciences. It is the representation of the knowledge of a discipline as neutral and objective that facilitates an assumption of certainty and generalizability. In this way the knowledge of

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53Caputo and Yount (1993) reminds us of Foucault’s notion of the problematic, i.e., developing something that is accepted, a "given", into a question.
educational psychology is able to function as a foundation on which to base practice or as a resource which informs practice. But, as Giroux (1981) explains, that view of knowledge not only undermines reflective thinking, it does this and more. It is also a form of legitimation that obscures the relationship between "valued" knowledge and the constellation of economic, political, and social interests that such knowledge supports. (p. 53)

When the acceptance of the neutrality of knowledge is subverted a whole new discernment is required. If knowledge cannot be accepted as neutral a demand follows to know more about the political implications that permeate it. New questions surface concerning whose interests does the knowledge serve? Whose experience is legitimated or marginalized? Who profits through this knowledge?

Many critical educational theorists have written persuasively on this subject. Banks (1993) has explained that "knowledge that people create is heavily influenced by their interpretations of their experiences and their positions within particular social, economic, and political systems and structures of a society" (p. 5). Apple (1993) asserts that "what counts as legitimate knowledge is the result of complex power struggles among class, race, gender, religious groups" (p. 46). It is not of question of what knowledge is of most worth, rather it is whose knowledge (Apple, 1993, 1996) is privileged and made to appear "natural", "normal".
The question of "whose" knowledge is normative is addressed by Alison Dewar (1987). She explains succinctly:

The knowledge we teach in our educational system has a white, middle class, androcentric bias. More importantly, this bias is not presented as one possible version of reality, but more often is taught as the only, legitimate and therefore, representative version of reality. (p. 265, quoted in Lewis, 1992, p. 42)

This white, middle class, androcentric knowledge is the knowledge that counts (Sleeter & Grant, 1994), and this is the knowledge that "provides formal justification for and legitimation of prevailing institutional arrangements" (Anyon, 1978, p.40, quoted in Giroux, 1981, p. 53). Generally this is the knowledge found in textbooks\(^5\) (Banks, 1993; Van Dijk, 1993a).

It is possible to discern whose knowledge gets privileged in the dominant discourse of educational psychology. There are a plethora of examples in educational psychology's mainstream discourse. One example is obvious, again using the psychometric understanding of intelligence. Gage and Berliner (1991) admit that

A society will always have a problem testing the intelligence of minority-group members because, by definition, they do not belong in important ways to the majority culture that usually develops the tests. (p. 54)

In the very next sentence these authors state simply: "We measure intelligence with tests" (Gage & Berliner, 1991, p. 55). Later in the chapter Gage and Berliner (1991) state

\(^5\)Political, social, economic constraints of textbook production are discussed in Chapter III.
that "Because minority-group and poor children less often do well on these tests, their parents have a right to worry about how the information from the tests are used" (p. 74). Indeed, assignment to a "slow group early on can be like a life sentence with no likelihood of parole (emphasis added)" (p. 74). Children who belong to minority groups and the poor are essentialized in these groups and seem almost alien (Rizvi, 1993). This kind of representation also presents the dominant group as homogenized. There is a clear admission that this normative practice of the discipline (i.e., psychometric testing) benefits those in the dominant culture.

This situation is naturalized by being represented as "the way things are", (note Gage and Berliner's (1991) assertion: "A society will always have a problem testing certain groups of children"). The assumption is that it could not be otherwise (Rizvi, 1993). Thus, this purportedly neutral discourse functions to sustain the power relations of the status quo. More importantly, it trivializes the violence done to children (e.g., calling it a life sentence). What Sharon Welch (1985) says of traditional theology applies to mainstream educational psychology, i.e., "it has tended to leave the concrete reality of oppression and destruction unchallenged" (p. 28).

55I do not want to give the impression that there is a lack of resistance to the dominance of mainstream ideology. There is great resistance. There are regular interrogations by
The Division of Labor in Knowledge Production

Implied in the above discussion is the existence of a hierarchy of power (Van Dijk, 1993b) in the production of the knowledge of the discipline. There are some who speak with authority; they are "author-ized" to speak, while others must listen (Usher & Edwards, 1994). Van Dijk (1993b) refers to the former group as the "power elites" who have "special access to discourse; they are literally the ones who have the most to say" (p. 255). The elites of the discourse have a particular social power.

Social power could be understood as involving control of one group over others regarding acts (limiting freedom) or cognition (how people think) (Van Dijk, 1993). The social power referred to here is primarily concerned with the cognitive aspects of power that involves knowledge production, or "managing the minds of others...a function of text and talk" (Van Dijk, 1993b, p. 254). Although the idea of "managing minds" may be startling it is the latent purpose of the dominant discourse of educational psychology. The dominant discourse is aimed at initiating novices into a particular meaning system, i.e., "facts, concepts, principles, and research methods that will be both theoretically enlightening and practically useful" (Gage & Berliner, 1991, p. xvii).

critical educational theorists and local resistances as well. The mainstream discourse, however is unyielding to change.
"Meanings" and hegemonic discourses. Those who are considered authorities purport to clarify meaning. Meanings that are accepted generally are understood as social cognitions (Van Dijk, 1993). These social cognitions influence "beliefs, understandings, attitudes, ideologies, norms and values" (Van Dijk, 1993, p 257). Clearly, classic textbooks take this as a goal, i.e., reproducing social cognitions by supplying meanings and definitions for various concepts.

Teachers of educational psychology may accept their task as "transmitting" (Freire, 1970/1992; Macedo, 1994) the meaning of the discourse to students. Students are, in a sense, positioned as receivers of knowledge, "consumers" of the dominant discourse presented in textbooks. Of course, the teaching-learning process is more complex than simply determined by the reproductive metaphor. On the one hand, students of educational psychology are active participants in their own learning, and their learning could never be determined by these texts. However, on the other hand, the rationality of the dominant discourse does steer them in the direction of particular interpretations.

As the discussion on narrative realism pointed out meanings in textbooks often appear to be fixed; they are presented as objective and static. "Textual" features are used to reinforce these meanings. The Gage and Berliner (1991) text supplies a glossary "providing brief definitions
of key terms appears at the end of the text" (p. xx) and marginal notes "highlighting important points ...in the margins of each page...quick guides to key ideas and issues..." (p. xix). Woolfolk (1995) furnishes readers with a margin glossary that "defines terms of the text to provide easy access (emphasis added) to the terms and their relevant examples as the student studies" (p. IS-ix).

A poststructuralist analysis makes the idea of meanings as fixed problematic. What is necessary is recognizing how power infiltrates language (Cherryholms, 1988) constructing social cognitions. Cherryholms insists

Culturally sanctioned, positive, and authoritative knowledge is incomplete, interest-bound, tied up with existing power arrangements, and cloaked in certainty. As the illusion of certainty is dispelled, it becomes possible to uncover the origins and commitments of our structures and the effects of power that led to their production. (p. 70)

Modern textbooks bear the effects of power and represent a privileged view of the material they present. The school knowledge they contain "reveals which groups have power....[and] which groups are not empowered by the economic and social patterns in the society" (Anyon, 1983, p. 49). These become obvious in omissions, stereotypes, and distortions that are found even in updated versions of textbooks (Anyon, 1983). Consider the following examples of stereotypes regarding American Indian cultures:

Some place high value on the skills required in weaving. Some of them depend on spearfishing for much of their food. If industrial society valued these skills in the same way, our educational system would
focus on them and our definition of intelligence would give them greater importance. (Gage & Berliner, 1991, p. 53-54)

At least two assumptions in this statement are problematic; one is that all members of given groups "share the same cultural and behavioral patterns" (Sleeter & Grant, 1993, p. 76). This refers not only to the minority groups, but the assumption pertains to the dominant groups as well. Another implication is that the minority group is deficient in comparison to the dominant culture. Both assumptions though erroneous serve to reinforce stereotypes, perpetuate social cognitions, and disguise oppression or power relations.

Meanings attributed to "race" are especially noxious and significant. Gage and Berliner (1991) note that "race" "typically should refer solely to such psychologically unimportant characteristics as skin color, eye shape, and facial configurations" (p. 79). Woolfolk (1995) defines "race" as: "A group of people who share common biological traits that are seen as self-defining by the people of the group" (Woolfolk, 1995, p. 165).

The essentializing of race as a stable and biological characteristic persists in both texts although this representation is generally considered anachronistic within the scientific community (Harding, 1996). It continues to be used in some discourse communities despite the fact that all scientific attempts to show any biological definition have been exposed as untenable (Hall, 1996). The reason this
representation persists is because it serves a discursive function as it codes race as fixed (Harding, 1996; Hall, 1996). This has a naturalizing effect as it constitutes social, cultural, political differences among people as if they function according to the logic of nature (Hall, 1996). Through a professed "disinterest" in "race" the understanding of meritocracy that is based on individual merit, hard work, and achievement (Haymes, 1996) can be preserved.

How is it that stereotypes and incorrect information continue to be presented in current textbooks? The possibility of the effects of power relations must be considered. Some individuals may dominate a field, not because of their arguments but "because of their positional authority" (Cherryholms, 1988, p. 89). What is important to recognize is that often those considered the "elites" of the discourse (van Dijk, 1993b) may "enact, sustain, legitimate, condone, or ignore social inequality or injustice" (van Dijk, 1993, p. 252) supported by the official knowledge of the discipline. Thus, knowledge in a dominant discourse needs to be interrogated as the "property of an elite establishment working to maintain its power" (Usher & Edwards, 1994, p. 198). When this is understood it facilitates a critical position in both teachers and students.
Summary

The work of this chapter focused on beginning an interrogation of the dominant discourse of the discipline of educational psychology using two classic textbooks. The first part of the chapter discussed disciplinary principles understood in terms of technical rationality. These principles, although supplying a grounding of the discipline, are rarely examined. In addition to providing a resource, they constrain the discipline and, therefore, are problematic and need to be interrogated. The remaining portion of the chapter considered the non-discursive aspects of the discipline that include the social and political contingencies in which the discipline is embedded.

This discussion is important not solely on the level of ideas. The meaning-making system and power relations of the discipline are important because they affect the everyday discursive practices of schooling and the material conditions of children's lives. These practices are the focus of Chapter V.
CHAPTER V
DISCIPLINING THE DISCIPLINE

Introduction

This chapter\(^{56}\) takes as its focus an examination of the practices sanctioned by educational psychology's dominant discourse and the effects of these practices. The discussion of Chapter IV regarding the disciplinary principles and the non-discursive power/knowledge relationships of the discipline facilitates the turn to this focus. This turn is imperative as the ideas generated by the meaning-making structure evident in the discursive principles of educational psychology "gain strength and are a form of power [because]...they take concrete shape in the actions of our daily lives" (Freire & Faundez, 1992, p. 26).

The argument presented in this chapter is that the mainstream discourse of the discipline relies on and perpetuates a static and mechanistic view of the world (Freire, 1970/1992). Through a process of education, often well-intentioned, students are "socialized" so as to adapt to this world. Students are judged, labeled, sorted, and

\(^{56}\)The sense of the word "disciplining" in the chapter title was inspired by the title of Jana Sawicki's (1991) book, Disciplining Foucault. It is used here to highlight a major focus of the chapter, that is, to subject the discipline to scrutiny.
selected according to how well they adapt. They are frequently viewed as "abstract, isolated, independent, and unattached to the world" (Freire, 1970/1992, p. 69), thus, made "objects" of a system of domination. Through its knowledge base and practices the discipline claims to explain characteristics of the student and the teacher; the assertion of the discipline is "to know those objects truthfully....[by their] 'natural characteristics" (Usher, 1993, p. 18).

Using the perspective of Foucault a different view is proposed. Foucault is skeptical regarding modern disciplines especially those connected with education (Ball, 1990). Foucault's contention is that knowledge of the modern disciplines is organized around the power to define and name others (Sarup, 1993); especially to define persons as normal and as abnormal. Human beings are formed and made subjects of the society through the process of normalization. The knowledge and the practices of the human sciences are central to this process because through their specific knowledge-claims and practices human beings are formed and constituted. These specialized knowledges produce a new

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57 Foucault wants to disrupt the commonsense positive idea usually attributed to socialization. His explanation of normalization is akin to Freire's idea of education's naming and positioning learners as "object".
subject, a subject\textsuperscript{58} of a particular kind (Marshall, 1990), i.e., subjects who are docile and useful. Foucault's contention is that every modern discipline is "a general formula of domination" (1995, p. 137). Thus, the knowledge of modern discipline "ceases to be a liberation and becomes a mode of surveillance, regulation, discipline" (Sarup, 1993, p. 67). The specific disciplinary practices derived from the knowledge claims of educational psychology are implicated and inter-related in the processes whereby societies control and discipline their populations (Philip, 1985).

I begin this chapter by taking up Foucault's idea of the meaning of the human sciences as "disciplines". The contemporary understanding is tied to the former meaning of discipline, i.e., it is concerned with the control of bodies. The understanding of "trope" helps illuminate this connection. Next, the formation of the discipline is presented. The discussion begins with Foucault's concept of genealogy through which he explicates how every historical era has sought control over populations; changing only the strategies through which control is achieved. The human sciences are the current means through which control is gained. Next, three disciplinary technologies are presented

\textsuperscript{58}While Freire (1972) refers to "objects" Foucault (1995) refers to "subjects" of a "particular kind", i.e., docile and useful. There is irony here in that both words can convey similar meaning.
that Foucault suggests form the basis of the disciplinary practice, i.e., hierarchical observation, normalizing judgement, and examination. These disciplinary practices are utilized by disciplines to normalize students and are located in the everyday activities of school life. Finally, I use these disciplinary technologies to inform my critical reading of the dominant discourse of educational psychology expressed in two classic textbooks.

A thorough examination of these various points is important in order to render visible what has been taken-for-granted, i.e., to make the familiar strange (Foucault, 1977/1995). The presentation of the everyday practices can and must be looked at differently because "as soon as one can no longer think things as one formerly thought them, transformation becomes both very urgent, very difficult, and quite possible" (Foucault, 1988, quoted in Dales, 1992, p. 83).

Discipline: Control of Bodies

"Discipline" as Trope

One meaning of "discipline" was taken up in Chapter IV. "Disciplines" were discussed as they are usually considered, i.e., "neutral, scientifically validated bodies of knowledge whose only effects are enlightening and empowering and which thus enable effective action" (Usher & Edwards, 1994, p. 48). However, this chapter takes up a different meaning of discipline. The word "discipline" can be understood more
fully through a consideration of "trope". Tropes are words where new meanings contain residues of former uses of the word; new meanings are understandable in connection to the original sense of the word (Briscoe, 1993). Tropes help us notice what could have been missed without their recognition; they make us swerve (Haraway, 1996) and see things differently.

In thinking about "discipline" as a trope it is helpful to consider its various lexical meanings:

1. Training expected to produce a specific pattern of behavior....
2. Controlled behavior resulting from disciplinary training.
3. A systematic method to obtain obedience.
4. A state of order based on submission to rules and authority.
5. Punishment intended to train or correct.
6. A set of methods or rules [that regulate] practice....
7. A branch of knowledge or of teaching.  
(Soukhanov, 1984, p. 383)

It is not until the sixth and seventh meanings that a match is found for our commonsense understanding of the word "discipline" used in the context of a body of knowledge. Educational psychology, for example, as a discipline and branch of psychology includes laws and principles, theory, and practice aimed at improving teaching and learning. However, recognizing discipline as trope helps one to appreciate Foucault’s meaning of disciplinary power; it is important to see the connection with the other meanings
listed for the word "discipline". The discipline, the human science of educational psychology, is connected with managing and controlling the bodies of students, i.e., behavior. The recognition of the dynamic relationship among power, knowledge of the discipline, and the control of bodies is necessary to understanding the practices of the discipline.

Disciplines and Bio-Power

In Discipline and Punish Foucault (1977/1995) connects the control of the body and the growth of the scientific knowledge of disciplines since the seventeenth century. Foucault studies the spread of "disciplinary mechanisms... [as] techniques through which modern societies train and regulate individuals" (Sarup, 1996, p. 72). In modernity, as the "objective" science developed so did "a radically new regime of power/knowledge" (Fraser, 1989, p.22) through the discipline's discourse. This shift in regimes of power from the classical age through modern times will be discussed later in the chapter, however, it is important to emphasize here that the aim of the disciplinary technologies remains the same, the control of the bodies of human persons.

Foucault explains two manifestations of power over the

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59Shumway (1989) notes that this double meaning of "discipline" is sometimes considered as nothing more than an elaborate pun. However, Dreyfus and Rabinow (1983) explain that it is far from a "rhetorical convergence" as Foucault asserts that "the very self definition of the human science as scholarly 'disciplines'...is closely linked to the spread of disciplinary technologies" (p. 160).
body. One manifestation is "bio-power", a "modern form of power... characterized by increasing organization of population and welfare for the sake of increased force and productivity" (Dreyfus & Rabinow, 1982, p. 7-8). Dreyfus and Rabinow explain that bio-power is so ubiquitous that it appears as a "strategy, with no one directing it and everyone increasingly enmeshed in it, whose only end is the increase of power and order itself" (p. xxvi). This modern form of power is a control and regulation of the masses, a kind of macro-politics. However, it did not emerge as a coherent management process. It was preceded by Foucault's other manifestation of power, micropolitics.

Micropolitics developed as administrators in various institutions were faced with the daily government of large numbers of people. The historical process of growing and shifting populations, for example, was connected to the formation of the disciplines (Smart, 1985). In order to manage and control the growing number of those in their charge "a variety of 'microtechniques' were perfected by obscure doctors, wardens, and schoolmasters in obscure hospitals, prisons, and schools....only later were these techniques and practices taken up and integrated" (Fraser, 1989, p. 22). In other words, specific tactics were "invented and organized from the starting points of local conditions and particular needs....in piecemeal fashion" (Foucault, 1980b, p.159). Only later were these procedures
gathered to form a coherent discourse.

An example of the development of the local conditions generating specific practices can be found in writings about the history of educational psychology. Hilgard (1996), for example, notes that in the later part of the 19th century before educational theory and teacher education became "centered in the universities, most of the adaptions of education...were made by...school administrators" (p. 992). To make his point Hilgard recounts the work of William Torrey Harris (1835-1909). Harris was superintendent of the St. Louis, Missouri school district as the Civil War was ending, a time of increased industrialization and immigration to the area. Hilgard (1996) explains the need for specific procedures to manage the burgeoning numbers of children in the schools of St. Louis:

The problems of school buildings, school management, and teacher training loomed large as the heterogeneous population expanded, and Harris took seriously his efforts to provide universal education on an efficient and effective basis. He did this by adopting the graded school so that the curriculum could be planned according to the movement of pupils through school, with careful records of attendance, of ages at leaving school, and of the progress of learning. (Hilgard, 1996, p. 992)

The specific procedures, or micropolitics, utilized by Harris (i.e., graded classes, records of attendance and progress of students) imposed an "order" or governmentality on the schooling of children in a particular time and locale. Only later would these practices and others would be gathered and generalized into a discourse.
Another notable example of the development of a tactic of micropolitics is the development of the first so called "intelligence" tests by Alfred Binet (1857-1911) and his student Theodore Simon (1873-1961). Universal education mandated in France in the nineteenth century meant that all French children be given several years of public education (Fancher, 1985). It is noted that for the first time "retarded [sic] children [were included], who in earlier years would have dropped out early or never attended school at all" (Fancher, 1985, p. 69). A diagnostic tool was thought to be needed to identify children who "could not profit from instruction in the regular public schools in Paris" (Lewontin, Rose, & Kamin, 1984/1996).

In 1904 Binet and Simon responded to this local need and formulated an intelligence scale. Binet's original intention was to "construct an instrument for classifying unsuccessful school performers" (Mensh & Mensh, 1990, p. 23) into different groups: idiots, imbeciles, and "debiles" or "weak ones" (translated to "moron" in America, see Fancher, 1985). Sorting students and bringing "order" to the educational system of the time was a function of the tests that were developed. Gage and Berliner (1991) report that these terms are no longer adequate or acceptable. However, three categories are still used: "Although definitions vary by state, many federally funded programs are designed with three levels of mental retardation in mind....severely and
profoundly mentally retarded...trainable mentally retarded...educable mentally retarded" (p. 209-210).

Later, the scales of Binet and Simon were appropriated for a variety of uses in the United States. For example, the army used variations of the test during World War I "not primarily for the exclusion of intellectual defectives...but rather for the classification of men in order that they may be properly placed in the military service" (Yerkes, quoted in Fancher, 1985, pp. 117-118). Post-war analysis of the results helped frame the rationale of the Immigration Act of 1924 defining immigrant groups thought suitable to become U. S. citizens. The testing movement is also linked to the passage of a series of sterilization laws beginning in 1907 and declared constitutional by the Supreme Court in 1927 (Lewontin, et al., 1984/1996).

Not long after these applications educational institutions adopted these tests as a tool for studying individual differences in order to make "formal schooling a successful and rewarding experience for the whole school-age population" (emphasis added, Jensen, 1987, p. 61). According to students' "ranking" in tests they could be sorted into "appropriated instructional programs...[that] can make it possible for the vast majority of children to attain at least the basic scholastic skills during their years in school" (Jensen, 1987, p. 86.). The intelligence test, designed for specific locations, has gradually grown into a
still burgeoning market-driven industry (Sternberg, 1992).

The point that needs to be clear is that the discourse of the discipline of educational psychology did not emerge self-contained and coherent. The shift in demographics led to the need to govern growing student populations. Gradually, the implementation of the practices of management were established. Of particular importance were the practices of sorting students; this was deemed necessary to bring order to local school situations. This demographic shift was accompanied by the shift toward industrialization and growth of capitalism and formed a particular historical conjuncture with an emphasis on increased production and efficiency.

There is another historical process occurring at the same time, referred to as a juridico-political process (Smart, 1985). The juridico-political historical process refers to the formal and legal structures of societies that were established around the existing power relations of the eighteenth and nineteenth century simultaneous to the demographic shifts that were occurring. This process of modern law-making took over the power of the sovereign of pre-modern times. The juridico-political process that developed guarded the status of the group wielding political power. An example of this historical process can be found in the contradiction of the framers of the U.S. Constitution. At the same time that freedom was guaranteed to all,
provisions recognizing and protecting slavery were also included (Bell, 1997). Myriad examples are found in the history of United States.

This is the milieu in which the growth of scientific knowledge gains importance. The scientific historical process refers to the increasing complex relationship between the formation of knowledge and the exercise of power.

The Formation of Disciplinary Practices

Genealogy

...the goal of my work over the past twenty years...has been to create a history of the different modes by which, in our culture, human beings are made subjects. (Foucault, quoted in Dreyfus & Rabinow, 1983 p. 208)

Foucault is skeptical about the ability of human sciences, or any totalizing discourse, to create a utopian dream of progress. He bases his skepticism on the "historical evidence...that what looks like a change for the better may have undesirable consequences..." (Sawicki, 1991, p. 27). Foucault offers the genealogy as a way to critique totalizing discourses (Sarup, 1993; Smart, 1985). The genealogist "is a diagnostician who concentrates on the relations of power, knowledge, and the body in modern

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Foucault explains that it is possible to see how power operates by looking at where there is resistance. To see how power operates in a juridico-political process in U.S. history we can look at the civil rights movement. Brown vs. the Board of Education is a pertinent example.
society" (Dreyfus & Rabinow, 1983, p. 105). The genealogy that Foucault presents is a particular history, clearly not "history" in the usual sense. Foucault (1980c) asks us to see a genealogy as a kind of attempt to emancipate historical knowledge from that subjection, to render them, that is, capable of opposition and of struggle against the coercion of a theoretical, unitary, formal and scientific discourse. (p. 85)

Sawicki (1991) explains genealogy as "resistance" which "involves the use of history to give voice to the marginal and submerged voices that lie 'a little beneath history' - the voices of the mad, the delinquent, the abnormal, the disempowered" (p. 28). The purpose of highlighting these subjugated and disqualified knowledges is both "modest and profound...to disrupt commonly held conceptions about events and social practices rather than to proffer, from on high, proposals for reform" (p. 62).  

**Genealogy of the Prison**

The genealogy of the prison presented by Foucault (1995) in *Discipline and Punish* has influenced the way I look at the discipline of educational psychology. Foucault believes that the prison is the "most characteristic of

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61 Michelle Fine (1991) presents a helpful example in her work *Framing Dropouts*. The voices of "dropouts" speak for themselves about their educational experiences. Their critical voices are juxtaposed against the bureaucratic discourse that both silences them and excludes them from the educational system.

62 This book is considered by some to be Foucault's masterpiece (Sarup, 1993).
disciplinary institutions, one which schools, factories, and hospitals all come to resemble" (Shumway, 1989, p. 133). It is Foucault's intention that his "history" of "the birth of the prison" can, or "must serve as a historical background to various studies of the power of normalization and the formation of knowledge in modern society" (p. 308). Normalization and a particular knowledge of each student are key aspects around which educational psychology is organized.

Foucault (1995) explains that every society had its means of control of the body. He describes this control within the historical recounting of the "birth of the prisons" beginning with the classical age, through the reform era, and arriving at the formation of the modern penal system. It is beneficial to present a sketch here.

In the classical age Foucault recounts the torture of Robert Francois Damiens, accused of trying to assassinate Louis XV, in 1757. The story delineates torture as a means whereby the sovereign is able to reinstate his authority; public torture being a kind of political ritual (Dreyfus & Rabinow, 1983). The brutality of the torture is fierce. The punishment leaves its marks, literally, on the body of the condemned, the subject of the sovereign. The retelling of this torment, however, is meant as an exercise in defamiliarization (Shumway, 1989); the cruel torture is obviously of another era. One finds oneself thinking, "We've
come a long way from such barbarism!"

Foucault continues with a review of the eighteenth century reforms for the punishment of crimes and criminals. In this era of reform torture decreases, but the person of the wrongdoer continues to be visible to the public. The accent in this system is on restoring the social contract, with penalties meted out according to the crime committed (i.e., the punishment for murder was death; arrogance was punished by humiliation; the lazy person was sentenced to hard labor). The "corrections" notion was put in place as each "punishment would function as a deterrent, a recompense to society, and a lesson, all immediately intelligible to criminal and society" (Foucault, 1977/1995, p. 148). The body in this era was marked, but marked differently than in the classical age. The body bears the representation of the evil of the crime (Shumway, 1989). 63

Describing the crime accurately was of utmost importance in this era of reform. Only in knowing the crime exactly could the proper punishment be given, and the correct ordering/reordering of social life made possible. Precise knowledge of the crime and the criminal allowed for "reformers...to construct a comprehensive table of knowledge in which each crime and its appropriate punishment would find its exact place" (Dreyfus & Rabinow, 1983, p. 149).

63The wearing of the scarlet letter by Hester Prynn, a character in Hawthorne's novel The Scarlet Letter, provides a helpful example.
Foucault reports that the model for this kind of individualization was taking place in natural history of the late eighteenth century. He refers to the prison reforms as a "Linnaeus" of crimes and punishments, so that each particular offense and each punishable individual might come, without slightest risk of any arbitrary action, within the provision of a general law" (Foucault, 1977/1995, p. 99). Knowing the crime and the criminal exactly emphasized the importance of the practice of representation. The marks on the body of the classical model are replaced by "signs, coded sets of representation" (Foucault, 1977/1995, p. 130) in the reform period.

The third development within the penal system, the modern model, was referred to as "the gentle way" (Foucault, 1977/1995) where "power must act while concealing itself beneath the gentle force of nature" (p. 106). This development is characterized by the appearance of the physical building, the prison, where economy and morality were combined (Dreyfus & Rabinow, 1983) in the methodical use of time (e.g., timetables were enforced and strict horaria were kept) and space (e.g., isolation in cells).

Prisoners were isolated from the rest of society as they were to be feared by society and more easily controlled

*A reference to Carolus Linnaeus (1707-1778) the Swedish botanist who originated binomial taxonomic classification. A statue in his tribute graces the entrance to the visitors center at the Chicago Botanical Gardens.*
behind the prison walls. Solitary confinement within the prison was added to the confinement as well, so as to facilitate meditation by the prisoner of his transgression. All activities of the prisoners' day, including the work which was required for economic purposes, were under strict surveillance. The acquiring of exact knowledge of the prisoner was very important and made possible through "dividing practices": separating prisoners from society, and often, from each other; separating the person of the prisoner into segments, i.e., the crime, intention, psychological state of the prisoner. In this way reform was sought to effect the "soul" of the prisoner in the re-socializing effort.

Distinct breaks appear with the reforms of the previous era in this third model of punishment. The focus is on the modification of the prisoner's behavior, rather than public representation of a violation and punishment. The primary aim becomes the reform the soul. The body in this era is like a machine (Shumway, 1989), and the success of the incarceration depended on the training and production of a "docile" and useful body (Dreyfus & Rabinow, 1983). But, it was really the soul that was being formed and re-formed. Instead of the commonsense understanding of the soul as the prisoner of the body, what Foucault wants to emphasize is that the body is actually the prisoner of the soul. The control of bodies remains the primary goal of state control;
the means is the "gentle way", through forming the soul.

Summary. In *Discipline and Punish* Foucault explains how in modern times the focus has shifted from the overt control of the body, exemplified by monarchial power (Sarup, 1993). The shift to a modern form of control is of a different order (Smart, 1985) although still focused on the control of the body. This shift is characterized by an exercise of power over the body which is covert; it is constant, regular, efficient, and unseen. It is characterized by Foucault (1995) as the "gentle way" of control, yet it is every bit as potent as the control of former eras.

**Disciplinary Technologies**

Foucault’s major concern is the way modern forms of power constitute individuals (Ball, 1990). The normalizing power of institutions, often characterized as a socializing effort, is key in this process and is produced through the disciplines of the human sciences. Foucault (1980) understands disciplines as systems of power with particular "structures and hierarchies...inspections, exercises and methods of training and conditioning" (p. 158) that have been "developed, refined, and used to shape individuals" (Marshall, 1990, p. 15). Disciplines of educational institutions, not unlike the prisons described by Foucault, exercise a kind of bio-power, a modern form of power. This is accomplished in the "increasing ordering of all realms under the guise of improving the welfare of the individual
and the population...a strategy, with no one directing it and everyone increasingly enmeshed in it" (Dreyfus & Rabinow, 1983, p. xxvi).

Foucault's "gentle way" is an apt description of this control through a discipline's normalization of students as they are rendered docile and useful. The dominant discourse of educational psychology, although using other words, seems to concur with normalization as the goal of the discipline as it is stated:

Because education is aimed at causing (emphasis original) wanted changes in people - in their knowledge, skills, and attitudes - the discovery of ways to cause these changes has great practical importance. (Gage & Berliner, 1991, p. 14)

This perspective of causing "wanted" change echoes what Thorndike (1910) asserted as the discipline was developing in the beginning of the twentieth century:

The aim of education is....changing [the student] for the better - to produce in him the information, habits, powers, interests and ideas which are desirable.65 (p. 4)

The "way" to cause these "changes" is the stuff of educational psychology, its knowledge-claims and practices. The normalizing practices of the discipline are utilized to render bodies "docile" as the individual is "subjected to habits, rules, orders, an authority that is exercised continually around him and upon him, and which he must allow

65This quote takes on added meaning when it is connected to Thorndike's leadership in the eugenics movement (Fancher, 1985; Karier, 1972).
to function automatically in him" (Foucault, 1977/1995, pp. 128-129). This also describes what Freire (1992) means by "banking" education:

...the educated man is the adapted man, because he is better 'fit' for the world...the purposes of the oppressors, whose tranquility rests on how well men fit the world the oppressors have created, and how little they question it. (p. 63)

Foucault (1995) specifies disciplinary practices as the technologies of: hierarchical observation; normalizing judgement; and, the examination. These major disciplinary "technologies" are understood as the "methods which made possible the meticulous control of the operations of the body that assured the constant subjection of its forces and imposed upon them a relation of docility-utility" (Foucault, 1977/1995, p. 137). Yet they are very simple instruments, perhaps that is the reason they are so effective (Foucault, 1977/1995).

Each of the three disciplinary technologies will be presented next. A discussion of the way these disciplinary technologies pervade the discipline of educational psychology follows.

Hierarchial Observation

Hierarchial observation is the disciplinary technology understood as a kind of "optics of power" (Dreyfus & Rabinow, 1983). It signifies the alliance between visibility and power (Smart, 1985). It is both a literal and a figurative observation. The purpose of requiring that
individuals be visible is to make it possible to know them; when people are known they can be changed, thus controlled and rendered docile. First in importance is determining the "nature" of the person, or seeing the individual as s/he really is.

Foucault (1995) explains the importance of understanding the significance of architecture to this optics of power. The palace, for example, was built to be seen, a symbol of the sovereign ruler; the fortress was built to observe the space external to it. However, the school (as well as the prison) was constructed "to render visible those who are inside it....to act on those it shelters....to make it possible to know them, to alter them" (p. 172). The schoolhouse, then, became figuratively and literally an apparatus of observation, a kind of "microscope of conduct" (Foucault, 1977/1995). Through observation, knowing, and training the normalization of students can take place.

The ideal situation is a single eye of authority seeing everything constantly (Smart, 1985). However, as numbers grew it became increasingly difficult for a "single eye" to supervise all students. A division of the work of the optics of power, or a system of "supervision", developed as a "disciplinary gaze" that took the form of a hierarchy of continuous and functional surveillance (Smart, 1985). The example discussed earlier of William Torrey Harris
initiating the graded schoolhouse is a useful reference for this system of supervision. As the one room schoolhouse was no longer practical because of growing numbers, students were separated into the graded school.

The disciplinary gaze developed as an analytic of observation (Dreyfus & Rabinow, 1983) that separates individuals into categories and distinguishes them "by an almost infinite number of means" (Shumway, 1989, p. 127). Hierarchical observation in schooling aims to see students (figuratively and literally) more clearly and thus know them more correctly, and aimed at eventually being able to alter and control students. Foucault (1995) refers to hierarchical observation as the "uninterrupted play of calculated gazes".

**Surveillance** is an important aspect of hierarchical observation. Foucault (1977/1995) introduces the image of the panopticon to demonstrate the potency of surveillance used in prisons. The panopticon of Jeremy Bentham was meant to produce the effect of "the state of consciousness and permanent visibility that assures the automatic functioning of power" (p. 201). Bentham’s model called for a central watch-tower surrounded by tiered rows of cells. Light from windows in each cell and a open space facing the center tower allowed for prisoners to be in the constant view of the "super-visor".

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66 Jeremy Bentham (1748-1832), the English philosopher and reformer.
The economy of this mechanism is a major feature of the panopticon’s usefulness. It allowed for the constant surveillance of each prisoner and, at the same time, did not require constant surveillance of each prisoner. Although prisoners knew that they could be watched at any time they never could be sure when they were being watched. The economy and effectiveness of this model was exacerbated as the prisoners began to internalize the gaze of the supervisor; that is, they watched themselves.

Foucault (1995) tells us that this mechanism, a form of hierarchal observation sets up a network of relations from top to bottom, but also to a certain extent from bottom to top and laterally; this network ‘holds’ the whole together and traverses it in its entirety with effects of power that derive from one another: supervisors, perpetually supervised...

(pp. 176-177)

The internalization of the gaze of the supervisor is extremely significant in the formation of the subject. This internalization has implications for teachers as well as students. Teachers know that they are under the watchful eye of administrators as well as the public. Teachers, too, internalize the gaze of those in authority and of the dominant culture; they learn to watch themselves. To be effective and economical the complicity of those who are watched must be enlisted.

**Normalizing Judgement**

Hierarchical observation allows for judgement and evaluation, and the basis of judgement is the norm (Jones,
The technology of normalizing judgement is said to be at the heart of any system of disciplinary power (Foucault, 1977/1995; Smart, 1985). Disciplinary practices need standards around which its operations can be organized so individuals and groups are assessed by "comparisons with a favored paradigm real or imagined" (Prado, 1995, p. 61).

Normalizing judgement has the simultaneous action which marks its power, that is, it assumes and imposes homogeneity and introduces individuality:

The power of normalization imposes homogeneity, but it individualizes by making it possible to measure gaps, to determine levels, fix specialties and to render differences useful by fitting them into one another. It is easy to understand how the power of the norm functions within a system of formal equality, since within a homogeneity that is the rule, the norm introduces, as a useful imperative and as a result of measurement, all the shading of individual differences. (Foucault, 1977/1995, p. 184)

Any behavior can be quantified and ranked as it falls on a field between two poles, good and bad (e.g., grades on tests, effective and ineffective teachers). Foucault tells us that it has become possible through the modern sciences to "quantify this field and work out an arithmetic economy based on it" (1995, p. 180). That is, "an objective hierarchy can be established by which the distribution of individuals is justified, legitimated and made more efficient" (Dreyfus & Rabinow, 1983, p. 158).

A system of penalties and rewards is effective in establishing and supporting normalization. Punishments are exacted for the slightest deviation from the norm, referred
to as micro-penalties. Micro-penalties grew to include more and more areas of life (Dreyfus & Rabinow, 1983). Examples of micro-penalties include issues around the following: time (e.g., lateness, absence), activity (e.g., inattention, lack of zeal), behavior (e.g., impoliteness, disobedience), speech (e.g., idle chatter, insolence), body (incorrect gestures, attitudes, cleanliness), sexuality (e.g., impurity, indecency) (Foucault, 1977/1995). An important issue regarding this system is that rewards are dispensed as well as punishments. This emphasizes that the intention of the system is normalization, not repression.

The established norm is the assumption of homogeneity; in reference to the norm finer and finer differentiation and individualization is possible. Through this differentiation then it is possible to "objectively" separate and rank individuals.

Examination

The examination is at the "heart of the procedures of discipline..." (Foucault, 1977/1995, p. 184). It combines the other two disciplinary instruments, hierarchical observation and normalizing judgement, into what Foucault (1995) calls the "normalizing gaze". This is the disciplinary technique in which can be found "a whole domain of knowledge, a whole type of power" (p. 185) which allows for differentiation, classification, and judgement of its subjects. Foucault (1995) considers this technology as a kind of tiny, slender,
widespread "ceremony of objectification" (p. 187). As such it marks "an explicit instance of the connection between power and knowledge" (Shumway, 1989, p. 131).

Increased visibility is a key effect of the examination. Foucault reminds us that in feudal times the most visible people were the most important people, e.g., the king, the epic hero. With the rise of modern sciences the common folk are the ones who become visible as they are subjected to the mechanisms of objectification through the examination. This disciplinary technique of examination has the power to bring the individual into view, able to be seen in multiple ways and with finer and finer differentiation. What needs to be highlighted, though, is that the examination is the "gaze" of the one with more power upon the one with less or no power (Shumway, 1989). The visibility of the subject, or student, is heightened as more and more features of the person are tested and a gathered into a file. Individuals become "cases" through the gathering of common occurring attributes and differences (Smart, 1985), a case that can be described and analyzed, known, categorized, and re-formed.

The way Haraway (1988/1996) highlights the metaphor of vision is helpful here. She insists that the visualizing technologies, exemplified in the examination, "are without

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See Hanson (1993) for a comprehensive discussion of the number and variety of tests available and used in the U.S., in school settings and beyond.
apparent limit; the eye of any ordinary primate like us can be endlessly enhanced. Vision in this technological feast becomes unregulated gluttony" (pp. 188-189). Haraway insists, however, that vision is always embodied. The eyes that see belong to some-body. This understanding exposes the impossibility of a "gaze from nowhere". The image of the eyes of the knower as always embodied renders problematic the claim of modern scientific methods that profess to "factor-out" or "control-for" the person of the scientist as the results or findings are understood to speak for themselves. On the contrary, the only possibility is vision from somewhere, from some-body, i.e., situated knowledge (Haraway, 1988/1996).

The effectiveness of this disciplinary technique of the examination is intensified through an inversion of visibility; as the individual becomes more visible the disciplinary power itself becomes invisible. Foucault (1995) explains:

Disciplinary power...is exercised through its invisibility; at the same time it imposes on those whom it subjects a principle of compulsory visibility. In discipline it is the subjects that have to be seen. Their visibility assures the hold of the power that is exercised over them. It is the fact of being constantly seen, that maintains the disciplined individual in his subjection. And the examination is the technique by which power, instead of emitting signs of its potency, instead of imposing its mark on its subjects, holds them in a mechanism of objectification. (p. 187)

Thus, despite its potency, the technology of power that facilitates the rendering of subjects as objects is itself
invisible, i.e., the productive character of the examination is itself invisible even as it renders its subject visible. In its ubiquity the normalizing activity of the examination is not questioned. The necessity of the examination in its multiple forms is a commonsense practice; it is taken-for-granted, considered natural or normal, as though things could not be otherwise. And this is also what renders it unquestioned and invisible.

Through the technology of the examination classifications and comparisons of persons become possible along increasingly finer gradations. Individual differences become significant. Foucault highlights the point that the modern individual is a historical achievement. Subjects are the product of the disciplinary power by which subjects are objectified, analyzed, and fixed (Dreyfus & Rabinow, 1983). Modern sciences have yielded the individual who is both the effect of power and the effect of knowledge, an example of questionable progress, from a dubious science (Foucault, 1977/1995). This is a key example of what Foucault calls the productive aspect of power:

We must cease once and for all to describe the effects of power in negative terms: it 'excludes', it 'represses', it 'censors', it abstracts, it 'masks', it 'conceals'. In fact, power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge gained of him belong to this production. (p. 194)

In other words, professionals in the discipline produce the knowledge they apply (Caputo & Yount, 1993), "they create
the knowledge they require in order to fashion functioning, well-formed individuals" (p. 7). Through this normalizing technology students become objectified; they become their "scores" as they receive their "marks".

This is an inversion of a modernist understanding that knowledge of the subject emerges through the technologies of the discipline. Subjects are in-scribed by the technologies of the discipline rather than de-scribed by them.

**Disciplinary Technologies in Educational Psychology**

The disciplinary technologies (i.e., hierarchical observation, normalizing judgement, examination) described by Foucault (1995) are obvious and operative in the discipline of educational psychology's discursive practices. The illustration of these technologies provides a way to interrogate how educational psychology uses power and knowledge to normalize students, i.e., to render students docile, neutral, and appropriate subjects. This interrogation highlights practices of the dominant discourse given expression in "classic" texts with the hope of "making the familiar strange" (Foucault, 1977/1995). When practices seem strange they are more open to critique and more readily able to be changed.

The technologies of the discipline come together in various practices generated and perpetuated by the discipline of educational psychology. The specific areas to be discussed are: 1) the surveillance practices that pervade
educational settings; 2) classroom management practices; 3) the practice of testing, especially standardized testing. In using these practices teachers step into the web of power relations through which students are normalized. Through an uncritical use of these practices teachers participate in their own normalization as well, i.e., they become docile and useful.

**Surveillance Practices**

In today's educational settings developing the capacity to see students clearly is represented as key to teacher effectiveness. Bentham's panopticon (discussed above) is a metaphor for a characteristic teachers are encouraged to develop, namely, "withitness". The effect of the panopticon was meant to effect "the state of consciousness and permanent visibility that assures the automatic functioning of power" (Foucault, 1977/1995, p. 201). Gage and Berliner (1991) describe a similar effect of withitness:

> the knack of seeming to know what is going on all over the room, of having 'eyes in the back of your head'. A teacher's awareness, and the students' awareness of it, make a difference. Teachers with high withitness make few mistakes in identifying which student is misbehaving, in determining which of two behaviors is the more serious, or in timing an effort to stop a misbehavior. (p. 512)

Woolfolk (1995) also highlights the importance of "withitness" as a characteristic of effective classroom managers whose classes are "relatively free of problems". These are contrasted with ineffective managers whose classrooms are "continually plagued by chaos and disruption"
Woolfolk states that withitness "means communicating to students that you are aware of everything that is happening in the classroom, that you aren't missing anything" (p. 416). Woolfolk repeats the optic power image of "eyes in the back of your head" and adds that "with-it" teachers avoid becoming absorbed or interacting with only a few students, since this encourages the rest of the class to wander. They [with-it teachers] are always scanning the room, making eye contact with individual students, so the students know they are being monitored....These teachers prevent minor disruptions from becoming major. They also know who instigated the problem, and they make sure the right people are dealt with. In other words, they do not make...timing errors (waiting too long before intervening) or target errors (blaming the wrong student and letting the real perpetrators escape responsibility for their behavior). (pp. 417-419)

"With-it" teachers convey to students that they can be seen and are being monitored continuously. An important effect of the proper development of this quality in teachers is so they will be able to "catch" and correct misbehaving students. Students know they will be punished for a transgression. Since normalization is the goal and not repression, students will also be rewarded for compliant behavior.

The economy of this surveillance technique is also a key factor in its utility. Since students know that there is always the possibility that they are being watched they are encouraged to internalize the gaze of their super-visor learning to monitor themselves and each other. The direction is clear, "Teach students to monitor themselves" (Woolfolk,
1995, p. 420). Thus, the power relations in the classroom are diffused as teachers watch students, students watch teachers, themselves, and each other, and so forth. There is a web of relations of surveillance being weaved as Foucault (1995) insists "from top to bottom...bottom to top...and laterally" (pp. 176-177).

**Classroom Management**

Despite the promised effectiveness of surveillance, or because of teachers' ineffective use of this technique (Gage & Berliner, 1991), children do "misbehave". Classroom management programs and practices are recommended by the mainstream discourse as explicitedly aimed at maintaining an atmosphere conducive to learning, yet there is another side to these practices. Management practices are powerful tools (i.e., technologies) used in the normalization of students as they effect increasingly finer differential categories of what it means to "mis-behave". The discursive practices of classroom management attend to "the specification of the most detailed aspects of everyday behavior, almost anything could become potentially punishable" (Dreyfus & Rabinow, 1982, p. 158).

Classroom management is a topic of special and seemingly growing import in educational psychology. There has been a marked increased in discussion of this topic in the past few decades, and it has been characterized as the number one concern of classroom teachers (Randolf &
According to a report of content analysis of educational psychology textbooks (Ash & Love-Clark, 1985) classroom management increased in amount of actual text space by 75% from 1954-64 to 1965-75. There was reported a 100% increase from 1965-1975 to 1976-83 in text space. The authors of this analysis speculated that the increased discussion may reflect the movement of textbooks toward the more pragmatic concerns of teachers and away from the 'softer' side of educational psychology (Ash & Love-Clark, 1985). Despite the lack of ability to draw definitive conclusions from this descriptive report the authors state that there have been changes in textbooks used in educational psychology "away from theory and toward the classroom" (p. 54).

The Woolfolk (1995) text, then, appropriately is attentive to the importance of issues related to classroom management. Woolfolk (1995) notes that classroom management is "one of the main concerns of teachers, particularly beginning teachers, as well as administrators and parents (p. 401). Woolfolk (1995) cites a Gallop Poll of the public's attitude toward public schools to substantiate this claim. Sixteen of the first seventeen polls list "lack of

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"Emotional and social development, and personality theory are offered as examples of "softer" areas (Ash & Love-Clark, 1985)."
discipline”⁶⁹ as the "number one problem facing schools" (p. 402). Since the late 80’s only "drug use" and "funding" issues have seized first place.

Gage and Berliner (1991), likewise, relate that all classroom needs fall into a "rough order of priority...the first [being] the establishment of classroom discipline, control, and management" (p. 509). It is claimed that "without it [classroom discipline, control, and management] nothing much of educational value can be done" (p. 509). Gage and Berliner (1991) also state that the issue of classroom management and discipline is considered by many administrators and teachers to be the "most important cause of teacher failure....[and the] leading cause for dismissal" (p. 510). If teachers are judged as being ineffective in their management of classrooms they are dismissed. This indicates that the web of power relations in classroom management practice affects teachers and students alike.

There are many points that could be made in critique of the discourse and practices of educational psychology regarding classroom management. I discuss three areas that are particularly problematic: 1) the practices of classroom management are based on a preemptory perspective; 2) "empowerment" through management practices; 3) a shift in

⁶⁹ Emmer (1987) explains that classroom management and discipline are related because "management is chiefly directed at establishing conditions for good discipline" (p. 233). The terms are often used interchangeably.
emphasis from management as a way to access the curriculum to curriculum as a way to ensure good management.

Practices based on a preemptory perspective. The discursive practices of traditional classroom management come out of a modernist view that the social world is locked into irrationality, where chaos will reign if order is not established and controlled (Ball, 1990). Practices are directed to the "problems" that arise in classrooms. As discussed in Chapter IV, these problems are viewed through the perspective of a rationality that looks for technical solutions that can be applied to restore or maintain order. Teachers and educational psychologists define, interpret, and judge both the students who resist the management practices and student's action from a hierarchical position in ways that limit the meanings that the behavior may have.

These judgements are based on an "assumption that there is a proper, correct, standard, or agreed manner of carrying oneself" (Berry, 1995). The teacher and educational psychologist know what that proper deportment looks like, and they can easily spot improper behavior. The judgement of proper/improper behavior is based on a "norm" and increasingly fine deviations from the "norm". In this atmosphere the "non-conformist, even the temporary one, [becomes] the object of disciplinary attention" (Dreyfus & Rabinow, 1982, p. 158). Although the judgements of both students and their actions are always historically,
socially, and politically contingent they are seldom problematized as such.

For example, Woolfolk (1995) recognizes difference in behavior may have cultural links. The critique that American schools "typically reflect the white, Anglo-Saxon, Protestant, middle-class, male-dominated values that have characterized mainstream America" (p. 155) is accepted as a valid appraisal. Readers are told that schooling formerly was thought to be "the fire under the melting pot" (p. 154). The importance of moving away from this assimilationist perspective, which takes this mainstream perspective as normative, is espoused; a new image of "mosaic" (p. 157) that "celebrates" and values diverse cultural behavior is introduced. 70

Yet, the deficit orientation model that judges non-mainstream behaviors as inferior resists displacement in the meaning-making basis of the text. Readers are instructed to:

...teach students directly about how to be students. In the early grades this could mean directly teaching the courtesies and conventions of the classroom: how to get a turn to speak, how and when to interrupt the teacher, how to whisper...You can ask students to learn "how we do it in school" without violating [the] principle ...respect your students.... (Woolfolk, 1995, p. 189)

What needs to be highlighted is that while "how we do it in school" is recognized as exhibiting the values of the

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70 See Sleeter and Grant (1991) for a comprehensive examination and analysis of various models of multicultural education. The "mosaic" metaphor, as well as "melting pot" is problematic.
dominant culture, and is regarded as problematic, it is never disrupted or displaced. Standards of the Anglo, male, middle-class culture remain the favored paradigm and retain the privileged position. These "standards" become the universal norm that is used to judge behavior as proper or not, and children are judged for their compliance to these norms.

Earlier in the chapter normalizing judgement was discussed as both imposing homogeneity and constructing individuals simultaneously. This dual effect is obvious in classroom management practices as conformity to the homogeneous universal standard is assumed as normative. Once this is established finer differentiation from the norm can be perceived and measured; eventually individuals can be ranked in relation to each other.

Other examples from Gage and Berliner (1991), explicate the privileged and uninterrogated view of teachers judging the behavior of students from a universalized norm. Activities of students' "misbehavior" are placed in two simple categories: 1) too many unwanted behaviors; and 2) too few wanted behaviors. Unwanted behaviors are listed as:

- physical aggression, moving around the room at inappropriate times, making too much noise, challenging authority at the wrong time or in the wrong way, and making unjust or destructive criticism and complaints. (p. 511)

Wanted behaviors that need to be increased include:

- volunteering to recite, standing up for his or her own opinion, paying attention to what is being explained or
discussed in class, being involved and active in individual or group projects. (p. 516)

What these actions mean to the students themselves is ignored or marginalized as unimportant. Behaviors are simply assigned to one category or another, and the ambiguous nature of students' behavior is eschewed. For instance, a student may view his/her own behavior as "standing up for his or her opinion", while the teacher judges the same action as "challenging authority in the wrong way" or making "unjust criticism". Deeper meanings of student behavior seem unimportant as the focus is on maintaining order and control. More frequently, that which is labeled misbehavior is lack of compliance to the preferred norm. What is ignored is that students are the ones producing the behavior that needs to be managed in the first place (Everhart, 1983). 71

Everhart (1983) explains that student behavior has social and political contingencies, and these extend beyond the classroom experience. Students, for example, understand their assignment to roles within the classroom and in the broader social context. Their activity forms a subculture as they struggle with the social and political aspects of schooling. As Everhart (1983) explains:

> Classroom management must be understood as a social system, but also as an interface between the state

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71 Everhart's article is most helpful in showing the active construction of a subculture of student opposition to practices of classroom management. One of my students of educational psychology said in response to reading the article, "I never saw myself in print before".
Students, from a socio-political perspective, are viewed as active agents who devise various strategies through which they contest and resist the management practices of teachers as well as their assignment to low status positions. Oppositional behavior of students may well be an appropriate response to an oppressive education (Kohl, 1994) that is preparing and directing them for life in subordinate positions in society. Their minimal involvement in school activities, boredom, or oppositional behavior may signify their own feelings of alienation from the process and product of their work. Through their own (sometimes oppositional) activities students act to reappropriate control of their labor process (Everhart, 1983). In recognizing the socio-political aspects of classroom relations much may be learned by teachers and students alike. Much needs to be learned as frequently oppositional activities, while a mark of student agency, have negative results in students' lives. Woolfolk (1995) notes, for example, that in high school years teachers can focus on academics more than procedures and rules because "By this

72 All of students' behaviors may not appear disruptive (e.g., use of humor, avoidance, and various communication practices). Students learn both how to work the system and beat the system (Everhart, 1983).
time, unfortunately, many students with overwhelming behavioral problems have dropped out" (p. 405). This is the only mention of the issue of "dropping out" I was able to find in the text. This lack of attention supports Fine's (1991) critique that the exodus of students, especially low-income students of color, from high schools "is represented as if it were all quite natural" (p. 8).

**Classroom management as empowerment.** Classroom management is generally represented as a way to promote the betterment of students. Yet, both texts advance models that focus on the empowerment of the teacher-manager (Ball, 1990). Students are not considered in terms of their own learning, agency, desires, and fears as discussed above. In the models presented in the discourse of the classic texts the focus is on what teachers do to maintain control and compliance; the activity of the teacher is central.

Gage and Berliner (1991), for example, present classroom teaching practices in terms of how the teacher gains power in contrast to the students who have none:

From the teacher’s point of view you’ll be looking at classroom teaching as an activity in which you have the power to shape the process. You probably had little of that power when you were in the student’s role. Then you did pretty much what your teacher wanted you to do. Now, as the teacher, you have the determining role and the responsibility that goes with it....We will introduce you to a diverse set of teaching behaviors that can help you plan and actually be more effective whatever the subject or grade. (p. 494)

In discussing issues of classroom management the perspective of Gage and Berliner (1991) is clearly based in
behavioristic psychology. Power is gained by the teacher, and order is maintained through this system set in a discourse of control; management is a case of extinguishing unwanted behavior and increasing wanted behavior. Strategies are suggested:

One way of stopping misbehavior is to extinguish it, to withhold reinforcement. This usually means not paying attention to it... Where it is feasible, simply ignore the [misbehaving] student. Turn your back, pay attention to a student who is behaving properly, walk away... Extinction takes time. It may be a while before a child's misbehavior begins to decrease. But be careful. Even an occasional reinforcement on your part can undo the whole process. (p. 513)

This is a traditional prescriptive approach to classroom management in that the focus is directed toward the activities of the teacher needed to keep students on task and attentive (Everhart, 1983). Educational psychology is aimed at equipping the teacher with techniques through which s/he is more able to control classroom agendas.

Gage and Berliner (1991) recognize the perspective presented in this text as traditional in that it "centers more on the teacher than the student" (p. 492). This perspective is represented as having an advantage over other perspectives of classroom management and teaching (e.g., open education, humanistic education). The advantage is that traditional, teacher-centered educational practices are viable: "it has one important advantage - viability. It is the kind of teaching toward which teachers gravitate and to which they return" (p. 492).
However, it is noted that this perspective and its practices are not entirely in the best interest of students. The comment of Cuban (1984) is reported that this model "has been extremely viable, for better or worse" (emphasis added, Gage & Berliner, 1991, p. 492). This method of classroom management is accepted as normative and unproblematic despite the expressed possibility that it may not be in the best interest of students.73

The practices encouraged in the text manifest a vulgar pragmatism (Cherryholms, 1988), as the emphasis is focused on what works, regardless of effects. What Gage and Berliner (1991) leave out in reference to Cuban's work, and the discussion of classroom management in general, is the reason teacher-centered styles of classroom management persists. Cuban (1984) theorizes that "Schools are a form of social control and sorting" (p. 9) echoing the social reproduction and correspondence theory of Bowles and Gintis (1976). Cuban (1985) argues:

The ways schools are organized, the curriculum, and teaching practices mirror the norms of the socioeconomic system...teacher practices become functional to achieve those ends...[i.e.,] reinforcing the teacher’s authority to control the behavior of the class...the practices encouraged by student-centered instruction ill-fit the character of the society children will enter and classrooms became inhospitable arenas for small group instruction, expression, student

73 Gage and Berliner (1991) repeat the idea that the traditional, teacher-centered model of classroom teaching "for better or worse, is part of the American, indeed, the worldwide experience" (p. 531). It is a taken-for-granted, unproblematic practice.
decision making, etc. Teacher-centered instruction, however, endured because it produces student behaviors expected by the larger society. (emphasis added, p. 9) Cuban (1984) has connected the micro-practices of schooling with the macro-values of the larger society. These issues are left unquestioned, even obscured, in the classic educational psychology texts. Through the traditional practices of classroom management students can be normalized, made proper citizens of the state, i.e., docile and useful.

The use of behavioristic psychology, so typical of traditional teacher-centered classroom management practices, exemplifies clearly the "shaping" of students to conform to norms that have become naturalized. What needs to be noted as well is that humanistic psychologies also are useful in the normalization of students, albeit their role in governmentality is more subtle.

In student-centered classrooms that espouse humanist psychology the emphasis is on the empowerment of the student. The student is understood as an active meaning-maker striving to know herself or himself and become self-actualized. This is evidenced in the content and process of schooling. Gage and Berliner (1991) explain self-actualized students as:

...people who come to accept themselves, their feelings, and others more fully. These people are self-directed, confident, mature, realistic about their goals, and flexible. They've gotten rid of maladjustive behaviors. They become like the people they want to be. (p. 479)
This student-centered perspective seems to be an improvement on the teacher-centered, traditional model. However, while the student is perceived as the center of the meaning-making system, he or she is considered self-contained, separate and isolated from the social and the political contingencies that generate the categories into which they place themselves. Getting rid of "maladjustive behaviors" mentioned in the quote above can be indicative of a even more subtle interiorization of a dominate and oppressive discourse."

Usher and Edwards (1994) state that humanistic discourses can be more powerful than the objectifying discourses generated by behavioristic psychology. In "subjectifying discourses, within which humanistic psychology has been strongly implicated...[d]iscipline is not something externally imposed by teachers since students discipline themselves" (p. 51). It is possible to argue that "regulation works by empowerment" (p. 50). Humanistic psychology, too, provides the "justification and the means for intervention and "shaping" (p. 53) students under the illusion of self-governance.

Curriculum as instrumental in control. There has been a subtle shift toward the control of students through the use

"This discourse appears uncomfortably close to a message in The Bell Curve (Herrnstein & Murray, 1994): "The broadest goal is a society in which people throughout the functional range of intelligence can find, and feel they have found, a valued place for themselves" (p. 535)."
of the curriculum. McNeil (1983) asks readers to picture a one room schoolhouse of the last century. The students sit on hard benches or at desks in rows facing front; students stand to recite; for much of the day they are silent and still. The teacher or schoolmaster is stern, perhaps wielding a hickory stick. There the purpose for the discipline is to help the students access the curriculum. Classroom management and discipline is viewed as instrumental to the learning of the curriculum.

To a major extent classroom management procedures of the current day are much different although they purportedly are intended for the same purpose, i.e., to help students access the curriculum. Woolfolk (1995) lists more time for learning and greater access to learning as reasons for management practices. Gage and Berliner (1991) insist nothing educational happens without good management practices. However, there is also indication of an obvious shift in the idea of management practices of educational psychology. While classroom management practices are instrumental in helping students access the curriculum, there is also evidence that there is an inversion, i.e., the curriculum is a means of classroom management. For example, Gage and Berliner (1991) connect "mis-behavior" of students with the way schools are organized. They note:

...behavioral problems...[can] stem from the way schools are organized. Sometimes school structure forces students to take courses that are inappropriate for them, that do not allow for their individual needs
or level of achievement. (p. 510)

They continue to explain that schools that do not allow for students' "individual needs or levels of achievement" (as well as a variety of other issues that are "outside the teachers control") contribute to the "crime, delinquency, and problem behavior that exist in [the schools]" (p. 511). The assumption is: the needs of students are met when they are correctly placed in appropriate learning groups and given the appropriate information. When and where this situation exists students will not "misbehave". Thus, there is signaled an inversion of means and ends. Where the practices of classroom management were intended as means toward the end of accessing knowledge there is a shift toward accessing of the curriculum as a means by which control is exercised.

Testing and the Production of Students

Following Foucault's (1995) position that normalization is a major aspect of the role of schooling the formation of the "norm" is a key consideration. As presented above, there may be a tacit endorsement by educationalists of what is "normal" or normative based in the commonsense acceptance of certain values, beliefs, and behaviors. These norms are reflective of the preference of the dominant groups and adopted as universal norms by social institutions, schools in particular. Norms grow in power through hegemonic control, i.e., they are validated by meaning-making systems
and granted consent by members of subaltern as well as dominant groups. They need to be continually exposed and critiqued. However, there is another area that needs to be highlighted regarding the establishment of norms.

Foucault (1995) has noted the increasingly complex nature of the normalization process in that it has become "possible", through the human sciences, to measure or quantify what is judged to be "normal". The technologies of hierarchical observation and normalizing judgement come together in the quantifying of an evaluative judgement. This is so much of the work of educational psychology and is the focus of the following discussion.

That "testing of students is ubiquitous" is a truism. Woolfolk (1995) remarks that "if you have seen the cumulative folders that include testing records for individual students over several years, then you know the many ways students are tested in this country" (p. 528). Hanson (1993) asserts that the testing associated with schooling can begin with examinations toddlers take to enter nursery school, and "that is just the beginning of an endless torrent of tests that will probe every corner of their nature and behavior for the rest of their lives" (p. 1). Gage and Berliner (1991) report that a "reasonable estimate" of teacher time devoted to the testing process is 20 to 30%.

Woolfolk (1995) states: "Measurement is evaluation put
in quantitative terms - the numeric description of an event or characteristic" (emphasis added, p. 514). Educational psychology advances the understanding that through testing practices that produce these measurements the "truth" about an individual is able to be known. In other words, testing increases the visibility and describability of students. It is necessary to make this familiar notion strange (Foucault, 19). It is argued in the following discussion that testing processes, i.e., forms of examination (especially the norm-referenced variety), are technologies of differentiation and individualization that inscribe rather than describe students. Examinations are also technologies of power that work to establish hierarchies among students\textsuperscript{75}, that are a means of control and a method of domination (Foucault, 1977/1995).

An important issue in the understanding of testing practices is the notion of validity, particularly construct validity. Validity is defined by Woolfolk (1995) as the "degree to which a test measures what it is intended to measure" (p. 525). What is generally avoided in mainstream discussions of construct validity is the social construction of these abstract characteristics. Social constructs are considered and treated "as if" they are "real". This exemplifies the problem of reification. However, reification

\textsuperscript{75}Lewontin (1976) quotes Thorndike as saying that "the actual race of life...is not to get ahead, but to get ahead of somebody..." (p. 107).
of abstract concepts is imperative in testing practices because only "real" things are able to be measured. Within the ideology of meritocracy, these "real" characteristics need to be understood as: innate properties of individuals; stable over time; and, varying in measurement in individuals.

Another important issue regarding testing is that it yields objective measurements according to a scale that is metric. The "normal distribution" of students along the bell-shaped curve assists with this process. Although the social construction of this arrangement has been presented and critiqued\(^7\) the discursive practice continues to be advanced unproblematically in classic texts of educational psychology. It is presented as "natural" as well as "normal".

For example, Woolfolk (1995) states that the "bell-shaped curve, [is] the most famous frequency distribution because it describes many naturally occurring physical and social phenomena" (p. 519).\(^7\) Gage and Berliner (1991) make the connection as well between physical and social characteristics in stating that "both measures of

\(^7\)See for example Layzer, 1975; Lewontin, 1984/1996; Mensh and Mensh, 1991).

\(^7\)It is added that the normal distribution "has been thoroughly analyzed by statisticians" (Woolfolk, 1995, p. 519). In light of the history of the development of this "normal" distribution it seems more correct to say that it has been thoroughly constructed by statisticians.
intelligence and height are normally distributed within any specific age, ethnic, and gender group..." (p. 57). The argument is that a "naturally occurring" physical phenomenon (e.g., height) and "naturally occurring" social phenomenon (e.g., intelligence) are normally distributed within a specific population.

There is constructed an illusion that there is a metric scale used to measure both phenomena. However, while there is a standard of measure for height (e.g., feet, inches, meters) only an ordinal system can measure "naturally occurring social phenomena" (see Lewontin et al., 1984/1996). It is more than an illusion that is created though, as Gage and Berliner (1991) state:

One reason for the popularity of tests is that they give us a quantitative estimate of ability or achievement; they tell us how much. In education the attributes that interest us emphasize the abilities and achievements of students — such things as intelligence, creativity, spelling ability, science knowledge, and interest in art. (p. 570)

Mensh and Mensh (1991) refer to the bell-shaped curve as a "particularly mystifying aspect of IQ" (p. 75). Although normal distribution may occur regarding the "metric characteristics of animals such as birth weight in cattle....IQ tests do not possess the characteristics for creating a normal curve" (Mensh & Mensh, 1991, p. 172). Even biology's conforming to normal distribution has been disputed (See Layzer, 1975; Lewontin et al, 1984/1996).
IQ does possess these characteristics.

The bell-shape curve is an arbitrary and social artifact (Lewontin et al., 1984/1996). Testers create tests so that a bell-shaped curve will appear. This preserves the illusion that the "tests measure a real characteristic" (Mensh & Mensh, 1991, p. 76). Intelligence and ability tests have been composed of items selected after trial for observed conformity with the normal distribution. Items that showed little correlation with the overall expectations, or with the previous tests of the kind, have been systematically excluded. (Morrison, 1977, quoted in Mensh and Mensh, 1991, p. 76)

This is the process Woolfolk (1995) is referring to in the following explanation of basic concepts in standardized test making: "The test items and instructions have been tried out to make sure they work and then rewritten and retested as necessary" (emphasis added, p. 517). What is meant by making sure "they work" is that the tests successfully correlate intelligence or ability scores of students taking the test with the placement of students in the social order (Mensh & Mensh, 1991). That "they work" is an indication of their power to differentiate (Gage & Berliner, 1991).

Gage and Berliner (1991) assert that developers of tests use "the tests' differentiating power as their guide" (p. 51). This differentiating power is further explained:

Partly because of the way the tests were made, and partly because of the way human intelligence functions, the resulting IQ scores...fell into a normal distribution (emphasis original) which has the bell shape....Why do IQ tests tend to be normally
distributed? *Is it simply because the test is rigged? Not entirely* (emphasis added). Remember that the tests consist of many items, each designed to differentiate among individuals. That is, the items are written so that on some items only about half of a given age group responds correctly, while on other items a higher or lower percentage of that group responds correctly. (p. 56)

The standard on which the tests' differentiating power is based is middle-class knowledge. Gage and Berliner (1991) recognize this and give many examples of this bias, and then they excuse it; bias is renamed "relevance":

Middle-class bias has proved much more difficult to eliminate than was anticipated. For tests of intellectual abilities useful in modern American society, a "middle-class" and "urban" orientation may constitute not bias but *relevance*...So we may not want to change the tests so much as we might want to change the environments that promote low test performance. (p. 90)

The suggestion of changing environments as a way to ameliorate low-test scores is contradictory and seems disingenuous. It is contradictory in that "intelligence" is repeatedly represented in the same text as an innate, stable, and inherited characteristic (Gage & Berliner, 1991). It seems disingenuous in that standardized test are *constructed* to rank a certain percentage of students below the normal range. Effective standardized tests are guaranteed, or, to use Gage and Berliner's term, "rigged", to separate and sort children. This is the differentiating power that guides the development of the tests in the first place. This is how *they work*, why they were developed, and why questions have to be written and rewritten (Woolfolk,
The "differentiating power" of tests is central to their use in educational institutions. The particular "norm" around which they are organized is never made problematic. On the contrary, the middle-class "relevance" is accepted as normative. Award or violence is distributed to students according to their "marks". Lewontin et al. (1984/1996) explain succinctly:

...the power of the "norm", once established, is that it is used to judge individuals who have been located along its linear scale. Deviations from the norm are regarded with alarm. Parents who are told that their child is two standard deviations from the norm on some behavioral scale are led to believe that he or she is "abnormal" and should be adjusted in some way to psychometry's Procrustean bed. Psychometry, above all, is a tool of a conformist society that, for all its professed concern with individuals, is in reality mainly concerned to match them against others and to attempt to adjust them to conformity. (p. 149)

Norms are established by validating what works in differentiating those considered "normal" from those who are not. The argument is circular. The process of standardized testing establishes what is "normal" based on information gathered on who are considered normal.

Although the classic text never say exactly who the norming sample is, it is noted that "social class, race, gender, and ethnicity can be relevant considerations" (Gage & Berliner, 1991, p. 574) if there is a concern with equal opportunity. It is stated that there is a "problem that many African American, Chicanos, and Native Americans face with norm referenced testing when the norms are based on distant
but supposedly representative, peer groups" (Gage & Berliner, 1991, p. 574). When this information is added to the "problem" that a hypothetical student named "Lisa" is having with her national percentile rank, then all the clues point to the norm group. The norm group is male, Anglo, and middle-class. It is important to note that although Gage and Berliner (1991) regard social class, race, and gender to be "relevant" considerations in discussions of equality, these same characteristics become "irrelevant" when the interest is in selecting "highly competent rather than mediocre" (p. 574) students.

The "objective" evaluation of students according to scores produced through testing needs to be regarded as a process that produces normalcy. This process also describes deviance from the norm. As more tests are taken by students their cumulative folder expands, and "more knowledge leads to more specification" (Dreyfus & Rabinow, 1982, p. 159). There is developed a new visibility and a more minute describability. The "examination is at the center of the procedures that constitute the individual as both effect and object of power, as effect and object of knowledge" (Foucault, 1977/1995, p. 192).

There is a certain "alchemy" in this process. The properties of a discipline's regime, i.e., its norms, values, procedures, and so forth, become attributes of persons. Rose (1989) expresses this well:
The procedures of visualization, individualization and inscription that characterize the mental sciences reverse the direction and domination between human individuals and the scientific and technical imagination. They domesticate and discipline subjectivity, transforming the intangible, changeable, apparently free-willed conduct of people into manipulable, coded, materialized, mathematized, two-dimensional traces which may be utilized in any procedure of calculation. The human individual has become calculable and manageable. (p. 129)

Disciplines are ways of ordering differences. Through their testing procedures they allow educators to categorize all the complexity of students by reducing them to scores, graphs, and tables. They present teachers with a way to order the world and soothe the modernist anxiety that without the organization they impose all will be chaos.

Gage and Berliner (1991) remind us: "All your life you've been taking tests. They have brought you success or failure, joy or sorrow, a sense of justice done or outrage suffered" (p. 569). That there is not more outrage is surprising.

Summary

This chapter is entitled Disciplining the Discipline in order to highlight the activity of placing the discursive practices of the discipline under scrutiny. Utilizing the process of critical reading and Foucault's methods of critique it is possible to look at the modern science of educational psychology differently. The practices of the discipline, its disciplinary technologies, are usually considered progressive, as a means of enabling students,
i.e., used in the liberatory interest of education. However, the limits of these technologies need to be recognized as they are used to judge, construct, and normalize students as subjects of a particular kind, docile, and useful.

The questioning of the discipline's practices is not aimed at looking for answers or universal solutions. Rather, the questioning is regarded as a way to engage the issues of the discipline more deeply and complexly. The questioning indicates a desire to interrogate "what what we do does" in the real life experiences of children - so that we can think about students and our own practice differently. A critique of the discipline needs to become an important part of the discipline.
CHAPTER VI

AT THIS JUNCTURE...

It seems to me...that the real political task in a society such as ours is to criticize the working of institutions which appear to be both neutral and independent; to criticize them in such a manner that the political violence which has always exercised itself obscurely through them will be unmasked, so that one can fight them. (Foucault, quoted in Rabinow, 1983, p. 6)

This dissertation is a form of postmodern critique that considers totalizing discourses and universal conclusions problematic (Usher & Edwards, 1994). Therefore, it would be contradictory to offer a set of final statements as a universal vision for the future in this concluding chapter. However, I would like to present a summary of some central issues of the dissertation and discuss some implications for the discipline of educational psychology as a feature of teacher education. The chapter concludes with a critique and an invitation for interrogations of this work as every discourse is an incitement to discourse (Foucault, 1990).

Summary and Implications

Critique of the Modernist Project

The current mainstream educational process in this country is organized around the modernist project, i.e., it celebrates reason and the individual subject, and has faith in science to provide progress, certainty, order,
efficiency, and control. The discipline of educational psychology, based in a technical rationality, is concerned with advancing these modern purposes.

The work of this dissertation offered an alternative way of looking at modernity’s project and the human science of educational psychology in particular. As critique the perspective maintained in the dissertation was a skeptical stance regarding the discipline as a neutral body of knowledge. This perspective was influenced by Michel Foucault’s concern with how modern societies control human persons through the practices and knowledge claims of modern sciences.

This work began with an uneasy reading of the discourse of educational psychology as I was teaching introductory courses to preservice teachers. I came to recognize myself, in Freire’s (1970/1990) terms, as both oppressed and oppressor. I saw myself as oppressed because I had internalized the rationale of the master narrative of the discipline; I had assented to its hegemonic discourse with its power to name and define persons as "objects" through disciplinary technologies. It seems as though I had been normalized and domesticated, made fit for the educational system, i.e., docile and useful. At the same time I took on the role of the oppressor by teaching the discipline as a neutral body of knowledge and skills. I was critical and reflective in this activity, although, from a position
within the meaning-making system of the discipline. My intent was to initiate preservice teachers into the rationality and language of educational psychology. I was complicitous in the system of domination (Foucault, 1977/1995) whereby my students would be made docile and useful, and where they, in turn, would learn to normalize their own students.

A shift in my perspective took place through an intertextual reading and critical analysis as I struggled to see connections with the discipline I was teaching, the prevailing social order, and a community of resistance I was encountering (e.g., Aronowitz & Giroux, 1991; Freire, 1970/1990; Giroux, 1981, 1988; Gordon, Miller, & Rollock, 1990; Harding, 1991; hooks, 1994; McLaren, 1989). The discourse of educational psychology was subjected to a "critical gaze", and the discourse's rationality, practices, and effects were made problematic and interrogated.

This dissertation questioned elements of the discipline's discourse that seem commonsense and taken-for-granted, taken as normative. It was hoped that by making the familiar strange (Ball, 1990; Foucault, 1977/1995) these everyday assumptions and practices could be more easily questioned and changed. The questioning did not seek generalizable and universal solutions to the crisis in education. Rather, questioning was proposed as a way to open a space where issues can be engaged in their social,
political, and epistemological complexity.

**Importance of Discourse**

The importance of discourse has been emphasized throughout this work. Recognizing that the discipline's discourse needs to be taken seriously was a key point as the discourse is so powerful in informing how we think about students, teachers, and the teaching-learning process. Discourse was also recognized as a social artifact (Gergen, 1985), the result of social negotiation, and the process through which human persons are constituted. This perspective subscribes to understanding that much of what we have taken as "real" is imminently tied with our use of language. Therefore, the human person as object/subject is understood as inscribed by language rather than described through scientific activity.

This productive aspect of discourse is a matter that needed to be emphasized because the socially produced knowledges of discourses are never neutral; knowledges of discourses work in favor of some people over others as power and knowledge are implicated in each other. Therefore, discourses are sites of social struggle.

However, what I attempted to show was that, although the discourse of educational psychology is powerful in the multiple ways it constructs and differentiates students, it is also vulnerable to counter-discourses that question, resist, and contest the assumptions and knowledge claims of
the discipline.

Critical discourse analysis as a research activity can be disorienting and disrupting. Yet, it is an important research enterprise because without this analysis social sciences may become part of a "social silence" (Fine, 1992) regarding society's "mechanisms of legitimation, marginalization, and punishment" (Brown, 1992, p. 223). Disrupting the dominant discourse is a kind of "talking back" (hooks, 1989) that seems to be in contrast to a desire for certainty and control typical of the modernist project.

**Situated Knowledge and Standpoint Epistemology**

The understanding that all knowledge is fashioned through the interaction of persons in particular socially situated positions with interests and biases is central to the epistemology espoused by the perspective of this dissertation. People are responsible for the knowledge they construct. The possibility that knowledge could be "objective" or disinterested eliminates knowledge construction as a social and cultural activity, and it exempts its constructors from responsibility for its contents and/or effects. The claim of neutrality is considered an illusion at best, or a "cloak" at worst, that covers the vested interest of "elites" in protecting positions of power and privilege as their worldview is imposed as universal.

Situated knowledge is always partial, shifting, and
even distorted. The claim of a partial vision or perspective is taken as a strength in that it is open and initiates, rather than closes off perspectives (Haraway, 1988/1991). Those who profess that only situated knowledges are possible claim responsibility for what they see and recognize the importance of learning "to see...from another point of view" (Haraway, 1988/1991, p. 190). Reflexivity is desired as there is a recognition of personal embeddedness in macro tendencies (Harding, 1991) of society, i.e., the values, meaning-making systems, power relations of the social world.

An effect of realizing that all knowledge is situated is that it makes communication among perspectives primary. Sharon Welch (1990) explains the difference of an "ethic of control", i.e., power over, and an "ethic of risk", i.e., power with. The "ethic of risk" understands the need for ethical conversations. Welch (1990) describes "communicative ethics" as combining pluralism and social responsibility. The goal is "mutual critique leading to a more adequate understanding of what is just and how particular forms of justice may be achieved" (p. 129).

An understanding of the discipline's knowledge claims as situated, partial, and shifting calls for a more reflexive stance from educational psychologists. Recognition of situated knowledges also encourages ethical conversations among those with multiple perspectives concerned with the educational enterprise.
Social Construction of Knowledge

The dissertation attempts to look at how the "truth" of the discipline is constituted. The perspective espoused is that all knowledge, including scientific knowledge, is the result of social processes, i.e., knowledge is produced in contexts by real people who have histories, biases, and are embedded in power relations. Thus, that which is considered the "truth" of the discipline is the product of social negotiations.

This position and the discursive practices that result may be considered "radical" in a sense; and yet not so radical as might appear at first glance. This perspective is coherent with the discipline of educational psychology's contemporary psychological perspective (Anderson et al., 1995), i.e., to understand the discipline from a social constructionist position. Perhaps the "radical" characteristic is in a social constructionist perspective itself, as Anderson et al. (1995) propose:

...the heart of a contemporary psychological perspective is an image of learners as active and social constructors of meaning, and an image of learning as an act of construction through social interaction in many contexts. (p. 145)

This dissertation exemplifies the disposition encouraged for classroom teachers that can, and must, be applied to understanding the formation of disciplinary knowledge as well. Unless this position is taken seriously as applying to the knowledge of the discipline it remains a static "fact"
of learning that is told to preservice teachers, while the discipline, as we know it, remains unchanged (Carter & Doyle, 1996). If a social constructionist perspective is taken seriously there are profound implications for how we understand knowledge of the discipline.

The Importance of History

A significant ramification of this epistemology is an interest in the historical formation of the discipline, the social actors, and social and political contexts in which the history of the discipline is embedded. This would be a momentous shift for the discipline.

The discipline of educational psychology is presented in classic texts as ahistorical; it seems that the discipline's history has been suppressed as there are few references to historical contexts or figures. A synchronic aspect of the discipline is indicated in that its focus is one moment in time, like a snapshot (Cherryholms, 1988). This situation is typical of a positivist epistemology, but it also has been taken to imply an "apparent lack of interest in the history of [the] field" (Glover & Ronning, 1987, p. vii). Mainstream prescriptions for introductory classes (see Anderson et al., 1995) contend that preservice teachers do not need to understand "the history of psychological ideas" (p. 145). However, Harding (1991) asserts that there may be serious reasons why the history of science is not taught to our young people, i.e., there is a
fear that students would feel the enterprise is not worth
the effort if they knew the history. Harding (1991) asks:

What should we want students to know about the
scientific enterprise, its history, practices, and
goals? Would any of them go through the arduous
training necessary to become a scientist [or
educational psychologist] if they were told the truth,
the whole truth, and nothing but the truth about this
institution and its present-day practices? (p. 31)

One example will provide a helpful illustration. What
would students of educational psychology think about some of
the discipline's central issues (e.g., nature-nurture
questions, normal curve, psycho-metric testing) if they knew
about the context and person who initiated them, namely,
Galton? Francis Galton (1822-1911) is described as "a strong
influence on what became American psychology...who was not a
psychologist at all, but a wealthy and somewhat eccentric
Briton" (Glover & Ronning, 1987, p. 19). Galton's thinking
was organized around a hereditarian view, and he "pursued
interests that led to the field of eugenics" (p. 19).
Yet, Galton and his assumptions and practices had a great
influence on many educational psychologists who were to
follow him including J. McKeen Cattell and Edward E.
Thorndike.

Today, Galton "remains a central figure in the progress
of modern psychology" (Fancher, 1979, p. 294). Yet, when
Galton is mentioned, albeit in passing, in "classic" texts

"Galton is considered the "father" of the eugenics
movement (see Fancher, 1979)."
(e.g., Gage & Berliner, 1991, p. 216) his position is unproblematic and seemingly neutral even as his ideas connected to eugenics can be found throughout the text and talk of mainstream educational psychology. So much of the discipline’s legacy can be traced to Galton; his influence does matter.

Robert V. Guthrie (1976), for example, included a chapter in his book, *Even the Rat Was White: A Historical View of Psychology*, that he entitled "The Past is Prologue". It is distressing to read his reflections of twenty years ago:

Some of the dubious research of the 1920’s has lingered nearly fifty years as a phantomlike apparition of pseudointellectualism. Present-day proclamations ...resemble the claims of biased 1920 educational psychologists....These theories recur with an appearance of "newness" enough to obscure the cobwebs of antiquity and actually encourage a repeat of the same defenses utilized decades ago. This is occurring today in the arguments against the continued use of IQ tests and the allegations of inherited mental deficits in black and brown children.... (p. 194)

That "not that much has changed" in the ensuing twenty years is evidenced in the recent publication of *The Bell Curve* (Herrnstein & Murray, 1994). Twenty years from now this quote may still be current. The discourse of educational psychology and its practices support and construct the conditions that made Guthrie’s statement meaningful in the 70’s and make his words meaningful today.

A comprehensive understanding of the discipline requires an appreciation of the history especially when the
history exposes undeniable propensities toward racism, sexism, classism, and so forth. What results in a failure to confront this history is "social amnesia" (Giroux, 1981) as the memory of the past has been concealed or silenced in the interest of advancing disciplinary programs.

Intertextual Reading and Critical Literacy

It is not only the study of the discipline's most influential figures and accomplishments that need to be addressed and interrogated. The perspectives found in resistance movements and literature add a needed viewpoint to the study of educational psychology. Foucault's genealogies direct attention to those records of resistance that have not gained acceptance within the mainstream discourse. Genealogies attend to subaltern perspectives and knowledges, opening up a space where knowledge that has been silenced or marginalized can be heard and taken seriously.  

Some important counter-discourses have been presented in various chapters of this dissertation that allow a reading against the mainstream text: the feminist critique of science aims at disrupting some of the myths that have been perpetuated regarding neutrality, objectivity, and the

---

80 Foucault (1988) comments that the difference between a real science and a pseudoscience is that "A real science recognizes and accepts its own history without feeling attacked" (p. 12).

81 Silenced and marginalized voices are not to be romanticized, however. They, too, are subject to critique.
primacy of scientific epistemology (Chapter II); Freire's resistance to a transmission model or "banking" notion of education and a call for critical literacy (Chapter III); Giroux (1981, 1988) and Kincheloe's (1993) critique of technical rationality, the dominant meaning-making system of the discipline (Chapter IV); Everhart's (1983) critique of prescriptive classroom management programs and his recommendation of a socio-political understanding of classroom life (Chapter V); Mensh and Mensh's (1991) explication of the historical fabrication of the bell-shaped curve that is represented in mainstream texts as "normal" (Chapter V).

These texts seek to question and disrupt the sometimes unconscious assumptions, "neutrality", and smooth historical "development" of educational psychology. Voices or perspectives that pose questions need not be considered "spoilers" to the discipline, as though all was well before their arrival. Rather, alternative perspectives and interrogations can be seen as opportunities to consider the discipline more critically and with a recognition of the greater social and political complexity of education as well as educational psychology's implication in social and political contexts. This intertextual reading is necessary if teachers-students of educational psychology are to move beyond a functional literacy to a critical literacy concerning the discipline.
Critique of a Critique

Among the many things I have learned in the work of this research is an appreciation for the importance and inevitability of critique of discourses. As Foucault (1978/1990) has insisted, any discourse offers "a point of resistance and a starting point for a proposing strategy" (p. 10). I take responsibility for critiquing my own discourse from my partial, shifting, particular position, and I welcome critique from anyone who will take this discourse seriously enough to offer one.

First, the breadth of the discourse of the discipline of educational psychology is immense. Consequently, I was able to barely "dust" a few areas of import. There is so much that needs to be interrogated and contested, not for the sake of science or in the interest of advancing the discipline, but in the name of social justice.

The discourse of the discipline itself supports and advances social cognitions that makes sense of oppressive practices in such a way that they are frequently accepted as tolerable. The discipline has not been able to address the ways its own knowledge claims and practices are caught in the web of meaning and power that masks oppression in education. Critical discourse analysis is a process of interrogation that disrupts these commonsense understanding and everyday practices of the discipline.

Second, this work is more about posing questions and
critique rather than offering solutions. This is not very satisfying to a modernist perspective. It may even be an irritant. However, questioning and critique as a way of looking at the discipline has had profound influence on my own practice as a teacher-learner. My hope is that in the future I will be able to ask better questions.

I would like to end with a word about Paulo Freire who died on May 2, 1997, as I was completing this final chapter. I mourn the loss of Freire even as I celebrate his courage and teaching. The words of Peterson and Tenorio (1997) have expressed Freire's influence on my own educational experience:

...for teachers...Freire leaves a profound legacy. Steadfastly opposed to teaching as indoctrination, he insisted that learning is inescapably political and that educators should help students articulate their own vision of social justice. He argued for a pedagogy that draws on the lives of our students to engage them in asking critical questions about the larger society. (p. 2)
APPENDIX A

COVER LETTER AND SURVEY
March 31, 1995

(Inside Address)

Dear...,

There is general agreement that education in this country is in need of reform. I believe that our discipline, educational psychology, has been and may continue to make significant contributions to the discussion of education and its future direction.

I am a doctoral candidate at the Loyola University of Chicago. My dissertation involves a study of the representation of unprivileged youth as expressed through the study of educational psychology. I will employ discourse analysis of the textbooks used in introductory courses with pre-service teachers. It is my intention to provide useful information to our colleagues in the educational psychology community as well as advancing the possibilities of education's service to children who are often characterized as unable to access our current educational system.

Your assistance is important to me as I gather those texts which are considered the most effective vehicles for transmitting the discipline to newcomers to the field. Your name has been surfaced as the result of a sample selected from APA Division 15 members. Familiarity with the discipline and knowledge of the published texts are the resources I need to tap. Please consider passing this questionnaire to a colleague only if you feel that the person is in a more suitable position to respond to this very brief survey. You can imagine how grateful I am for your response.

The confidentiality of your response is assured. The number found on this questionnaire is an identification number which facilitates mailing purposes only, allowing me too indicate that you have returned your response. Your name will never be placed on the questionnaire.

If anyone would like a summary of the results of this survey please write "copy of results requested," as well as your name and address, on the back of the return envelope. Please do not put this information on the questionnaire itself.
Any questions you might have are welcomed. Please feel free to write or call me.

Thank you in advance for your assistance.

Sincerely,

Suzanne Gallagher
(312) 274-5069
QUESTIONNAIRE

Demographic information

1) Where is educational psychology housed in your institution?  (Circle one)
   department/school of education
   school/college of arts and sciences

2) Do you currently teach introductory educational psychology courses, or have you taught these courses in the last five years?  (Circle one)
   YES  NO

3) For how many years have you considered yourself a member of the educational psychology community? ______

Textbook Information

1) Please indicate two texts you consider "classic" for an introductory educational psychology course.
   (Please provide as much information as you can.)
   Title - ________________________________
   Author - ______________________________
   Publisher - ____________________________
   Edition - _________  Publication Date - _________

second recommendation:
   Title - ________________________________
   Author - ______________________________
   Publisher - ____________________________
   Edition - _________  Publication Date - _________

(Over)
2) Have you used the above texts for introductory courses in educational psychology?  
(Circle one)  

YES    NO

3) If you do not use the above two texts, please list the books you do use in your courses.

Title - __________________________________________
Author - _________________________________________
Publisher - _______________________________________
Edition - ________ Publication Date - ___________

second choice:

Title - __________________________________________
Author - _________________________________________
Publisher - _______________________________________
Edition- __________ Publication Date - ___________

____ Please check if you would like the results of this survey.
"CLASSIC" TEXTBOOKS - SURVEY RESULTS
Suzanne Gallagher
September, 1996

A random sample of members of APA Division 15
(Educational Psychology) received the survey. A return rate
of 63.3% was realized with 133 of 210 surveys returned. The
results are given in the following tables.
Table 1
Survey Returns Tabulation

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<th>Type of Surveys</th>
<th>No. of Responses</th>
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<tr>
<td>Total returned</td>
<td>133</td>
</tr>
<tr>
<td>Nominating texts</td>
<td>84</td>
</tr>
<tr>
<td>Not nominating texts*</td>
<td>49</td>
</tr>
</tbody>
</table>

* Responses varied including: Do not teach educational
  psychology (29 responses); Courses taught in modules and do
  not use textbooks as such (7 responses); There are no classic
texts (2).

Table 2
Textbooks nominated as "classic" - traditional discourse of
the field.

<table>
<thead>
<tr>
<th>Author**</th>
<th>Title/Publisher/Date***</th>
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</thead>
<tbody>
<tr>
<td>Woolfolk, A.</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td></td>
<td>6th Ed., Allyn &amp; Bacon</td>
</tr>
<tr>
<td></td>
<td>(1995)</td>
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<tr>
<td>Gage, N.L. &amp;</td>
<td>Education Psychology</td>
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<tr>
<td>Berliner, D.</td>
<td>5th Ed., Houghton Mifflin</td>
</tr>
<tr>
<td></td>
<td>(1992)</td>
</tr>
<tr>
<td>Good, T.L. &amp;</td>
<td>Contemporary Education</td>
</tr>
<tr>
<td>Brophy, J.</td>
<td>Psychology</td>
</tr>
<tr>
<td></td>
<td>5th Ed., Longman</td>
</tr>
<tr>
<td></td>
<td>(1995)</td>
</tr>
<tr>
<td>Slavin, R.</td>
<td>Educational Psychology:</td>
</tr>
<tr>
<td></td>
<td>Theory and Practice</td>
</tr>
<tr>
<td></td>
<td>4th Ed., Allyn and Bacon</td>
</tr>
<tr>
<td></td>
<td>(1994)</td>
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<tr>
<td>Biehler, R.F. &amp;</td>
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<tr>
<td>Snowman, J.</td>
<td>Teaching</td>
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<td></td>
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<td></td>
<td>(1990)</td>
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<tr>
<td>Dembo, M.H.</td>
<td>Applying Educational</td>
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<td>Psychology</td>
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<td>(1994)</td>
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<td>Sprinthall, N.A.&amp;</td>
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<td>Sprinthall, R.C</td>
<td>A Developmental Approach</td>
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<td></td>
<td>5th Ed. McGraw Hill</td>
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<tr>
<td></td>
<td>(1990)</td>
</tr>
</tbody>
</table>

** Fourteen other authors received less than five nominations.
*** Edition cited most.
REFERENCES


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Gergen, K. J. (1985). The social constructionist


Publishing Corporation.


Charlottesville, VA: University of Virginia Press.


VITA

Suzanne Gallagher was born on April 27, 1947 to Martin F. and Helen M. Gallagher in Delaware County, Pennsylvania. She entered the Sisters of Mercy in Merion, Pennsylvania in 1965. Suzanne earned a B.S. in elementary education at Gwynedd Mercy College, Gwynedd Valley, Pennsylvania, and a M.S. at the University of Dayton in Ohio.

Suzanne was a classroom teacher in elementary schools in Pennsylvania and North Carolina before becoming an elementary school principal in 1978. As an elementary school principal she was an elected board member the Archdiocese of Philadelphia Elementary Principals' Association, the Private Schools Advisory Board of the Montgomery County Intermediate Unit, a member of the Elementary Education Committee of the Sisters of Mercy, and coordinator of her regional Mercy community’s Elementary Education Social Justice Committee.

Her interests include the social and political contingencies of education, teacher education, multicultural and interdisciplinary education.
DISSERTATION APPROVAL SHEET

The dissertation submitted by Suzanne Gallagher, RSM has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

3/31/97
Date

[Signature]
Director’s Signature